

“UNSETTLING LANDSCAPES:  
APPLICATIONS OF ETHNOBOTANICAL RESEARCH IN DEFINING ABORIGINAL  
RIGHTS AND RE-AFFIRMING INDIGENOUS LAWS IN T’SOU-KE TERRITORY,  
VANCOUVER ISLAND AND BEYOND.”

by Pamela Ruth Spalding

A Dissertation Submitted in Partial Fulfillment of the  
Requirements for the Degree of

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I acknowledge and respect the ɫəkʷəŋən peoples on whose traditional territory the university  
stands and the Songhees, Esquimalt and W̱SÁNEĆ peoples whose historical relationships with  
the land continue to this day.

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Supervisory Committee:

Dr. Nancy Turner, Supervisor  
School of Environmental Studies

Dr. Karena Shaw, Departmental Member  
School of Environmental Studies

Dr. John Borrows, Outside Member  
Faculty of Law

## ABSTRACT

In this dissertation, I explore how, in Canada, Indigenous people's relationships with culturally-significant plant species are an expression of Aboriginal rights, and I ask how these rights can be affirmed and exercised using a form of intersocietal law within and between First Nations and state governments. I examine how my own and others' ethnobotanical and ethnoecological research can help to decolonize the Crown legal systems that limit Indigenous peoples in regenerating their relationships with native plant species and the ecosystems within which they are situated. In order to explore how Indigenous people's relationships with native plant species can be expressed in law, my dissertation is grounded in a case study, developed and carried out in collaboration with the T'Sou-ke Nation, members of which have lived on southern Vancouver Island since time immemorial as part of the Straits Salish language group. Using the T'Sou-ke case study as an example, I explain how this evidence of knowledge and use of plants helps to root contemporary First Nations' rights throughout their territories, which is essential to establishing the basis of land and resource rights that have legal force to be claimed today. I indicate current challenges faced by T'Sou-ke Nation in exercising plant-associated rights throughout their territory and outline how the current legal test for proving Aboriginal rights is problematic. The T'Sou-ke have an abundance of rich evidence of their use of 100 native plant species and of Indigenous laws and governance associated with the same. I contend that the obvious and long-standing Indigenous management of these plant species and various ecosystems on southern Vancouver Island supports a very significant claim of legal rights and I believe that my research is broadly applicable to other First Nations in BC and beyond. The T'Sou-ke Nation, historically and today, are norm creating, generating and interpreting people as reflected in their distinct social organization adapted and adjusted by their members through many changing social and ecological variables over centuries. The re-examination of the values, rules, protocols, customs and practices associated with markers of Indigenous plant use throughout Straits Salish landscapes, specifically with the assistance of Indigenous knowledge holders, as well as ethnohistorical, ethnobotanical, and traditional ecological knowledge, re-frames how evidence of land use and occupancy is presented, and, ultimately, how we might all govern these resources together. For the T'Sou-ke, laws around plants are not limited to certain traditional practices, or to specific sites or places; law also rests in species and in the long-term relationships that people have with culturally important plant species. As such, the normative ordering of T'Sou-ke laws relating to their plant use and management must be judged on T'Sou-ke terms, not by Canadian legal terms. My hope is that this research contributes to the larger discussion of acknowledging Indigenous peoples' distinct and culturally relative rights and principles with respect to native plants, while strengthening and growing the ties that bind all British Columbians together.

## Table of Contents

Supervisory Committee	ii
Abstract	iii
Table of Contents	iv
Acknowledgements	ix
List of Figures	vii
List of Tables	viii
1. Finding Law in Canons of Plant Knowledge, Covenants of Reciprocity and Customary Landscapes	1
1.1 Introduction	2
1.2 Studying Relationships Between Humans and Plants	7
1.3 Self-location within this Research	10
1.4 Constitutional Context	12
1.5 Ethnobotany & Ethnoecology Framework	15
1.5.1 Ethnobotany’s Contribution to Women’s Roles in Plant Use	17
1.5.2 Challenges in Representing and Sharing Ethnobotanical Knowledge	19
1.6 Significance of plant relationships in Ecosystems, Landscapes, and Common Law	22
1.7 Introducing the Case Study with the T’Sou-ke First Nation	29
1.7.1 The T’Sou-ke territories and language	29
1.7.2 Challenges and Opportunities, T’Sou-ke face as a community	31
1.7.3 What is important about T’Sou-ke’s situation for this research	35
1.7.4 Research Partnership with T’Sou-ke Nation	36
1.8 T’Sou-ke Ethnobotanical Data: Sources and Limitations	37
1.8.1 T’Sou-ke Ethnobotanical Summary Table	39
1.8.2 Mapping Plant Use	40
1.9 Structure of Thesis	43
2. A Canon of Plant Knowledge: T’Sou-ke Relationships with Plants and their Habitats	48
2.1 The Canon of T’Sou-ke Plant Knowledge	49
2.2 Sources of Ethnobotanical Information for T’Sou-ke	53
2.3 Ecological Context	55
2.4 “Coping with Abundance ”: Overview of Straits Salish peoples’ relationships with plants	61
2.5 Plants for Each Season: Harvesters’ Knowledge of Plants and When and Where to Harvest Them	64
2.5.1 The Seasonal Round	64
2.5.2 Phenological Indicators	68
2.5.3 Winter Villages	68
2.6 Knowing plants and their ecosystems	69
2.7 Cultivating Ecosystems and Coaxing Habitats	74
2.7.1 Digging and Tilling	76
2.7.2 Weeding, Selective Harvesting and Transplanting: root vegetables	79
2.7.3 Burning	80
2.7.4 Pruning and Coppicing	85
2.8 Mature forest live harvesting: Maximizing the Production of Living Plants	88
2.9 Discussion	93
	iv

2.10 Conclusion	95
3. Managing People and Plant Relationships: Understanding the Socio-political and Physical Infrastructure of Customary Landscapes	97
3.1 Introduction to Customary Landscapes	98
3.1.1 The Animation of Customary Landscapes	102
3.2 The Historic and Ethnographic Context of this Landscape	104
3.2.1 Biases in the Literature	104
3.2.2 The Problem with Establishing a Date of European Contact	109
3.2.3 The Impact of Smallpox on the Coast Salish in the 18th Century	110
3.3 Physical Infrastructure Supporting Plant Use and Management	112
3.3.1 Cedar and Its Importance to Infrastructure	114
3.4 Social Organization Supporting T'Sou-ke Plant Relationships	119
3.4.1 Kinship, Governance, Prestige and Plants	121
3.4.2 Feasting and Potlatching	125
3.4.3 Supporting Plant Management through Property Arrangements	127
3.5 Central Role of Plants in the T'Sou-ke and NWC economy	130
3.5.1 Reserve Army of Labour: Polygamy and Slavery within Coast Salish Economies	134
3.6 Covenants of Reciprocity in Customary Landscapes	138
4. Plant Use in Aboriginal Law: Building Evidence and Defining Rights	144
4.1 Introduction	145
4.2 Legally Recognizing Indigenous Peoples' Rights to Plants	146
4.3 Overview of Aboriginal Rights Law	149
4.4 Categories of Aboriginal Rights	155
4.4.1 Specific and Generic Rights	156
4.4.2 Aboriginal Title	158
4.5 Meeting the Van der Peet Test with Plants	160
4.6 Discussion	178
4.7 Conclusion	185
5. Rooted in Laws: Recognizing Indigenous laws relating to plants through Customary Landscapes	191
5.1 Introduction	192
5.2 Indigenous Law and Plant Relationships	197
5.2.1 Sources of Indigenous Laws relating to Native Plants	198
5.3 Resurgence of Straits Salish Laws	204
5.4 Ethnobotany, Ethnoecology and the Resurgence of Indigenous Legal Orders	211
5.4.1 Kincentricity and Animism	214
5.4.2 Natural Rules	216
5.4.3 Social Restrictions and Protocols	217
5.4.4 Land and ownership laws	220
5.5 Discussion	223
5.6 Conclusion: Whose laws prevail?	230
6. Conclusion: Starting from a Mutual Love of Plants	236
6.1 Death by a Thousand Cuts: Cumulative effects of overlooking Aboriginal Rights	237
6.2 Findings of this research	245
6.2.1 Canon of Plant Knowledge	246

6.2.2	Covenants of Reciprocity	247
6.2.3	Customary Landscapes	249
6.2.4	Aboriginal Law	251
6.2.5	Indigenous law	254
6.3	Next Steps: Work to be done	256
	References	262
	Appendices	
Appendix A:	Ethnobotany Table for T'Sou-ke Plant Use	282
Appendix B:	Traditional Use Study Values for T'Sou-ke Nation	296
Appendix C:	Sample Area of Plant Species of Cultural Significance to T'Sou-ke: Indicator Species by Ecosystem	297
Appendix D:	Culturally Important Plants Present in the Sample Terrestrial Ecosystem Mapping (TEM) Area	304

## List of Figures

Figure 1.1 The Straits Peoples and their Neighbours. Adapted from Wayne Suttles (1974)	5
Figure 1.2 T'Sou-ke Nation territory as submitted to the BC Treaty Commission	30
Figure 1.3 Land Ownership in T'Sou-ke Nation Territory—2022	33
Figure 2.1 Mapping of terrestrial ecosystems within the T'Sou-ke sample area	58
Figure 1.2 Susan Lazzar Cooper Johnson demonstrates basket-making	65
Figure 2.3 Predicted presence of various culturally important berry species throughout the sample area.	72
Figure 2.4. John Thomas digging for riceroor at Sooke Bridge in 1981	76
Figure 2.5. Predicted camas presence in the sample mapping area	84
Figure 2.5 Salmon trap by Paul Kane (1847) situated near the mouth of Sooke River	87
Figure 2.6 Predicted mapping of T'Sou-ke medicine plants in the sample area	91
Figure 3.1 Agnes George (in the 1960s) showing salmon traditionally smoked on a rack	98
Figure 3.2. T'Sou-ke Customary Landscape Map: “An assemblage of lands governed by the laws of an assembly”	100
Figure 3.3 Predicted Cedar Presence Map if T'Sou-ke Sample Area	117
Figure 3.4 T'Sou-ke Plant Expert, Mary George	126
Figure 3.5 Paul Kane. 1856 Weavers	136
Figure 5.1 The Planes Family	193
Figure 5.2 <i>The Story of the Star Husbands</i>	199
Figure 5.3 Anishnaabeg Story of the <i>Rabbits and the Roses</i>	201
Figure 5.4 Andrew Lazzar with his daughters Mary and Susan (Cum-Chiat-Sia) in 1928	205
Figure 5.5 <i>Hul'qumi'num Origin Story</i>	207
Figure 5.6 <i>Sister Snail and the Blackberries</i> from T'Sou-ke Legends	218

List of Tables

Table 3.1 SENĆOFEN Possible Terms for Plant Management	119
Table 4.1 Spectrum of Aboriginal Rights Related to Plant Practices	157
Table 4.2 The Van der Peet Test	162
Table 4.3. Plants Don't Forget: Indicators of anthropogenic uses on the landscape	172

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# Chapter 1

Introduction:

Finding Law in Canons of Plant Knowledge, Covenants of Reciprocity and Customary Landscapes



## Highlights

Framing the question of how are Indigenous people's relationships with culturally-significant plant species an expression of Aboriginal rights, and how can these rights be affirmed and exercised using a form of intersocietal law within and between First Nations and state governments?

- Introduction to Ethnobotany and Ethnoecology in the context of Aboriginal rights
- Summary of the T'Sou-ke Case Study
- Canons of plant knowledge and covenants of reciprocity between humans and plants
- Ecosystem Management and Customary Landscapes

## 1.1 Introduction

All human life is sustained by plants. Our bodies, our livelihoods, our futures are immersed in the thick oxygenated space between plants and the sun...Plants underpin our food supply and contribute to the air we breathe, but this is not a simple relationship of dependency. Given the current predictions for global climate change for example, we might now argue that human–plant futures are mutually concerned in a way that has no historical precedent (Atchison & Head, 2017).

All human cultures maintain significant and resilient relationships with plants, so that our pasts, presents and futures are densely entangled with those of plants. This dissertation explores how the enduring relationships between Indigenous peoples and culturally-important, native plant species reflect legal evidence of their land and resource rights in Canada. Human relationships with plants vary according to environmental factors (such as climate, ecology and habitat) and socio-cultural factors (economic systems, social and political organization, language, knowledge transmission and spiritual associations).<sup>1</sup> I will demonstrate how both ethnobotany (the study of interrelationships between people and plants) and ethnoecology (the study of people’s place-based ecological relationships within their home territories) provide a useful lens through which to understand these complex cultural and ecological relationships among people, plants, landscapes and justice (Berkes, 2012; Ford, 2001; Minnis, 2000; Nazarea, 2003; Nolan & Turner, 2011). Throughout this dissertation, I am guided by my research question: In Canada, how are Indigenous people’s relationships with culturally-significant plant species an

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<sup>1</sup> In this dissertation I use the term “Indigenous peoples” to refer those human groups who have lived in a particular territory in interconnected relationships with species and abiotic features for many generations prior to the arrival of colonizing peoples. When I use the term “Indigenous-plant relationships” I am referring to the relationships between Indigenous peoples and native plants. When I refer to ‘native plants’, I am referring to plants that are native to a specific geographical region of Canada.

expression of Aboriginal rights, and how can these rights be affirmed and exercised using a form of intersocietal law within and between First Nations and state governments.<sup>2</sup>

I address this question by breaking it down into the following sub-questions:

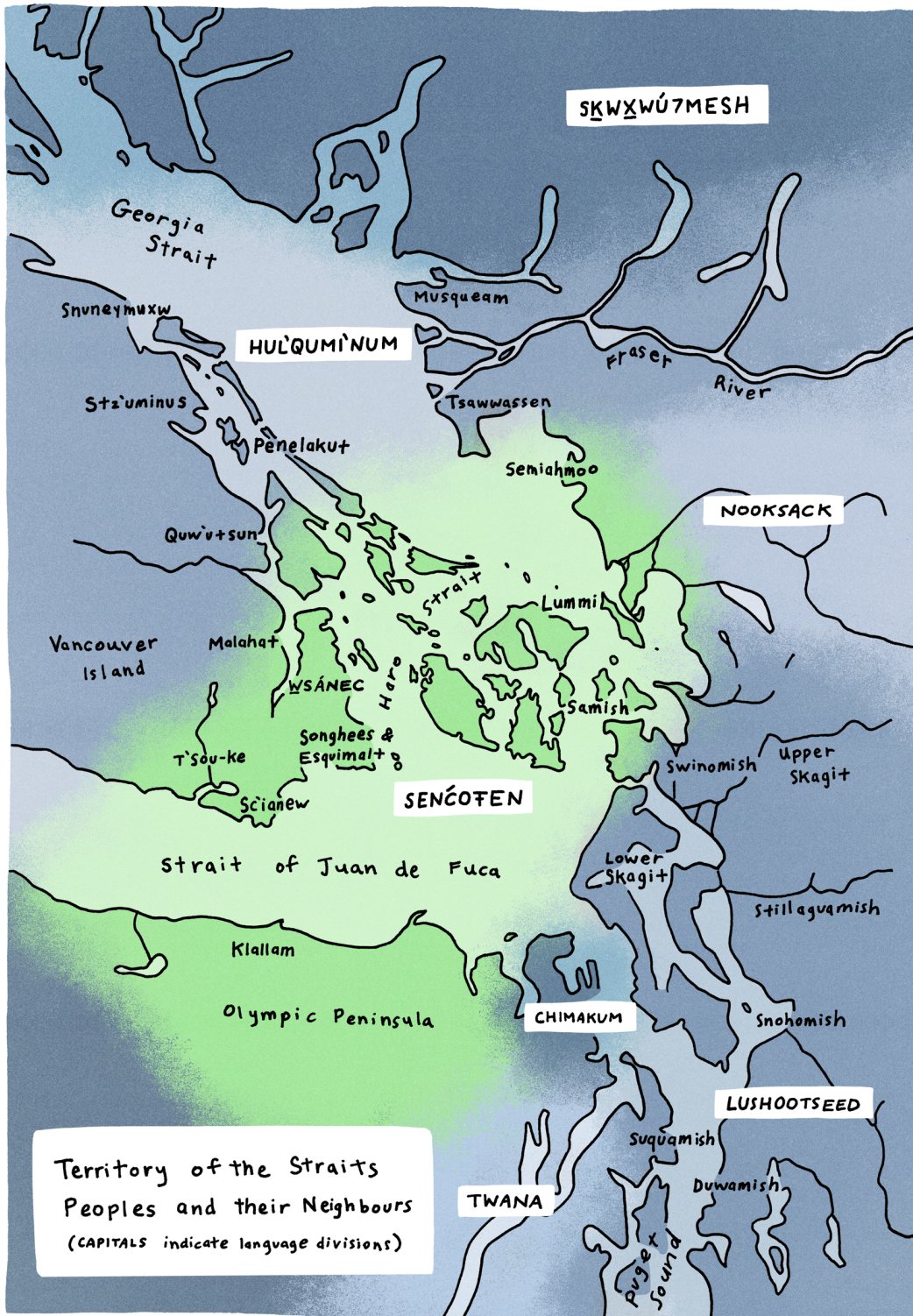
1. How did Indigenous peoples work in collaboration with culturally important plant species and variable ecosystems and what can the ethnobotanical knowledge about these relationships tell us about their laws and governance around plant use within the physical space of their territories?
2. Using ethnobotanical and ethnoecological scholarship, can we discern the social and physical infrastructures required to support Indigenous peoples' intensive and extensive use of native plants within a social, metaphysical and spatial landscape in the pre-colonial era?
3. What is the relationship between Indigenous people's knowledge and practices relating to culturally significant plant species and habitats and Aboriginal legal rights as defined within the Canadian legal system, and how can ethnobotanical and ethnoecological research support legal action to affirm land rights?
4. If some Indigenous laws rest in relationships with certain plant species, how, then, can ethnobotany and ethnoecology help to support Indigenous people's quest to bring the Indigenous legal orders from the past into working laws of the present so that Indigenous laws coexist and communicate with the common law?

I frame my analysis within three broad concepts that I rely upon throughout the dissertation. First, I refer to what I call a '**canon of plant knowledge**' that each Indigenous

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<sup>2</sup> I use the term Aboriginal when I'm referring to Indigenous peoples and their protected rights as they are defined in Canadian law. According to Section 35(2) of the *Constitution Act*: "aboriginal peoples of Canada" includes the Indian, Inuit and Métis peoples of Canada.

group developed over millennia. This canon was and is used differently at different times but, ultimately, remains intact as an accepted group or body of related expressions or records of plant knowledge. It includes plant names, their uses, the directions for cultivation and using plant parts, the rules and laws associated with behaviour towards and around plants, and the acknowledged connections between plants, humans and the more than human world. This canon of plant knowledge is sometimes used, sometimes not, sometimes lost, sometimes retrieved and added to—but always exists as a whole in testimony to an Indigenous group’s past, present and future ties to plant species and their habitats. Second, I discuss how this canon of plant knowledge reflects Kimmerer’s (2017) ‘**covenants of reciprocity**’ between humans and certain favoured plant species. These covenants or agreements regulate human/plant relationships in a manner that, at once, promotes and manages abundance of culturally important plants and plant products within ecosystems that are highly variable. The covenants or collaborations with plant species can range from actively managing plants (e.g., for the cultivation of edible “root” species), to simply being careful to leave a mature forest alone so that certain plant materials are available whenever required. Like any agreement, these covenants include give and take: the giving of gifts and acceptance of responsibilities in return. The canon of plant knowledge, and the covenants arising from the important human/plant relationships represented by it, ultimately were imprinted throughout Indigenous territories to form what Olwig (2016) calls the ‘**customary landscape** (an assemblage of land governed by the laws of an assembly). These customary landscapes often appear in BC only as remnants today, as for almost two centuries Indigenous lands have been overwhelmed by Settlers and state governance and laws.



Map from Suttles (1974). Adapted by Emily Thiessen and Pamela Spalding (2020)

Figure 2.1 The Straits Peoples and their Neighbours. Adapted from Wayne Suttles (1974)

In order to explore how Indigenous people's relationships with native plant species can be expressed in law, my dissertation is grounded in a case study, developed and carried out in collaboration with the T'Sou-ke Nation (one of the Straits Salish Nations, see *Figure 1.1*):

T'Sou-ke is a Coast Salish First Nation. In our traditional dialect of Northern Straits Coast Salish Sen'coten, T'Sou-ke means "Stickleback," a rare (and now endangered) species of fish found near our ancestral village site of the same name, at the mouth of, what is now known as, the Sooke River. (Planes, 2015 :1)

I contend that T'Sou-ke peoples' traditional relationships with native plant species helps define their past, present and future rights and responsibilities within the terrestrial landscapes of their territories. In this case study, I use landscape in the substantive sense advocated by Olwig (2018b), which reflects "an interest in the relationship between justice and landscape [lands] understood as the place of a (political) community" rather than an assortment of material things within a bounded space or a particular scenic vista (Olwig, 2018b:384). The practices associated with cultivating, harvesting, processing, storage, trading and management of plant species, provides compelling evidence of long-term Straits Salish land use, occupancy and tenure of this region. The canon of T'Sou-ke plant knowledge used in this dissertation reflects a remarkable body of knowledge held by past and present Straits Salish plant experts. Being afforded the opportunity to acquire a basic literacy of this knowledge system has been a great privilege for me, and served to deepen my love for this very unique place in the world and to better appreciate the human and plant communities within it. Using the T'Sou-ke case study as an example, I explain how this evidence of knowledge and use of plants helps to root contemporary First Nations' rights throughout their territories, which is essential to establishing the basis of

land and resource rights that have legal force to be claimed today. I will describe the goals, sources and methods of this case later in this chapter.

## **1.2 Studying Relationships Between Humans and Plants**

When ethnobotanists refer to human-plant relationships we refer to both humans' knowledge about plants, the ways we use them and care for them, and to our communicative exchanges with them. Increasingly, within the fields of ethnobotany and botany in general, there is an acknowledgement that this communication does not happen by human action and investment alone, but through responses and direction provided by plants (Kimmerer, 2013). In addition to providing us with the air that we breathe, and a plethora of essential foods, medicines and materials, living plants are, according to some researchers, able to communicate with humans in order to support mutually beneficial reciprocal exchanges (Atchison & Head, 2017; Pitt, 2017). For example, research on the nature of plant intelligence and the manner in which plants communicate with each other and with other lifeforms is being undertaken by botanists and forest ecologists (Gagliano, 2018; Mancuso & Viola, 2015; Simard, 2018). As I will discuss in the next chapter, humans can work with a living plant species or its habitat to encourage it to grow, produce fruit or otherwise develop or adjust itself to suit human requests. Even after a plant has been made lifeless through harvesting, many herbalists and artisans believe that plants retain a form of living power and must be handled with respect in order to produce safe medicines and products for human use (Gagliano, 2018; Turner & Hebda, 1990).

People and plants have evolved very differently. Terrestrial plants were present on earth for several hundred million years before humans or their ancestors existed. Human physiology, and that of humans' animal relatives – at least of vertebrates, is reflected in a central nervous system, a brain, vital organs, a skeleton and mobility. Plants, on the other hand, grow fixed in

place and they are therefore vulnerable to roaming herbivorous predators, which makes it all the more surprising that plants comprise over 95% of earth's biomass (Mancuso & Viola, 2015). How have plants been so successful without eyes, ears, legs or fins? The ability of plants to think, sense, function and feel is developed in a distributed and modular structure throughout their physiology and this allows them to live, communicate, rally defences and reproduce even when large parts of their anatomy are severed from the whole (Gagliano, Renton, Depczynski, & Mancuso, 2014). Thus, as we acknowledge the sentience and agency of plants, we must also not forget the dramatic differences between the ontology (the nature of being) between plants and humans to better appreciate the uniqueness of the knowledge systems that direct human relationships with plants throughout the world (Gagliano, 2018; Simard, 2018). When ethnobotanists study these 'relationships' they are not simply referring to the study of conceptual connections between humans and plants, but also of the deeper communication that determines how humans and plants feel, behave toward, and influence each other.

Ethnobotanical research complements plant intelligence research by documenting the robust, reciprocal relationships among people, plants and their habitats (E. N. Anderson, 1996; Atleo, 2011; Balick & Cox, 2020; Ford, 1994; Hunn, 2007; Kimmerer, 2000, 2013; Turner, 2008, 2014). For the purposes of this dissertation, I draw a broad distinction between Indigenous and non-Indigenous peoples' relationships with plants. Embedded within the putative 'Western'

ideology arising from Greco-Roman philosophy,<sup>3</sup> organized religions,<sup>4</sup> and the scientific tradition,<sup>5</sup> up until recently, plants have been viewed as without agency because their lack of mobility is thought to render them insentient. In this worldview, plants are alive but without intelligence, lacking feeling or a soul and, thus, have been rendered as akin to unthinking machines, not requiring the rights, dignity or respect afforded to humans and other animals (Gagliano, 2018; Kimmerer, 2017a; Mancuso & Viola, 2015). Following from this view of plants, is what Kimmerer (2017:369) describes as “...a strictly materialist, utilitarian view of the Earth” that privileges human needs over all other beings. This worldview, originating within Enlightenment philosophy, is increasingly understood to be a maladaptive and limited understanding of the nature of plants and of non-human species in general.<sup>6</sup>

Many Indigenous peoples throughout the world, however, while appreciating the fundamental and obvious differences between plants and animals, generally view plants not only as animated but also as constituting a primary part of people’s intricate webs of kin and non-kin relations and responsibilities (Kimmerer, 2013; Salmón, 2000; Turner, 2005). It is common for

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<sup>3</sup> For Aristotle, plants were closer to nonliving things without a soul, because they lacked the ability to move. While Aristotle did eventually ascribe them a low-level soul because they can reproduce, he still relegated them to an unthinking existence. While other philosophers, such as Democritus and Plato countered Aristotle’s limited understanding of plants, similar to his sexist opinions of women, Aristotle’s words have been immensely powerful and still strongly influence the way plants are perceived in Western culture and science (Mancuso & Viola 2015: 12-13).

<sup>4</sup> As Mancuso and Viola (2015:10) note: “All three of the Abrahamic religions have implicitly failed to recognize that plants are living beings, in effect grouping them with inanimate objects.” Also see Merchant (1980).

<sup>5</sup> Although Charles Darwin and Carl Linnaeus both studied and recognized plant sentience, their influential voices were not enough to alter the predominating conservative mindset on the subject of plant intelligence (Mancuso & Viola, 2015)

<sup>6</sup> As Kelly (2013:4) summarizes: “In Enlightenment thought, history was a record of progress, progress that was reflected in technology and material goods as well as social order and morality. This view provided Europeans with a way to understand human diversity. In a world thought to be created by a perfect God, diversity in humanity reflected differences in the degree of perfection. And just as God stood above the whole of humanity, so could cultures and ethnic groups be ranked in terms of their perfection. Progress, according to European thinkers, arose from increasingly rational thought that resulted in the control of nature. Allegedly unable to think rationally, members of ‘primitive’ society were controlled by nature.”

Indigenous peoples to refer to plants, in stories and ceremonies, as sentient, able to impart wisdom, and requiring respect and protection from humans (Geniusz, 2015). Key to this difference between worldviews of Indigenous and non-Indigenous peoples is an acknowledgement within Indigenous ontology that plants have agency, and that their relationships with people and other animals, and with other plants and fungi, reflect this.

### **1.3 Self location within this Research**

Considering the sentience of plants and how humans engage in relationships with plants and plant communities has profoundly influenced my approach to this research. I was taught to garden by both my mother, Isabel, and my grandmother, Winnifred, and, as an adult, I have maintained and established gardens in all of the homes where I have lived. I also appreciate and have been surrounded by the plants of the Salish Sea region for most of my life. Yet, even though I have engaged with many plant species and learned much from these liaisons, I did not consider the significance and structuring of these relationships until embarking on this dissertation project. Framing my research in the language of relationships helped me to better understand the variability of associations between humans and plants—from very coercive and toxic relations to ones that are nurturing, loving, and respectful. In reflecting on the causes and nuance of these differences, I examined political economic influences, ecological influences, cultural and spiritual influences and how these all bias our individual connections with plants, as well as larger systems of governance and law. On a personal level, I examined my own biases toward the world of plants, and how my own mixed identity and professional experience has influenced the direction and research questions of this project.

I approach this research as a woman who is a fifth-generation Settler to BC, and who has deep Métis roots in Red River, Manitoba. My own connection with my long distant Indigenous

heritage has always been an awkward one for me. My parents encouraged me from a very young age to be proud to be ‘part’ Indigenous. At the same time, as a Settler to BC, with a limited connection to the Métis community, I would not self-identify as Indigenous. Then again, I have never been comfortable with describing myself as non-Indigenous as, to me, this denies the lives and existence of my Cree, Anishnaabeg and Métis great grandparents, who met and married my Scottish and English great grandparents. The results of these long-ago, seemingly loving unions were large families, an exchange of cultural knowledge (including plant knowledge), a sense of identity and belonging to Canada, and many examples of individuals acting bravely and generously to speak up for the rights of each other. In particular, I have learned from and been inspired by my 2<sup>nd</sup> great grandfather, Joseph McKay, my great grandmother Liliias McKay Spalding, my great-aunt Beatrice Spalding and my grandfather Herbert Spalding for the leadership they exhibited in their lifetimes in reaching out to assist and better understand Indigenous peoples in BC. I also fully recognize that some of their actions and good intentions, as well as their inaction in other areas, contributed to the terrible legacy of colonialism that continues to undermine the lives of Indigenous peoples today.

My professional experience as a former treaty negotiator and consultation manager for the Province of BC left me with many unanswered questions about how Indigenous peoples can maintain and regenerate their relationships with the plants and landscapes in which they have been embedded since a time out of mind. My great, great grandfather, Joseph W. McKay, moved to BC as a boy of fifteen, and was recently described as “one of the most successful Métis men to rise through the ranks of the Hudson’s Bay Company in the late nineteenth century...he advocated on behalf of Indigenous Peoples,” while at the same time “he also participated in a system that did untold harm to First Nations, Métis, and Inuit people” (Fraser, 2021). Even

though my training in social anthropology and my professional career have primarily focussed on recognizing Indigenous rights and cultures in BC, I also acknowledge my participation in a system that continues to victimize Indigenous, Métis and Inuit peoples. This is a familiar paradox for those who work as agents of change for Indigenous rights within the Canadian legal and political systems. The transformative change required in order to realize real reconciliation between Indigenous and non-Indigenous societies requires individuals to work within public governments, the Courts, and academic institutions in order to effect institutional and systemic change with the least possible harm to Indigenous peoples.<sup>7</sup>

Institutional change for the purpose of reconciliation between Indigenous peoples and other Canadians, however, is glacially slow, cumbersome, contested and often messy. It takes a sustained commitment on the part of those within and outside of the state system to achieve meaningful reconciliation through ongoing discussion and debate to ensure that changes in state institutions or new relationships between governments within Canada are fair to Indigenous peoples and responsive to all Canadians. In short, I do not see how this change can be achieved without some of us — Indigenous, non-Indigenous and both — fully participating within systems of governance that presently extend the colonial agenda. From this paradox, then, this dissertation examines how my own ethnobotanical and ethnoecological research can help to decolonize the legal and political systems that prevent Indigenous peoples from regenerating their relationships with native plant species and the ecosystems within which they are situated.

#### **1.4 Constitutional Context**

Since the earliest contact between European settlers and Indigenous peoples in BC, there has been no common agreement on sovereignty, land ownership and associated resource use

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<sup>7</sup> In this dissertation, I refer to the federal, provincial, and local governments collectively as public governments.

(Lutz, 2009; Reynolds, 2018; Tennant, 2011). The *Constitution* is the supreme law in Canada, and *Section 35* of the *Canadian Constitution Act 1982* promises that: “The existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed.” Delivering on the specifics of this bundle of core legal rights, however, has challenged Indigenous peoples and their leaders, as well as federal and provincial politicians, the legal community, scholars, and public servants for forty years. In BC, the rights of Indigenous peoples to self-determination and, in particular, to lands, and to marine and terrestrial resources are still a long way from being fully acknowledged, notwithstanding that resistance to European dispossession of sovereignty, lands and resources has fuelled Indigenous political activism since contact in the early 19<sup>th</sup> century (Cardinal, 1969; Poelzer & Coates, 2015; Tennant, 2011; Wickwire, 2019). Clarification on what is often referred to as ‘the empty box of rights’ provided by *Section 35* has been made primarily through legal decisions, often initiated through direct political action, over the past four decades (Reynolds 2018:17). Nevertheless, the piecemeal understanding of what constitutes Aboriginal rights (particularly Aboriginal title), where these rights are located, and how they can be accommodated continues to frustrate all of the parties.

If the “reconciliation of Aboriginal and non-Aboriginal Canadians in a mutually respectful long-term relationship is the grand purpose of s. 35 of the *Constitution Act 1982*”, I am interested in how this reconciliation might support the relationship between Indigenous peoples’ and plant species, ecosystems and landscapes.<sup>8</sup> Despite the prominent use of plant species by Indigenous peoples throughout Canada, early European settlers and generations of scholars mostly assumed that fishing and hunting alone supported Indigenous economies within the region (Turner,

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<sup>8</sup> from *Little Salmon* at para 10

Spalding, & Deur, 2020). Many factors contributed to European settlers' profound failure to recognize Indigenous peoples' plant practices throughout the colonial period, the impact of which continues to undermine Indigenous Peoples' ability to maintain their plant rights and responsibilities throughout their territories (Carlson, 2010; C. Harris, 2002a; Lutz, 2009; Turner & Spalding, 2013; Turner et al., 2020; Viverios de Castro, 1998). A terrible consequence for Indigenous Peoples was that in the absence of European-defined evidence of plant cultivation (e.g., plant domestication and field agriculture), the colonial and later Canadian governments found the justification they sought for dispossessing First Nations of the majority of their lands and resources in BC—effectively disrupting Indigenous people's connections to many plants and ecosystems (Asch, 2014; C. Harris, 2004; Reynolds, 2018).<sup>9</sup>

The initial attempts at treaty making in BC ceased after the 1850s, and "[a]s a result, land in the province was sold to, or pre-empted by, settlers without extinguishing Aboriginal title, a practice that hampered the efforts of reserve commissioners from the 1870s on" (Foster & Grove, 2003). Additional consequences of European colonization for Indigenous plant management include: interruption of the transfer of plant and tenure knowledge to subsequent generations of Indigenous Peoples; the undermining of Indigenous Peoples' diets and health (Kuhnlein & Receveur, 1996; Turner, Gregory, Brooks, Failing, & Satterfield, 2008); and the lack of recognition of women's roles in landscape management and resource tenure (Bruchac, 2014; Norton, 1985; Turner, 2006b). Aboriginal rights related to plants and plant habitats are beginning to be recognized in Canadian Aboriginal law (J. Borrows & Rotman, 2012; Robbins &

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<sup>9</sup> In the strange logic of colonialism Spanish jurist Francisco de Vitoria "maintained that Indigenous peoples owned their lands, and then detailed the means by which Europeans could take land and assert authority" (Charters 2009:161-162). Noteworthy here is that from its inception, international law was structured within a European political legal framework with the final authority on universal legal concepts and rights resting firmly within European ideology.

Bendle, 2020; Rush, 2020), but how these rights can be expressed and accommodated within Indigenous and state government agreements continues to be poorly understood.

Plant traditions and practices presented as legal evidence in Aboriginal law hearings are specific to a particular time and place in history and it is unclear how these early plant relationships can be acknowledged, accommodated or exercised over 150 years later in a political, cultural and ecological landscape that has been radically transformed (Spalding, 2019; Turner & Spalding, 2018).<sup>10</sup> The process of translating past Indigenous plant relationships into modern rights necessitates navigation through the dark history of colonialism because it “is impossible to understand Aboriginal law without understanding the history of colonialism in Canada” (Reynolds 2018:29). If, as Ruru (2012:54) claims, “...the Western legal system has developed and applied notions of space and place that substantiate the continuing colonization of Indigenous peoples’ land and resources,” how do we now ensure that legal rights with regard to Indigenous Peoples’ plant use and habitat management are sensitively acknowledged in a manner that promotes ‘co-existence’ rather than ‘assimilation’ (Abbott, 2017; Natcher, Davis, & Hickey, 2005; Ostrom, 2009; Panagos, 2016; M. A. P. Smith, 2013; Stevenson, 2006; M. G. Stevenson, 2013)?

## **1.5 Ethnobotany & Ethnoecology Framework**

In this section, I introduce the ethnobotanical and ethnoecological frame for the research. As Minnis (2000:6) notes:

Systematic investigation of what we would now call ethnobotany has a long history in the Western tradition. Early interest in ethnobotany was built on Greek, Roman and Islamic foundations and intensified by colonialism and geographic exploration.... But the systematic study of the natural world, which has been so widely associated with the

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<sup>10</sup> I use Reynolds’ (2018: 3) definition of the distinction between Aboriginal law and Indigenous law: Aboriginal law deals with the legal situation of the Aboriginal peoples of Canada under the laws of Canada; ‘indigenous law’ refers to the law of a particular Aboriginal group, developed within and applying to that group.”

Western world, has equals elsewhere. . . . Curiosity about plants and their relationships with humans is not uniquely Western, nor is it sole a product of the modern era. But exponential growth of ethnobotanical research is a product of the modern world.

What is ethnobotany and how can it and ethnoecology be used to support the legal recognition of Aboriginal plant rights? Even with the exponential growth of ethnobotanical research for over a century, as described by Minnis above (Minnis & Elisens, 2001), accompanied by a tremendous academic documentation of various cultures' plant practices, the field of ethnobotany, as defined by Richard Ford (1994:xxii) 30 years ago, remains "best distinguished by its paradigmatic pluralism." The reason for this pluralism is that the field has always been purposively interdisciplinary, drawing upon theory, methods and expertise primarily from botany and anthropology (including the subfields of social anthropology, archaeology, and linguistics). Ethnobotany's strength has been to amplify the complex plant knowledge of marginalized cultural groups who, through contact with imperial and colonial forces, have been prevented from engaging in their traditional plant customs and practices. Ethnobotany builds from a botanical base of plant morphology and ecology to document the culturally important uses of plants and plant parts. Most ethnobotanists use ethnographic methods to undertake this research from an emic perspective resulting in a rich body of plant knowledge organized into internal cognitive categories drawn from insiders within the cultures under study. This cognitive research is "based on the assumption that the existence of a word to name a concept is the most reliable indication that the concept exists in that culture" (Berkes 2012:55).

More recently, ethnobotany has developed a broader analysis of the spiritual connections between humans and plants to explore the deeper meaning that these relationships encompass (Berkes, 2012; Kimmerer, 2013; Turner, 2008). The ethos of mutual respect and connection between humans and the more-than-human world is a common principle shared by Indigenous peoples throughout the globe, often expressed as a form of kin relationship known as

kincentricity (Salmón, 2000; Turner, 2005). Animism, the belief that the world is animated by and interconnected through a unifying cosmological force that permeates biotic and abiotic features, is an extension of the Indigenous philosophy of kincentricity and has been explored by many ethnobotanists working with Indigenous groups, particularly in recent decades (Kimmerer, 2017a). Scholarship about Indigenous beliefs in the interconnectedness of humans with non-humans provides a sophisticated understanding of the mutuality of the relationship between humans and plants that is strong and enduring—a relationship that represents much more than a one-sided, ingenious human appropriation of plants (c.f. Turner 2005, 2014). Many ethnobotanists have long argued that the pervasive Indigenous understanding that plants are “active agents able to sense change and respond with intention” should be adopted within ecosystem science to better understand the interplay between plants and humans within ecosystems.

#### 1.5.1 Ethnobotany’s Contribution to Women’s Roles in Plant Use

Since the middle of the 20<sup>th</sup> century, ethnobotanical research has contributed to a more accurate understanding of Indigenous women’s substantial roles in food production, thus supporting a larger theoretical re-evaluation in anthropology around gender roles and the social and economic organization of hunter-gatherers (Blukis Onat, 2002; Deur, 2000; Howard, 2003; Kelly, 2013; Norton, 1985). In the context of the wide cultural variation among hunter-gatherer groups throughout the world, this reflection in anthropology over the past several decades provides clearer insights into gender roles and behaviour *vis-à-vis* cultural institutions and ecological influences (Kelly, 2013). Indeed, most human groups who are described as *foragers* or *hunter/gatherers*, should also be regarded as plant cultivators and land managers, whose practices and customs with plant species and ecosystems within their home landscapes serve to

enhance the net primary productivity of photosynthesis, while maintaining high biodiversity, and, thereby, maintaining the availability and quality of culturally important plants (M. K. Anderson, 2005; Balée, 2013; Boivina et al., 2016; Deur, 2000; Kareiva, Watts, McDonald, & Boucher, 2007; O'Flaherty, 2000; B. Smith, 2010). In Canada and elsewhere, Indigenous women's substantial roles in food production and resource management, both pre- and post-contact with Europeans, were overlooked until recent decades, where previously women in these societies were perceived as being passive gatherers of nature's bounty (Norton 1985; Kelly 2013).

Without appreciating Indigenous women's central contributions to societal well-being, diet, material culture, and health through the harvesting and stewardship of native plants, it is more difficult to grasp how Indigenous people's landscapes reflect regular and sometimes exclusive use of defined areas. This oversight, coupled with a century and a half of draconian federal legislation served to undermine Indigenous women's rights, identity and enfranchisement within their own communities, has diminished the role that Indigenous plant cultivation and harvesting should play in both scholarship and legal rights' arguments (Gunn, 2019; Napoleon, 2009; Parlee & Berkes, 2006).<sup>11</sup> I believe that this narrow appreciation of Indigenous women's social, political and legal relationships with plants has discriminated against the identity and wisdom of Indigenous women more generally, and I hope that my research, in whatever small way, helps to redress this oversight.

That said, while throughout this dissertation I explore the past disregard of Indigenous women's relationships with plants, I am in no way suggesting that these historic gender roles should be replicated exactly in the present day. Clearly, Indigenous men maintained important

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<sup>11</sup> For a full discussion of this see, "Aboriginal Women" pp. 785-872, in Borrows and Rotman, 2012. Also see Napoleon (2009) and Turpel-Lafond (1997).

relationships with plants in the past, as they continue to in the present. More importantly, gender roles and identity are not static within any society, and certainly are fluid within Indigenous societies (Napoleon, 2009; Starblanket & Stark, 2018). In Chapters 2 & 3, I examine plant activities in a binary framework of gender roles to illustrate the historical economy of the Straits Salish and how Indigenous women's contributions to this economy were overlooked. To the best of my understanding, during the pre-contact and historic periods, gender divisions in Straits Salish culture were observed. The contemporary regeneration of these important human-plant relationships, however, will include women, men and non-binary individuals within communities and in ways that are meaningful and intelligible to them in the present day.

#### 1.5.2 Challenges in Representing and Sharing Ethnobotanical Knowledge.

Even though ethnobotanists have been praised for their integrative analytical approach, the mobilizing of traditional knowledge systems out of communities into a broader interpretive context has not been without controversy. In recent decades, the relationship between academic researchers and Indigenous knowledge holders has been “increasingly strained by differences in understanding and in expectation about the relevance of research” (Davidson-Hunt and O’Flaherty 2007:291). As Indigenous people seek to decolonize their knowledge systems and control how this knowledge is collected and used by both public governments and the Western academy, the understanding and application of local knowledge research has changed (Smith 1998; Simpson 2004). Certainly, ethnobotanists working with local knowledge actively avoid simply documenting and calibrating Indigenous plant knowledge for the purpose of appropriating it into the dominant knowledge system (e.g., scientific and ecological knowledge systems), yet, conducting scholarship that reflects a dialogue about “respective understanding of

diverse phenomena” is not a straightforward task (Atchison & Head, 2017; Davidson-Hunt & Michael O'Flaherty, 2007).

Traditional ecological knowledge is a term used to describe local knowledge that is found in Indigenous societies throughout the world. Berkes (2012:7) defines traditional ecological knowledge as “a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment.” A key difference between traditional ecological knowledge and scientific knowledge is that traditional knowledge is unapologetically embedded within belief systems. Much has been written about the pitfalls of documenting traditional knowledge, codifying it into the framework of scientific ecological knowledge and then using it out of context and community control for land use decision-making (Berkes, 2012; Cruikshank, 2007; McIlwraith & Cormier, 2016; Nadasdy, 2004; M. G. Stevenson, 2013). While plants are rooted in the biophysical world, they are connected to humans by associated historical, social and cultural values and to separate this knowledge from its original owners and re-cast it as science is criticized by post-colonial scholars as another expression of imperialism (L. R. Simpson, 2004). In the same vein, these scholars observe that the emphasis on the term 'traditional' distinguishes this knowledge from that of Western science by its focus on the past, whereas scientific knowledge is generally perceived to be 'modern', 'objective' 'universal' and 'progressive' (Starblanket & Stark, 2018).<sup>12</sup> M.G. Stevenson (2013:117) astutely observes that the problem lies with our assumption that traditional ecological knowledge held by Indigenous peoples is somehow separate from the rest of their non-traditional and non-ecological knowledge and, thus can be applied as a discrete

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<sup>12</sup> For an excellent discussion of this dilemma, see Berkes (2012:7-9).

epistemological system divorced from the “broader, articulated system of knowledge, meanings, values and understanding that most Aboriginal peoples possess.” Fundamentally, then, we must push past erroneous assumptions that traditional ecological knowledge can be abstracted from the knower in a normative format that supports mechanistic explanations of human-environment interactions (Nadasdy, 2005; M. L. Stevenson, 2013; Thornton, 2015).

It would also be a mistake, however, to suggest, that any application of traditional ecological knowledge outside of its community context is inappropriate. As Napoleon (2009:254) observes:

Edward Said wisely suggested that, while groups must preserve what is unique about themselves, they must also strive to preserve some sense of the broader human community. Said was concerned with theories of essentialism and exclusiveness, or with barriers that might ‘give rise to polarizations that absolve and forgive ignorance and demagoguery more than they enable knowledge (Napoleon, 2009:254).

State legal and administrative management systems of lands and resources are not formed in a vacuum but are governed by laws and policies often based on knowledge arising from academic research. Currently in BC, native plants and ecosystems are presumed to be managed by the public governments according to principles of ecological science, with little or no involvement from Indigenous knowledge holders. Although culturally specific knowledge systems cannot be cut and pasted into other knowledge systems, there are areas of compatibility between traditional and scientific knowledge systems, where some principles can be shared, while others mark departures in understanding (Cruikshank 2007). I agree with and use the understandings of Kimmerer (2013) that some Indigenous uses, practices and laws associated with plants can be accommodated and co-exist alongside other uses within the same landscape or ecosystem management regimes. The challenge with applying traditional ecological knowledge outside of its cultural and community context, however, is that the application of knowledge within new contexts influences the structure of these knowledge systems and this shifting requires that

definitions, values, and meanings are constantly re-evaluated through discourse between practitioners.

## **1.6 Significance of plant relationships in Ecosystems, Landscapes, and Common Law**

Ethnobotany is naturally reliant on naming plants and describing their uses, yet, its analysis extends beyond the descriptive to, for example, understanding how plants are classified and ordered linguistically and conceptually, or how the ecological processes or functional relationships associated with culturally important species are embedded within the cultural institutions of human groups. Key to this analysis has been the development of the “theoretical concept of the ecosystem” which is a focal term in this dissertation and one that I define below (Ford, 2001:2). The knowledge, practices and beliefs of traditional ecological knowledge are examined by ethnobotanists as a relationship between humans, plants, and the habitats or landscapes in which they are situated. It is this larger, more complex set of relationships that is better comprehended within the paradigm of ethnoecology. The ethnoecological framework within which ethnobotany now sits, reveals how these important human interactions with plants are carved into the ecosystems, other lifeforms and landscapes of a human group's home places. As Fowler (2000:130) states: "...ethnoecology has been responsible for taking ethnobotany...beyond the stage of cataloging uses and into many other facets of human-environment interrelationships,” and, of significance to this dissertation, is that a socio-ecological perspective of Indigenous plant management systems has important connections to legal rights and self-government interests.

In Western science, the term *ecosystem* is a fundamental organizing concept of ecology and resource management, used to describe the totality of vegetation, fungi, microorganisms, animals and the physical environment within a unit or portion of the landscape. The boundaries of the

ecosystem concept are not always clear and, similar to terms such as *culture*, ‘ecosystem’ is frequently defined differently (particularly with regard to scale) by different practitioners and is applied in a wide variety of contexts. In ecology, an ecosystem is a spatially bounded area defined by its physical characteristics, such as:

...a landscape segment relatively uniform in the composition, structure, and properties of both the biotic and abiotic environments, and in their interactions. Numerous organisms such as fungi, earthworms, bacteria, insects, birds and mammals are as much a part of a forest ecosystem as are trees, shrubs, herbs, and mosses. Within the ecosystem exists a complex and dynamic set of relationships among these organisms and between them and their physical environment (Meidinger & Pojar, 1991:11).

As mammals, humans are a part of the ‘complex and dynamic set of relationships’ of most, if not all, ecosystems on the planet, making this definition of ecosystem a particularly strong one. That said, the inclusion of anthropogenic indicators in ecosystem data collection and analysis is often done poorly, if at all. There is a pervasive bias in ecology studies that human involvement within an ecosystem transforms it from its original state of nature into something less than natural or ‘wild’. This bias is accompanied by an assumption that most rural areas (at least in North America) were untouched by humans until a century or so ago and were healthier because of it. Of course, such assumptions are antithetical to acknowledging the thousands of years of Indigenous people’s uses and stewardship of ecosystems and how human relationships with other species are imprinted on ecosystems and the larger landscape (Kimmerer, 2000). Understanding how ecological systems are integrated with human social systems underpins social-ecological systems theory (Berkes & Folke, 1998). In chapters 2 and 3 I look at T’Sou-ke plant use within the contextual framework of a social-ecological system.

A related concept to ecosystems is that of *landscapes*, which is frequently used as a planning concept or as a unit of analysis and is also subject to wide variations in definition. In

this dissertation, I am introducing a substantive definition of landscape as the site of a political community as explored by Kenneth Olwig.

Landscape is now on the agenda in a new way. The increasing interest in justice, power and the political landscape expresses a sea change occurring in the meaning of landscape itself, from landscape as scenery to landscape as polity and place.... It is in this socio-political context that it becomes necessary to consider the role of power, and the importance of justice, in the shaping of the landscape as an area of practice and performance with both cultural and environmental implications (Olwig and Mitchell 2009: preface).

The English term “landscape” is a widely acknowledged term in the broader European context and how it is defined at various periods in history, and by whom, provides important insight into how contemporary Indigenous rights to lands and resources in Canada can be understood. Assisted by linguistic and discourse analysis, Olwig (2016; 2018) examined the historical relationship between landscape and law in the context of northern Europe and Britain. Since the onset of the enclosure movement, and the rise of the centralized state in Europe during the sixteenth century, landscape has come to be defined as a scenic, ecological or heritage entity that forms a boundary around a collection of physical things or sites.<sup>13</sup> This idea of landscape relies on a Euclidean representation of fixed cartographic space that rationalizes the “topological and temporal complexity of the earth and its life” to a uniform and spatially enclosed property system linked to state sovereignty and the “ideology of individually owned property” (Olwig 2018: 443). One of the many impacts of the enclosure movement was, and continues to be, a reduction in biodiversity within the newly defined private spaces (Olwig 2016). With the enclosure of formerly common lands in Europe, all of the resources in a bounded area of land were brought within the control of one person or party, who held the rights to use the area for themselves, to

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<sup>13</sup> This movement was the general pattern of European elites accumulating land by dispossession through enclosure of commonly managed lands into privately owned lands by the ruling classes from the 14<sup>th</sup> to 19<sup>th</sup> century in Europe and Britain (Holzl, 2010).

exclude all others from entering those lands and also to set the agenda for deciding on how the property is used by others (Blomley, 2003, 2007; Bryan, 2000; Katz, 2008). In contemporary European property relations, the sovereign state holds exclusive power over a larger, defined territory within which these enclosed, privately-held lands are situated and through which the state maintains some regulatory power over lands and resources for the common good (Graham, 2010).

This paradigm of contemporary property relations that separates people from their environment, shrouds an older European understanding of landscape as an expression of a relationship between a collection of people, lands, and species through customs and practices that are regulated by their community polity (Graham, 2010). Here, landscape is defined as a form of commons used to optimize variable agricultural yields, graze animals, and gather subsistence foods, fuel and building materials in a manner supportive of existing ecosystems, habitats and topographies.<sup>14</sup> Contrary to the popular misconception of common lands as providing open access to all, these communal areas were closely regulated according to a complex mix of spatially overlapping customary use rights reflecting a diverse community that varied in wealth and rights to property between commoners, nobles and sometimes even monarchs (Olwig 2009). Prior to the enclosure of common lands throughout Europe, these customs and practices served as a body of unwritten laws binding a community together to manage how lands, species and places were shared, set aside for exclusive use, cultivated and tended (Blomley, 2007). Conflicts arising from customs, practices and infringements within the landscape were "...brought before a *thing, moot or court*, where the things involved could be discussed and the matter resolved and

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<sup>14</sup> Where commons are defined as commonly held goods or lands and represent "a place lying at the core of the legal and political landscape, with deep roots in our language and society" (Olwig 2009:13).

formalized as customary law” according to a representative assembly’s interpretation of the community’s principles and practices (Olwig, 2009:382).

Unlike European state laws arising from the Roman legal tradition, which was built upon supposed natural, unchanging and eternal laws (such as geometry), customary laws are in a continuing state of definition through precedence, reflection and ongoing discourse within communities about the efficacy and applicability of these laws (Olwig, 1996, 2009, 2016). In essence, Olwig (2009) describes custom as a bond to the past, but not trapped in the past, so that, through practice, customs are regenerated in a manner that is relevant to contemporary circumstances and communities. Finally, while customary law “may be subaltern in relation to an official body of statutory law,” when “custom is formalized as customary law through the working of a court system, as in Britain [and by extension, Canada], then custom becomes part of an official body of common law” (Olwig 2009:382-383).

In this older definition, then, landscape is land (and everything within that land) shaped by customary law and these laws are monitored and adjudicated by community assemblies, hence, in this context the term *landscape* is both a physical place and a polity: an assemblage of land governed by the laws of an assembly Olwig (2018a:382). I introduce these ancient and intricate connections between landscape, common lands, custom and the common law in Britain and Europe, to emphasize that even though in Canada private property is now valued as the highest form of legal tenure, customary law over lands held in common is foundational to British and, therefore, Canadian common law.<sup>15</sup> The dynamic between communities shaping landscape through customary law, and landscape shaping communities through adaptive local practices and

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<sup>15</sup> I must be noted, however, that it is not entirely clear that English law around the commons was received into Canadian law (Greer, 2018).

socio-political organization is significant to understanding the role of Indigenous laws around plants and how this might inform Aboriginal law in Canada.

In Canada, as Reynold's (2018:23) explains, the "...law of Aboriginal rights has been described as 'intersocietal law' resulting from both the common law brought by the British Settlers and the Indigenous laws of the Aboriginal peoples." I contend that this older law of landscapes, found at the root of British common law, allows ample space for Indigenous laws related to plants and plant management to flourish in present day Canada. Those laws arising from landscapes in historic Europe and Britain (Olwig, 2016:440) are embedded in communities and based in culture, or in other words, a community's cultural relationship with ecosystems (such as living plant communities, animals, waters, geological features, etc.), "based on the precedence of established practices remembered for 'time out of mind'."<sup>16</sup> These older practices were not divorced from the places and territories within which they were exercised because the complex relationships between people, culture, plants, animals and soils literally shaped the lands in a unique and proprietary manner. This substantive definition of landscapes is similar to Nancy Turner's (2014(b): 217) definition of *anthropogenic landscapes* of Indigenous peoples in BC, which she describes as:

Taken in total, all of the practices and approaches for sustaining and enhancing plant and animal populations, species, and habitats and special ecosystems over the entirety of people's territory combine to produce anthropogenic landscapes: mosaics of geographic and ecological regions and sites where people participate in diverse ecological processes while still maintaining the overall biodiversity and productivity of the region. Apart from the practical strategies people apply to their resource and harvesting areas as a means to utilize resources yet sustain them, their belief systems, seasonal rounds, social organization, and systems of ownership and proprietorship for particular sites and territories apply on a broad scale to the sum total of all resources,

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<sup>16</sup> "17<sup>th</sup>-century English Chief Justice, Sir Edward Coke, who wrote that: 'Custom lies upon the land'. There are 'two pillars' for custom, he noted: 'common usage' and 'time out of mind'. It is on the basis of these pillars that customs 'are defined as a law or right not written; which being established by long use and the consent of our ancestors, hath been and is daily practised'" (Olwig 2009:12).

which are interconnected in a seamless web of natural and cultural processes that extends across generations and millennia.

Currently, in Canada, the Crown's vision of the scope of legal Aboriginal rights represented by customary law and how those laws will be accommodated in state regulatory statutes and policies is much narrower than either Turner's definition of anthropogenic landscapes or Olwig's description of the original British and European laws of landscape from which the common law tradition appears to have emerged. This divergence is examined in this dissertation with the intention of promoting a more pluralistic approach to acknowledging Aboriginal rights to plants and plant habitats.

When conservation of our resources is not the priority, where profits are paramount, where private interests in the commodization of resources dictate resource policies, then resources will be depleted. *It is not because they are common property that they suffer tragedies, but on the contrary, because private property has superseded the commons* [my emphasis.] (Marchak, 1988:23).

The legacy of the enclosure movement continues to impact tenure and governance in Canada to the present day, where private property held in fee simple is highly valued, land enclosure for the purpose of economic development is rewarded and the centralized nation state is viewed by most as the appropriate authority for land and resource governance (Graham, 2010). Indeed, Olwig (2016) argues that the current establishment of parks and protected areas throughout the world represents another form of enclosure that is equally unjust and damaging to local and Indigenous peoples. Understanding the nature of ecosystems and the variability of their plant communities, as well as the dense web of rights and obligations associated with customary landscapes is integral to this project because the alienation of Indigenous lands through colonial enclosure seriously disrupted access to and management of ecosystems for plant use and the governance structures associated with customary landscapes.

## 1.7 Introducing the Case Study with the T'Sou-ke First Nation

### 1.7.1 The T'Sou-ke territories and language

Before describing the case study, I will clarify my use of terms and references regarding culture areas, language families and cultural groupings. The Northwest Coast of North America (NWC), on the northeastern edge of the Pacific Ocean, is a commonly cited culture area within anthropological writing because the Indigenous peoples who occupy this large coastal region share many similar cultural practices and socio-economic institutions (Suttles, 1990). As one moves along the gradient between the north and south coastal areas – from southern Alaska to Oregon – however, there are significant ecological and cultural distinctions, and some of these are reflected in plant use and relationships. Where I use “NWC”, I am referring to broader social practices or relationships with plants shared by Indigenous groups from the Alaskan panhandle and Haida Gwaii down to the Columbia River and beyond. I also refer to “Coast Salish” practices – cultural traits and patterns of plant use common to the Salishan peoples of the Coast. The Salish language family contains 23 languages, 16 of which are spoken by Salish groups on the Northwest Coast (Czaykowska-Higgins & Kinkade, 2011). The Coast Salish peoples occupy vast territories of the Salish Sea region and share many kinship ties and economic relationships amongst their communities.<sup>17</sup> Most frequently, I refer to the Straits Salish—including the T'Sou-ke (SO, EŁ), Sc'ianew, ləkʷəŋən (Songhees and Esquimalt), WSÁNEĆ (Saanich), Pauqachin [BOĶÉĆEN], Tsawout [STÁ,UTW], Tsartlip [WJOĽĽP], Tseycym [WSÍĶEM], and Malahat [MÁLEXEĽ]), Semiahmoo, Samish, Lummi, and Klallam—whose territories cover the lands and waters within and around Johnson, Haro and Georgia Straits (Suttles 1974) (see Figure 1.1).

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<sup>17</sup> Following Carlson's (2010) argument, I include the lower Fraser River as part of the Salish Sea. Clearly, the Fraser River is a freshwater extension of the marine highway that connects the Salish world and knits the Salish peoples together through culture, kinship, and, very significantly, trade.

These peoples share extensive and complex kinship relations (Kennedy, 1995) as well as cultural traditions associated with plants and ecosystems. While the T'Sou-ke have some unique plant relationships because of the bio-geoclimatic zone that they occupy and also their proximity and kin relationships to their Nuu-chah-nulth and Hul'qumi'num neighbours, the vast majority of the plants they use and the practices associated with these are shared by all of their Straits Salish kin. Mostly, I use Straits Salish interchangeably with T'Sou-ke, unless I am referring directly to the T'Sou-ke territory or to T'Sou-ke Nation individuals.



Figure 1.2 T'Sou-ke Nation territory as submitted to the BC Treaty Commission.

T'Sou-ke Nation's territory is located on the southwest coast of Vancouver Island. As Suttles (1974:6) observed, all of the Straits Salish groups (T'Sou-ke, Sc'ianew, Songhees, Esquimalt, WSÁNEĆ, Klallam, Semiahmoo, Lummi and Samish) should be considered as a single unit because "...they share a common language (which Suttles documented as

Lekwungen); and they shared a common pattern in their relation to their habitat, a greater adaptation to life on salt-water channels than that of their Salish neighbours, with an emphasis upon reef-netting for sockeye salmon in the channels” (Suttles, 1974:61; 2001). While I develop this case study with the T’Sou-ke, I draw upon research and understandings about their plant use and landscape management from a larger body of research conducted among the various Straits Salish groups that occupy the southwestern coast of British Columbia and the northwestern coastal areas of Washington State. In this unique homeland, several major rivers drain into the Salish Sea, which is divided into the Strait of Georgia, Juan de Fuca Strait, and Puget Sound. Living in the rain shadow of the Olympic Mountains, and in a sheltered and defensible coastline, the Straits Salish peoples flourished in this temperate and ecologically diverse region for at least one thousand years. Indeed, at the time of contact with Europeans the human population in this region appears to have been denser than in much of North America (Boyd, 2021; Suttles, 1998).

### 1.7.2 Challenges and Opportunities T’Sou-ke face as a community

The T’Sou-ke Nation are signatories to a Douglas treaty, one of the few treaties signed in British Columbia. Although it refers to lands, fish, and enclosed fields, it, and the other Douglas treaties, are generally viewed by history and legal scholars as peace and friendship treaties, not ones that involved land transfers (Cook, Vallance, Lutz, Brazier, & Foster, 2021; Vallance, 2016). In the words of Chief Gordon Planes:

I have been advised by my Elders that T’Sou-ke signatories to the Douglas Treaty believed the Treaty was about working together with the Crown to jointly manage the

resources within our Territory. We therefore take the stance that T'Sou-ke never ceded our Territory to the Crown through the Douglas Treaty (Planes, 2015).<sup>18</sup>

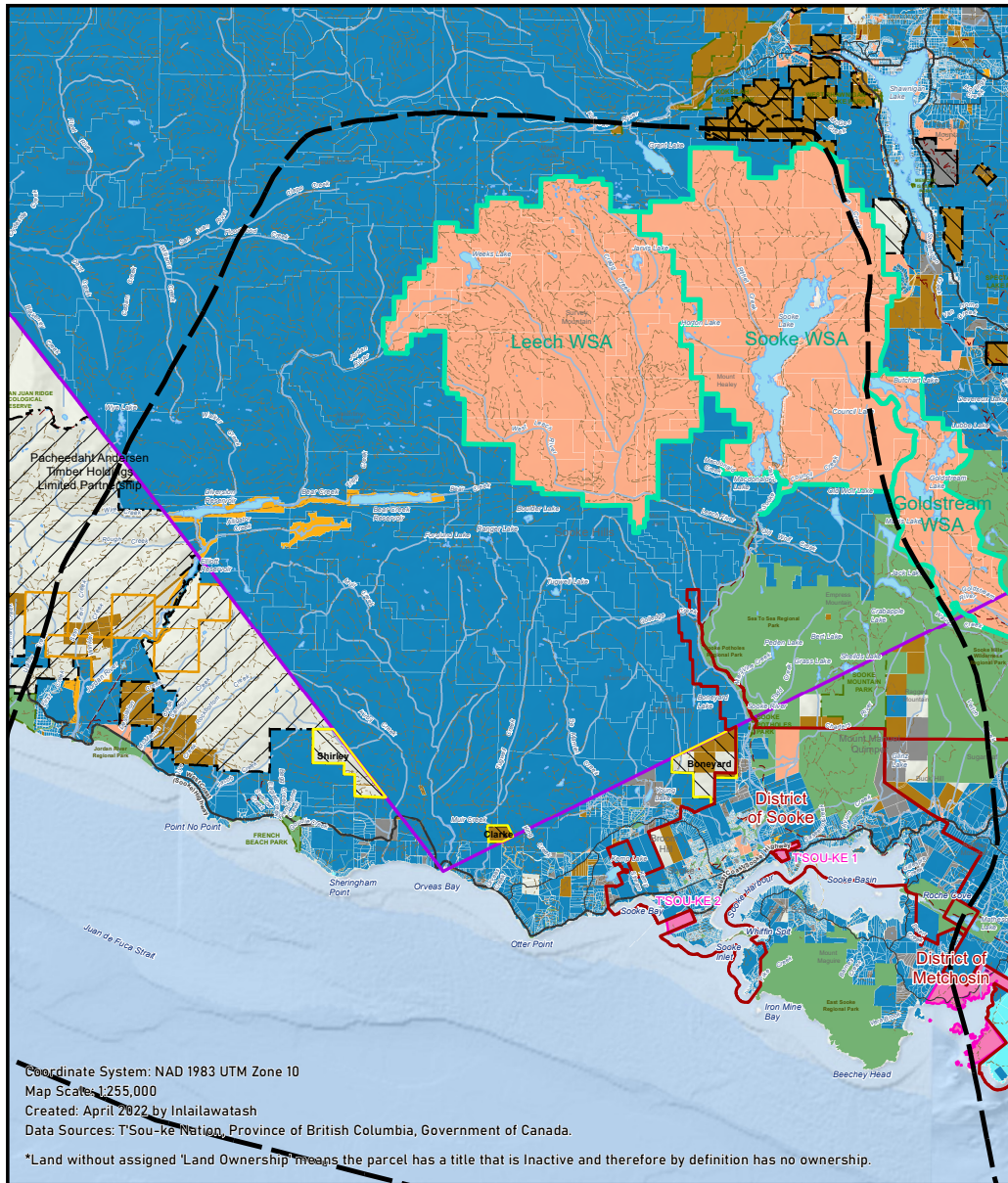
Even though the T'Sou-ke never ceded their territory to the Crown, Figure 1.2 shows the various tenures that have been permitted to federal, provincial, municipal, corporate or individual land-owners. Rather than receiving land through treaty, in 1877, the Joint Reserve Commission allocated two reserves to the T'Sou-ke, totaling 165 acres (in pink on the tenure map in Figure 1.3)—nowhere near large enough to accommodate the residential needs of their membership (then or now), much less to maintain their economic well-being, support traditional plant and other practices or facilitate the governance and maintenance of their homelands. The T'Sou-ke territory (totaling 129,710 ha and outlined in a black border in Fig 1.3) is almost completely held by private landowners in fee simple title (see blue areas in Fig 1.3).<sup>19</sup> Some of these private landowners are residential or local business people with long-term investment in the region and community, as ongoing personal and business relationships with the T'Sou-ke themselves. A large swath of T'Sou-ke lands (totaling 58,820 ha and bounded by the purple border) however, was alienated 133 years ago from the T'Sou-ke and several other nations on Vancouver Island for the purposes of facilitating the development of a coal mine and attendant railway. This massive block of land, known as the E&N (Esquimalt and Nanaimo Railway) land grant, which contains many culturally important plant species and places for T'Sou-ke, takes up 45% of their territory, including both land and water.<sup>20</sup> For a century and a

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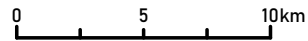
<sup>18</sup> This understanding that the few treaties signed by Sir James Douglas were peace and friendship treaties that did not contain land or resource transfers is also shared by several legal scholars (see Borrows and Rottman 2012: 402-404; Vallance, 2016).

<sup>19</sup> All area calculations regarding T'Sou-ke territory provided by Pano Skrivanos December 2021

<sup>20</sup> A total of 838,073 hectares (including old growth forests, mineral rights and coal deposits) of southern Vancouver Island was granted to the E&N Railway Co.



## T'SOU-KE NATION Land Ownership



T'Sou-ke Traditional Territory	Forest Tenure Managed License	Greater Victoria Water Supply Area (CRD)	Federal
T'Sou-ke Woodlots	Tree Farm License	Municipal Boundary	Mixed Ownership
Reserve	Provincial Park	<b>Ownership</b>	
E&N Railway Grant	Park	Crown Agency	Private
Forest Tenure Timber License	Park Water Extension	Crown Provincial	Unknown*

Figure 1.3 Land Ownership in T'Sou-ke Nation Territory--2022

half, the E&N lands have passed from one large corporation to another and are currently tenured as a private managed wood lot by the Province of BC, owned by Mosaic Forest Management Corporation.

In this research, I consider the whole system of culturally important plants used by T'Sou-ke prior to the influence of European trade and colonization because as I will show, all of the plant species, whether used every day or only sometimes, were important to the domestic, ritual and trade economies of the T'Sou-ke. To prioritize some species over others within T'Sou-ke's plant use system ignores the broader impact to T'Sou-ke that development has had on their way of life that was supported by plants and ecosystems. Throughout T'Sou-ke and other Straits Salish territories, the culturally important plant species that were managed intensively prior to contact are no longer abundant in many parts of their former range. Without the ongoing intervention and management by humans, the extensive, dense and productive patches of root vegetable species and berries present along the Sooke River in the early 19<sup>th</sup> century are often no longer visible. The former customary landscapes have been impacted by European settlement and agriculture, cattle grazing, housing developments, introduction of new predators and/or invasive plant species, filling in and draining of wetlands, industrial logging and prohibition of landscape burning. In the Sooke Basin, in particular, much of the lands that were formally used by T'Sou-ke ancestors are now owned by individuals or corporate entities as fee simple tenure.

In the last twenty years, many of the remaining areas in T'Sou-ke territory that are not private residential or corporately owned have been designated as parks or protected areas by the province and regional governments. As concluded by Turner (2005:201-206), often the response by Indigenous communities to changing ecology—when entire ecosystems are

eradicated or undermined, and the native plants within them are lost, is an associated loss of cultural knowledge about plants. Clearly the T'Sou-ke are challenged to be able to harvest and steward plants of cultural importance, or even to revitalize the extensive knowledge system around their traditional use and habitat management in a form that suits their contemporary cultural or socio-economic objectives. The Capital Regional District is a delegated local government on southern Vancouver Island and the CRD is the second largest land owner in T'Sou-ke territory. The CRD holds very restrictive tenures across the Sooke and Leech River watersheds because these areas provide drinking water to communities throughout southern Vancouver Island. The impact of the collection of tenures depicted in Figure 1.3—corporate, residential, parkland, or protected area—severely restrict T'Sou-ke individuals from exercising their rights to use and steward native plants as they have done for centuries.

### 1.7.3 What is important about T'Sou-ke's situation for this research

While T'Sou-ke's specific legal circumstances may be perceived as a relatively urban exception to the rural norm of many First Nations in BC, it is precisely their exceptionality that makes their situation such a powerful case study. By examining the exceptions to the normative approach to Aboriginal rights (including title), hopefully we can expand our understanding about how these rights are expressed, protected and applied in the present day. For example, Reynolds (2019:103) observes that the Tsilhqot'in Nation had several advantages in bringing forward their successful claim for Aboriginal title in their traditional territory that other First Nations may not enjoy, such as a well-preserved oral tradition which was corroborated by strong written records, no private lands in the claim area, no overlapping claims and “the area was remote and undeveloped.”<sup>21</sup> Unlike the Tsilhqot'in,

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<sup>21</sup> Also, see Borrows (2015a).

the T'Sou-ke (and also Scianaw, Songhees, Esquimalt and all of the WSÁNEĆ nations) were inundated early on with European settlement, actively isolated through forced enclosure from their home places and species, and now live on tiny reserves that are surrounded by private and urban lands. For T'Sou-ke, the realities of the colonial past make continuing or regenerating cultural plant practices or landscape management extremely challenging.

According to the policies set in the early 1990s by the federal and provincial governments in their treaty cost-sharing agreement, these factors mean that T'Sou-ke peoples, as part of their land and cash offer from the public governments, are offered more cash than land, and that the land/cash offer, which is based upon a per capita formula, will allow them to buy private land as it becomes available. While there is a certain amount of accounting logic for the public governments within this policy, it does very little to address issues at the heart of T'Sou-ke's land claims, which is justice for the dispossession of their sovereignty over lands and resources, including plants.

#### 1.7.4 Research Partnership with T'Sou-ke Nation

Early on in my doctoral program, my advisor was contacted by Chief Gordon Planes, asking if she had a graduate student who was interested in working with the T'Sou-ke First Nation on regenerating traditional plant use. Since that time this research has been guided by key leaders within the T'Sou-ke community. I developed the case study for my broader dissertation project through discussions with Chief and Council from T'Sou-ke Nation, staff and contractors with the T'Sou-ke Band office, and other individuals from the T'Sou-ke community. The guidance and direction that these conversations have had on the structure and content of this research are invaluable although, of course, any errors in fact or judgement are mine alone.

My understanding of T'Sou-ke plant use and relationships with plants, past and present, was hugely enriched by the land-based learning I undertook with several T'Sou-ke Nation individuals (Chief Gordon Planes, Christine George, Larry Underwood, Elizabeth Hermson, Thor Gauti, Michelle Thut and Allan Planes) who generously hiked with me throughout their territory. Prior to the pandemic, these hikes, undertaken over the course of 4 years, allowed me to identify the culturally important plant species within this study and to encounter many of the landmarks and cultural sites within T'Sou-ke Nation's vast territory. I heard individuals' remembrances of their own interactions with their territories and with plants, and their perspectives are invaluable to this study. In particular, Chief Gordon Planes' depth of knowledge of T'Sou-ke territory, and of past use, and current tenures and future aspirations of the T'Sou-ke Nation, provided me with insights that documents and texts about the T'Sou-ke peoples could never impart. Prior to the pandemic, I was able to attend several T'Sou-ke Culture Nights where I met community members and was able to introduce my research in a relaxed environment with great food. Early on, as I was establishing my methods and project goals, I met with T'Sou-ke cultural leader, Ardyth Cooper, whose insights and guidance for this project were indispensable. Finally, I was able to acquire a much fuller understanding of cedar bark harvesting from the TSAWOUT master cedar artisan SELILIYE (Belinda Claxton) who showed me how cedar is stripped on one hike in Sooke and with TSAWOUT elder, Helen Jack, guided me through my first bark strip during our next hike, on my family property on South Pender Island. **Huy ch q'ua** to all of you.

## 1.8 T'Sou-ke Ethnobotanical Data: Sources and Limitations

To understand the significance and scope of T'Sou-ke plant traditions, I rely upon a rich collection of academic and archival texts.<sup>22</sup> The Coast Salish peoples have fascinated explorers, historians, ethnographers, linguists, archaeologists and ethnobotanists for over two centuries, and observations of their lifeways, beliefs and material culture are frequent. While not always an internally coherent body of scholarship, the extensive writings by many citizens and scholars help me to situate the contemporary T'Sou-ke peoples within a contextual framework of plant relationships and ecosystem management that would have existed prior to intensive settlement of the region by non-Indigenous peoples. That said, developing a representative overview of traditional T'Sou-ke plant use, knowledge and management was not a straightforward task, since most observations and writings about Coast Salish and Straits Salish peoples focus on fishing, hunting, ceremonial aspects, and potlatch practices. As Thoms (1989:299) observed: “The patterned neglect of the role of plant foods in cultural history, or more specifically in the development of community sedentism along the Northwest Coast, results in a distorted picture of regional land use systems.” By the time ethnographers began working with Salish communities in the early 20<sup>th</sup> century, some cultural traditions had been seriously undermined due to Salish peoples’ alienation from their lands and resources with incoming European settlement (Carlson, 2010; C. Harris, 1994, 2002a, 2004; Lutz, 2009).

Thus, while there are many indirect references to plants and their uses in ethnohistorical and ethnographic texts, understanding of the overall cultural significance of plants is lacking until the ethnobotanical work of Erna Gunther (1945), Wayne Suttles (1974), Marguerite

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<sup>22</sup> Both amateur and professional botanists kept detailed plant journals and deposited hundreds of specimens in herbaria back in their home countries (Justice, 2000; Turner, Deur, & Lepofsky, 2013a; Wulf, 2008).

Babcock (1967), Nancy Turner (Turner 1969; Turner and Bell 1971, 1974), and Mark Fleisher (1980) in the late twentieth century (Bonady, 2012; Gunther, 1927, 1973; Jolley, 2000; Norton, 1979a, 1979b; Suttles, 1974; Suttles & Lane, 1990; Turner & Hebda, 1990, 2012; Turner, Thomas, Carlson, & Ogilvie, 1983). Turner's (2014) research specifically examines plant uses, as well as the myriad ways these uses are embedded within Indigenous histories and cultures throughout British Columbia and, specifically in this case, in Straits Salish territories. I rely on Turner's publications, her ethnobotanical plant name database for British Columbia (Turner 2014) which is stored for public access in the University of Victoria D-Space, as well as her personal knowledge which she has generously and frequently shared with me. Also, for learning about plant use, relationships with plants, and toponyms amongst the T'Sou-ke and other Straits Salish and Coast Salish peoples, I used ethnographic information from Wayne Suttles' (1974, 1987a, 1990, 1998, 2001, 2005) extensive research. Finally, I examined historical records (e.g., published diaries and letters), historical paintings, early maps, archaeological records, local histories, the Te'mexw traditional use study transcripts and maps, and Sooke museum elder interviews, alongside the ethnographic records and analysis (Barnett, 1938, 1955a; Collins, 1974; Elmendorf, 1971, 1993; Hill-Tout, 1978; Jenness, 2016; Johnson, 1990; Suttles, 1974, 1990; Suttles & Lane, 1990; Te'mexw Treaty Association, 2015).

### 1.8.1 T'Sou-ke Ethnobotanical Summary Table

In Appendix A, I present a T'Sou-ke ethnobotany table—the base of their canon of plant knowledge—using T'Sou-ke and other Straits Salish plant use information from the sources cited above. In this table, I have organized culturally important plants into the following categories: Marine Plants; Lichens, Mosses, Ferns and Fern Allies, Trees—Cone Bearing; Trees—Broad-leaved; Shrubs and Woody Vines; and Herbaceous Flowering Plants. I list known culturally

important native plants that contributed to the T'Sou-ke traditional food system (including for food, technology, formal feasting and medicines), at the time of contact with Europeans.<sup>23</sup> In developing the table, I reviewed all the species mentioned in the literature sources to ensure that the plants actually live within the Biogeoclimatic Zones of T'Sou-ke territory (namely, Coastal Douglas-fir, Coastal Western Hemlock, Mountain Hemlock and Alpine zones). All plants listed in these sources were further cross-referenced to see if they were named in the T'Sou-ke, SENĆOŦEN, or Lekwungen dialects of Straits Salish. I also cross-checked plants associated with the Coastal Western Hemlock zone for their Ditidaht and Klallam names, because of the past and present kin ties with these groups (Turner & Kuhnlein, 1983).

### 1.8.2 Mapping Plant Use

Thom (2009) concludes that the current methods of recognizing Indigenous territories and traditional governance overlook the signposts of continued or future use by not being able to capture the complex web of traditional group, kin and regional trading relationships, not to mention storied landscapes or spiritual history. Mapping, such as that presented in Figure 1.3, is a very popular tool within BC, used in both treaty-making and land-use planning to illustrate legal and political relationships. Decisions are made by senior civil servants and politicians based on maps and their supporting data. Yet, mapping exercises can serve to cloak rather than reveal Indigenous relationships with plants, especially if these are presented only as discrete sites, areas or points on a map, such as is the case with most archaeological and traditional use mapping (see Appendix B). For example, The T'Sou-ke traditional use study maps are useful

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<sup>23</sup> The exact date of contact with Europeans varies widely for the Straits Salish. The first contact in the T'Sou-ke region – with explorers Manuel Quimper and James Cook – was in the 1790s. European settlement, however, did not occur until decades later, from the 1840s onward. Further complicating the exact date of contact are the introductions of European material goods through the extensive Indigenous trade networks throughout North America. These extend the date of contact back to at least a hundred years earlier.

for establishing patterns of use by T'Sou-ke within their territory throughout the late 19<sup>th</sup> to the end of the 20<sup>th</sup> century.<sup>24</sup> Those interviewed were born in the early mid-20<sup>th</sup> century so they had knowledge and memories from their parents stretching back into the 19<sup>th</sup> century, as well as their own memories of when imposed land tenure and enforcement began to limit their access to key plant resources within the 20<sup>th</sup> century, such as referred to by Agnes George (1977, #25)

“In the old days you could get all the bark you wanted...All the bark you wanted...because you're not supposed to go peeling now...no more...they watch you.”

The mapping produced from these interviews with T'Sou-ke specialists identify important sites and corridors for many uses by T'Sou-ke of their territory, including some plant uses. The level of interviewing conducted, however, was not fine grained enough regarding plant use to explicitly identify the uses of many plants known to be significant to T'Sou-ke in the past. This is consistent with traditional use study methodology which is designed to provide a general picture of traditional cultural uses as remembered by community members within a given time period (Spalding, 1998).

Yet, if we cannot see the relationships between plants and practices on the landscape (including people's past connections to living plant species and ecosystems) and their transcendence within the interests and relevance of contemporary Indigenous peoples, then we will not be able to protect these relationships as rights. To better understand T'Sou-ke relationships with unique plant communities and their ecosystems, I used available terrestrial ecosystem mapping from which to predict where culturally important plants species reside today.

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<sup>24</sup> The mapping produced in Appendix B came from two traditional use studies conducted by Te'mexw Treaty Association (Te'Mexw Treaty Association, 2019) and the Firelight Group (Olson & Steager, 2015), as well as the interviewing conducted by the Sooke Regional Museum project (T'Sou-ke-Elders, 1977). This was integrated for this project into the map in Appendix B by Adrienne Kroeze and Pano Skrivanos in April 2021.

In Chapter 2 I explain the relevance and the application of this mapping to understanding ecosystems variability and plant abundance.

I found that relying only on lists of plants and their uses from written sources does not relay enough about the relationships among people, plants and ecosystems, or the socio-ecological systems contained in these relationships. With guidance and analysis from key T'Sou-ke community members, and with the assistance of illustrator, Emily Thiessen, I developed a graphic map indicating where, over time, plants would have been harvested and used in T'Sou-ke territory, and also to show the various ecological habitats within which these plants occur (see Figure 3.1). Initially I asked Ms. Thiessen to develop a pen-and-ink drawing of T'Sou-ke traditional territory, showing the main lakes, rivers and creeks, mountains and shorelines. I had her emphasize the perspective around Sooke Basin where the most intensive activity for T'Sou-ke peoples has always been – at their winter village sites and along the lower reaches of Sooke River. From this base map I penciled in place names, drew habitat zones and started writing out plant names and plant activity sites as documented in the literature cited above. In some cases, I inferred plant sites based on habitat, or in areas where, on hikes with T'Sou-ke community members, I had located a particular type of plant. I used the T'Sou-ke Traditional Use Studies; and the Sooke Museum Elder interviews to identify other plant-related activity areas (Olson & Steager, 2015; T'Sou-ke-Elders, 1977; Te'mexw Treaty Association, 2015). Ms. Thiessen then took all of my pencilled notations and drew icons for each on a digitized map. As the early drafts were being developed, I showed them to key T'Sou-ke community members and they made suggestions and adjustments. We went back and forth with several drafts between January 2019 and February 2022. Although right up until the writing of this research, I had arranged with the generous help of T'Sou-ke Councillor Rose Dumont to vet this map through a T'Sou-ke elders'

group, the 2.5-year global pandemic coinciding with this aspect of my research prohibited this type of community interaction, particularly with the elders group. The current form of this map is presented here as Figure 3.1 and is used with permission and approval from the T'Sou-ke Band Council. It is my hope that a future iteration of this map will be completed with the help of the T'Sou-ke community in a post-pandemic setting.

Conferring with the illustrator about the icons, representation of different habitats, landscape features to be represented, and the iconography for the place names was a very enriching process. Transferring sites, places, habitats and activities that are mentioned in various texts onto the general sketch map of the T'Sou-ke homeland helped me acquire a deeper understanding of pre-colonial T'Sou-ke relationships with plants, plant habitats and landscape features throughout T'Sou-ke territory. It allowed me to weave together the disjointed and isolated references to plants and their uses from a wide variety of sources and from different time periods into a cohesive, graphic T'Sou-ke plant use landscape. Nonetheless, this portrayal still remains an impression for many of T'Sou-ke plant relationships that exist outside of time. It illustrates the customary landscape that I discuss more fully in Chapter 3 and allows for the expression of plant knowledge and uses not only for those species well known at the present, but also for species whose cultural connections were disrupted very early on in the colonial era, but that are nonetheless important to the contemporary expression of T'Sou-ke laws related to plants.

## **1.9 Structure of Thesis**

This dissertation first examines the relationship between Indigenous Peoples' practices with culturally-significant plant species and customary landscapes. I suggest how plant use can be seen to represent a legal expression of Aboriginal rights, and how ethnobotanical and ethnoecological research supports the understanding of this relationship. In the context of resurgence scholarship around Salish legal orders, I propose how

ethnobotanical research and ethnoecological research might support the important role of Indigenous laws within and outside of the Canadian law. I identify some of the key opportunities and limitations of applying the framework of legal Aboriginal rights onto traditional plant knowledge and practices, and the strengths and weaknesses of using ethnobotanical and ethnoecological research for this purpose. My hope is that the results of my work with the T'Sou-ke Nation will be applicable to First Nations throughout BC, establishing a viable method for articulating Indigenous plant interests in a variety of legal and political contexts. Throughout this dissertation I argue that Indigenous-plant relationships are under-valued and overlooked in both legal and political systems within Canada, and that this oversight, particularly as it relates to shared governance, must be remedied.

In Chapter 2, I present the T'Sou-ke ethnobotany to illustrate the knowledge system of human-plant relationships for T'Sou-ke Nation and other Straits Salish peoples. I examine the breadth and depth of knowledge of plant and ecosystem ecology required by T'Sou-ke plant practitioners in order to develop and maintain the complex plant use and stewardship of the 100 identified native plant species of traditional importance to T'Sou-ke. With the aid of ecosystem mapping, I reveal how the ecosystem variability of T'Sou-ke's territory required that they were not simply "coping with abundance," but managing abundance for a remarkably stable livelihood. I contend that Indigenous people's legal rights to access, use and manage plants and their habitats cannot be discussed or understood without first identifying and understanding the nature of human relationships with plants and their habitats. For the T'Sou-ke, this includes the distinctiveness, complexity and ability of these relationships to absorb change within the physical and social landscapes in which they have been embedded for centuries (Johnson, 1990).

In Chapter 3, I examine how, over millennia, T'Sou-ke's relationships with plants were integral in forming a landscape similar to those described by Olwig (1996) that is carved into ecosystems, social structure, economy, and belief systems of T'Sou-ke and other Straits Salish groups. I describe and analyse the socio-political and physical infrastructure required to support the intensive and extensive plant use and management discussed in Chapter 2. My goal in Chapters 2 and 3 is to establish that, at the time of contact, T'Sou-ke governed itself on a territorial basis, including laws which managed land and plant use by its own members as well as providing important direction to neighbours and strangers. Many important aspects of this land management system can be seen in the covenants of reciprocity between humans and plants.

In Chapter 3, I particularly foreground Salish women's pre-colonial roles in plant tending and management, and describe how, at the time of the T'Sou-ke and other Straits Salish peoples' first contact with Europeans, plants figured into the local and regional economy and shaped political organization, decision-making, and property ownership. Addressing this topic required that I overlay an ethnographic framework onto the information I had collated about plant use and Straits Salish peoples' interactions with ecosystems and plant habitats. I rely on the lens provided by Suttles (1974, 1987a, 1990), and Norton's (1984: 1994) analyses of the importance of the Straits Salish and larger NWC economies and trading networks needed to ensure food stability (Norton, 1985, 1994). In examining the impact of kinship rules in managing root gardens and other property, I use Deur's (2000), Collin's (1974), Elmendorf's (1993) Kennedy's (1995; 2001), and Suttles and Angelbeck's (2009) analyses to examine how Salish traditional political organization allowed at once for household autonomy and for coalitions amongst multiple levels of social organization. I draw upon Donald's (1997) research into NWC slavery to better understand the central role of slave labour within the economies of the Coast Salish and other

NWC groups and to understand how, in the past, slavery was important in the production of plant products. Finally, remembering that T'Sou-ke relationships with plants are not based upon economic and ecological factors alone, but have always been deeply embedded within the metaphysical world of the Straits Salish, I apply the understandings provided by Amoss (1978), Jenness(2016), and Carlson (2010), to recognize the spiritual aspects of these relationships.

In Chapter 4, I examine how the existing Aboriginal and treaty rights flowing from Section 35 of the *Canadian Constitution* can be recognized and affirmed with the help of ethnobotanical information and an ethnoecological framework of plant use, cultivation and management presented as presented in chapters 2 and 3. I propose how Indigenous plant practices and customs might meet the normative evidentiary tests for Aboriginal rights in Canadian common law.<sup>25</sup> I explore the connection between culturally-important plant species and Indigenous Peoples, the cultivation of terrestrial landscapes and legal evidence of Indigenous land and resource tenure in British Columbia. I indicate current challenges faced by T'Sou-ke Nation in exercising plant-associated rights throughout their territory and outline how the current test for proving Aboriginal rights is problematic.

In Chapter 5, I consider the importance of the emerging academic field of Indigenous law to support and protect Indigenous plant relationships within the multi-juridical context of Canadian Aboriginal law. I review published frameworks for Salish legal orders (Clifford, 2011; Morales, 2014) and suggest how these can inform a stronger presence for T'Sou-ke legal orders with respect to culturally important plants and management of the anthropogenic landscapes within which they reside. If we embrace pluralism in the context of incorporating Indigenous

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<sup>25</sup> *R v. Vanderpeet* [1996] 2 SCR 507

legal orders for native plant management into Aboriginal law, then where should Indigenous peoples be able to exercise their rights to apply their laws and policies regarding culturally important species: within their own communities on reserve and treaty lands only; or throughout their territories? Furthermore, while the path to equality is achieved through different methods and procedures for protecting Indigenous plant values and ongoing use than those of other Canadians, it is essential that these alternate paths be agreed to as being equal. Finally, I highlight potential concerns around equality when differing, and sometimes competing, plant and ecosystem values are considered within the same legal context.

Throughout this research I try to celebrate and bring forward T'Sou-ke Nation's canon of plant knowledge and reveal how it has helped shape their identity, rights and responsibilities within their territories and that their cultivated landscapes – within forests, prairies, riparian areas, bogs and fens, tidal marshes, and intertidal areas – arising from the tending, harvesting, processing, storage, and trading of plants and plant products, provide evidence of long-term land use, occupancy and tenure (Beckwith, 2004; Trant et al., 2016; Turner, 1998a, 2006a; Turner, Deur, et al., 2013a; Turner & Peacock, 2005).<sup>26</sup>

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<sup>26</sup> Indigenous peoples also have important relationships with animal species and abiotic entities throughout the more than human world. There are also very important relationships between animals, fish and plant species that impact human's relationships with plants. That said, in the interests of scope, in this dissertation I focus on plants and their human partners and refer to terrestrial animal and fish species only in passing.

## Chapter 2

### A Canon of Plant Knowledge: T'Sou-ke Relationships with Plants and their Habitats



### Highlights

How did Indigenous peoples work in collaboration with culturally important plant species and variable ecosystems and what can the ethnobotanical knowledge about these relationships tell us about their laws and governance around plant use within the physical space of their territories?

- The canon of T'Sou-ke plant knowledge
- Mutuality of relationships between people and plants
- Variability of plant abundance over seasons and ecosystems
- Intensive and extensive uses of plants
- Stewardship of ecosystems
- Women's extensive roles in plant management

## 2.1 The Canon of T'Sou-ke Plant Knowledge

It was the ladies who would dictate to you how much you needed. That went for ducks, for deer, everything was preserved with winter in mind. There were no jars. Everything was done with winter in mind. The ladies would say “well that is enough we have enough for the village”. Then they would go on to something else. There was a time for crabs, a time for root picking, for just about anything you had to do—even for canoe building. Everything had a time and place. (Frank Planes 2-21-97: 7-8)

Throughout the Pacific Northwest Coast region of North America (NWC), Indigenous peoples' relationships with plants were often characterized by explorers, colonists and early anthropologists as the opportunistic gathering of the fruits and other products that were passively and conveniently produced by plants in their natural settings (Boas, 1896; Brown, 1864; Drucker, 1951; Grant, 1849; Underhill, 1945). Native plants and Indigenous harvesting and processing practices were deemed inferior to European agricultural and silvicultural plants and associated practices of farming and forestry (Armitage, 2012; Brown, 1868; Grant, 1849; Osterhammel, 2005). While knowledge of Indigenous peoples' specific uses of plants and plant parts is foundational to ethnobotany, it is humans' work with plant partners and their ecosystems that I emphasize in this and the following chapter. I first examine the relationships between the T'Sou-ke and other Straits Salish peoples and the native plant species on which they traditionally depended. Along with fishing, shellfish harvesting and hunting, the Indigenous peoples of the southern Straits in the Salish Sea have cultivated, managed, and/or guarded plants and plant habitats in their homelands over many centuries. Frequently in ethnobotany, Indigenous peoples' relationships with plants are analysed in terms of a single species or genus such as camas, or by groups of plant resources used similarly, such as berries or food plants. (Babcock, 1967; Beckwith, 2004; Darby, 2005; Garibaldi, 2003; Lantz, Swerhun, & Turner, 2004; Lloyd, 2011; Norton, 1981; Stewart, 2009; Turner & Kuhnlein, 1983). In this research, however, I include all

of the plant species that I have been able to locate that were known to be culturally important to T'Sou-ke peoples throughout time.

As with other Indigenous nations, T'Sou-ke's legal interests in plants, algae and fungi encompass the full spectrum of knowledge relating to native species, tying each community member to all culturally significant plant species, past or present, within their territory (Appendix A presents a summary table of these species, their uses, and their usual habitats). As introduced in Chapter 1, I treat the full spectrum of plant knowledge stored in oral and written forms as a canon of T'Sou-ke plant knowledge (recall, where canon is "a sanctioned or accepted group or body of related works"). Their canon of plant knowledge expresses in many forms the various intricacies of T'Sou-ke's relationship to these species and the plant world generally. Over time this plant knowledge has been articulated in the canon through practices, teachings, social institutions, technology, songs, stories, art, rules, beliefs and protocols to support these human/plant relationships. Originally this canon of knowledge was documented and shared through oral texts but, since the late 18<sup>th</sup> century Straits Salish plant knowledge has also been chronicled and catalogued in written texts, both by T'Sou-ke Nation members and by settlers, anthropologists, and other from outside the community. The full canon of T'Sou-ke plant knowledge represents thousands of deliberate decisions made by Indigenous knowledge holders to formally declare or communicate the understandings and agreements about plant use to their kin and interested outsiders. To my mind, once this knowledge formally enters the canon, it cannot be withdrawn or diminished, even if time lapses during which the knowledge is not actively used. The knowledge simply exists, firmly in the ownership of T'Sou-ke and other Straits Salish peoples, and is ready to be used, stored, relearned and adapted by them, as needed.

In referring to this canon of plant knowledge, I use the term ‘traditional’ when referring to plant-related practices that are unique or distinctive to Straits Salish peoples. While I in no way wish to present the T’Sou-ke or any other Indigenous peoples’ identity in a generalized and timeless present, I need to introduce some form of distinctive picture of Straits Salish plant use as an explanatory device through which to resolve the questions that I pose in this dissertation. The research, maps and tables I use in the next two chapters to describe T’Sou-ke plant traditions are offered as a clarifying illustration of a host of complex human/plant relationships, many of which have waxed and waned over time, particularly since the arrival of Europeans. As Kennedy (2000:111) observes, “anthropologists who, in their efforts to explain the intricacies of complex social institutions, fall back upon models whose explanatory powers may disguise the ways in which particular societies are defined and experienced by the people themselves.” I want to stress, then, that this representation of traditional plant use and relationships that attempts to capture the canon of plant knowledge from long ago up to the present day is merely an illustration of T’Sou-ke individuals’ actual experiences of the same.

At the time of contact with European newcomers, certain species of plants had great significance to the T’Sou-ke people, even though they may not be as well known today. Contemporary T’Sou-ke individuals participate in radically different food and economic systems than those of their ancestors. Many traditionally known plant foods and other products are not presently used to the same extent as formerly, and some have been largely forgotten (due to urbanization or industrial activities, as well as enforced acculturation through the Indian Residential School System, the influence of the churches and the wage economy) (Chippis-Sawyer, 2007; Johnson, 1990; Kuhnlein & Receveur, 1996; Turner & Spalding, 2018). While this situation may provide a challenge in discussing how foods and

other plants known and used historically are significant in a contemporary context, it is important to recognize what the full knowledge system with Europeans of T'Sou-ke plant relationships—their canon of plant knowledge—was at the time of contact as a point of departure.

Mostly, I try to present the T'Sou-ke canon of plant use, knowledge and management at its fullest expression—a time prior to any contact with European explorers, including through disease. I do this in order to lay the groundwork for a discussion on how this canon can be applied to T'Sou-ke's contemporary legal rights, traditional plant use and habitat management in subsequent chapters. My aim in this chapter, and the one following, is to situate the role of plants in a past customary landscape as a way of positioning the research in relation to ecologies, lands, social organization and economies of T'Sou-ke peoples, both past and present. In presenting plant use and management in this way, I hope that I avoid becoming trapped in a presentation that at once overgeneralizes and reduces T'Sou-ke relationships with plants to unchanging practices, or relegates these practices to a time long ago. Here, I take direction from Leanne Simpson (2017:2) who, in a related approach, says:

I began to start my own talks with a narrative of what our land used to look like as a quick glimpse, albeit a generalized one, of what was lost—not as a mourning of loss but as a way of living in an *Nishnaabeg* present that collapses both the past and the future and as a way of positioning myself in relation to my Ancestors and my relations.

In this vein, then, I examine traditional T'Sou-ke relationships with plants from several angles. First, I summarize my methods for finding and reviewing the ethnobotanical data for this chapter. Second, I provide an ecological context for the plant communities described in this research. I discuss the role that the unique terrestrial ecosystems play in structuring the relationships between people and plants in T'Sou-ke territories. Third, I look at the knowledge of the harvesting, uses, roles and habitats of various species and their parts. T'Sou-ke plant

harvesters long-term success stems from their deep knowledge of where to find certain species and how and when these plants or plant parts are successfully collected. Fourth, I consider how human actions extend particular habitats for propagation of favoured species and plant communities. By collaborating with some plant species over others, the T'Sou-ke were able to increase the biomass of the species with whom they partnered. A primary way that T'Sou-ke collaborated with some culturally favoured species was by managing forest succession. Succession is the predictable, orderly progression of plant communities that dominate an ecosystem, usually after a disturbance. The classic succession process, following clearing of a mature forest or other mature ecosystem by fire or other disturbance, moves from bare soil, to grassy fields with herbaceous species, to shrubby brush, to deciduous woodlands and finally to coniferous forests (Meidinger, Trowbridge, Macadam, & Tolkamp, 1998). In pre-contact times, the T'Sou-ke managed ecological succession through various strategies, to create or nurture particular habitats, ideal for particular species, especially in locations close to winter and summer villages (Lepofsky & Turner, 1985).

## **2.2 Sources of Ethnobotanical Information for T'Sou-ke**

As with other Indigenous cultures throughout the NWC, fishing (the T'Sou-ke used all five species of Pacific salmon, as well as halibut, herring, several other fin fish species, and a variety of shellfish) and hunting (seal, elk, deer, geese and ducks) have always been central to the traditional T'Sou-ke food system and way of life. Coast Salish peoples' proficiency as fishers and fish habitat managers has been analyzed extensively and, as witnessed in recent ethnographic research with T'Sou-ke (Olson & Steager, 2015; Te'mexw Treaty Association,

2015), fishing and hunting are still integral to their food system and cultural identity today.<sup>27</sup>

Certainly, understanding and acknowledgement of Indigenous fishing and hunting rights are also well represented in the Common law. In this dissertation, however, I do not discuss fishing and hunting practices and their importance to T'Sou-ke, except as they may pertain to plant use. As I reviewed various texts and research for information about T'Sou-ke traditional use of plant resources, I focused on plants and considered hunting and fishing only in terms of their relationship with plant use and knowledge.

In studying T'Sou-ke relationships with plants, I have not re-inventoried the culturally important native plants and their uses by Straits Salish peoples; this work has been rigorously undertaken by others (Babcock, 1967; Beckwith, 2004; Chipps-Sawyer, 2007; E. Claxton & Elliott, 1994; Fleisher, 1980; Gunther, 1927, 1973; Johnson, 1990; Jolley, 2000; Norton, 1979a, 1979b; Norton, Hunn, Martinsen, & Keely, 1984; Suttles, 1974, 2005; Thoms, 1989; Turner & Bell, 1971; Turner & Hebda, 1990, 2012). While a systematic ethnobotanical study has not been directly undertaken with T'Sou-ke peoples, I was nonetheless able to draw upon considerable additional research conducted with T'Sou-ke to piece together information relating to T'Sou-ke plant relationships. Early on in my research with T'Sou-ke, it was suggested by my community advisors that a value of my project for the T'Sou-ke Nation would be in collating and analysing all existing information about T'Sou-ke plant use, including information reported in the Te'mexw Treaty Association Traditional Use Study (TUS)<sup>28</sup>; the Firelight Traditional Use Study

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<sup>27</sup> In the TUS research done with T'Sou-ke by the Te'mexw Treaty Association, as well as more recently by the Firelight Group, fishing is discussed extensively. In particular Frank and Jack Planes also discuss how T'Sou-ke used bull kelp, yew trees, hemlock boughs and eel grass to support their fishing navigation and technology.

<sup>28</sup> The Te'mexw Treaty Association represents five First Nations: Scia'new [Beecher Bay], Malahat, Snaw-naw-AS [Nanoose], Songhees, and T'Sou-ke [Sooke] in treaty negotiations with the Federal Government and the Province of BC. In the early 1990s, The TTA received funding from the Province of BC to conduct a TUS with their elders and other cultural specialists. The T'Sou-ke Nation, with the special efforts of Councillor Rose Dumont provided me with access to all of the recordings and transcripts associated with T'Sou-ke members in

(Olson & Steager, 2015); and through the T'Sou-ke Elder interviews conducted by T'Sou-ke and other interviewers<sup>29</sup> for the Sooke Museum in the 1970s<sup>30</sup> (Sooke Museum, 1999; T'Sou-ke-Elders, 1977). Our collective aim has been to bring together and review this canon of plant knowledge for the T'Sou-ke community, particularly youth, as a source to support future projects that help them reconnect and revitalize their relationships with culturally important plants and their habitats. My emphasis on archival work to build a T'Sou-ke ethnobotany, was reinforced by the COVID 19 pandemic, which severely limited my direct access to community members over the last two and a half years (from February 2020 to May 2022) of my dissertation research. I have integrated the available ethnohistorical, ethnographic, ethnobotanical, and archaeological information, together with contemporary T'Sou-ke community member interviews, and with ecological research and analysis for this region, to present a traditional plant use overview. This includes: 1) an ethnobotanical summary table (see Appendix A); 2) an ethnobotanical landscape map (customary plant use map) (See figure 3.1); 3) overview mapping of the influence of ecosystem variability on the contemporary presence of cultural important plant species (in this chapter); and 4) a narrative presentation of T'Sou-ke people's uses of and relationships with plants and their communities and ecosystems (here and in the next chapter).

## **2.3 Ecological Context**

This discussion is broadly set in the homelands of the T'Sou-ke and their neighbours situated within Georgia, Juan de Fuca and Haro Straits, collectively known in English as Straits Salish (Figure 1.1). These are the waters of and lands surrounding the Salish Sea of North

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May 2020. Particularly with the lack of access to community members resulting from the COVID 19 pandemic, these recordings provided a pivotal source for this dissertation.

<sup>29</sup> I am grateful for the museum research and many well researched newspaper articles about the T'Sou-ke Nation by Elida Peers, former Director of the Sooke Museum.

<sup>30</sup> I was provided access to these recordings for my research in 2019 by T'Sou-ke Administrator, Michelle Thut, on approval from the T'Sou-ke Band Council.

America, on southern Vancouver Island and the northwestern coastal areas of Puget Sound, Washington State. Straits Salish territories are located largely within the Coastal Douglas Fir Biogeoclimatic Zone (BGC), the smallest and most biologically diverse BGC zone in British Columbia (Demarchi, 2011).<sup>31</sup> Particularly as one moves towards the northwestern T'Sou-ke part of territory, this biogeoclimatic zone slowly transitions to Coastal Western Hemlock, Mountain Hemlock and Alpine BGC zones. Noted for long, dry summers and mild wet winters, this region contains several unique plant species within ecosystems ranging from dense forests, to rocky outcrops to moist valley bottoms and savannah-like prairies (Meidinger & Pojar, 1991; Meidinger et al., 1998). Mostly living in the rain shadow of the Olympic and Vancouver Island mountain ranges, and on a sheltered and defensible coastline, the Straits Salish peoples have flourished in this temperate, biologically diverse region for millennia. Several major rivers drain into the Salish Sea and the surrounding lands and waterways support a protected and rich base of marine and terrestrial resources that Straits Peoples have tended and incorporated into their economies for thousands of years. Particularly prior to European settlement in the region, the ocean acted as a maritime highway, “facilitating economic strategies and opportunities which took advantage of both maritime and terrestrial resources” (Norton et al. 1984:220).

The Coastal Western Hemlock (CWH) and Coastal Douglas-fir (CDF) Bio-geoclimactic zones reflect a wide variation in climate (between moist and dry), geography (between rocky outcrops, prairies, and riparian habitats) and ecosystems in general (with a wide variety of plants

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<sup>31</sup> BC provincial land-use planning uses a variety of conventional ecological valuations, observations and descriptions of terrestrial ecosystems to characterize and map provincial ecosystems and the species that live within them. In its environmental and extractive resource planning and restoration activities, the Province of BC uses a resource inventory and mapping standard called *Terrestrial Ecosystem Mapping (TEM) Data* or TEM from the *Field Manual for Describing Terrestrial Ecosystems* (Meidinger & Pojar, 1991; Meidinger et al., 1998). This ecosystem identification and mapping tool allows practitioners to identify what plant communities are currently represented in an ecosystem. Furthermore, through relatively simple soil analysis, it can also identify what plant communities would naturally be present in highly industrialized sites at each stage of succession.

and animals). The interplay between climate, geography and biota within these broader ecological zones determines the location and abundance of plant species that form plant communities. Small variations in the environment can affect the presence or absence of a species within a plant community. Terrestrial ecosystems involve a complex and dynamic set of relationships among biotic and abiotic features, but two components are generally used to identify an ecosystem: plants and soils. According to Pojar et al (1991:11):

The model of ecosystem function is that of Major (1951): vegetation and soils are products of climate, organisms, topography, parent material, and time. Plants and soil, considered simultaneously, integrate all ecosystem components and reflect ecosystem functioning. They are easy to observe and assess, and are considered to be the most convenient and suitable ecosystem features upon which to base the classification.

Groups or ‘communities’ of plants prefer (or can grow within) specific soil conditions, climate, and geology and these very consistent plant preferences and tolerances are used to classify different ecosystems. So, for example, in T’Sou-ke territory some prominent ecosystems are called: *Western hemlock-Amabilis fir-Pipecleaner moss*; or *Douglas fir-Western hemlock-Salal*; or *Western redcedar-Sitka spruce-skunk cabbage*, based on their dominant plant communities (see Appendix B). Dominant species in ecosystems live alongside many other associated trees, shrubs, herbs and mosses that are consistently present in these ecosystems. The dependable ecosystem preferences of various species for particular soil, sun, moisture, mineral and nutrient conditions are instructive for those studying cultural plant use, because, as the mapping that I present in this chapter reveals,

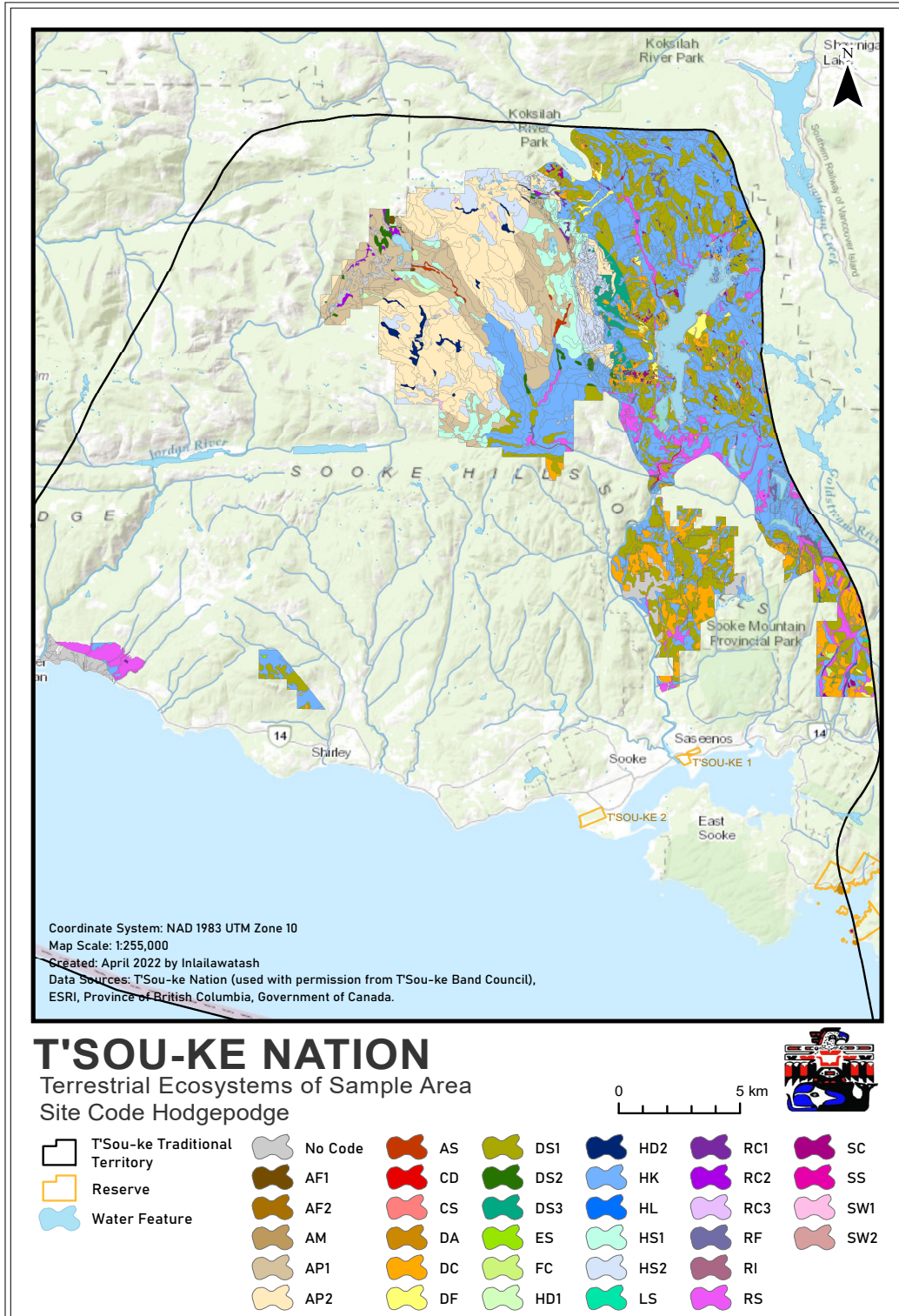


Figure 2.1 Mapping of terrestrial ecosystems within the T'Sou-ke sample area. N.B. For the sample area, expanded ecosystem names and the plant communities associated with these are found in Appendix B.

these biotic and abiotic factors indicate the presence or absence of culturally important plant species.

On my own journey to understanding T'Sou-ke plant use and relationships, I was initially surprised at the variability of ecosystems throughout T'Sou-ke territory. I expected to see variation of plant presence at the level of the biogeoclimatic zone (e.g., coastal forest, montane forest and rainshadow forest) or even at the general habitat level (e.g., riparian areas, prairies, beaches, etc.), but not much ecosystem variation within these habitats. With the assistance of the T'Sou-ke Nation (and Geographic Information Systems mapping specialist, Pano Skrivanos), and the Capital Regional District, however, I was able to access and analyse a large sample of Provincial government terrestrial ecosystem data within the northeast portion of T'Sou-ke territory. This analysis is invaluable to this project, because the ecosystem mapping visually impressed upon me that, while T'Sou-ke's culturally important plants are present in all ecosystems, none of the culturally important species are found throughout T'Sou-ke territory. Many species are found in only a few ecosystems, or in ecosystems that are located far apart from each other. Often plant species are only marginally associated with an ecosystem, or might be present but in less than ideal growing conditions so that the quality of stems or fruits in that environment will be poor. Reviewing the uniqueness of the plant-ecosystem relationship deepened my understanding that the irregularity of plant presence and abundance is a major factor in the complexity of T'Sou-ke's plant use knowledge and management.

Figure 2.1 presents a map of the sample area within T'Sou-ke territory where I analysed variability of ecosystems by colour. Within the sample area, there are 35 different

ecosystems (see Appendix B) represented within 4510 sites (mapped as separate polygons).<sup>32</sup> Each distinct ecosystem is associated with different plant communities. Present in those 35 ecosystems are at least 75 culturally important plant species (see Appendix C).<sup>33</sup> I am confident that if similar ecosystem mapping data were available for ecosystems in the southeast and central part of T'Sou-ke territory the range of plant communities would follow a similarly diverse pattern. However, while still expecting variability of ecosystems, as one moves towards the lowland floodplain and the ocean, with its intertidal areas, estuarine marshes and beaches, the plant communities will differ from those of the sample area (with habitats that contain the remaining 35 culturally important species not present in the analysed sample area). The ecosystem variability mapping, then, underscores that plants that are culturally important to T'Sou-ke for food, fiber, building materials or medicines or other purposes are not universal, but occur in unique habitats and locales within the overall territory; they are not simply ubiquitous everywhere in a forest out behind T'Sou-ke main village sites. This has obvious implications for current political agreements that offer T'Sou'ke (or other nations) access to only small portions of their traditional territories. With the mapping assistance of Pano Skrivanos, I was able to locate some of these culturally important plant/ecosystem relationships as part of my research.<sup>34</sup> The maps we developed predict the

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<sup>32</sup> Technically, 10 of these are variants of ecosystems, however, because the variants include additional culturally important species from each other, I refer to them as separate ecosystems here.

<sup>33</sup> I say, at least, because this mapping is a prediction of the presence of species and, for several reasons, additional plant species may be present in the sample area. For example, I have identified Pacific crabapple in the Smokehouse lakes area, which do not show up in this mapping exercise.

<sup>34</sup> While the TEM data was useful in predicting the presence of several culturally important plant species, I did not find it a responsive analytical instrument for more nuanced analysis. For example, culturally important plants such as crabapple, cattail, and tule in wetlands and riparian areas, are not regularly inventoried in TEM inventories (particular those done by commercial foresters). My own botanical notes from hikes, as well as other researchers' recorded plant sightings over the years, identified several species that were not recorded in the TEM data. For the purposes of the mapping and analysis included in this chapter, however, this data was certainly adequate.

presence of select, culturally important species within the sample area and help to emphasize that these important human-plant relationships are grounded in real places and the species that inhabit these places. Understanding the variability of plant presence and abundance also helps explain why the T'Sou-ke traditionally employed several different strategies to develop long-term harvesting and tending relationships with various plant species.

## **2.4 “Coping with Abundance”: Overview of Straits Salish peoples’ relationships with plants<sup>35</sup>**

There was no way you could starve in this country. We had so much of everything. It would be impossible to starve. There was so much food, it was everywhere. This is why I say our people were so rich. (Dave Elliott, 1990:48)

As reflected in the words of WSÁNEĆ Elder, Dave Elliott Sr., the homelands of the Straits Salish are distinguished by their abundance of food sources, found within a diversity of plant species that is unparalleled throughout much of Canada. In the pre-colonial world of the Straits Salish, the variable temporal and geographic availability of plant species for food, technology, spiritual and medicinal resources throughout their territories was a fundamental influence on their unique and resilient social structures, kinship patterns and resource management (Kennedy, 2007; Suttles, 1962; Suttles & Lane, 1990). Food production and protection from the cool wet climate would have been the most pressing and consistent motivator for activities required to maintain the Coast Salish local and regional economies. Stories from deep history throughout the NWC frequently warn of famines and suggest that particular plants were valued as predictable food and fuel sources, where “...vegetables like bracken and spiny wood fern and fruits like rosehips, highbush cranberries, and kinnikinnick berries that remain on the bushes over winter—

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<sup>35</sup>(Suttles, 1987a)

often meant the difference between life and death (Turner, 2014:380; Turner & Davis, 1993). Turner (pers. Comm. 2022) and Kennedy (2000) elaborate, however, that, for the Coast Salish, while the fear of food shortages was omnipresent, the archaeological data suggests that famine was infrequent.<sup>36</sup> It appears that actual famine was widely prevented by constant and focussed industry by T'Sou-ke peoples in order to harness the food capability of this biodiverse region. Indeed, in remembering activities like cedarbark stripping, seaweed processing, basket grass (slough sedge) harvesting, fish processing and firewood collecting (often with a baby strapped to a swaddling board as it was “easy to pack them around...”), Agnes George (1977) laughed and concluded each story about her life with “lots of work” or “keep working”. To mitigate resource shortages, men, women and children from nuclear and extended families worked in flexible teams, fulfilling highly specialized tasks to access a wide variety of species, found in many different ecosystems at different times of the year.

Fish (e.g., salmon, herring, halibut, and sablefish) and shellfish were available everywhere and Indigenous peoples' technology and ideology around fishing practices are quite uniform throughout the NWC region (Stewart, 1977). Suttles (1962; 1974) observed that as ecosystems varied along a north-to-south gradient, distinctiveness in cultural practices and social organization also starts to become evident from the north to the south coast. Later, Norton (1985:245) concluded that while plant resources “provided the foundation for both the material and subsistence economies of coastal cultures... the major difference in resource availability, north to south, lies in plants and land mammals, the two resources most neglected by ethnographers.”

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<sup>36</sup> Of course, finding reliable and conclusive evidence of famine in the archaeological record is difficult to discern (Richard Hebda, personal communication, September 20, 2021)

There are many compelling arguments and observations to reinforce the significance of variable access to resources across Salish territories as an explanation for T'Sou-ke patterns of plant use and management (Suttles, 1962, 1987a). From an ethnoecological perspective, traditional food systems rely on energy sources and raw materials that occur locally: sunlight, human labour, raw materials for food, medicine and technology; and propagation boosters (e.g., fertilizer from local species or nutrients from fire). This model of socio-ecological systems concludes that, over time, humans within a particular food system establish a balance between energy and resource inputs and consumption of ecological surpluses (Berkes & Folke, 1998; Turner, Davidson-Hunt, & O'Flaherty, 2003). Once this balance is achieved through socio-cultural behaviour (e.g., rules of access, protocols for redistribution, etc.) then long-term, human populations can occupy the same territory for generations, relying on a predictable and sustained supply of food and materials from which to survive and thrive (Suttles, 1962).

While in this chapter, I emphasize the ecological aspects of T'Sou-ke plant use and management, I recognize the important influence of the metaphysical world on plant use. As Carlson cautions below, any utilitarian model of human adaptation to unique plant ecosystems must not overlook other equally important spiritual influences on Coast Salish peoples' relationships with plants.

A fundamental tension in the writings about Coast Salish people revolves around the utility of either a material and/or ecological basis for social and political affiliation or a spiritual basis....Consequently, while foregrounding spirituality risks reinforcing the image of Indigenous people as exclusively 'otherworldly,' allowing metaphysics to lie as an icing on the cake of geography, biology, and economics risks creating scholarship that is not only disconnected from Aboriginal realities but within which Aboriginal people cannot recognize themselves (Carlson 2010:58).

I will consider the important relationships between plants and the Coast Salish spiritual world in the next chapter. In the following sections I explore how in the example of plants, the concept of

‘coping with abundance’, should really be read as managing the variable abundance of plants in order to stave off harmful shortages.

## **2.5 Plants for Each Season: Harvesters’ Knowledge of Plants and When and Where to Harvest Them**

Some foods could be gathered at any time, others only in season; some could be gathered at many places and others at only a few, but for the Straits peoples nearly everything had its proper time and place. Times and places were more or less fixed by the whole year’s schedule of activities, and women’s gathering and men’s fishing and hunting were made to meet each other’s requirements (Suttles 1974:113).

### 2.5.1 The Seasonal Round

The Straits Salish have used marine plants, fungi, lichens, mosses, and ferns and fern allies, coniferous and deciduous trees, shrubs, and herbaceous flowering plants both intensively and extensively (see Appendix A). Some plants were harvested opportunistically, as they were encountered, while others were harvested regularly at particular locales in large quantities, processed and stored for winter use, and traded and served in feasts (Turner & Bell, 1971). The seasonal timing of when and the specific places where particular plants could be harvested contributed heavily to the pattern of the T’Sou-ke seasonal round (as referred to by Suttles, above). Harvesting traditionally followed a thirteen-moon cycle, as explained and illustrated by Earl Claxton and John Elliott (1993) as well as by Frank Planes (1998). Some culturally important species are more widespread (e.g., salmonberry [*Rubus spectabilis*], red-osier dogwood [*Cornus sericea*] and Douglas-fir [*Pseudotsuga menziesii*]), occurring in a range of ecosystems (although with particular requirements for light and moisture and varying in quality and productivity), whereas other species (e.g., soapberry [*Shepherdia canadensis*] and highbush cranberry [*Viburnum edule*]) are very restricted in their distribution within T’Sou-ke territory. Less-abundant plant products such as dried soapberries would have been obtained more

frequently by T'Sou-ke and other Straits Salish peoples through trade with neighbouring groups from Vancouver Island and the mainland.

Photo withheld  
for reasons of  
copyright.

*Cooper Johnson  
(Grandma Sue)  
demonstrates basket-  
making using cattail,  
cedar and slough sedge.*

The T'Sou-ke and their Salish relatives navigated their territories throughout the year between permanent winter villages in and around Sooke Harbour and summer villages or camps in different locales within the overall territory (e.g., Iron Mine Bay, Roche Cove, Otter Point, Point no Point, Muir Creek, Jordan River; see figure 3.1). Cultivation and foraging sites that would have been “visited routinely for hundreds and, in some cases, thousands of years, are indicated by the presence of archaeological features such as root roasting pit depressions” and shell middens (Turner 2003:144). A Straits Salish harvester would have been

responsible for collecting and processing a huge quantity of plants for a wide array of food, medicine, and technology uses, as well as for trade. Not only would she need to know which plant parts (leaves, flowers, shoots or stems, roots, tubers, rhizomes, bulbs, bulblets, fruits, seeds or bark) were required for a given task or purpose, but also which plant communities and habitat conditions a species preferred, and at what stage of the plant's life cycle was the optimal time for harvesting (Norton, 1985 Turner and Bell, 1971; Turner and Hebda 2012). She would need to be fully proficient in the social and spiritual protocols involved in these harvests. Further, in processing her harvest she would have to know which plant foods were appropriately steamed, roasted, dried, boiled, or packed in oil or water for storage, how to transform bark and other plant fibres into textiles, basketry, twine, and rope, or how medicinal plants should be prepared and administered (Turner 2014). This knowledge was taught orally by mothers to daughters as T'Sou-ke matriarch Cum-Chiat-Sia, Susan Lazzar, (1910-1997; Figure 1.2) daughter of Annie

Jones (Sister of Queesto) and Andrew Lazzar, “learned traditional Salish skills, in preparing seafood and learning to weave cedarbark and sweetgrass baskets at her mother’s side. [Said Susan] ‘My mother, she’d say *Watch me, I don’t have to tell you, just watch me.* She wouldn’t talk about it—she’d just show us how it’s done’” (Peers, 2016).

Generally, as noted above, the T’Sou-ke followed a coordinated seasonal round for plant harvesting that also would have accommodated the times and locales for harvesting fish, shellfish and game (E. Claxton & Elliott, 1994). Chief Frank Planes recalled the timing and location for harvesting cattail (*Typha latifolia*), cow parsnip (*Heracleum maximum*) and salmonberry shoots:

Well, we’d go to the lakes. Around swampy areas and the lakes. Like Smokehouse Lake, and all these little lakes here and swamps. [gesturing outside] Behind the museum used to be a swamp. And that’s where we got all our cattails. Well that’s a swamp, that was a very sacred swamp... That’s where all the first vegetables of the year would come out, in that swamp. And she [his mother] used to give us little pack sacks and say, fill this one full of this, and fill this one full of that, and fill this one full of this. So all us kids would go crawling around them swamps and plucking out these... and bring them home.... And that’s where we [kids] were sent. (Frank Planes, 02-03-00)

In the springtime, tender green shoots from salmonberry, thimbleberry (*Rubus parviflorus*), cow-parnsnip and giant horsetail (*Equisetum telmateia*) provided fresh food, along with the soft inner bark and cambium tissues from red alder (*Alnus rubra*) and other trees such as western hemlock (*Tsuga heterophylla*). Many species of highly prized berries and other fruits were managed and harvested throughout the growing season: beginning in late spring, with salmonberries, red huckleberries (*Vaccinium parvifolium*), wild strawberries (*Fragaria chilioensis*, *F. vesca*, *F. virginiana*), and red elderberries (*Sambucus racemosa*); through summer, with Saskatoon berries (*Amelanchier alnifolia*), blueberries (*Vaccinium ovalifolium*, *V. uliginosum*, *V. alaskaense* and others ), thimbleberries, trailing blackberries, blackcap raspberries, and salal berries (*Gaultheria shallon*); to fall and winter, with crabapples (*Malus fusca*), bog cranberries (*Vaccinium*

*oxycoccus*), highbush cranberries (*Viburnum edule*) and evergreen huckleberries (*Vaccinium ovatum*).

Various “root vegetables,” such as camas bulbs, bracken fern (*Pteridium aquilinum*) rhizomes, tiger lily bulbs (*Lilium columbianum*), chocolate lily bulbs (*Fritillaria affinis*), northern rice root (*Fritillaria camschatcensis*), silverweed roots (*Potentilla egedii*), springbank clover rhizomes (*Trifolium wormskioldii*), and possibly Spiny wood fern (*Dryopteris expansa*) rhizomes were harvested throughout the early to late summer (and fall, or for some even in winter), depending on the species.<sup>37</sup> According to the thirteen-moon calendar, *PENÁWEN*, the "Moon of the Camas Harvest," appearing around May, marks the start of the camas bulb harvest (E. Claxton & Elliott, 1993).<sup>38</sup> In early summer, when the sap is rising and the inner bark can be separated easily from the wood, western redcedar (*Thuja plicata*) bark was harvested in strips from living trees to manufacture textiles, mats and baskets. During the same time, the bark of various species of willow (e.g., *Salix hookeriana*, *S. lucida*, *S. scouleriana*, *S. sitchensis*) was intensively harvested from living trees to manufacture, along with stinging nettle (*Urtica dioica*), into rope and twine for reefnets (E. Claxton & Elliott, 1994; N. X. Claxton, 2015). Soft fruits such as wild strawberries, found along beaches, village areas and rocky coastal bluffs, and salmonberries, growing in wet, open areas, were eaten fresh in early summer (George 1977). Pacific crabapples (*Malus fusca*), growing in dense stands around lakes (e.g., Crabapple Lake and along Sooke River) and in wetlands usually, were eaten fresh and also gathered and processed in large quantities in the late summer and fall, to be stored in oil or water for winter

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<sup>37</sup> The Klallam were recorded as pit cooking Spiny wood fern, and Ditidaht also used it, so it is likely that the T'Sou-ke used these rhizomes too (Gunther, 1973; Turner et al., 1983).

<sup>38</sup> The camas harvest generally occurred between May and August (Beckwith 2004:65-66).

use (Jolley, 2000; Turner and Hebda 2012). Some were left on the trees to soften and sweeten after the first frost, then eaten with great appreciation.

### 2.5.2 Phenological Indicators

Not only were plants harvested in different seasons but they were also used as “phenological indicators” for the appropriate timing of other important seasonal activities (T. C. Lantz & N. J. Turner, 2003). For example, the appearance of the creamy, cascading floescence of oceanspray, or ironwood (*Holodiscus discolor*), coincides with the timing of the first sockeye runs, and also indicates when black-tailed deer (*Odocoileus hemionus columbianus*) are best for hunting: “[when] the iron wood is blooming, that is a sign the bucks are fat” (Suttles 1974:138). The seasonality of plants as food for game was closely monitored, in part because the source type of food an animal browses affects the taste of the meat. For example, Chief Gordon Planes (personal communication, 2020) said that his grandmother, Ida Planes, instructed him to hunt deer in August, when the animals are browsing on fireweed, because the meat tastes sweeter. Likewise, Suttles (1974:148) explained:

Bears, like deer, were hunted when the flesh was best. In the early spring, bears eat skunk-cabbage [*Lysichiton americanus*] roots and their flesh smells bad. The flesh is good in June; when the crabapples begin to get big the bears climb the trees to eat them. While they are eating salmonberries and blackberries the flesh is also good, but in August the flesh is bad again because they eat ants; there used to be anthills several feet high in this country. Bears are fat in the fall when they are eating fish, and may be eaten then.

### 2.5.3 Winter Villages

Finally, during the winter months households returned to their winter villages, which for T’Sou-ke was located at present-day Siason and Saseenos, on the Sooke Harbour. Traditionally, winter was a time when people lived mostly in Big Houses, observing ceremonies and welcoming relatives and friends to feast and witness important legal and political deliberations

and rites of passage—many traditions which continue to this day. It was a time when the stored surplus plant and animal foods carried families through the winter. As Frank Planes notes:

Well, January is a... is known...for dancing and potlatches and generally a happy, very happy month... Yeah, because the whole month is... in fact, there's three or four months that are totally dedicated to dancing and...and to the potlatch and rejoicing and remembering old friends, finding new ones, and going from village to village visiting relatives. And a lot of singing goes on...And that's these... what we in this Nation call "hide-your-paddle season"... Hide-your-paddle season starts from... oh, around November, December, January and ends in sometimes... some time in February...Now those are the winter months. And the way it was told to me that, if you haven't got your winter supply in by those hide-your-paddle months, you're in trouble. If... well, really, by then, you should have had everything stored away and everything comfortable for when you want to dance. You didn't have to go out and harvest anything... except ducks... that was... you should have all the fish dried, you should have the halibut dried, you should have all the clams dried, you should have... maybe dig a few fresh ones.

In T'Sou-ke, visitors would first wait at Whiffen Spit, where a guardian Big House was located, until they were invited to come into the village by the receiving Hereditary Chief. When describing how a Hereditary Chief would plan for a potlatch, Frank Planes said that he would count the number of canoes coming in and then direct his household to prepare for the visitors. (FP-05-23-96:2-3). When not potlatching during the long winter months, women and men would use the stored plant and other materials (such as tule, cattail, cedar bark and roots, cherry bark, wool etc.) to manufacture a wide array of technology and trade items (baskets, mats, clothing, hats etc.).

## **2.6 Knowing plants and their ecosystems**

In pre-contact times, the majority of plant materials around which the Coast Salish economy revolved were cultivated and harvested from ecosystems within people's traditional territories. Intensive use of the same places at specific times of the year was not only motivated by the need to harvest culturally important species, but also governed by the acquisition of supernatural powers obtained from associated sites throughout their territory (Suttles 1974: 50).

T'Sou-ke people harvested native plants from at least eight major habitat types, including:

meadows, rain shadow forests, coastal rainforests, montane forests, marshes and swamps, bogs and fens, tidal wetlands, and human occupation beach sites (Suttles, 1974; Turner & Bell, 1971; Turner & Hebda, 1990; Turner & Peacock, 2005). As factors such as pollen production, presence of pollinators, drought, flooding, and climate fluctuations affect, at times drastically, the availability of plants and plant products, (e.g., berries) the need to adopt strategies to accommodate periods of underproduction of single or favourite species was paramount. To address such ecosystem variability and productivity, in cases where preferred species failed to grow or might not be productive at a given place or time, Straits Salish plant practitioners also developed the knowledge needed to harvest and use less favoured or substitute species (Garibaldi & Turner, 2004; Turner & Davis, 1993). This ability to substitute one plant for a given purpose with several different species, requires a broad botanical knowledge within a territory. It is also quite a different approach to plant use than found in human groups with a primary focus on agriculture, where far fewer plant species are relied upon to support local economies. Essentially, it is a system that depends on redundancy of knowledge across many species and ecosystems, rather than streamlining plant use to a handful of species that are managed within (relatively) small plots.

T'Sou-ke territory is notable for its abundant rivers, streams and lakes. The riparian zones, at the interface between land and water, supported the harvesting, processing and storage of thousands of kilograms of various species of berries and other plant resources each year (Turner et al., 2003). The edge ecosystems provided by wet soils and an open tree canopy in the transitional zone between water and forest is ideal for many highly valued plants, particularly of the fruiting variety. Indeed, in the Te'mexw Traditional Use Study (TUS), elders repeated many times that they harvested berries everywhere, and, as such, the TUS mapping locates berry

harvesting evenly throughout the territory (Te’Mexw Treaty Association, 2019). Other fresh fruits such as strawberries, found along beaches and rocky coastal bluffs and eaten fresh, and Pacific crabapple trees growing along the edges of rivers, creeks, lakes and wetlands were also gathered and processed in large quantities for food (Jolley, 2000; Turner & Hebda, 2012).

Wetlands, such as bogs, fens, marshes and swamps, are home to many culturally important plant species, valued for food (e.g., bog cranberry [*Vaccinium oxycoccos*], Labrador tea [*Rhododendron groenlandicum*]), medicines (e.g., devil’s club, [*Oplopanax horridus*]) and technology (e.g., cattail, tule [*Schoenoplectus* spp.], sedges [*Carex obnupta*] and other species) (Chippis-Sawyer, 2014; E. Claxton & Elliott, 1994; Jolley, 2000).

Figure 2.3 maps the presence of different species of berries within the sample area and as stated in the TUS elders’ interviews, berries are found everywhere. This sample area is the site of the Sooke and Leech rivers’ watersheds, which, in the present-day, supplies southern Vancouver Island with fresh water. Unsurprisingly, throughout this drainage area many of the berry species that are culturally important to T’Sou-ke can be located. This ecosystem mapping, however, highlights the soil, climate and moisture preferences of individual berry species. Some species such as salmonberry, dull Oregon grape, Alaskan and oval-leaved blueberries, red huckleberry and salal are ubiquitous throughout many ecosystems in the sample area, (provided that these are at the shrub or woodland successional stage). Other prized berries, however, such as thimbleberry, strawberry, bog cranberry, black huckleberry, trailing blackberry, highbush cranberry, and stink currant are found in far fewer ecosystems (such as tall Oregon grape which is only found in the very dry *Arbutus-Hairy Manzanita* ecosystem). Finding and harvesting different, favoured berries requires a thorough understanding of the habitats and plant

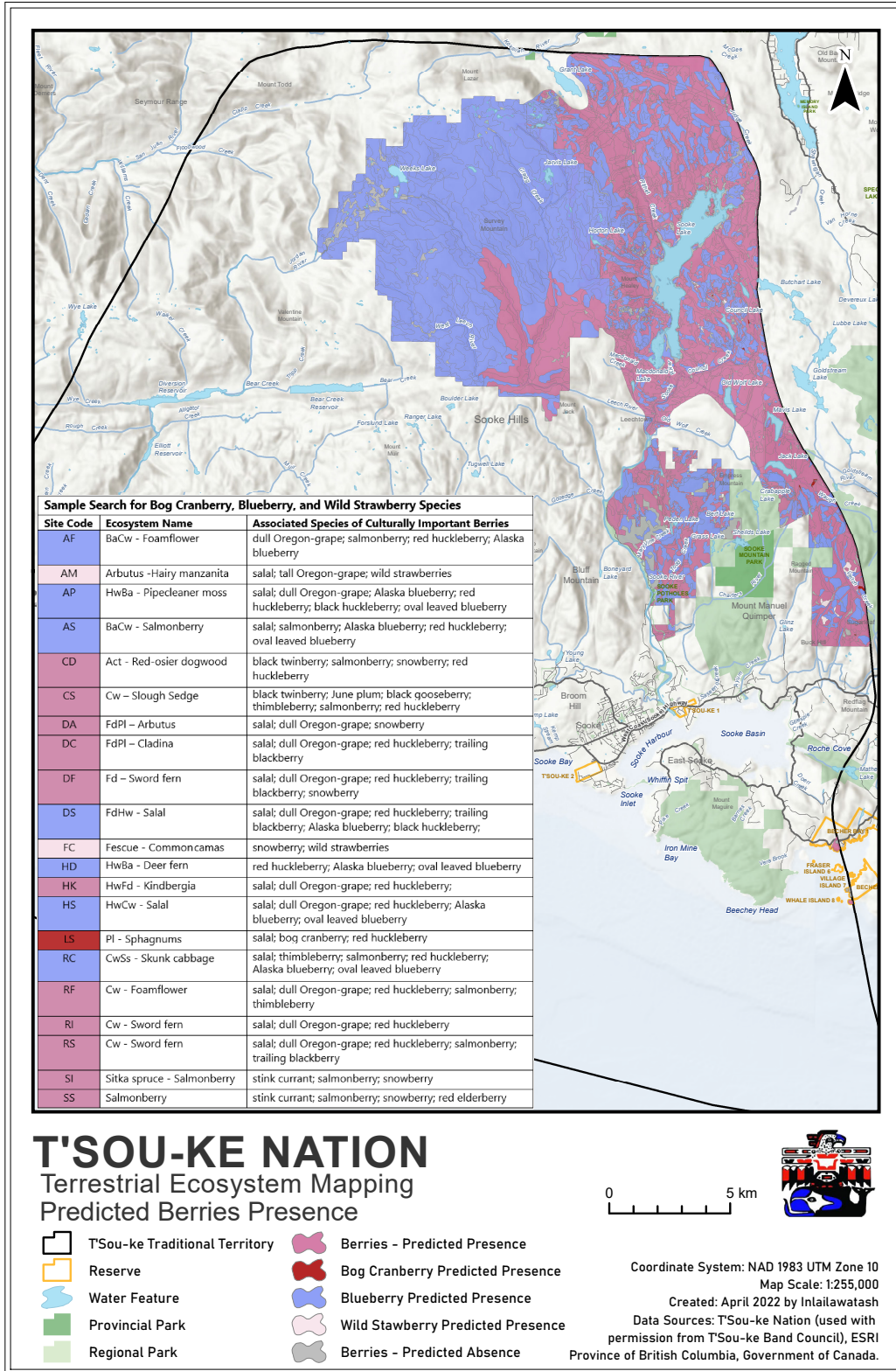


Figure 2.3 Predicted presence of various culturally important berry species throughout the sample area.

communities for each species, particularly if the more populous species undergo a poor fruiting or growing season. By allowing for redundancies in plant use in a system incorporating a hundred species, harvesters can access required, fruits, roots, bulbs, stems, leaves or when needed.

Plants used for their fibrous tissues such as rushes and sedges growing in swamps, marshes, riverbanks, wet meadows and alluvial forests were harvested in tremendous quantities for constructing mats and bags, for which Straits Salish weavers were renowned (Turner & Hebda, 2012). Rigorous harvesting of the leaves of cattails and stems of tule is not harmful to either plant's root systems, and actually stimulates the next year's growth (Geniusz, 2015). In his report to the Ethnological Society of London, Captain C. Wilson (1866:288) observed:

Mats are made from the bulrush [probably *Schoenoplectus acutus*, growing around lake edges], which is gathered in summer, dried in the sun, and stored away till winter, when the mats are made; the rushes are cut to an even length, and are taken two at a time, the large end of one being placed with the small end of the other; these are fastened by a cord twisted round the ends, and so on till the desired length is attained, and on this framework the body of the mat is sewn in with a wooden needle. When completed, they look very neat, and throw off the rain well.

T'Sou-ke weavers manufactured rush mats for use as room dividers in Big Houses, sleeping mats, and lightweight roofs and walls to cover summer village shelters. The prowess of Straits Salish weavers made these mats a popular trade item. In examining existing mats found in museum collections, Turner (2019:22) calculated the numbers of cattail leaves and tule stems harvested annually would have been staggering where "one large mat alone could require 1000 or more cattail leaves or tule stems... (e.g. the Cowichan tule mat at the Museum of Anthropology, 1096/2 440 x 105 cm)". Quantities of cattail leaves and tule stems were also used by T'Sou-ke women to manufacture large bags, providing safe storage (cool, dry, and well-ventilated) for hundreds of kilograms of annual root, fruit, and berry harvests, sun-dried. These

bags, along with dried salmon and meat, were hung from the ceilings of Big Houses throughout the winter, and surplus harvests were also heavily traded (Thoms, 1989:230).

## **2.7 Cultivating Ecosystems and Coaxing Habitats**

Camas blooms in May and withers soon after seeding. It must be dug in the latter part of May while the stalk is still visible. It grows on prairies and on ledges of rocky slopes.... The Semiahmoo and the Songish and probably the Sooke had prairies behind their winter villages where they could get camas and other bulbs.... At some of the beds that were used most frequently, the soil was loosened so that digging was easy. One informant said “the more you dig, the better it grows” (Suttles 1974: 114-115).

For Straits Salish groups, root vegetables are a primary group of cultivated plants and the focus of traditional management activities was to extend the habitat required to support more intensive production of these species (Norton, 1979a; Turner, 2021). Unlike humans, plants produce their own food through photosynthesis and most plants also store extra reserves of food in underground storage organs as a form of root (tuberous roots, taproots) or as modified stems (stolons, rhizomes, tubers, bulbs, corms). Some herbaceous perennials are specialized for underground food storage (referred to by botanists as “geophytes”) and have been used by humans throughout the world as a major food source for tens of thousands of years (M. K. Anderson, 1997; Thoms, 1989). These root vegetables are easily propagated as they reproduce by both seed and asexual reproduction (for example, where bulbs multiply by dividing or producing bulblets or fragments of rhizomes will grow into new plants) (Turner & Kuhnlein, 1983, 2020). They are less sensitive to above-ground predators and variable ecological conditions, and become highly productive in response to even moderate human intervention. In the traditional Straits Salish diet, with an emphasis on fish and game, carbohydrate-rich roots (e.g, camas, bracken fern, tiger lily, springbank clover, and riceroor) were a welcome source of carbohydrates and providing dietary fibre and other essential nutrients (Turner & Kuhnlein,

1982). Various horticultural practices, enhanced the productive habitat of these species and illustrate how the T'Sou-ke and others were able to cultivate plant populations to provide a very stable source of carbohydrate foods as well as a highly valuable trade commodity. Many foods were processed in community or multiple household pit ovens dug on beaches and near shorelines, where camas, bracken rhizomes, sea mammals or game would be cooked at one time. (Turner & Bell, 1971; Turner & Hebda, 1990, 2012; Turner et al., 1983).

A selection of native plant species were actively manipulated by Straits Salish using horticultural practices combined with social rules of access (Norton, 1985; Norton et al., 1984; Turner & Kuhnlein, 1982, 1983, 2020). Throughout their territories, Straits Salish groups traditionally regulated human interaction with plants at different scales: **species level** (by increasing productivity of species such as camas (*Camassia* spp.), and bracken fern and willows (*Salix* spp.); **ecosystem level** (by increasing habitat diversity in open prairies, for example); and **landscape level** (by increasing the overall heterogeneity of the landscape and managing human behaviour and actions through regularized practices and laws) (Deur, 2000; Norton, 1979a; Turner & Peacock, 2005). Following regular seasonal patterns, plant management activities of the Straits Salish included: 1) selective harvesting and replanting; 2) digging and tilling; 3) tending and weeding; 4) sowing and transplanting; 5) pruning and coppicing; 6) landscape burning, 7) processing for long term storage, and 8) oversight and proprietorship by individuals, families, and communities. In this section I will review how the T'Sou-ke employed each of these plant strategies to improve and manage their supply of root vegetables, berries and other fruits, and plant fibre for basketry and textiles.

### 2.7.1 Digging and Tilling

The cultivation, harvesting, and management of blue camas and other root vegetables was a key activity supporting the economy of the T'Sou-ke and other Straits Salish that transformed the landscapes around southern Vancouver Island and represents a form of horticulture. In 1852, the surveyor Joseph Pemberton observed that: "A canoe can be paddled for 2 miles up the [Sooke] river, the banks are pretty & thickly wooded, 30 acres or so cultivated by Indians (my emphasis)."

Beckwith (2004:71) observed that the T'Sou-ke used the natural contours of the Sooke River to establish their root gardens<sup>39</sup>. The regular digging<sup>40</sup> at sites in estuarine salt marshes, along floodplains, on rocky slopes and in level meadows serves to loosen and aerate the soil, as well as to



*Figure 2.4. John Thomas digging for riceroot at Sooke Bridge in 1981. Between 2018 and 2020, I looked for evidence of riceroot at this site several times when it should have been blooming. The estuarine flats, however have become overgrown with invasive plants which have crowded out the native root vegetables. Photo credit: N. Turner*

sever off bulblets from the parent bulbs so that they fall back into the dug-over area or are replanted, thereby maintaining the root bed over generations (Proctor, 2013). Pemberton was not specific about the species cultivated by T'Sou-ke, but along the river it is likely that some of these cultivated acres would have been tended root gardens of springbank clover, northern riceroot and Pacific silverweed. In 1981, Pacheedaht elder, John Thomas, directed ethnobotanists

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<sup>39</sup> As observed by Grant (1849): "[The] Natives have several little gardens in which they grow considerable quantities of Potatoes, Carrots & Turnips. These are situated on little nooks of flat Land formed at the bends of the River."

<sup>40</sup> Nineteenth century British botanist, Robert Brown praised the skill of the camas diggers in his reflections of his travels: "The gathering is nearly wholly done by women and children, who use a sharp-pointed stick for the purpose; and it is surprising to see the aptitude with which the root is dug out. A botanist, who has attempted the same feat with his spade, will appreciate their skill" (Brown, 1868:379).

Nancy Turner (personal communication) and ethnonutritionist Harriet Kuhnlein to a site below the bridge over the Sooke River on the south bank to where he had harvested northern rice root, with permission from T'Sou-ke. (He also recalled stopping at Whiffen Spit en route to Victoria, where his family travelled by canoe when he was a boy, and noted that there were nodding onions (*Allium cernuum*) growing in abundance along the spit there (Nancy Turner, personal communication).

Instead of encountering only mature conifer forests on southeastern Vancouver Island, early explorers and traders such as Manuel Quimper, George Vancouver, James Cook and James Douglas enthused about the grassy prairies that predominated in this region and marvelled at the picturesque open savannahs with groves of oak trees widespread around the southern Salish Sea region (Lutz, 2020; Turner & Spalding, 2018). When Manuel Quimper first visited T'Sou-ke and other Straits Salish territories he wrote that:

They are lazy and therefore do not make a practice of fishing or hunting, maintaining themselves entirely on seeds [sic] while they last. The country is so prolific in these that the Indians from outside the strait come here in great canoes to provide themselves with them. Together with fish they serve as a general source of food for one and all (Wagner 1933:130, cited by Kennedy 1995:72).

Quimper arrived into the region in July, apparently when people were still harvesting camas during camas season, and misunderstood the complete focus on its harvest as being their only economic activity. Both camas species (common camas, *Camassia quamash*, and great camas, *C. leichtlinii*) are found on grassy slopes, moist meadows and rocky cliffs, from sea level to mid-elevations throughout the Coastal Douglas-fir Biogeoclimatic Zone and even extending west as far as Port Alberni. In T'Sou-ke territory, camas species are found in the following ecosystems: *Arbutus-Hairy Manzanita*; *Fescue-Camas*; and *Selaginella-Cladina* (see figure 2.4). As noted previously, the T'Sou-ke harvested the bulbs of both camas species: the more ubiquitous

Common camas, and the less populous Great camas (*C. leichtlinii*), were traditionally harvested at Deadman's Island, Otter Point and behind the T'Sou-ke winter village, east of what is now Milne's landing (Beckwith 2004:65). As T'Sou-ke matriarch Mary George recalled, "Women's hands got purple from the flowers," as groups of related families dug hundreds of kilograms of camas bulbs yearly, with digging sticks fashioned from Pacific yew (*Taxus brevifolia*) or oceanspray wood, and collected the bulbs in large pack baskets, and later, in burlap potato sacks (see Beckwith 2004:65).

The main carbohydrate in camas is a complex group of sugars, collectively known as inulin, which is made digestible to humans through roasting in pit ovens. The pit-cooking process serves to break the inulin down into digestible sugars (fructose and fructans) (Turner & Kuhnlein, 1983). Camas processed in this way (up to 50 kg of bulbs at one time), cooked and then dried, also lasts longer than storing it fresh. Today, just below the likely location of the main T'Sou-ke camas fields and next to the main T'Sou-ke winter village is Kaltasin Road which is an anglicized way of saying "Pit-cooking place" (Gordon Planes, personal communication, 2016). However, Frank Planes (V4-01-03, V4-02-02 and V4-03-03:45) observed that smaller pit ovens were located in many places because "If you don't have a cooking pit where you've got a camping area, it's like wearing one shoe." Certainly, in a diet rich in protein from fish and game, cooked camas would have been a welcome carbohydrate and sweetener in the traditional T'Sou-ke diet. Due to its limited ecological range on the British Columbia coast, the bulbs were also an important trade item. Along with smoked clams, camas bulbs were processed in bulk for transport to the Fraser River trading centres (Carlson, 2010).

## 2.7.2 Weeding, Selective Harvesting and Transplanting: root vegetables

Women kept productive camas fields and patches free of the poisonous death camas plants (*Zigadenus venenosus*) and other unwanted species by regular weeding (Proctor, 2013). Owners of blue camas beds removed and piled stones at the sides of their fields to keep the beds clear for the camas and also to mark off their family property (Thoms, 1989). Other species harvested for their underground parts were taproots (e.g., Pacific silverweed) and rhizomes, (e.g., bracken fern and springbank clover), which also benefited, in both enhanced quality and size, from digging to diminish soil compaction, and reduced the need for weeding (M. K. Anderson, 1991:9). Straits Salish women would dig a square or circle of turf with soil attached, of approximately 0.5 metre across, flip it over and selectively harvest the larger bulbs within the hole while replanting any smaller ones for future harvesting.<sup>41</sup> Collectively, these digging, weeding, selection and replanting practices for various root vegetables are a form of tillage (M. K. Anderson, 1993). Further supporting the understanding of camas cultivation as horticulture, Beckwith (2004) and others have found evidence that camas was intentionally transplanted in places throughout the Salish world and beyond (e.g., to the Nuu-chah-nulth village of Hesquiaht and to locales within Kwakwaka'wakw territory) (Turner, Armstrong, & Lepofsky, 2021). The most effective cultivation strategy used to promote and abundant camas and bracken fern fields however, was through regular burning over of the prairies where they grew (Norton, 1979a; Turner, 2021; Wray & Anderson, 2003).

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<sup>41</sup> It takes about seven years for a camas bulb to reach the size optimal for food harvesting (Proctor, 2013). The smallest bulbs (1 to 3 years old), also, were retained intact in the upper layer of turf, which would have been replaced after the larger bulbs were removed from the dug-out hole.

### 2.7.3 Burning

...the frequency of the fires kindled promiscuously by the Natives both in wood & prairie between the months of August & October. Their object is to clear away the thick fern & underwood in order that the roots & fruits on which they in a [great] measure subsist may grow the more freely & be the more easily dug up (Grant, 1857:275).

Captain W. Calhoun Grant was the first European settler to homestead in T'Sou-ke territory and the burning practices to which he refers, in the quote above, were the primary means by which T'Sou-ke and other Indigenous groups managed forest succession. They burned camas fields, usually after the camas harvest, when the seed capsules of the plants were dry and the wind had scattered their seeds.<sup>42</sup> Camas prairies were burned over by individuals with specialized knowledge. For example, in the 1950s Mary George explained to Wayne Suttles:

When [the women] finished digging, they leveled the ground, covered it with seaweed, and when it was dry, they burned it over. This made the bulbs bigger the next year (Beckwith, 2004:76).

Regular burning keeps seedlings from species like Douglas-fir and Garry oak (*Quercus garryana*) from becoming re-established while not harming the thick, scaly ridged bark of fire-resistant mature trees of these species (Beckwith, 2004:56). When fires are lit routinely in an open prairie the fuel load is small, primarily burning leaf litter and one to three year's growth of grass. The resulting flash fires are low in intensity and able to convert nutrients bound in dead plant tissues to enrich the surrounding soils without damaging the soil microorganisms and root systems beneath (M. K. Anderson, 1993; Boyd, 2021; Thoms, 1989; Turner, 2021). Burning was an important ecosystem management tool for T'Sou-ke, used to maintain the high productivity of their camas beds in Garry oak meadows and along rocky ridge crests dominated by Douglas

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<sup>42</sup> The digging process also had the effect of scattering seeds from ripe fruiting capsules of camas.

fir and onion grass (*Melica subulate*). Burning enriched the soils with nitrogen and kept these areas as open grasslands, grassy slopes or savannahs.

Burning can also effectively halt the natural succession of plant growth at the woodland stage of a conifer forest ecosystem, opening up the tree canopy in places, and thereby providing more sun, as well as nutrients, for berries (e.g., thimbleberry, blueberries, trailing blackberries, blackcaps, and wild strawberries) to fruit and sweeten, while also providing prime habitat and fresh forage for deer and other game. Opening up the tree canopy also encourages the growth of culturally important broadleaved trees (such as big-leaf maple [*Acer macrophyllum*], red alder, bitter cherry [*Prunus emarginata*] and black cottonwood [*Populus balsamifera* ssp. *Trichocarpa*], and flowering shrubs (such as oceanspray, Saskatoon berry [*Amelanchier alnifolia*], and red-flowering currant [*Ribes sanguineum*]) in otherwise conifer-dominated ecosystems, particularly extending woodland ecosystems in riparian habitats. Broadleaved trees and flowering shrubs found in woodland ecosystems were harvested by T'Sou-ke for their hard woods, used for making a wide array of implements, from paddles to needles. Their bark and, in some cases, flowers were used for medicines, and their fruits for food and medicines. Woodland species are traditionally important to T'Sou-ke for a variety of purposes: bigleaf maples (leaves for drying berries and wood for paddles), red alder (wood for fuel, containers, masks; bark for medicines and dyes), black cottonwood (fluffy fruits for stuffing; buds for medicine), cascara (*Rhamnus purshiana*) (bark for medicine; wood for implements) and Pacific crabapple (fruit for winter food, bark for medicine; wood for implements). Following a fire, suppressed buds along the base of woody shrubs such as willow, hazelnut, or oceanspray will send up “long, straight, flexible switches useful for making many items...” (M. K. Anderson, 1999, 2005).

When W.C. Grant settled in T'Sou-ke territory, he wrote that: "in the Neighbourhood of Soke Harbour, there are 6000 acres of available land, of which 430 are open prairie, the remainder rich woodland" (Hendrickson, 1975:11) At the time of early European settlement, both surveyor J.D. Pemberton and explorer and botanist Robert Brown noted that T'Sou-ke maintained open fields at Otter Point and at Sooke Harbour, as well as 30 acres of cultivated gardens along or east of the Sooke River (Beckwith, 2004; Brown, 1864; Pemberton, 1852). During his survey of Sooke in 1852, J.D. Pemberton noted that there were 8 square miles of "improvable woodland from which however a deduction should be made of 400 acres open unwooded land close to Cap<sup>n</sup> Grants house" (Pemberton, 1852). While it is difficult to interpret various historical records from early explorers and settlers, generally, individual writers made a distinction between prairie, woodland (deciduous trees) and forested (coniferous populations) areas. It would appear that much of the land from Roche Harbour to Kemp Lake would have been either woodland forest or open prairie at the time of Grant's settlement. Grant's early letters suggest that T'Sou-ke burning practices extended to woodland areas when he complained about the "Savages...abominable custom of burning the woods" (Hendrickson, 1975:11). Around this time, early explorers' maps indicate various "Burnt Hills" in the vicinity of what the T'Sou-ke refer to as their Smokehouse Lakes, a popular area for hunting, berry picking and food processing (Kellett, 1847; Pemberton, 1855; Te'mexw Treaty Association, 2015). The explorers' observations of burning in this important food gathering area represent evidence of intentional burning by the T'Sou-ke of both within camas prairies and in more heavily wooded areas.

Certainly today, in reviewing the presence of plant species within my sample area in the northeastern part of T'Sou-ke territory (see figure 2.4), Camas ecosystems are not naturally abundant, and are found only in the most southerly part of T'Sou-ke territory. The historically

recorded camas fields at Otter Point, however, are outside of the sample mapping of ecosystems used in this study, and were a detailed ecosystem analysis of the lands between Roche Harbour and Kemp Lake be undertaken, it would very likely indicate stronger potential for camas in lowland and floodplain areas closer to T'Sou-ke communities. Camas still blooms on the rocky bluffs on the hills surrounding present-day T'Sou-ke reserves. Mary George also stated to Wayne Suttles that "...there were fewer trees in the Sooke region in the past as a result of fire" (Beckwith, 2004:76). Unfortunately, after over a century of bans on traditional landscape burning, dense Douglas-fir forests have encroached on what were the probable locations of these historic camas fields. This entire area has also been the site of intense residential and commercial development on former T'Sou-ke cultivated lands and, as a result, surface evidence of these historic fields is now almost non-existent. Given that T'Sou-ke territory is at the northwestern reach of the Garry oak/camas associated ecosystems (McDadi & Hebda, 2008), in order to harvest camas in the quantities that have been historically documented, proactive burning of transitional areas would have been necessary to favour camas cultivation in the meadows and lowlands near their winter villages.

While burning of meadows for camas production was practised throughout southern Vancouver Island, I believe that woodland and subalpine parkland burning to increase berry production (such as remembered and discussed by St'l'atlimx elders Baptiste Richie, Sam Mitchell and Charlie Mack) and to clear hunting areas, was also practised by T'Sou-ke, but likely less frequently than burning of camas fields (Turner, 2021). Because of the cumulative fuel load of taller and more abundant grasses, herbaceous plants, shrubs, seedlings and downed trees, woodland burning every 5 or 6 years produces a higher intensity fire than the more

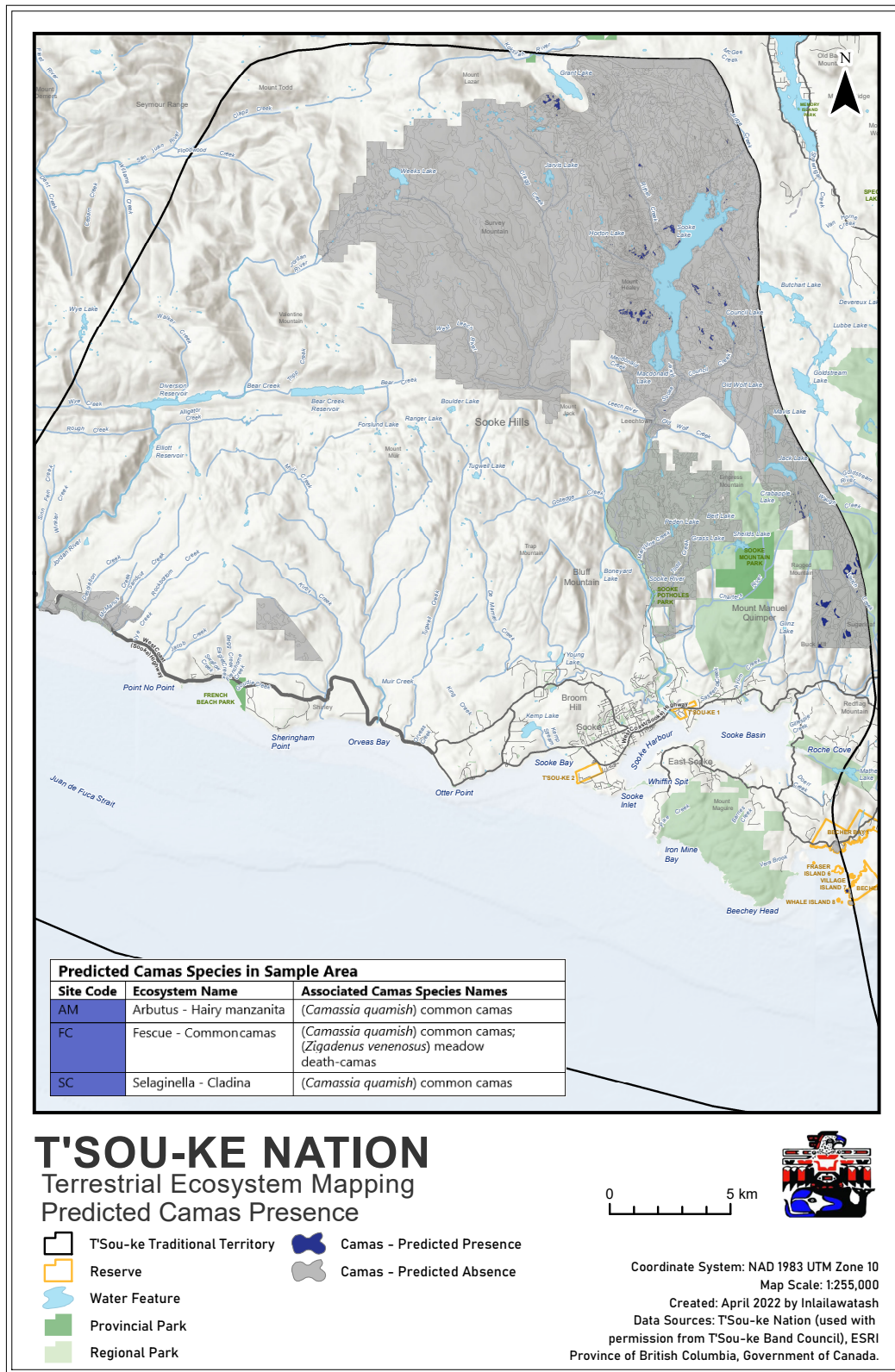


Figure 2.5. Predicted camas presence in the sample mapping area.

frequent burning of leaf litter on a camas field. While effective in promoting berry growth at least along the edges of woodlands, and in maintaining populations of broadleaf trees (Pacific crabapple, bitter cherry, bigleaf maple) and shrubs such as oceanspray, wild rose (*Rosa nutkana*) and willow, this more intensive burning in or at the edges of wooded areas would have been a much riskier management activity to control. Frank Planes said he was taught by Pacheedaht Hereditary Chief Charlie Jones (Queesto) that different wooded areas were burned each year to clear away the thick underbrush for better hunting. As he reflects on T'Sou-ke burning practices:

This was a way of managing. He [Queesto] said, see we'll burn that place out, the next year we'll burn the other place out, the next year we'll burn the other place out, that's why I've often wondered through my roaming around this island that you will always see an old growth tree, a real old one you know, it is always charred on the butt. You look up a little ways and there's no char marks up there, but it's always on the butt. That's because a little raging forest fire went through there in the wet season when they couldn't get away, and that's what they would do and things like that. (FP, 02-22-97:7).

To efficiently burn off the vegetation on a wooded hillside, during a seasonal period still dry enough to sustain the fire without igniting a more extensive wildfire would have required a large coordinated effort and expert knowledge of fire, climate, wind, and geography (Turner, 2021). As in many other places in the world, burning practices (including what is known as swidden agriculture, or shifting cultivation) were an established food production complex practised by T'Sou-ke of past generations.

#### 2.7.4 Pruning and Coppicing

Pruning berry bushes was incorporated into T'Sou-ke harvesting practices, where berry pickers cut or broke off whole branches of berries and later picked the fruit (such as huckleberries and blueberries) off the stems by hand on a mat (Turner, 2006a; Turner & Hebda, 2012). Pruning can make berry picking more efficient and generally produces more berries the following years as the bushes are kept lower to the ground with denser branches that often bear

larger fruit in greater quantities than unpruned bushes (M. K. Anderson, 1999). Even picking off the elongated clusters of berries rather than the large leafy branches from species such as salal is said to stimulate the regrowth of more abundant fruit in the following years (Turner, N., pers. comm., 2021). The T'Sou-ke practice of cutting the salal berry clusters intact to later pick off the individual berries continues today; as Frank Planes (Dec 3 1997:6) describes taking salal branches home to sort through and pick berries:

[I]n this Nation, we do that as a family... how am I going to say it... not a chore. It's... a family event. You clear the table off and when you pick them [salal berries], you pick them by the stems, eh... And you just dump the whole stems on the table. And even the children will sort out the berries and pick them, and put all the stems on one pile. Oh, yeah, and it's...there's lots of little purple tongues after you're finished.

Pruning is a traditional Indigenous practice from California to Alaska done to create long, smooth withes for basketry, effectively removing leaf scars from lateral branching for better and more aesthetically pleasing baskets (M. K. Anderson, 1991). Similarly, shrubs such as willows, oceanspray, hazelnut, and various berry-producing species of berries respond very positively to coppicing, where bushes are cut or burned to the ground, triggering them to regenerate in straight, flexible, densely growing branches. Coppicing a tree or shrub produces materials prized for basketry, manufacturing fibre, nets, hats, needles, arrows and other implements. Furthermore, shrubs managed over time through coppicing provide a much higher number of useable branches per bush making harvesting for basketry and other manufacturing purposes much more efficient (M. K. Anderson, 1991, 2005). For the T'Sou-ke, who used the inner bark of willows extensively for cordage, particularly to create various sizes and types of nets (reef nets, hoop nets, duck nets and deer nets), coppicing would have been an effective strategy for regeneration of quality construction materials in patches closer to village sites.

Reefnets and fish weirs were essential technologies to support the mass capture of salmon and other species throughout the Straits Salish region. Along with the fibres rendered from dried

stinging nettle stalks, cordage made with bark from coppiced willows was produced annually by households to build and repair nets with "the twine used being 'laid up' by rolling the fibre between the palm of the hand and the bare leg, and put by in hanks ready for use (Wilson 1866: 288)." Turner (2019:22-23) calculates that collectively these nets would have required thousands of tall nettle stalks and thousands of metres of inner willow bark as "...even modest nets, 10 m long and 1 m deep (10 m<sup>2</sup>) can require some 30 m of cordage (50-60 nettle stalks), and could take 20-25 hours for one person to construct." Reef nets needed to be remade each year; women would harvest the bark and make the twine, men would make sections of the net, and the finished product would be brought to the reef net captain who would stitch the net sections together (Suttles 1974:218). Moreover, additional cordage would have been required to lash together cedar stakes, and likely coppiced willow stalks to build fish weirs like the one situated at the mouth of Sooke River as painted by Paul Kane (See figure 2.5).

Figure withheld for reasons of copyright.

*Figure 2.5  
Salmon trap by Paul Kane (1847)  
situated near the mouth of Sooke River.  
Fish weirs would have taken large  
quantities of materials to build –  
hundreds of wooden staves and bundles  
of fibrous cordage for binding – and,  
like the Big Houses, would also have  
required constant maintenance and  
repair by their owners with new  
materials made from cedar, nettle, yew,  
willow, and rose.*

## **2.8 Mature forest live harvesting: Maximizing the Production of Living Plants**

It is with cedar that the Indians build their houses as well as their totem poles, canoes and beautiful carved dance masks, their boxes, rattles, and paddles, and with cedar they make their fires. They weave their artistic mats, blankets, baskets, and other containers of cedar bark, infants are wrapped in shredded cedar bark when laid in the cradle, and cedar bark is used for head, neck, and arm rings. Some tribes twist cordage of cedar

bark, from the finest strings to the strongest ropes used for whaling, and finally the coffin is also made of the wood. [Norton 1985: 175, citing Johan A. Jacobsen 1977:12 (1881-1883)].

In the last section I discussed recent scholarship that reveals how T'Sou-ke and other NWC groups employed various horticultural strategies to effectively suspend ecological succession in meadows and forests for greater bulbs, fruits, and fibres with production of chosen plants (Beckwith, 2004; Lepofsky, Armstrong, Mathews, & Greening, 2020) These studies highlight how one type of biomass in an ecosystem (such as camas, nuts or berries) was selected and favoured over others by Straits Salish and other NWC Peoples. A fundamental part of Salish plant use and management, however, was conducted by working with the ecological traits of mature and climax forests to efficiently harvest large quantities of plant products from living trees (Deur et al 2009) or by only lightly harvesting from plant patches and thickets. In mature and old growth forests, the bark, pitch, wood, boughs, withes and roots of several conifers—western redcedar, yellow cedar (*Chamaecyparis nootkatensis*), Douglas-fir, Pacific yew, grand fir (*Abies grandis*), western hemlock, Sitka spruce (*Picea sitchensis*), lodgepole pine (*Pinus contorta*), and white pine (*P. monticola*)—were used for multiple purposes, from fuel to a wide variety of textiles, containers, implements, medicines and other products. The most striking example of sustainable harvesting practices is found in the intensive use of western redcedar. For T'Sou-ke and other Indigenous groups throughout the NWC, cedar is referred to as the 'tree of life' (Stewart, 2009). As art collector, Johan Jacobsen, observed in the 1880s (see quotation above), the importance of cedar cannot be overstated. T'Sou-ke and other coastal Nations used—and in many cases, still use—every part of this tree, for tinder and fuel (wood, bark), house posts, planks, canoes and paddles (wood), clothing and mats (inner bark), basketry (withes, roots, inner bark), rope and cordage (withes, roots, inner bark), stakes for fish weirs (wood), splints for fish spreaders (wood), as well as for medicinal and spiritual applications (aromatic boughs).

Cedars and other plants were, and are, seen as generous relatives, protected by guardian spirits, who willingly provide resources for people, as long as they are properly thanked and used with respect (Jenness, 2016).

While they clearly employed horticultural practices for some species (such as camas, springbank clover, riceroot, bracken fern and willow), the T'Sou-ke did not use classic horticultural techniques with cedar, but, instead, practiced a form of intentional management.<sup>43</sup> Other Pacific cultures in Polynesia and Hawaii cultivated trees (e.g., the paper mulberry [*Broussonetia papyrifera*]) for bark cloth by coppicing saplings and densely planting stem cuttings to produce slender, straight shoots with reduced lateral branching (Levitan & McMahon, 2020). This management strategy is similar to the Straits Salish practices used with stinging nettle and various species of willow for fibre. All along the NWC tree bark (western redcedar and yellow cedar) is used for textiles but instead of using coppiced shoots of pole saplings, NWC peoples harvest strips of bark of young to middle-aged trees in mature forests, where lack of sunlight under the thick tree canopy produces straight trunks with minimal lateral branching. Unlike the coppiced bark trees of the Polynesians, the larger clear strips of western redcedar bark are harvested from the living mature tree. The fibrous inner bark is split off the outer bark for weaving, or sometimes the entire bark sheets are used for roofing, or to make buckets or bailers. Often bark strips are removed several times from different parts of the trunk during the life of the tree. This approach to harvesting the bast fibres of a tree by stripping is likely an equally effective strategy to the Polynesian coppicing approach for sustainably producing quality textile materials from inner bark. Furthermore, after its bark is harvested in a strip, without girdling the

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<sup>43</sup> Horticulture is classically defined as small-scale, low-intensity farming. Rather than trying to force T'Sou-ke's traditional forest practices into this definition, I prefer to express these as intentional management strategies or practices which, I believe, better describes what they are.

trunk, the living cedar tree is still available when required for its many other uses (house planks, roots for basketry, withes for ropes, etc.) to T'Sou-ke peoples described above.

Within this management system a cedar tree is not cut down unless whole-trunk construction materials are needed, for example: for a dugout canoe, house post and beams, large quantities of lumber, duck net posts and fish weir frames, or monumental art. Taking parts from a living tree by carefully working with its physiological, regenerative properties provides a predictable and abundant return for multiple applications (Deur & Turner, 2005; Stewart, 2009; Turner, 2014:195). An added bonus of not cutting a tree down for a single use, such as lumber, is that this restraint allows for continuing access to cedar resources closer to villages and routes of fixed seasonal rounds (Lacourse et al., 2007). Finally, thinking of harvesters of the past, chopping down a mature conifer with hand tools (recall that old growth cedar trees can grow to 60 m high, with a maximum diameter of 6 m at its base) and then hauling it to a waterway to transport to a village would have been a massive job. Such activities would have entailed complicated labour coordination and the expenditure of valuable social capital from extended kin networks, thus, would have been undertaken very deliberately, not as a matter of course.<sup>44</sup>

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<sup>44</sup> As Captain Charles Wilson (1866:288) observed in his travels throughout the southern Salish territories: "In felling trees, great labour must have been expended before the introduction of iron, the stumps of trees felled many years ago having somewhat the appearance of those gnawed through by the beaver...."

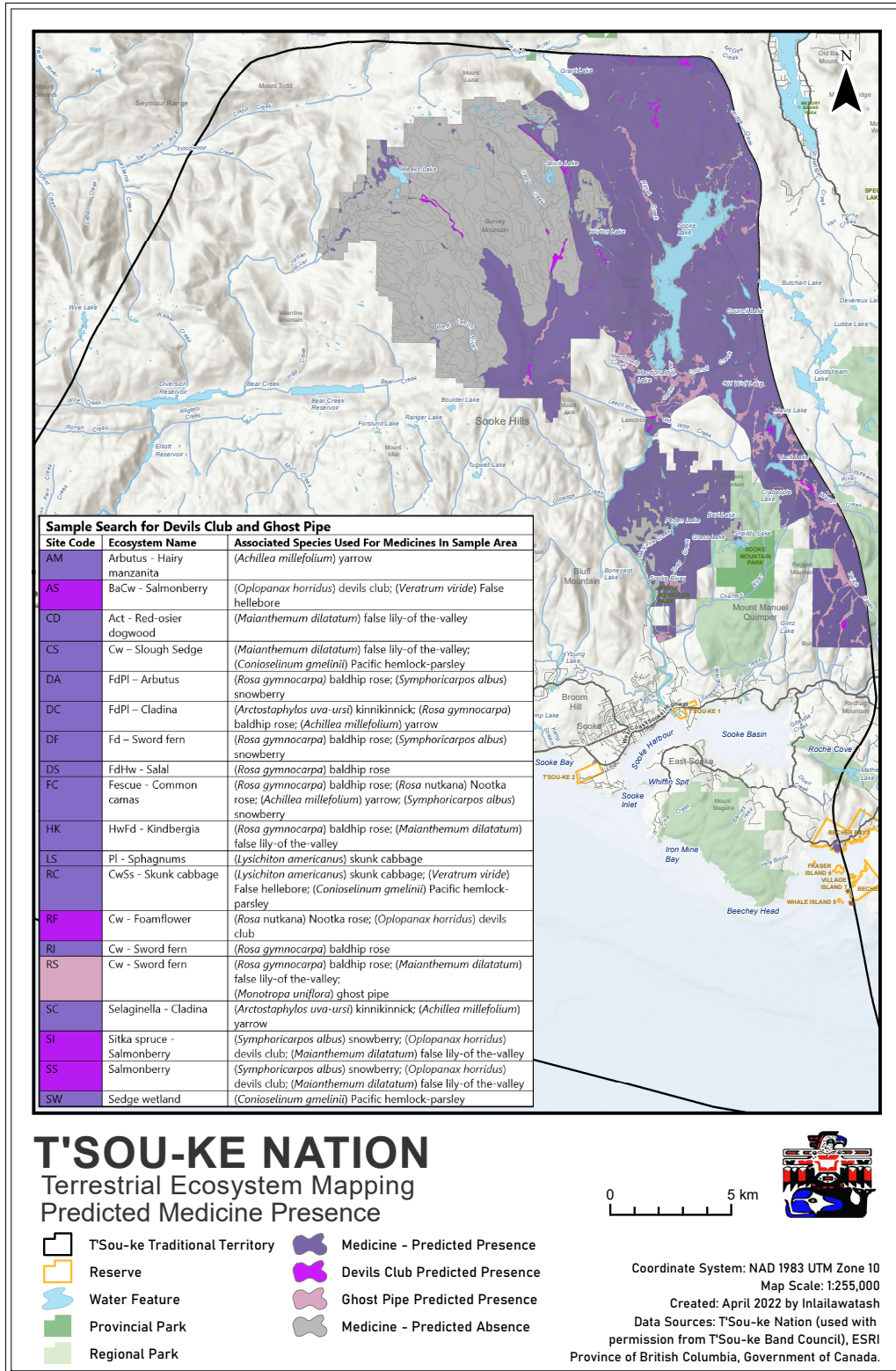


Figure 2.6 Predicted mapping of T'Sou-ke medicine plants in the sample area.

T'Sou-ke plant harvesters, then, achieved efficient management of plants through applying various strategies. Sometimes, such as with root vegetable cultivation, this involved intensive synchronization with a plant's life cycle or with its habitat. At other times, by simply working with the plant's regenerative capacity and maintaining the integrity of a mature forest, Salish harvesters were able to continuously receive the gifts of various species: for cedar technology as described above, for dyes (e.g., from western hemlock and red alder bark), fuel (e.g., deadfall and outer bark of Douglas-fir), essential tools such as digging sticks (e.g. Pacific yew wood) or medicines (e.g., from diverse tree barks, pitch, and other plant materials). Notably, many important medicines, such as devil's-club, wild lily-of-the-valley; false Solomon's seal, rattlesnake plantain, and ghost pipe, collected and administered by Indigenous healers, require the soils and structure of a mature forest in order to grow well (Burton, 2012; Burton & Burton, 2015; Lantz et al., 2004; Turner, 2006a). The effectiveness of a strategy of selective harvesting within mature forests is supported by contemporary research into the difficulties of regeneration of western red cedar and devils club after clearcut logging in the industrial forest industry (Antos, Filipescu, & Negrave, 2016; Burton & Burton, 2015).

Figure 2.6, reveals that important medicine plants for T'Sou-ke can be harvested throughout the sample area. Yet, one would think that a plant like the highly prized devils-club (predicted presence shown in bright pink) which is used as medicine for a variety of ailments as well as being an important material for spiritual implements, would be found in sites here wherever there are lowland forests with wet to moist streambanks. The ecosystem analysis, however, reveals that devils-club is more particular than that and is more likely found in areas of moist, shaded woods populated with plant communities of western redcedar, Sitka spruce and salmonberry. Similarly, ghost pipe (predicted presence shown in light pink), is a perennial

saprophytic herb that acquires its food from coniferous trees with the assistance of a fungal host. It is usually found in the understory of dense, mature forests and used as a medicine, where it is boiled and then rubbed on to muscles that require strengthening (Turner and Hebda 2012). Ghost pipe requires a coniferous forest that has achieved a successional stage where it contains mycorrhizal networks as well as at least partial shade. These examples of human/plant relationships reveal that practicing restraint and selective, careful management in harvesting, promoted forest habitats for sporadically found herbs or other important plants requiring the ecological conditions of a mature successional stage within a coniferous forest. This strategy also accommodates the ecosystem and successional preferences of culturally important plants that do not respond well to regular human interference. The unique preferences of different plant species would have required the application of a continuum of plant management strategies at a range of scales of time and space allowing for intensive, bulk harvesting of some species and highly selective and careful harvesting for others.

## **2.9 Discussion**

Near their villages the T'Sou-ke and their neighbours cultivated, extended and maintained patches of several staple species, including camas (*Camassia quamash*, *C. leichtlinii*), as well as bracken fern and, likely, riceroot (*Fritillaria* spp.), springbank clover, trailing blackberries (*Rubus ursinus*), blackcaps (*Rubus leucodermis*), and wild strawberries, among others. In this complex system of plant use and species distribution, however, harvesters needed to travel long distances to locate other plants growing within unique geological, climactic and ecological habitats. At once, then, the T'Sou-ke practised horticultural cultivation as well as managing their dependant relationships with plants in a form of the classic foraging model (Kelly, 2013). Whether foraging or cultivating, all human behaviour towards plants was traditionally managed according to laws and agreed upon values that developed and adapted over centuries. The

harvesters and users of plants routinely supplicated the supernatural powers associated with the plants and their habitats to ensure ongoing good relations with the plants and the plants' guardian spirits.

The Coastal Douglas-fir and Coastal Western Hemlock Biogeoclimatic Zones, along with the many lowland and floodplain habitats of Vancouver Island and the smaller islands of the Salish Sea allowed for intensive cultivation of some culturally important plants (Suttles & Lane, 1990). These habitats, and the species they supported, would certainly have been an environmental factor allowing the Coast Salish to create sedentary villages with increasingly large populations. In the Salish Sea region, unlike more exposed areas of the coast where the rugged coastline provides fewer habitable village areas, people could at times move to other locations and start a new village when resource shortages or conflict outweighed the need to stay in a community (Suttles, 1962). The evidence that this was an ongoing adaptive strategy lies in the middens covering the hundreds of habitable beach sites throughout Straits Salish territories: reminders of thriving settlements and encampments. Certainly, within my own experience of boating and hiking around the Straits Salish region, I have observed that on any beach that a kayak can be hauled up, there is a strong likelihood of finding shell midden, fire cracked rock, hearth sites and concentrations of culturally important plants.

Obviously, the remarkable canon of knowledge associated with native plants and their unique Indigenous uses remains undeniably and categorically the intellectual property of the Indigenous peoples – in this case the T'Sou-ke and other Straits Salish peoples– who built this knowledge system over millennia. Some of this knowledge would have been exclusive to Straits Salish (e.g., using willow bark and nettle fibre to build reefnets), while other plant knowledge

would have entered into the canon through marriages into the community and other sharing occasions across many NWC groups (e.g., root vegetable cultivation; working with western redcedar, pruning berry bushes or drying diverse types of berries into cakes for winter storage). Certainly, the knowledge system outlined in this chapter was not created by, nor was in any way developed by, the Settler cultures who moved into the T'Sou-ke and other Indigenous territories in the 19<sup>th</sup> century. Neither were the management strategies associated with directing ecological succession, understanding phenology or the ability to cope with the abundance and diversity of productive but highly dispersed ecosystems the result of knowledge transfer from Europeans. Regardless of whether some of these human-plant relationships have been interrupted or reduced as a result of colonial actions over time, this knowledge system stands as a testament to the deep and enduring bonds between T'Sou-ke and other Straits Salish groups and the ecosystems and plants of their territories. Clearly, people could not simply step into the forest behind their communities and find a cornucopia of plants for foods, fibres, and medicines at their feet. Rather, a careful understanding of when and where different species could be found, and then developing management strategies to convert the abundance of resources into processed food, technology and medicinal products for storage and year 'round use was required and is reflected within the canon of T'Sou-ke plant knowledge.

## **2.10 Conclusion**

Traditionally, in order to provide basic nutrition and protection from the cool, wet climate of T'Sou-ke and neighbouring Straits Salish territories, reliable and organized access to a wide variety of plants and animals was essential (Deur & Turner, 2005; Norton, 1985; Turner & Hebda, 2012). Straits Salish women's central role in plant cultivation, production and trade historically served to enhance and extend the range, populations and productivity of targeted native plant species, and helped accommodate the high group populations and sedentary

residence patterns for which the Coast Salish peoples are known (Suttles, 1962, 2005). The native plants and their uses presented in Appendix A affected every aspect of T'Sou-ke people's lives, particularly prior to first contact with Europeans in the late 18<sup>th</sup> century. The physical existence of culturally important plant communities today in their unique ecosystems throughout T'Sou-ke territory should be seen as a mnemonic to the canon of knowledge associated with these special plant/human relationships. Understanding the roles of culturally important plants and the T'Sou-ke physical, socio-economic and spiritual relationships with them, is essential to understanding the T'Sou-ke people's customary landscape and traditional use of their entire territory—a topic which I will explore in the next chapter.

# Chapter 3

## Managing People and Plant Relationships: Understanding the Socio-political and Physical Infrastructure of Customary Landscapes



### Highlights

Using ethnobotanical and ethnoecological scholarship, can we discern the social and physical infrastructures required to support Indigenous peoples' intensive and extensive use of native plants within a social, metaphysical and spatial landscape in the pre-colonial era?

- Social and physical infrastructure to support the intensive and extensive plant use and management of abundance by T'Sou-ke and other Straits Salish peoples
- The significance of trade and kinship systems vis-à-vis plant management
- The impact of European colonization, particularly on women's roles and activities

### 3.1 Introduction to Customary Landscapes

“They all have little names—every little inch all over the beach, all over the mountain, they name too” (T’Sou-ke elder, Agnes George, Interviewed by Sheila Whincup / Adele Lewis, 1977, track 2).

Indigenous place names, like the ones referred to by the late T’Sou-ke matriarch Agnes George, outline the shape of a customary landscape. Contained in stories, people’s memories, ethnographic texts, and land use and occupancy studies, to name a few, these place names, at once, reflect and constitute T’Sou-ke people’s social, political and legal relationships to physical places in their territory (Napoleon, 2013).

These names point to the genesis of a customary landscape by telling the history of how people came to occupy the territory, such as when the Salish Creator, XÁ,EL,S, transformed people into some of the rocks,

plants and animals that are culturally important today. Place names also identify sites of importance for hunting, fishing, plant harvesting and settlement. They reveal travel routes as well as property ownership (Rozen, 1985). Due to the disruptive colonial forces of the past two centuries, many of the T’Sou-ke place names indicated by Agnes George—“all over the beach, all over the mountain”—are no longer in everyday use. However, some names are remembered by T’Sou-ke individuals, and additional ones can be found in ethnohistorical texts. In the previous chapter, I explored the canon of knowledge that reflects T’Sou-ke people’s relationships with plant species, communities and ecosystems within the physical space of their territory. In this chapter, I examine the socio-political and physical infrastructure required to support T’Sou-ke’s intensive and extensive plant use within a social, metaphysical and spatial landscape prior to contact with the maritime fur trade.

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copyright.

*Figure 3.1 Agnes George (in the 1960s) showing salmon traditionally smoked on a rack made from Oceanspray or hardhack stems. Photo credit: Sooke Museum.*

Over millennia, Straits Salish peoples' relationships with plants have been integral in shaping a landscape similar to those described by Olwig (1996) – a landscape carved into ecosystems, social relationships, economies, and knowledge transmission and belief systems. As introduced in Chapter 1, until relatively recently in Western scholarship, the concept of 'landscape' was presented as a view or panorama, or, simply as a mapped unit of the 'environment' or 'nature.'—"a distinctive bundle of material forms" (Blomley 1998:574). By representing space solely according to the values and perspectives of European definitions, these landscape conceptualizations have been rightly criticized as being both Eurocentric and reinforcing the hegemonic control of Western state societies (Blomley, 1998, 2007; J. Borrows, 1997; C. Harris, 2004; Lutz, 2020; Olwig, 2009). Similar to the movement to enclose of the commons in 16<sup>th</sup> century England, the lines and cadastral spaces surveyed and mapped by 19<sup>th</sup> century colonial agents on Vancouver Island effectively banished Indigenous individuals from their harvesting places and plant species, and imposed a definition of property that is "a bounded and territorialised thing, rather than a set of interlocking local obligations and relations" (Blomley, 2007; J. Borrows, 1997; C. Harris, 2002a). At the same time, the process of transforming many of these areas into European-style usage – logging, mining, sheep farming and urban development – began. In describing the customary landscape of T'Sou-ke plant use in this chapter, I consider the interplay between social rules or laws that are now, or were in the past, localized with a selection of plant species in real places throughout T'Sou-ke territory.

Olwig defines the customary landscape as the expression of a relationship among a collection of people, lands, and species through values and customs that are regulated by their community polity through rules and agreements (Olwig, 1996, 2005, 2009, 2018b). He discusses

# T'SOU-KE CUSTOMARY LANDSCAPE

an assemblage of land, governed by the laws of an assembly



Figure 3.2. T'Sou-ke Customary Landscape Map “An assemblage of lands governed by the laws of an assembly”.

Map researched and designed by P. Spalding and illustrated by Emily Thiessen. This map is an illustration of the relationships between T'Sou-ke peoples, places, plant species, other non-humans and habitats. A representation only of some of T'Sou-ke's culturally important plants are depicted here. A fuller compendium of culturally important plants species, their T'Sou-ke names and their uses is presented in Appendix A. © 2022

how these customary landscapes structured the governance systems of northern Europe and Britain prior to the enclosure of the commons and the Industrial Revolution. I believe this conception of landscape is a helpful lens through which to view the web of relationships between T'Sou-ke and their territory prior to the onslaught of European colonialism. In this chapter I present a composite picture of that pre-colonial landscape by situating people's relationships to culturally important plant species and associated ecosystems within the social and metaphysical web of values and beliefs that have traditionally informed and dictated the practices, protocols, rules, and rituals of everyday and ceremonial life (see Figure 3.2). The Straits Salish peoples' deep attachment to the sea, lands, plants and animals of this region is imprinted on the customary landscape that they created over time. This is revealed in village sites blanketed with clam shell, cultivated prairies where edible blue camas (*Camassia quamash*, *C. leichtlinii*) continues to bloom each spring, estuarine root gardens revealing remnant communities of Pacific silverweed (*Potentilla egedii*), springbank clover (*Trifolium wormskioldii*), and northern riceroot (*Fritillaria camschatcensis*), intertidal areas of eelgrass (*Zostera marina*) and sedges (*Carex obnupta*), remnant fish weirs, fish traps and clam gardens, and woodland areas still abundant with berries, edible greens and game (Fleisher, 1980; Johnson, 1990; Lane, 1977; Mathews, 2014; Suttles, 1974).

Within Olwig's concept of landscape, I discuss how, over time, people's relationships with plants have formed a customary landscape, through the collaboration between humans and some plant species over others. This favouring by creating an ideal habit for chosen species, can result in the suppression or elimination of less favoured plant species, at least from some areas. Embedded within these collaborations are practices, rules, values, protocols, and technology—all wrapped up in the canon of knowledge referred to in Chapter 2. Kimmerer

(2017a) refers to the give and take of people receiving plant gifts and stewarding plant habitats with their knowledge and tools as covenants of reciprocity. She suggests that: “For much of humans’ time on the planet, before the great delusion, we lived in cultures that understood the covenant of reciprocity—that for the Earth to stay in balance, for the gifts to continue to flow, we must give back in equal measure.” I will demonstrate that these covenants of reciprocity between humans and plants rely upon a formalized coordination of understandings and efforts amongst humans to keep up their end of the agreement with plants, as reflected in the practices of T’Sou-ke and other Straits Salish.

### 3.1.1 The Animation of Customary Landscapes

All activities and agreements between T’Sou-ke and favoured plant species, traditionally existed within a deep ideology of the supernatural world. Suttles’ (1974) found that every activity in the Straits Salish world, from making and setting reefnets, to carving canoes, to tending camas fields, was directed, navigated and mediated by spiritualism and ritual, with traditional plant use being no exception. In the beginning-time narratives, humans were dropped from the sky throughout Coast Salish territories and their descendants became the title-holding families who drew their power from their illustrious ancestors (Kennedy 2000). For T’Sou-ke, their first ancestors were dropped from a copper box into their home territory and they landed at Billings Spit (Planes, G 2015:2). Later, the Creator, XÁ,EL,S, appeared and transformed many humans into plants, animals and stone markers, each associated with vivid teachings about the fundamentals of appropriate and inappropriate behaviour within a culturally meaningful landscape. Found throughout Coast Salish territories, these transformation sites are “imbued with oral tradition, stamped with reminders of a time when the world was a much more awesome place” (Kennedy 1995:69). During the age of transformation, XÁ,EL,S changed humans into

plants and animals without depriving them of their souls, thereby allowing these species to continue to think and act with agency. According to 19<sup>th</sup> century Coast Salish cultural leader, Old Pierre Simon, plants (and animals) possess vitality (or thought) and special powers and talents that they receive from the sun:

In the winter, vitality left the limbs and trunks of trees and retired into the roots. That is why, Old Pierre explained, leaves fade and drop. Evergreens, made directly by the Great First, retain their vitality better than the deciduous trees XÁ,EL,S made. Vitality can travel through the spirit world to a XÁ,XE, (sacred or taboo) and there acquire knowledge, or reacquire lost knowledge (forgotten memories) (Carlson 2010:72)

Jenness (2016:85) recorded the WSÁNEĆ belief that trees, like fish and animals, had a mother tree that was larger and nurtured the smaller trees around it. This understanding of the nurturing and exchange of nutrients between trees in a given stand is also examined in the contemporary forest ecology research of Suzanne Simard and colleagues (Gorzalak, Asay, Pickles, & Simard, 2015): a potent example of the parallelisms of empirical observations and analytical conclusions between Indigenous and Western scientific knowledge systems (Turner & Berkes, 2006). Jenness noted the depth of WSÁNEĆ people's deep connection to tree communities when he observed that people would sometimes weep when a tree was blown down by the wind. He documented the names of many WSÁNEĆ and Hul'qumi'num guardian spirits for plants, including the *siahahhao* (Camas bulb) spirit, the wood chopper (*qwe'qxwq*) spirit and the Timber Giant (*sie.ye'*) spirit. According to Jenness, Coast Salish guardian spirits protect many aspects of existence (Jenness, 2016), and if humans adhere to appropriate protocols, the spirits might appear in dreams or be appealed to in rituals such as ceremonial dances, to enhance, for example, the harvesting of camas or trees or, in the case of *sie.ye'*, for activities such as plank house building that require great strength.

The significance of the Salish belief systems around plants is reflected in the mutuality of the relationships between humans and plants. The sentience of plants is recognized in Salish

metaphysics, where the vitality or agency of plants must be treated with respect and humility in order for humans to continue receiving gifts from the plants via the supernatural. Thus, people's connections with plants are an extension of the set of complex relationships humans engage in with other humans and the more-than-human world connecting Salish individuals to their territories and all life within it. Underlying these beliefs are values and normative rules of behaviour required to encourage certain plant species to behave in ways that benefit humans. This is not necessarily a relationship of domination, though, where humans coerce plant lifecycles and behaviour, but rather a relationship of mutual respect that requires persuasion, coaxing and appropriate behaviour and reciprocity on the part of humans to receive the desired response from plants. Likewise, this collaboration with humans yields direct benefits for the plant, such as reducing competition for water, soil and sunlight from other less favoured species, or the dispersal of seeds or other propagules far beyond the footprint of the plant, or widely followed human rules of behaviour that provide ongoing protection and support for the chosen species (Kimmerer, 2017b). In this context, Salish covenants of reciprocity around plants are not brought about by rote inputs to achieve positive outputs, but rather are a "continuous process of becoming" in response to shifting external and internal ecological, cultural and metaphysical factors (Kelly, 2013:30).

## **3.2 The Historic and Ethnographic Context of this Landscape**

### **3.2.1 Biases in the Literature**

In reconstructing a landscape (see Figure 3.2) of T'Sou-ke peoples' relationships with plants that existed prior to the massive disruptions of European colonialism, I have come to better appreciate what was lost, what has survived, and what reconnections are aspired to by present day T'Sou-ke peoples for the future. Using both ethnohistoric and ethnographic texts in

tandem was helpful in this reconstruction. However, in reviewing various historical records describing T'Sou-ke directly, or Straits and Coast Salish more generally, I was struck by the gaps within the texts about the Salish world and about T'Sou-ke peoples' relationships with plants. These gaps were revealed in two pronounced biases that I bore in mind as I reviewed the archival and ethnographic texts and documents.

First, there was a pervasive bias amongst the European travellers and reporters that the highest and best use for plants is when they are ordered and controlled by humans through domesticated agriculture or silviculture undertaken within fenced and bounded fields, orchards and gardens, and tree plantations (Holzl, 2010; Lutz, 2020). The form of plant tending and production used by NWC peoples, referred to as “perennial cultivation” by Turner and Peacock (2005), was so foreign to early settlers that it appears they did not recognize or understand the sophisticated plant management systems they encountered, and therefore, these were recorded very vaguely, if at all, in historic and ethnographic texts (Deur, Turner, Dick, Sewid-Smith, & Recalma-Clutesi, 2013; Maclachlan, 1998).<sup>45</sup> Further, with the exception of a few conifer species (e.g., Sitka spruce, *Picea sitchensis*; Douglas-fir, *Pseudotsuga menziesii*; white pine *Pinus monticola*, and western redcedar, *Thuja plicata* – being the most popular in commercial forestry), the vast majority of culturally significant plants throughout the NWC had no currency within the capitalist global economy of the early explorers and colonists and were usually not recognized.<sup>46</sup> Most early settlers viewed the forests of North America as untouched and endless, to be

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<sup>45</sup> For example, agrarian European settlers would have looked for fields of domesticated crops or grasslands created through domestication of flora and fauna, as evidence of occupation of the land.

<sup>46</sup> This, of course, is with the exception of the Surgeon-Botanists who served on sailing ships in the 18<sup>th</sup> and 19<sup>th</sup> centuries and were tasked by Kew Gardens' director, Joseph Banks, with enumerating and bringing home specimens of as many native plants as possible, primarily “for the ornamental adornment of grounds and gardens at home in England” (Justice, 2000:7).

aggressively harvested to support the exponential growth of local, national and global economies. For example, the Settler ethos of the day is well reflected in the following view from the early 1900s:

All the efforts of the Dominion must be devoted to production and economy. The vast resource of Canada...must be turned to some useful purpose. Untilled fields, buried minerals or standing forests are of no value except for the wealth which, through industry, can be produced therefrom. (Whitford, Craig, & Leavitt, 1918)

Non-timber native plant species were generally viewed as useless weeds which needed to be removed to make way for settlement, farmlands and, eventually, plantation forests (Turner and Spalding 2018; Lutz, 2009). As I will return to in Chapter 4, early settlers also participated in a form of wilful ignorance, where it was highly convenient to classify any Indigenous management of terrestrial plants and habitats as a form of opportunistic gathering from a bountiful wilderness, rather than a more purposeful cultivation that would signify Indigenous property rights (Foster & Grove, 2003; Lutz, 2009; Turner, 2014).<sup>47</sup>

The second bias within these texts is a pervasive, sexist attitude towards women, in which domestic activities and childcare are dismissed as being neither distinctive, nor culturally significant. Not only is this prejudice demeaning, it also has legal implications, which I will pick up on in Chapter 4. Aside from monumental wood-working, the majority of Coast Salish plant harvesting and processing was carried out by women, and sadly there is a general lack of description of women's roles about plant practices as well as within the household and regional economies. At the time when Manuel Quimper and James Cook sailed up the NW Pacific coast

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<sup>47</sup> This activity obviously flows from the 18<sup>th</sup> century philosophy that once the Crown had asserted sovereignty through the Doctrine of Discovery, settlers would follow the principle of terra nullius—borrowed from Roman law to describe ‘empty land’ without a sovereign—where Settlers acquired the rights to land, providing they could demonstrate that the land had not been removed from a state of nature through the labour of Indigenous peoples (Armitage, 2012).

in the 1790s, women in Britain and Europe who worked with forest plants as foods or medicines were still being accused of witchcraft or were simply labelled as anti-science—backward and superstitious. For Europeans during these times, any female behaviour that stepped outside of the tight, puritanical image of a pious Christian woman was classified as savage and barbaric because, so this prejudice goes, the true nature of women is wild, uncontrollable and unintellectual (Merchant, 1980).<sup>48</sup> While most European women had supposedly overcome this unruly state through Christian devotion, Indigenous women throughout the world were judged harshly by explorers and colonists as immoral because their economic, domestic, and sexual agency did not fit within the “twinned concepts of Christian marriage and the Christian home” (Barman, 1998:261). For example, Norton (1985:24-25) concludes:

[Indigenous] Women are dimerously portrayed in the literature of the Coast, appearing as drudges and warriors, entrepreneurs and prostitutes; producers of wealth for men on the one hand, contributing food of questionable value on the other. Their economic endeavours can be interpreted as essential (Martinez 1789:201) or unnecessary (Drucker 1955:42, 54) to the subsistence of the community. Their participation in the social structures is seen both as complementary (Dawson 1882:406-7) and incidental (Boas 1895:341-366). Coastal women are described both as stereotypic gatherers and powerful leaders, but throughout the Coastal literature they remain virtually nameless and scarcely visible to the reader.

This bias that backgrounds and suppresses women’s roles and knowledge in historic narratives continues into the ethnographic literature (e.g., Philip Drucker above). Bruchac (2014) elaborates that in the case of Franz Boas’ ethnographic research on the NWC, Kwakwaka’wakw matriarch Lucy Homikanis insisted that her husband, George Hunt (Boas’ Indigenous field agent), present detailed information about plant gathering and food preparation to Boas, but it was only after a protracted argument by letters, that Boas acquiesced to include this information

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<sup>48</sup> The English word “savage” actually derives from the Latin term ‘*sylvaticus*’ which translates to ‘of the woods’ (Balick & Cox, 2020).

in *Ethnology of the Kwakiutl* (1921). Boas dismissed women's plant knowledge by misunderstanding it as universal information (not culturally distinct) from women who were "thoroughly familiar with the duties of a good housewife" (Boas 1921: 45). Norton's (1985: 246-247) critical review of historical accounts and the contributions from contemporary Indigenous plant specialists, reveals that the bulk of women's activities on the NWC focussed on "efficient management of terrestrial resources to fulfill their extensive domestic obligations," and that by specializing in production of surplus harvests, they produced large quantities "...of both staple and supplemental products which were locally consumed and also exchanged for non-local specialties."

Using Norton's analysis as I read through various texts about the T'Sou-ke, I was mindful that, due to the early replacement of many important trade, textile and technology plants with industrial substitutes, T'Sou-ke people's, and particularly T'Sou-ke women's, relationships with plants were often discussed, if at all, as a relic or a marginal curiosity of Straits Salish culture, as opposed to reflecting an ongoing living connection to the T'Sou-ke traditional territory and the plant species within it. In fact, the majority of the detailed ethnographic interviewing around plants and plant management did not occur until one hundred years after many regular plant practices had lapsed due to the events and circumstances of colonization (see Norton 1985:167-170).

The customs, practices, and knowledge transfer surrounding Straits Salish traditional plant use and management were historically supported by an extensive infrastructure. This social and physical infrastructure, particularly with regards to Indigenous plant use and relationships, was deeply undermined by various stages of colonialism and, as such, an analysis of how T'Sou-ke political and economic institutions have supported plant use is

challenging. As noted previously, since many of the values and practices associated with plant use and relationships were not systematically documented until a century and a half after initial contact with Europeans, we cannot simply read either historic or ethnographic texts at face value. Rather, from a base of wisdom documented from more contemporary Indigenous knowledge holders (Turner, 2003), I have tried to interpret information in archival texts that might relate to plants both in the context of cultural loss and of resilience, and also in light of the inherent biases of those who recorded any observations of plant related practices.

### 3.2.2 The Problem with Establishing a Date of European Contact

It is challenging to pinpoint an exact date of first contact between the Straits Salish and Europeans as European technology and diseases preceded the actual physical presence of explorer's ships. At least four epic historic events occurred at various times since the late 18<sup>th</sup> century that, collectively, disrupted T'Sou-ke and other Straits Salish relationships with native plants: 1) the smallpox pandemic of 1782; 2) the introduction of the European maritime trade followed by T'Sou-ke peoples working in the wage economy;<sup>49</sup> 3) European settlement of T'Sou-ke homelands without consent;<sup>50</sup> and 4) imposition of the *Indian Act*, Indian residential schools and other government policies on Indigenous communities.<sup>51</sup> These epic events were accompanied by millions of other contact events that have impacted, and continue to impact, Straits Salish peoples and their communities over the past two hundred years. Our understanding

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<sup>49</sup> For a full analysis of this, see Lutz (2009)

<sup>50</sup> This includes the E&N Land Grant which effectively privatized almost half of T'Sou-ke territory.

<sup>51</sup> See "Honouring the truth, reconciling for the future: summary of the final report of the Truth and Reconciliation Commission of Canada" (Canada, 2015) and Report of the Royal Commission on Aboriginal Peoples (Dussault & Erasmus, 1996)

of ‘contact’ then should be viewed not so much as an event occurring at one time and place but as a series of encounters that have a cumulative and variable impact on individuals and their communities to this day.

In the context of plant use and stewardship, historicizing Indigenous peoples’ experiences within a continuing series of disruptive events is important to understanding “that native societies changed like any others and generated multiple histories” (Harris 1994: 617). As argued by Butler (2006:126,107), “Indigenous knowledge...must be understood in light of the forces of change acting upon Indigenous resource activities since contact,” because this knowledge is too often presented without acknowledging the “massive disruption of Indigenous resource use” predicated by the assertion of British sovereignty. So, while I reconstruct a model of the customary landscape of the socio-political organization required to support plant use and stewardship as traditional plant and ecological knowledge, I do not presume that this is timeless picture of T’Sou-ke reality. It is a representation from which we can understand how ethics, protocols, rules and laws have mediated plant use in the past and might help to build an Indigenous governance and legal model for the present and future. In particular, appreciating the impact of the smallpox epidemic of 1782 and the early maritime trade with Europeans is key to understanding a fuller role of native plants in the socio-political organization and economy of the Straits Salish prior to the time of contact with Europeans.

### 3.2.3 The Impact of Smallpox on the Coast Salish in the 18<sup>th</sup> Century

Transmitted across trade and exchange routes throughout North and South America in 1782, smallpox appears to have been catastrophic for the Coast Salish, striking down their communities less than a decade before the first European in this area, Manuel Quimper, sailed into the Juan de Fuca Strait in 1790 and encountered the T’Sou-ke (Gough, 2015). From this

single epidemic the dense populations of peoples around the Salish Sea were cut by anywhere between 50 and 95 percent of their original numbers (Boyd, 1999; C. Harris, 1994). Entire villages were abandoned and Captain Vancouver's records of his 1791 exploration of the Straits refer to the obvious crippling de-population where, throughout the Salish Sea, he encountered deserted Coast Salish villages with large numbers of skeletons lying where the victims had fallen. Vancouver puzzled at the small populations of people he found relative to the extensive village infrastructure, including plank houses and what he referred to as large "lawns" throughout the region becoming overgrown with brambles and bracken (Balfour, 1924). Clearly, prior to any European observations of Coast Salish plant use, every aspect of the Coast Salish world was dealt a devastating blow that would affect their occupation and use of their territories for generations. The elimination of extended households and sometimes whole villages would have severely disrupted the Salish plant tenure systems that I discuss in this chapter, and the rapid reduction in population left the Salish vulnerable to raids and territorial encroachments from northern tribes who were less affected by the 1782 epidemic (Carlson, 2010).

According to Floyd (1969), twenty years later, in the early 1800s, an estimated 2000 Straits Salish people lived on southern Vancouver Island in several villages, "the largest of which were at Sooke (T'Sou-ke), at Cadboro Bay (Lekwungen), and on the Saanich Peninsula (Saanich)" (Beckwith, 2004:36). Having survived this ruinous epidemic, Straits Salish peoples and their plant traditions, particularly women's practices, were then impacted by the influx of industrial materials (such as wool and cotton textiles) introduced through the 18<sup>th</sup> century maritime fur trade, followed by the effects of European settlement and the resulting decrease in access to plants and habitats for Indigenous harvesters. Knowledge of plants – what parts can be used, when and where to find them and how to work with ecosystems to increase plant productivity

during this time – is only part of the traditional T'Sou-ke plant use system and relationships with plants. Notably, the full canon of knowledge of Straits Salish plant use was likely not used regularly since this very early period.

### **3.3 Physical Infrastructure Supporting Plant Use and Management**

Prior to the European colonial period, throughout their customary landscape, physical infrastructures were required to support plant use and management. The Salish Sea, along with the major rivers flowing into it, was, and to an extent still is, an essential maritime highway through which most economic activity traversed, formerly by way of various sized dugout canoes built from western redcedar. Canoe routes along the T'Sou-ke coastline are remembered by both Frank and Jack Planes with long-established canoe pull-outs where a paddler could pull into a safe harbour and common-use campsite in the occurrence of a sudden storm (Te'Mexw Treaty Association, 2019). Established foot trails led household and task groups to plant-harvesting areas, spiritual sites and hunting areas (for T'Sou-ke these would have been along the Sooke River into the Smokehouse lakes, and along Stoney, DeMamiel, Tugwell, and Muir creeks and over to East Sooke via Roche Cove, as well as northeast over to Hul'qumi'num territory (Te'Mexw Treaty Association, 2019)). Structural capture sites made from plant wood and fibres such as duck nets, hunting blinds, reefnets, fish weirs, and fish traps allowed for mass harvesting of fish and game.<sup>52</sup> Permanent seasonal camps, including frames for mat houses, were the locus of private and common harvesting areas such as productive cedar stands, berry patches, camas fields, root gardens, hunting areas, clam gardens and fish traps and weirs. Clothing made from cedar bark as protection against the cool, wet climate of the region can also be understood as part

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<sup>52</sup> Raised duck-net poles were among the first things observed by European explorers. Quimper saw “many high poles” on the spit at the entrance to Sooke Harbour in 1790, These were braced by props at the bottom, and four served as channel markers since they stood at the edge of the sand bank, their bases evidently covered at high water (Suttles 1974:73). Other duck nets were observed in Sooke Basin, nest to Goodrich Island, and La Roche Cove.

of the physical infrastructure and just “as necessary to the lifeway of the Coast as waterborne means of transportation” (Norton 1985:167). Prior to the influx of cheap woolen and cotton textiles from the maritime fur trade, hats, capes, skirts and blankets made from plant fibres were essential for people to protect against hypothermia during most of the year (Norton 1985:167).

Likewise, the substantial technologies to support the various major food harvesting activities of the T'Sou-ke are mostly dependent on plant materials to underpin this infrastructure. For example, the gear associated with the reefnet fishery would have minimally involved canoes, harpoons, hooks or spears, nets, needles, lines and grass ties, canoes, paddles, and canoe bailers, collectively derived from diverse plant species (e.g., Pacific yew, willows, western redcedar, yellow cedar, western hemlock, oceanspray, bull kelp, stinging nettle, dunegrass) (E. Claxton & Elliott, 1994; N. X. Claxton, 2015). Additionally, the digging sticks (often made from Pacific yew, crabapple or oceanspray), baskets and mats (using western redcedar bark, roots, and withes, Sitka spruce roots, basket sedge, cattail leaves, and tule stems, bitter cherry bark, red alder bark,) required for root, clam, and berry harvesting involved diverse plant species and hundreds of hours to source, process and manufacture (Turner 2014; Suttles 1974: 219). Food harvesting led into extensive food processing, smoking, and pitcooking each of which required many types of fuel from trees such as Douglas fir, grand fir, western redcedar, alder and Bigleaf maple. These species were harvested alongside of food plants (often while families were out fishing and hunting) and were essential to the infrastructure of the entire T'Sou-ke food system (FPlanes, 02-03-00).

### 3.3.1 Cedar and Its Importance to Infrastructure

Perhaps the most important piece of physical infrastructure required for most aspects of T'Sou-ke plant use, and one that involves management of western redcedar in mature forests, was the Big

House. Until relatively recently, these large, rectangular structures with shed style roofs, primarily constructed with posts, siding and roofing of rot-resistant western redcedar, were at once multi-family dwellings, food processing and storage warehouses, textile production centres, and the locus of governance and legal assemblies (Suttles 1991).<sup>53</sup> Although some architectural features of Big Houses vary up and down the coast, the function and building of these monumental dwellings remain consistent throughout the NWC culture area, allowing for rigorous archaeological analysis of their manufacture and significance to traditional NWC communities (Ames & Shepard, 2019). The structures varied in size, with some being quite small and housing as few as 15 people, and others being much larger, replete with wooden palisades to safely house and defend as many as 100 people (Angelbeck, 2009). Everywhere, however, the Big Houses “...were the material expression of extended, multifamily households” and of the rules, rights and obligations embedded within these households (Ames & Shepard, 2019:203). Depending on the regular maintenance of the foundations, walls and roof of a Big House, the use life could be anywhere between 200 to 1000 years (Gahr, 2006). Drucker (1951) and others observed that building a new Big House was undertaken infrequently because it required access to and management of considerable labour power that involved substantial wealth to support and entertain the labourers for an extended period. Mostly, Salish households would maintain their existing structures by adding on or removing rooms as needed, and by replacing parts one-by-one or section-by-section as they rotted and needed repair (Jenness, 2016).

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<sup>53</sup> It should be noted that, similar to food and textile production, families were no longer living in Big Houses when most of the ethnography was conducted on the NWC. Much of our knowledge about these monumental structures comes from archaeological reconstruction and analysis.

Ames and Shepard (2019) undertook detailed calculations of house construction in the building and maintenance of three houses at the Cathlapotle and Wapato valley sites in Washington State. The authors acknowledge differences within architectural features of house construction throughout the NWC culture area.<sup>54</sup> However, they argue that their analysis of a variety and depth of research throughout the NWC on all aspects of plank house construction makes the numeric ranges that they present applicable throughout this broader culture region. They found that building Big Houses would have required between 57 to 100 old growth cedar trees, which would have been processed mostly with hand tools into anywhere from 5,000 to 45,000 board feet (depending mostly on the size of house) of planked roof, siding and floors (where applicable), requiring a median of 3,419 person days of labour. During a house's lifespan, all elements, including planks, posts, and beams would have needed to be replaced "...a minimum of 5 times over the house's 400-year use-life, and probably closer to 20 times," further requiring anywhere from 300 to 1500 cedar trees to maintain a single plank house (Ames and Shepherd 2019:214).<sup>55</sup>

Ames and Shepherd (2019:210) noted that western redcedar, while present throughout the NWC, was not consistently abundant, so that "...the sheer volume of wood required for plank houses, among the other uses for cedar, especially over the 6500 years or more that western redcedar has been available as a building material, must have significantly shaped the region's forests and required management for sustainable use over millennia" (Ames & Shepard, 2019:210). This reasoning is reinforced by my ecosystem analysis in the T'Sou-ke sample area

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<sup>54</sup> For example, northern Big Houses have gabled rather than the shed roof design of the Coast Salish, and southern groups around the Columbia River have wooden floors, which would have required more materials to build.

<sup>55</sup> Traditionally, T'Sou-ke Big Houses did have wooden floors. However, the only house in the sample without a floor was smaller than average, so I have included the full range of estimates for large and small houses.

with regard to the presence and abundance of western redcedar. As Figure 3.3 reveals, while it is possible to find cedar trees throughout the sample area, they are only dominant species in selected areas (showing as darker brown polygons), and, of course, cedar would only be dominant in these selected ecosystems at the mature and climax successional stage. It is likely that the technical requirements for fine quality cedar bark for textiles, and cedar withes and root materials for basketry, require different growing conditions for cedar than that required for house posts, beams and planks, thereby increasing the numbers of individual trees required to meet the human demand for cedar. For example, cedar trees suited to harvesting for their inner bark cannot be too small, but neither can they be so big that you can no longer wrap your arms around the trunk. For trees to have bark or planks harvested from them, they require the shelter of a tree canopy in a mature forest so that the lateral branching on the lower stems is minimal, thereby allowing for long, unrestricted strips of bark or knot free planks for building. Cedars required for house beams, planking or monumental art, however, are found in climax, old growth forests (Benner, Nielsen, & Lertzman, 2021). Furthermore, a cedar tree found in an open canopy ecosystem would be of inferior quality as building material or even for bark stripping because it would receive too much light, allowing lower lateral branching (although such a tree may well have strong lower branches from which to construct rope and fishing lines). Tough, flexible branches or ‘withes’ used for tying and binding would more likely be found on cedars in transitional successional areas or in ecosystems where a mature cedar would receive enough sunlight to be accessible to harvesters to access lower branches along the trunk (e.g. *Cottonwood-Red osier Dogwood* or *Hardhack Labrador tea* ecosystems). In consideration of the

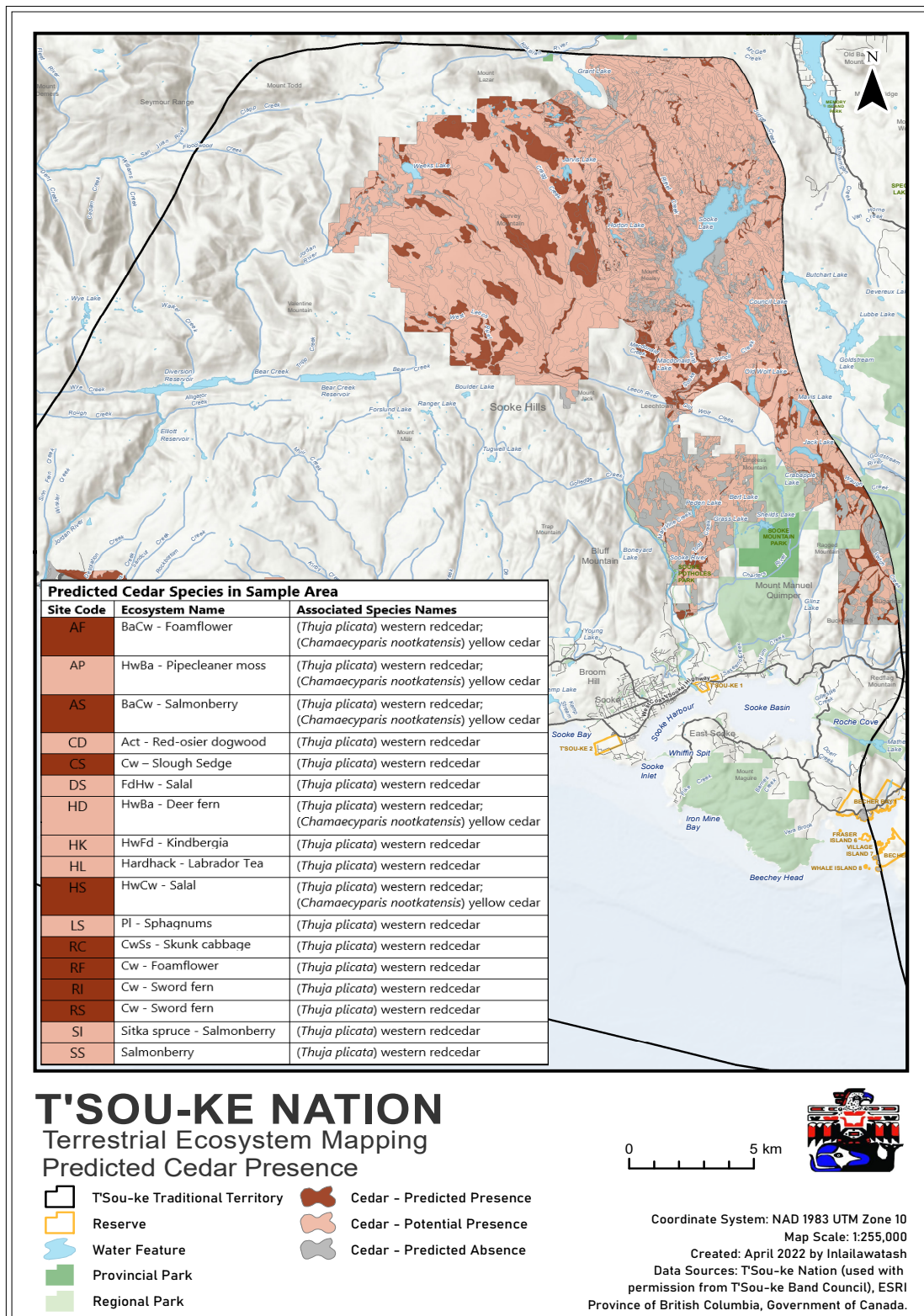


Figure 3.3 Predicted Cedar Presence Map of T'Sou-ke Sample Area.

impressive volume and variety of cedar used by the Coast Salish and other NWC groups, it seems inevitable that households owned individual stands of cedar to manage for their sustained and specialized uses of this crucial resource (Benner et al., 2021; Turner, 2014:210).<sup>56</sup>

As with many Indigenous peoples throughout the world, T'Sou-ke and other Coast Salish groups did not adopt full-scale agriculture with domesticated, genetically distinct species, they nonetheless, understood and were able to modify or work closely with the ecology of hundreds of plant species within their territories to accommodate the large-scale harvesting and tending of many species for food, medicine, and technology (Kelly, 2013). In T'Sou-ke territory, the prime savannah and woodland habitats were dependent upon the ongoing, controlled burns, described in the previous chapter, to maintain the vertical structure, spatial extent and species composition of culturally important plant communities. As also discussed, T'Sou-ke managed plant species by working with plant communities in mature forests to allow for sustainable harvesting and a minimal impact on the surrounding ecosystems. These activities required a tremendous coordinated effort amongst people, which I will examine in the next section.

Notably, the T'Sou-ke and other Indigenous groups, from Alaska to California, did not refer to their traditional plant activities as 'cultivation' or 'management' so much as 'caring about' or 'tending' or 'fulfilling obligations' to plants and plant communities (M. K. Anderson, 2005; Atleo, 2011; Suttles, 1990; Turner, 2005). Indeed, there are no SENĆOŦEN terms for 'management', 'cultivation', 'orchard' or 'farming', but as Table 3.1 reveals there are several SENĆOŦEN terms for plant practices and rights and obligations to the human and more than human world (Montler, 2018). Again, the values underlying these terms reflect the fact that

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<sup>56</sup> Although I am focussing on management of western redcedar, here, some of these details equally apply to harvesting and tending yellow cedar, the soft inner bark of which was sometimes preferred for clothing and baskets and the wood for carving and tools. (Charlie & Turner, 2021)

T’Sou-ke and their neighbours were involved in a deep relationship with plants as sentient beings, and I will now turn to a general description of the social infrastructure, or political economy, needed to support these relationships.

Table 3.1 SENĆOŦEN Possible Terms for Plant Management (Montler, 2018).

SENĆOŦEN terms	English translation
<b>SJSEŦENEÇ</b>	a garden, plants, growing things
<b>SJSENEÇ</b>	a place where you grow things; garden
<b>KEP</b>	to gather
<ul style="list-style-type: none"> <li>• <b>KPEN</b></li> <li>• <b>KPET</b></li> <li>• <b>KEPSIST</b></li> <li>• <b>KEPSIT</b></li> <li>• <b>ELEXOT</b></li> <li>• <b>TKEÇ</b></li> <li>• <b>IXET</b></li> </ul>	<ul style="list-style-type: none"> <li>• to gather, collect things or people</li> <li>• to gather, join things or people</li> <li>• to gather from something or someone by hand</li> <li>• to collect, gather (something) for someone</li> <li>• to gather, harvest something</li> <li>• to gather firewood (not cutting)</li> <li>• to sweep something up, gather up trash</li> </ul>
<b>EŁOSET</b>	to have respect, care about
<b>O,EQEŁ</b>	to be looking after, taking care of (someone or something)
<b>SWNINE,ÇEN</b>	to be the object of caring
<b>QE,NĂŁ</b>	responsibility
<ul style="list-style-type: none"> <li>• <b>QEN,Ă,ŁEN</b></li> </ul>	<ul style="list-style-type: none"> <li>• to watch over, babysit</li> </ul>
<b>SQA</b>	to have to, must, be obliged to
<b>EL,ONEŁ</b>	to comply, agree, obey (of a group)
<b>ÇEKENEÇEN</b>	to burn brush, clear land by burning
<b>WŁENEŁO,</b>	to clear land (NB., diff terms for cleared land and clearing)

### 3.4 Social Organization Supporting T’Sou-ke Plant Relationships

The scholarship on Salish social and political organization, kinship, and economy is expansive (Barnett, 1955b; Carlson, 2010; Collins, 1974; Curtis, 1913; Gunther, 1927; Hill-Tout, 1978; Inglis, 1970; Jenness, 2016; Keddie, 2003; Kennedy, 1995, 2000, 2007; Suttles, 1974,

1987a, 1990; Suttles & Lane, 1990; Thom, 2005). I will not summarize this work here, nor will I interpret the genesis of the social organization and political economy of the Coast Salish peoples. Rather, as in Chapter 2, I am more interested in describing the effectiveness of these traditional political, spiritual and economic systems for the long-term use and sustainability of culturally important plant populations and communities. Socio-political organization amongst the Coast Salish has undergone many changes over the past two centuries. As I am interested in understanding the full spectrum of rights and responsibilities to the T'Sou-ke's culturally important plant species, in this section I focus on the applicability of Coast Salish socio-political organization to the strategic management of plant resources use and distribution, as it functioned prior to their involvement with the maritime fur trade.

Following from Suttles (1987), I underscore that whatever the original motivation for developing these social systems, the result is that the social rules within them are uniquely responsive to the plant and ecosystem ecology of this region. In light of the ongoing need to manage variable abundance of particular plants, traditional Salish socio-political organization allowed for: 1) organization of labour for getting and storing food; 2) a means of redistributing people to various habitats (e.g., seasonal round) and/or redistributing the bounty of the habitats (e.g., household food sharing; robust trading economy); and 3) intensive acquisition and storage of surplus food and material goods, motivated by the need to maintain and build household prestige (Suttles 1987:62). This socio-political organization also allows for the facilitation of inter-generational knowledge transfer and for a political and legal structure that supports planning, decision-making and an ethos of sharing and stewardship.

### 3.4.1 Kinship, Governance, Prestige and Plants

In pre-contact times, the motivating social value of prestige is seen as the long-term stabilizing factor in maintaining large sedentary populations throughout the NWC (Suttles 1987; Kelly, 2013; Suttles, 1990). Like other NWC groups, Straits Salish peoples were traditionally organized into ranked groups: including title holders or nobles (the majority of people), commoners (a much smaller group who usually lived in separate residences from nobles),<sup>57</sup> and slaves (who lived with nobles).<sup>58</sup> Traditionally, Coast Salish noble families traced their ancestry to illustrious individuals who first peopled their world. Birthright from a supernatural ancestor represents a form of charter from which descendants trace their rights, privileges and responsibilities (Kennedy 2000; Norton 1985:210). Regional groups of title holders cross-cut territories, forming a corporate social network of Straits Salish and neighbouring tribes through which all members of this elite group established political and economic alliances through marriage and blood kin (Kennedy, 2000; Suttles & Lane, 1990). In pre-colonial times, the Salish political economy consisted of a dense network of complex relations radiating from the central “extended household”: the basic unit of economic production which was composed of several nuclear families. An upper-class nuclear family of the late 18<sup>th</sup> century may have included multiple wives, as well as slaves. Today, of course, Coast Salish peoples no longer practice either polygamy or slavery, but, the importance of a person’s lineage and ability to trace kinship connections between individuals and families is of primary importance to their continuing social

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<sup>57</sup> Commoners were a smaller group of people who had somehow become disenfranchised from the title holding group. As Suttles observed: “In native theory the lower class consisted of people who “had lost their history,” that is, people who had no claim to the most productive resources of the area and no claim to recognized inherited privileges, and who furthermore “had no advice,” that is, they had no private knowledge and no moral training.”

<sup>58</sup> Throughout the NWC, Europe, the Americas and Asia, slavery was an accepted practice throughout the 18<sup>th</sup> century. Along the NWC, slaves supported the intensive tasks associated with fisheries and plant cultivation, storage and exchange (Kelly 2017).

and legal relationships. As Morales (2014:52) explains, in current legal practice, acquiring a traditional Coast Salish name remains an essential bridge to a greater family, and “tangible and intangible property rights often depend on these types of familial relationships.”

The Coast Salish Big House plank structure functioned as the physical locus of the extended household, or social House group, and, was recorded by Jenness in the following:

Each married family in this group occupied one segment or room in the dwelling; it owned the wall and roof boards of that segment, either through inheritance or through having cooperated in the building; and it might remove these boards whenever it wished, leaving that portion of the common home wide open. [and in a footnote he added] As a rule a family only removed its wall and roof boards for temporary shelter in a spring or summer camp; but occasionally (e.g., in the event of a quarrel) it removed them permanently and used them for construction of a new home (Jenness 1934-1936c, 54fn).

Unlike the more northern groups, Coast Salish nuclear families traced descent bilaterally and, although patrilocal residence was favoured, it was also perfectly acceptable to reside with either the wife's or husband's village. So, while the extended household was the primary unit of production and governance, unlike northern NWC groups, membership was not permanent and Coast Salish nuclear families maintained some autonomy to break off from the larger group should the need arise (Angelbeck, 2016). Suttles (1962) suggests that the option to alternative membership and individual or nuclear family mobility amongst the Coast Salish likely arose due to the unique ecology, geography and climate of the southern part of the NWC, providing many more possible places for human habitation than found along the coastlines farther north. The geography of the Salish Sea includes a lowland trough between the Coastal and Inland mountain ranges, providing multiple beaches, floodplains, estuaries, sheltered groups of islands and prairies between the forest and the sea which present “numerous locations suitable for human occupation in contrast to the brusque shores of the northern mainland and archipelagos” (Norton 1985:53).

Traditionally, the Salish practiced marriage exogamy whereby, a man or woman must marry a partner from another village. This practice served to knit families from the corporate titleholding group together for generations, providing proprietary access to a broader expanse of private and common-pool resources than if they married exclusively within their home village (Kennedy, 1995, 2000, 2007). In this marriage system, affines (related by marriage) from one generation became consanguines (related through descent from a common ancestor) in the next, and bloodlines were closely monitored by alternating unions between families so that affinal relationships (potential marriage partners) are maintained for several generations (Carlson, 2010; Suttles, 1960). By examining early census data in Puget Sound, Norton (1994) charted the impact of exogamy on the larger economy and legal rights of Coast Salish peoples where she concludes:

Spousal selection was the matrix through which the distribution of individual social and economic rights and intertribal allegiances emerged.... Marriages joined members of house, village, or tribal groups into webbed tiers of kin, each sharing specific obligatory rights and responsibilities. These marriages decode familial rights to resources, potential use of common territory, and cast light on social and economic exchange patterns recorded elsewhere.

In pre-contact times, several households cooperated flexibly as local groups living in permanent winter villages, with nuclear families moving off to summer village sites in their territory to cultivate and harvest plant and animal resources according to property rights they held through marriage and inheritance (Kennedy, 1995). Household groups harvested, processed, and traded many specialty and prestige items derived from plants, including baskets, blankets, mats, and edible bulbs and other roots, which they produced from designated plots that women inherited from their mothers (Collins, 1974; Darby, 2005; Suttles, 1974). Indeed, as Inglis (1970:152) found, the concepts of ownership and inheritance in NWC societies generally relate more to the

“small bounded areas” of root and clam gardens, for example, as well as berry patches, which “characterize the economic activities of women to a much greater degree than they do of men.”

Family heads were the primary decision-makers for their respective households; the word in SENĆOŦEN for government is SI,ÁM which means boss, chief, or leader (Montler, 2018). Unlike many ranked societies, Salish chiefly leadership was non-coercive, so that chiefs could organize and strongly influence community members but had limited power beyond their households (Ames, 1995; Angelbeck, 2009, 2016). Leadership as Head Chief at the village level was flexible and usually earned by high born male individuals through socially prized behaviour such as cooperation and generosity. Their leadership was used as required for instances or activities involving complex cooperation; Head Chiefs of villages could coordinate labour, exchanges, or defence on the village level—but only if this leadership was accepted by the village constituents (Angelbeck, 2009, 2016). These flexible coalitions allowed the strong plant practices (tending, harvesting, processing, trading) described in the last chapter to emerge, that at times were carried out by individual families or household units, and at other times executed through complex consanguineal and affinal networks. Traditionally, in Salish society, the majority of actual decisions were made by a council of notable authorities who interpreted the rights and duties toward everything from supernatural obligations to property rights (Morales, 2014). Membership in these councils was somewhat fluid (but, minimally, required a member to be in the title-holding class), and the councils were convened as required. Councils met in Big Houses as well as at certain key landmarks such as rocks and lakesides. The T’Sou-ke continue to acknowledge landmarks in their territory where these councils met in historic times to deliberate on important decisions (see Council Rock in Young Lake and Boulder Lake in Figure 3.2).

By balancing local autonomy against shared societal needs, the Straits Salish peoples traditionally managed their world and their economy through their ability to form coalitions as needed, but also to break off as independent units when it suited (Suttles, 1960). Although Coast Salish territories are not absolutely bounded by permanent borders, in pre-colonial times primary rights to use particular plants and other resources were recognized by protocols and laws over areas of overlapping use, negotiated through consanguineal and affinal ties or, when negotiation failed, through conflict and warfare (Donald, 1997; Suttles & Lane, 1990; Thom, 2009; Turner & Jones, 2000; Turner, Smith, & Jones, 2005). The temporal and geographic variability of a resource base essential to sustaining the densely populated Salish territories required a cultivation and harvesting complex at the landscape level, based on an ethos of prestige, cooperation, generosity and obligations between consanguines (Beckwith, 2004; Suttles, 2005; Turner et al., 2013). Key to the strength of these relationships was the allowance for nuclear families to leave the household and join the spouse's kin, should the need arise.

#### 3.4.2 Feasting and Potlatching

On the other end of the political spectrum was the ability to incorporate affinal and slave relationships into a household, particularly a larger household that required more labour for a household chief who might be building his prestige (Collins, 1974; Jenness, 2016; Kennedy, 2000). The rules around how these coalitions and free agents worked were managed through their SKAU or natural laws: expressed in Straits Salish ceremonies, protocols, rules, dances and narratives. Notably, these political activities were supported by plant products (primarily in the ceremonial regalia and masks, as well as feast foods and dishes) and also determined how, and by whom, these plant products were owned, managed, harvested, processed and exchanged. Establishment and maintenance of status pre-occupied much of the Straits Salish political

activity, and plants featured strongly in this. Even after undisguised attempts by the Government of Canada to eliminate this system of governance, the significance of the Big House as the physical seat of government continues to resonate with T'Sou-ke peoples.

Because a Longhouse to a Native Indian is a very, very sacred place. I mean everything was done in a Longhouse. The decisions were made. When you walked into a Longhouse, you left all your lies at the door. You left all your prejudice at the door. You left all your bad things at the door. When you walked in, you spoke nothing but the truth, or else. Decision-making was all done in a Longhouse...And not only decision-making, good times. Like potlatches. Frank Planes, 02-03-00

The most formal expression of the Straits Salish governance system was carried out through the potlatch complex. These winter ceremonies, which continue in a modified form today, allow the coalitions between households, extended families, affines, and villages to be presented, witnessed, accepted or rejected. Here, individuals received their formal names which link them to families within the corporate kin network of the titleholding class. Property and inheritance rights to use masks, ceremonial regalia, dances and stories are conferred in these ceremonies. Births, marriages and funerals are recognized at potlatches. Traditionally, it was only on these occasions that a Household Chief would unveil the guardian spirits carved into houseposts (normally kept covered to protect the household from their power) as prestige was gained through "the display of supernatural power and the giving of property, the two being symbolically the same" (Suttles 1962:131). Plant foods and other products are integral to the potlatch events providing specialty foods, containers, cooking and serving utensils, as well as the essential gifts (mats, blankets, etc.) for those attending the event to witness the proceedings by accepting the gifts. Traditionally, by participating in these ceremonies and accepting these gifts, visiting households also formally legitimized that Household's rights to resource areas (e.g., camas, bracken, estuarine roots, berry patches, cedar stands, fishing traps and weirs, clam gardens).

### 3.4.3 Supporting Plant Management through Property Arrangements

At several places where the plants [*Camassia spp.*] grew thick, women had their own plots, marked off with stakes so that no one else would dig there. A woman defended her rights to her plot. After her death, a relative inherited it. Women dug the bulbs in the spring, while the flowers were in bloom. Using digging sticks...they pried up a piece of sod, described as solid camas bulbs. “There was no grass then,” I was told, “because the patches were cared for.” They turned a strip of sod over, pulled off the bulbs from the underside and then replaced it with flowers on it. Their hands got purple from the flowers. When they had finished, they leveled the ground and covered it with seaweed. Later, when it was all dry, they burned it over. This was said to make the bulbs bigger next year (Suttles, 2005:181).<sup>59</sup>

Photo withheld  
for reasons of  
copyright.

Figure 3.4 T'Sou-ke Plant  
Expert, Mary George.

To understand the social infrastructure supporting T'Sou-ke plant use and management one must turn to property and inheritance rights. Like everything else in Coast Salish traditional social organization, property laws are enmeshed in a dense complex of kin relations, with the sum of a Coast Salish person's estate made up of both corporeal and non-corporeal property (Miller, 2001). Suttles (1960) suggests that traditional Straits Salish culture can be seen as a set of possessions which Straits people use to mediate between themselves, the supernatural and the habitat of their homelands. This set of possessions begins with “...a world-view which sees nature as a source of supernatural powers and sees food as a gift of the supernatural” (Suttles 1974: 49-50) and is therefore held as XÁ,XE, (“meaning sacred, powerful and potentially dangerous, taboo”) (Montler 2018: 799). Often priests (originally both women and men) would supervise and conduct ceremonies related to food harvesting activities to ensure that these tricky supernatural pathways were navigated safely (Amoss, 1978; Mathews, 2014; Norton, 1985; Suttles, 1974). Other forms of non-corporeal property were kinship ties (i.e., the web of

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<sup>59</sup> Wayne Suttles recounts an interview with Mary (photo above) and Agnes George from Sooke in 1952.

relationships binding title-holding families together throughout the Salish world) as well as individual spiritual possessions. The body of knowledge associated with plant use and supernatural powers is also considered a possession. In this instance, the knowledge associated with fishing, hunting, and harvesting, cultivation, processing and manufacturing of plants and plant products are all proprietary as well as “general notions as to where and how spirits may be contacted” (Suttles 1974: 50). This proprietary knowledge is enshrined in oral history, dances, songs, names and crests passed down from time immemorial and through which ownership rights to intellectual, spiritual and physical property can be conveyed.

Corporeal property consisted of everything from bounded plant and clam harvesting plots, to masks and dance regalia, to house structures (both cedarwood and mat), to portable house planks, to monumental harvesting structures (duck nets, fish weirs, reef nets), and even to slaves (Donald, 1997; Suttles, 1974; Suttles & Lane, 1990). In pre-contact times, most of the human-constructed property was made from plants, but the more significant jural obligations associated with plants were tied to resource sites that were owned and inherited through kinship ties within the title-holding class.<sup>60</sup> Property rights bound together wider kinship coalitions where individuals held rights to use resources in a multitude of areas, that were not necessarily in the home territory of their household group (Kennedy 1995:69). Exclusive inherited privileges of nobles to own important resources, including rights to patches of culturally favoured plant species, defined their membership in the upper class and, as Hill-Tout (1978:130) observed, in

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<sup>60</sup> Relating to the law, and the rights and obligations associated with law.

particular the Straits Salish "...have separate and exclusive fishing, hunting, root, and berry grounds."

At the same time, many fish weirs, clam gardens, root gardens and berry patches were non-exclusive or open access and, thus, as part of the public domain, could be harvested by nobles and their slaves, commoners, or non-related kin from outside the territory (Suttles 1960). However, it was the owned and specifically managed sites where the real wealth could be produced. As Suttles (1974:56) concluded:

These [owned] sites are limited in number, and usually the most productive ones for whatever product is obtained there. While everyone can make a living in exploiting the public domain, the real surpluses are produced at the owned locations and the owners thus have considerable advantage over the other members of the group. The owners can and in native theory should feed those who are in need, and thus if their surpluses are great can attract the needy to them.

The property rules regarding plants, then, were made up of common pool resources managed by everyone obeying shared stewardship and other access protocols, as well as exclusive resource locations where those without title to an owned location had to seek and receive permission prior to harvesting (Kennedy, 2000). In terms of stewardship protocols, T'Sou-ke women interviewed by Suttles told him that specific women were responsible for overseeing the camas harvest and one of his consultants (likely Mary George) said that she was responsible for burning the camas area that belonged to her grandmother once they had finished harvesting for the season (Suttles 1974). Here then, the responsibility for managing the shared resource through burning was delegated to ensure that the resource would be sustained, and likely giving preferred access to those responsible for stewardship. Other people were allowed to harvest from this site, but responsibility for managing the resource site through landscape burning was clearly delegated to ensure that the resource would be available in following years. Rights to resources could be held within one's household territory, but a noble individual would have had resource rights (such as

to camas and bracken fields, berry grounds and possibly cedar stands) in their in-law's territory as well (Thom, 2009).

As Kennedy found in reviewing Sir James Douglas' approach to treaty-making with the Coast Salish:

In purchasing rights to the other lands, Douglas expected to find clearly demarcated territories associated with particular men (identified as chiefs or owners), with whom he could negotiate. Instead, Douglas encountered a situation he failed to comprehend.... Douglas accepted the situation as he found it, rather than attempting to reconstruct which groups of individuals might have been associated with certain areas in former times, prior to the depopulation and extensive migration that had occurred since contact. (Kennedy 2000:195)

Women's inherited privileges loomed large in this governance system, and while these ownership rights were exclusive, they did not look and feel like the land-owning units found in 19<sup>th</sup> century European property law, thus were largely ignored by the European newcomers. Rather than appreciating that openness of access does not mean there are "no 'objective structures'" that define the limits of resource ownership and access, early Settlers simply replaced Indigenous place names that recorded these property associations with Western ones and moved in (Kennedy, 2000:197). Both Kennedy (2001) and Thom (2009) have analysed how the incomprehension of the Straits Salish property system by European newcomers undermined subsequent understanding of household rights and tribal boundaries. Throughout the 19<sup>th</sup> century, the biases toward and the overlooking of Strait Salish women's rights to highly productive plant locations and cultivated areas served to further alienate women from their traditional plant activities and from the bounded areas which they owned.

### **3.5 Central Role of Plants in the T'Sou-ke and NWC economy**

The T'Sou-ke and broader Coast Salish economy was structured to manage different expressions of variable resource abundance through the constant pursuit by extended households of surplus production. On an annual basis, surplus production of food was necessary to feed large

sedentary communities through the winter. During the productive growing season, T'Sou-ke harvested vast quantities of fish, game, and plant products in various locations throughout their territory to process as preserved food and manufacturing materials for the winter months during the “hang up your paddle season” (Frank Planes 1998). As noted above, many plant products were stored as essential foods, used as fuel or flavouring in food processing, or manufactured into boxes, bags and baskets for storing preserved food products. Yet, the quantities of surplus production of food, textiles, lumber and ceremonial items far and away exceeded the needs of the immediate subsistence economy (Turner & Loewen, 1998). While, certainly, T'Sou-ke access to preferred products such as chert and slate rock for arrowheads, soapberries for ceremonial feasts, and unique sedges and other grass-like species for basketry, would have motivated some of the active trading, it does not properly explain the breadth and depth of the trading economy of the NWC that existed prior to the maritime fur trade.

When Manuel Quimper arrived in the Strait of Juan de Fuca in 1790, his ship was greeted by experienced T'Sou-ke traders with stores of “salmon, berries and nuts [possibly hazelnuts (*Corylus cornuta*)]” for trading, in exchange for buttons and needles (Norton 1985:149). Goods for trade were not necessarily resources found throughout the NWC (such as fresh salmon, which was present everywhere), but, rather, were generally specialty items that were valued for trade because they were made from species sourced in locally distinct ecosystems (e.g., prepared camas bulbs), or products that were processed in a unique manner that was associated with a group (e.g., Straits Salish necklaces of smoked butter clams). Furthermore, early explorers often complained that the NWC peoples whom they encountered were expert traders, with fixed values for different trade products. For example, when describing the value of a highly sought-after Kwakwaka'wakw copper potlatch piece from the 19<sup>th</sup> century, Helen Codere's (1966) research

suggests a systematic approach to valuing assets within the NWC trading economy, including many processed plant products:

...There was nothing that was not paid for it [a legendary copper]. It made the house empty. Twenty canoes was its price; and twenty slaves was its price; and also ten coppers tied to the end was its price, and twenty lynx skins, and twenty marmot skins, and twenty sewed blankets, was its price; and twenty mink blankets was its price; and one hundred boards was its price; and forty wide planks was its price; and twenty boxes of dried berries added to it, and twenty boxes of clover [rhizomes], and also ten boxes of hemlock-[inner] bark, was its price; and forty boxes of grease was its price; and one hundred painted boxes was its price, and dried salmon not to be counted was its price; and two hundred cedar blankets was its price; and two hundred dishes was its price. (Codere, 1966:99)

To fully understand the tremendous surplus production of plant products in the pre-contact NWC world, we must return to the pivotal role of prestige in the social organization and economy amongst Straits Salish and their counterparts throughout the region. While producing a summer surplus to survive the scarce winter months, and having several back-up plant species to fulfill key food, medicinal and technology functions were important strategies for dealing with variable ecological abundance, the Coast Salish had an additional social safety net through which to rely upon during lean periods or in times of crisis. By bulk harvesting, processing and trading out food and material products during “bumper” periods, household groups were able to provide a form of social credit that they could reclaim when required (Suttles, 1960). Just as village exogamy provided access to resources and kin support for families throughout the Salish Sea, trading relationships amongst the titleholding class redistributed limited resources, or resources unique to a region (e.g., camas bulbs), throughout the coast (Norton 1985). By building up a store of wealth in non-subsistence goods (usually manufactured from plant products) that could be later exchanged, or by providing access to highly productive resource sites, or by gifting surplus resources to kin or affines, excess wealth could then be used or reclaimed when required (Turner & Loewen, 1998). When viewed through this lens, it is clearer how the pursuit of prestige, with its formal rules of who and how individuals in Coast Salish society could

participate, fueled their entire economy and facilitated the establishment of large, sedentary populations. The T'Sou-ke actively participated in this overall pattern where engagement in wealth accumulation for household prestige required that they maintain a sophisticated knowledge of species and ecosystems, ongoing management of plant succession and productivity, and processing of plant products for quality and abundance throughout their territories.

The trade of transportable, preserved subsistence and non-subsistence products from the land and sea was often managed by women. Prior to earliest contact, in addition to their maternal responsibilities, operation of surplus processing and storage technology and plant and animal husbandry (e.g., camas, berries, cedar, domesticated dogs, clams and salmon), Coast Salish women also wielded considerable influence in trading relationships (Turner & Loewen, 1998). Norton (1985:247) found that, prior to the maritime fur trade, it was women's products that mostly established the Coastal standard of value, and their management of systems of surplus redistribution for a wide array of trade goods resulted in a dependable and high standard of living for their households. For example, Salish wool blankets woven from domesticated dog hair, mountain goat hair, fireweed seed fluff, duck down, and stinging nettle fibres were amongst the highest valued trade and potlatch items along the NWC (McKechnie, Moss, & Crockford, 2020). Along with camas bulbs, many of these blankets were purchased by the earliest European seamen to journey into the Straits of the Salish Sea (Gunther, 1973; Norton, 1985). The pivotal role of women and native plant products in trade is found in the historical records of explorers and early traders (Turner, 2003).

As explorers, traders, and later colonists flooded the Salish trading economy with new industrial goods, however, the manufacture of traditional textiles (such as the highly coveted

Salish blankets) and production of many processed plant foods (such as prepared camas bulbs and cedar textiles) declined markedly. European traders and those who followed were accustomed to trading with men, and this bias adversely disrupted women's economic responsibilities and social rights within the regional trading economy (Norton 1985:205).

Increasingly, restricted access to culturally important plants, in combination with the availability of cheap, industrial alternatives such as wool and cotton, decimated the manufacturing of dog wool blankets, cedar textiles and use of foods such as camas bulbs, clover rhizomes, and berries (Turner & Turner, 2008). The result was that within a few decades after the influx of imported alternatives and certainly by the time the ethnographers arrived, many plant foods and traditional textiles – the products of thousands of years of innovation and sustainable relationships with plants – were used mostly for ceremonial occasions or for sale to museums and tourists (Norton 1985:168).

### 3.5.1 Reserve Army of Labour: Polygamy and Slavery within Coast Salish Economies

Chiefs and the entire status system were carried on the backs of slaves. (Donald 1997:312)

Managing variable abundance of plant and animal species through bulk harvesting, processing and storage techniques was integral to the survival of the title holding class of Salish corporate groups. The Coast Salish political economy, fueled by the pursuit of prestige, required that people practiced a lifestyle of hard work and abstinence in order to participate in the formal exchange of goods and property with other titleholders (Egan, 2009). As noted previously, noble families held title to the most productive root and berry patches, clam beds, fish weirs and, possibly, cedar stands. Only a title holder could afford the luxury of more than one wife, and of slaves. As Collins (1974:80) remarks on Salish polygamy:

A man with ten wives had a work force which could produce many more baskets, blankets, and mats than the man with one wife. The potlatches given in such a family conferred prestige on all the co-wives and their children as well as on other relatives. (Collins 1974:80)

In addition to food production and the manufacture of rush mats described in the preceding chapter, T'Sou-ke and other Straits Salish women made water-tight baskets and hats<sup>61</sup> from western redcedar and yellow cedar bark, Sitka spruce roots and basket sedge leaves and stems, as well as clothing and mats from cedar bark, and blankets from wool<sup>62</sup> woven onto warp fibres of stinging nettle, fireweed, cottongrass and cedarbark (Suttles 1974: 136; Norton 1985:188). In pre-contact times, production of textiles was undertaken for everyday use as well as ritual and commercial purposes, and the coordinated work involved in harvesting, curing and manufacturing plant products for these, in the quantities used (e.g., up to 200 mats could be woven to give away at a potlatch), is astounding (Donald 1997).

In pre-colonial times, there seems to be a certain amount of labour specialization amongst women, at least by those in large and powerful families. For example, excluding the harvesting and preparation of the raw materials, it would take a weaver several weeks to produce a cedar-bark cloak, and up to six months to weave one of wool. Women working together as a team would have shortened that manufacturing time to two weeks per item, and very early ethnohistorical accounts reveal that this is what they did (Norton 1985: 172). Pantoja y Arriaga's 1791 diary, recording Spanish exploration of the Strait of Juan de Fuca, notes that the women of extended households worked in an apartment of their own, making bark garments in a sort of

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<sup>61</sup> "Hats and baskets are woven by the women from 'grass' [sedges, cattails, or tule] or cedar root, and made so strong and compact as to hold water; they are sometimes adorned with patterns or devices worked in with grasses coloured by some native dye-red, obtained from the bark of the alder, is principally used." (Wilson 1866: 288)

<sup>62</sup> The wool was sourced from their domesticated dogs which women were in charge of looking after and shearing. They may also have used some mountain goat wool in blanket making, that would have been traded with groups from the mainland (McKechnie et al., 2020).

assembly line of textile production of which “the Machines for that purpose is not unlike the Looms with us”(Wagner, 1933:166). In work teams, some women would take bark that had been steeped for several days and after pounding it to separate and wash the threads, they would pass the fibre along to other women who were only employed in the work of making the cloth (Wagner, 1933).

Figure withheld for reasons of copyright.

*Figure 3.5 Paul Kane, 1856 Weavers*

*The looms referred to by Pantoja y Arriaga were painted, over a century later in 1856, by Paul Kane in a visit to the T'Sou-ke and their Straits Salish neighbours. In this painting of the interior of a Straits Salish Big House, one woman is weaving with her baby in a cradle board on one side of her and a domesticated dog sitting on the other, while another woman spins wool in the background, amongst a substantial amount of processed and manufactured goods.*

If we accept that the bulk of fish, game, and plant food processing, plant harvesting, cultivation, and fibre and textile manufacturing was the primary responsibility of women, it seems likely that women's skills would have been: 1) prone to specialization, and 2) in greater demand during abundant productivity times. It is not surprising, then, that while not conclusive, it appears that women were more likely than men to be captured as slaves (Donald 1997: 82). Slavery was an essential component of the regional NWC economy, with common rules and social values associated with slaves observed throughout this region (Donald 1997). Individuals up and down the coast who were captured during intertribal conflicts were generally enslaved and taken home to the communities of their captors to live. Once enslaved, unless ransomed by their families shortly after their capture, an individual and their descendants were permanently categorized as slaves, with emancipation being exceedingly rare (Donald 1997; Wilson 1866).

Unlike blood kin or affines to whom a Chief held reciprocal obligations, the only labour that a Chief could reliably control in historical NWC society was that of a slave. Furthermore, they could be disposed of through trade or killing without legal repercussion (unlike any member of the titleholding or commoner classes). Slaves were not bound by normative gender divisions of labour, as either sex could be tasked with activities such as hauling water, gathering firewood, root digging, fish processing or paddling canoes (Ames 2001:4). Mobilizing male slave labour would have been crucial in the construction of Big Houses.

In pre-contact times, all along the NWC, the ethnographic record indicates that the ruling elite relied on the support of slaves for the production of surplus food and textiles, and slaves also represented a standardized commodity within the comprehensive NWC trading economy (Donald 1997). Slaves had no right of refusal as to which tasks they were assigned, and could be inherited within the household, given away or sold as a property transaction. Slaves provided a flexible pool of labour to be applied to whatever task required and then could be converted to wealth by selling individuals if they were no longer needed. Slave labour allowed for the specialized work supporting the noble and commoner classes related to fishing, hunting, root cultivation, textile manufacturing, food processing, art and monumental building construction (Ames 2001). The wealth produced by the whole collective was then converted to authority and power which conferred prestige on an entire household (Collins 1974). Without institutions such as slavery and polygamy to manage and mobilize labour, it seems unlikely that the bulk harvesting, processing, storage and trade of plant products distinctive of Coast Salish society would have been possible. Moreover, these various labour strategies would have strengthened each household's ability to manage the abundance of plants at different times and across the wide spaces throughout their territories.

### **3.6 Covenants of Reciprocity in Customary Landscapes**

Customary landscapes, as land assembled and governed by the laws of an assembly, have been present for millennia on all continents. In customary landscapes, lands used in common are defined as “a place lying at the core of the legal and political landscape...” (Olwig 2009:13), but do not exclude the possibility of individual property ownership or exclusive rights to access of specified resources. These landscapes reflect how local peoples manage their relationships to plants, animals and special places according to: rules of justice, laws of the supernatural and non-human relatives, and the protection of the necessities of life such as our kin, food, technology and medicine supplies, and trade (Balée, 2013; Kaplan, Pfeiffer, Kolen, & Davis, 2016; Kareiva, Watts, McDonald, & Boucher, 2007; Minnis & Elisens, 2001). In this chapter, I have undertaken an analysis of the pre-colonial, T’Sou-ke physical, governance, and economic infrastructure required to produce the impressive surpluses of plants and plant products that T’Sou-ke people and other Straits Salish harvested and manufactured into preserved food items, lightweight textiles, buildings, art and technological items and medicines.

Straits Salish ethics, practices, obligations, protocols, rights and social institutions relating to culturally important plant use all worked in concert to establish a customary landscape for the T’Sou-ke in pre-contact times. Acting according to the covenants of reciprocity between humans and plants, and also between groups and classes of humans, households produced a long-term abundance and stability of certain plants and their products central to a comfortable life for the Straits Peoples. Throughout their territories, this customary landscape also embodies the sacred places created by XÁ,EL,S through which T’Sou-ke and other Coast Salish peoples connected the physical and metaphysical world since time immemorial. Remnants of the T’Sou-ke customary landscape are found today in the remains of monumental plank houses, shell middens, pit ovens, fish weirs and traps, Douglas-fir and cedar stands, willow thickets, Garry oak

savannahs, berry patches and root gardens and human modified soils. This customary landscape is also reflected in the deep knowledge associated with the 100 or so culturally important plant species that helped define the many ecosystems that T'Sou-ke worked with and managed through specific practices, protocols and laws, enabling them to support their large sedentary population.

Wayne Suttles proposed at length how the Central Coast Salish managed the abundance of plants and animals of this region prior to colonization, particularly in unexpected, periodic times of scarcity, to support a dense population of sedentary peoples. The prestige economy and corporate kin ties of Salish noble families allowed for a highly coordinated, yet flexible, governance system where surpluses could be produced, harvested, manufactured, stored, and traded. The pre-colonial Coast Salish political economy allowed accommodated frequent resource fluctuations within the unique ecosystems of southern Vancouver Island. The laws of the Big House and an ethos of stewardship addressed internal group conflict, greed, competition, and nuclear family autonomy. This management system was maintained through accepted individual and family property rights, as well as group rules of access and stewardship obligations towards plants and their ecosystems—in short, through governance and laws.

The systems of knowledge, practice and beliefs associated with Straits Salish use and stewardship of root species reveal diverse horticultural practices as well as individual and common property laws that were noted by many early explorers and European settlers at the time of contact, but not properly recognized by colonial officials in treaty relationships and other land and resource tenure allocations (Beckwith 2004; Deur, Turner et al. 2013; Turner and Lepofsky 2013). It is misleading, however, to suggest that cultivation practices and property ownership were the *only* strategies supporting human-plant relationships throughout T'Sou-ke territories.

The manner in which T'Sou-ke and others harvested and managed resources within mature forests reveals a sophisticated understanding of forest ecology and formal practices to sustainably harvest diverse and rare plant species by working within natural forest succession rather than arresting succession at a specific stage. Much of Straits Salish interaction with plants is better described as relationships of coaxing plants and ecosystems through relationships of respect and covenants of reciprocity between plants and people, rather than as plant cultivation. These caring relationships in Straits Salish territories were governed by their laws, and their laws were governed by values and ethics regarding right relationships among humans, plants, animals and the supernatural. These bonds with favoured plant species are expressed in traditional T'Sou-ke and Straits Salish identity, economic standards and rules, property, kinship laws, and spirituality.

As I have discussed elsewhere (Turner & Spalding, 2018; Turner et al., 2020), while there is strong Indigenous interest in reconnecting with culturally important plant species, many of the traditional foods, medicines and technology materials are not used by T'Sou-ke today, at least not to the same extent as before. This is primarily due to impacts arising from colonization and European settlement. The kinship structure that allowed T'Sou-ke to flourish, through corporate networks with other Coast Salish, was, ironically, very likely the primary factor in their widespread population decimation by smallpox in the late 18<sup>th</sup> century. This epidemic that followed the trade routes of kin and affines virtually wiped out entire Coast Salish populations where movement between kin and other villages was fluid. While Captain George Vancouver encountered deserted communities, with overgrown woodlands surrounding villages high with brambles and overgrown "lawns", he also noted that the Indigenous groups north of the Salish Sea were relatively unscathed by this particular pandemic (C. Harris, 1994). Tragically, just as

the Straits Salish were beginning to recover from that pandemic, their trade routes and products were overwhelmed by industrial goods of the European newcomers, and a demand for different trade products, followed by waves of incoming settlers and, finally, repression by the assimilative policies and legislation of the Colonial and Canadian governments (Lutz, 2009).

European colonialism dehumanized Indigenous peoples in North America by first ignoring their knowledge, property, governance, and religious and legal structures and then dispossessing them of their home places and access to local resources (Bryan, 2000; Egan, 2009; C. Harris, 2004; Thom, 2005). Ultimately, it was the European newcomers' fallacious assessment of Indigenous landscapes as empty spaces that rationalized Settler possession of lands and resources, thereby allowing the colonial project to proceed. Indeed, as Ruru (2012) found both in Canada and New Zealand, the markers of Indigenous place were overlooked by European newcomers as a way of creating a fictional, pristine wilderness for incoming immigrants, which was eventually transformed into a colonial place, recognized in English law as coming under the sovereignty of the British Crown. As such, Ruru (2012:54) says: "the Western legal system has developed and applied notions of space and place that substantiate the continuing colonization of Indigenous peoples' land and resources."

In academic scholarship on Indigenous cultures in British Columbia, for too long "...we have become entrapped in a partial world [of men's activities], that represents itself as the whole world" (Barman, 1998:238). Throughout colonial British Columbia, the agency which Indigenous women held prior to the 19<sup>th</sup> century was stolen from them as colonial policies dismissed their marriages and property transfers; cut off their access to different ecosystems for various plants; undermined their plant manufacture and labor structures by demonizing multi-family households; undermined their ability to teach their own children; and ignored the

governance system and laws that supported the same (Mitchell, 1976; MMIWG, 2019). Later, the privatization of forested lands, and government management of the forests as cutblocks and tree plantations further disrupted T'Sou-ke relationships with plants and ecosystems. Clearcutting forests, and suppression of culturally important herbs and shrubs (such as berry bushes, stinging nettle, willow and cattails) through the application of herbicides and fungicides, has eroded T'Sou-ke people's traditional relationships with native plants in forests and surrounding areas. The valorization of men's fishing and hunting activities and the backgrounding of women's work as generalized domestic chores, the push to create policies and laws to force women back home to their reservations, and, later, the legislation which forced them away from their home villages if they married a non-Indigenous man, was a relentless onslaught on Straits Salish women's relationships with native plants (MMIWG, 2019). It is remarkable that so much of the canon of plant knowledge survives today, yet, an acknowledgement of T'Sou-ke traditional governance and laws around plants and their habitats continues to be ignored.

As Borrows (2015a:110-111) states:

Social organization should be treated as a synonym for self-government. When a nation organizes itself socially on a territorial basis, and through its own laws, controls land, makes decisions about its use and excludes others, we should conclude that such a nation governs itself. First Nations governance is an important dimension of Aboriginal title. It cannot be proven or exercised without this broader dimension being present.

Clearly, the T'Sou-ke managed their relationships with plants on a territorial basis, and through laws arising from these relationships they governed themselves around access and use of culturally important plant species. The canon of plant knowledge and the covenants of reciprocity arising from these important human/plant relationships were imprinted throughout T'Sou-ke territory to form customary landscapes that colonial settlers encountered but failed to understand. The application of an ethnobotanical and ethnoecological lens to plant use in the pre-

contact world of the Straits Salish helps illustrate the profound role of human/plant relationships within the physical and social infrastructure of the T'Sou-ke peoples. Recognizing Indigenous peoples' plant use and stewardship contributes to a better understanding of the deep and enduring sense of place and identity held by Indigenous peoples throughout BC and beyond. The relationships that T'Sou-ke and Straits Salish groups maintained with plants respected their direct connections, not only with culturally important plant species but also the essential relationships that those plants have with other plants, animals and fungi. Whether it be the sentience and agency of plants, the critical role that plants played in Straits Salish culture and economy, or the central contribution of women in plant procurement, management, processing and trading, the ethnobotanical perspective helps to amend areas where these relationships have been discounted. It is the canon of knowledge, covenants of reciprocity and customary landscapes representing all culturally important plants in T'Sou-ke territory that is significant to the next chapters, where I will explore how Aboriginal law and Indigenous law might now be used to express and protect legal rights to plants and their management for the T'Sou-ke, Straits Salish, and other Indigenous peoples.

## Chapter 4

### Plant Use in Aboriginal Law: Building Evidence and Defining Rights



#### Highlights

What is the relationship between Indigenous people's knowledge and practices relating to culturally significant plant species and habitats and Aboriginal legal rights as defined within the Canadian legal system, and how can ethnobotanical and ethnoecological research support legal action to affirm land rights?

- Plant use is an under-recognized area of Aboriginal law
- How ethnobotany/ethnoecology is and could be used to support Aboriginal rights litigation
- Shortcomings of litigation to date in scoping out plant rights

## 4.1 Introduction

I hope that one day, before long, we'll have our own Indian lawyers to look after our interests. It's up to the natives to make their own choices and fight the laws that are unfair to our people. We can't go back to the old ways; there's no fish anymore, there's no deer in the forests, the white man killed them all. How could I go back to the way my grandfather used to live? If I tried to, I'd probably starve to death. The white man won't even let us hunt and fish the way we used to, anyway. In that House of Commons, in Ottawa, there's a couple of hundred white men, and sometimes I think that all they do is dream up new laws against the Indians! They've pushed the old ways out so we can never go back. *Queesto Chief Charles Jones* (Jones & Bosustow, 1981:55)

Chief Queesto's observation, written in 1981 when he was 105 years old, eloquently states the need for Indigenous self-determination within the Canadian legal system and acknowledges the deep impact of colonialism on all aspects of Indigenous people's lifeways. Although he was a Hereditary Chief from the Pacheedaht Nation (bordering to the north of T'Sou-ke territory), Queesto and his wife Ida Jones are closely related to T'Sou-ke Nation families and these kin ties are acknowledged and continue to be important today. In the previous chapter, I presented T'Sou-ke's multi-layered relationships with plants and ecosystems within a customary landscape, however as I concluded, these relationships have been compromised by countless colonial actions that have 'pushed out the old ways' for over a century. Most poignantly, as Chief Queesto says, is that while this history must be understood, acknowledged, and remedied, there is no going back. Instead, reclaiming justice within these landscapes will only be found by moving forward through a complex legal system to acknowledge Aboriginal rights and Indigenous laws.

In this chapter, I explore the relationship between Indigenous people's knowledge and practices relating to culturally significant plant species and habitats and Aboriginal legal rights as defined within the Canadian legal system. First, I present an overview of how Indigenous people's relationships with plants, and more generally the conservation of native plants, is barely

acknowledged in Canadian law or legislation. Second, using ethnobotanical and ethnoecological perspectives, I examine how Indigenous plant practices and customs might meet the normative evidentiary tests for Aboriginal rights in Canadian common law. In Canadian common law, only the Court can decide and define the scope and content of Aboriginal rights related to plants, plant communities and their habitats, and I will discuss how ethnobotanical and ethnoecological knowledge imparted by expert witnesses can support these important deliberations. Third, I highlight the *Tsilhqot'in* decision and suggest that its findings of Aboriginal title and rights over a tribal territory provides important guidance with respect to rights associated with plants at the landscape level and opens up a legal space for discussion around Aboriginal rights to plants that has often been avoided (such as Indigenous management, co-management and rights to plants on private and Crown lands).<sup>63</sup> This decision, along with others referred to in this chapter, is also instructive in terms of the influence of expert witnesses in Aboriginal law, and I examine this in the context of ethnobotany. Next, I explore the problematic nature of the legal tests for Aboriginal rights and how ethnobotany and ethnoecology can help disrupt the systemic cultural biases within which they were established. Finally, I indicate the major challenges to the legitimacy of state sole authority over Aboriginal legal rights and suggest how this might be addressed in relation to native plants and ecosystems. Throughout this chapter I use the canon of plant knowledge within the customary landscape of T'Sou-ke to illustrate my findings.

## **4.2 Legally Recognizing Indigenous Peoples' Rights to Plants**

How can the existing Aboriginal and treaty rights arising from Section 35 of the Canadian Constitution be recognized and affirmed with regard to the plant use, cultivation and

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<sup>63</sup> *Tsilhqot'in Nation v British Columbia* [2007]

stewardship systems presented in the previous chapter? Canada is one of the oldest constitutional democracies in the world and our Constitution represents the supreme law in Canada, with all of our jurisprudence flowing from it. Canada, however, is a multi-juridical legal system because “it embraces common law, civil law, and Indigenous legal traditions...[and] could be characterized as a juridically pluralistic state because it draws on many sources of law to sustain order” (J. Borrows, 2010:23).<sup>64</sup> Civil law arises from a code containing a comprehensive statement of rules (such as the Civil Code of Quebec), while common law is built upon a system of rules based on precedents found in past legal decisions (Government of Canada, 2022).

Aboriginal law in Canada has developed primarily through Canadian common law; it deals with the legal rights of Aboriginal peoples within the laws of Canada. Indigenous law “refers to the laws of a particular [Indigenous] group, developed within and applying to that group” (Reynolds, 2018:3) and, further, is “entwined with the social, historical, political, biological, economic, and spiritual circumstances of each [Indigenous] group” (Borrows 2010:24). The process of formalizing customary law through the workings of the Canadian court system acknowledges Indigenous laws as part of an official body of common law (J. Borrows, 2010). Aboriginal rights arise from a form of inter-societal law—a discussion between common law and Indigenous law -- that was supposed to regulate relations between Indigenous communities and the rest of Canada for over 200 years. Of course, over most of this period, this discussion has been unreasonably one-sided and Indigenous laws and the rights and responsibilities enshrined within them have mostly fallen on deaf ears within Canadian jurisprudence.

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<sup>64</sup> A Constitution maintains “the basic principles and laws of a nation, state, or social group that determine the powers and duties of the government and guarantee certain rights to the people in it” ( <https://www.merriam-webster.com/dictionary/constitution>).

In the Canadian federation, the Parliament makes laws to apply to all of Canada and, according to the division of powers set out in sections 91 and 92 of the *British North America Act, 1867* (U.K.), 30 & 31 Vict., c. 3 (now the *Constitution Act, 1867*) each provincial or territorial legislature makes laws covering their areas of jurisdiction. When laws are enacted, they replace common law or precedents regarding that subject, provided that they support the Constitution, including Section 35 rights. Finding legislation, statutes or acts related to native plants is a perplexing task, as plants have poor legislative protection in Canada. Unlike wildlife or fisheries, which have their own legislation at the federal and provincial levels, only some plant species are referred to in wildlife, fisheries, forestry, environmental assessment or land acts, and then only in relation to specific, mostly commercial, uses.<sup>65</sup> Native plants that are threatened with extirpation or extinction are covered under the federal *Species at Risk Act* (SC 2002, c.29). None of these specifically discuss plants in relation to Section 35 rights, in the way that fisheries and wildlife are cited, and any possible reference must usually be inferred from more general wording around rights to food, social and ceremonial activities in some parks, infringement in the environmental assessment processes, or the potential for the site of a traditional use or a heritage tree to be protected under, for example, BC's *Heritage Conservation Act* [RSBC 1996] c. 187.<sup>66</sup> In this

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<sup>65</sup> See, federal *Fisheries Act* (RSC, 1985, c. F-14), with reference to Aquatic Plants; and BC provincial *Forest and Range Practices Act* [SBC 2002] c. 69 (and accompanying Government Actions Regulation), which together enable listing of plant species and plant communities as Species At Risk or Regionally Important Wildlife (the list is rather limited and out of date; the wording is clearly oriented around animals rather than plants or communities, and it's limited to the jurisdiction of FRPA – i.e., public lands); *Wildlife Act* [RSBC 1996] c. 488: Plants could theoretically be listed as "endangered" or "threatened" species under the *Wildlife Act*, but a) this is not really done, and b) the *Wildlife Act* doesn't really say much about how endangered or threatened species would need to be treated, even if they were listed; *Land Use Orders* (Land Use Objectives Regulation of the *Land Act* [RSBC 1996] c. 245): Some of these can and have specifically listed some plant communities, with reference to the red and blue list, in order to set objectives related to those communities.

<sup>66</sup> This is a poorly enforced and underfunded piece of legislation that bizarrely places trees valued by non-Indigenous peoples under the management of municipalities where they can be protected and saved, and Indigenous-valued trees under the management of the Province, where a culturally modified tree is documented for 'science' and then cut down. Further, it does not have the capacity to recognize and address culturally important species and their habitats. Also, see *Kitkatla Band v. British Columbia*.

context, then, neither the majority of the thousands of native plant species in BC nor Indigenous people's relationships with around some 400 of these species and their ecosystems are recognized by either federal or provincial legislation.<sup>67</sup> The plants of cultural and spiritual importance to Indigenous peoples are particularly vulnerable to impacts from industrial, resource and residential development and, without appropriate legislation for protecting either or both the plants or Aboriginal rights related to them, we must turn to the common law to ensure that these unique and enduring human relationships with plants and their ecosystems are maintained into the future.

### 4.3 Overview of Aboriginal Rights Law

It may now be affirmed with confidence that the common law accepts all types of aboriginal interests, "even though those interests are of a kind unknown to English law": per Lord Denning in *Oyekan*, supra, at p. 788. What the laws, customs and resultant rights are "must be ascertained as a matter of fact" in each case, per *Brennan J. in Mabo*, at p. 58. It follows that the Crown in Canada must be taken as having accepted existing native laws and customs and the interests in the land and waters they gave rise to, even though they found no counterpart in the law of England. In so far as an aboriginal people under internal law or custom had used the land and its waters in the past, so it must be regarded as having the continuing right to use them, absent extinguishment or treaty (CJ McLachlin in *R v Van der Peet* [1996], para 269).

The development of Aboriginal law has been critical to anchoring and forcing a broader societal engagement with Aboriginal rights throughout Canada. For the past forty years, the decisions in this area of law have been the backstop to all government-to-government discussions, negotiations and agreements between the public governments and Aboriginal peoples (including First Nations, Inuit and Métis peoples). In the 1990s, as these legal decisions began to find political and administrative purchase, I found it a relief in my work in provincial government

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<sup>67</sup> Instead, Section 87 of the *Indian Act* provides that Provincial laws of general application apply to Aboriginal people "except if they conflict with: existing treaty rights; existing federal legislation; any provisions in the *Indian Act*; any order, rule regulation or by-law made under the *Indian Act*" (J. Borrows, 2017:25).

consultation to counter reluctant civil servants' questions about why they had to adjust policies, regulations and programs to accommodate Aboriginal traditional uses with: "...because this helps address the direction of the Supreme Court of Canada (SCC)". Later, as a negotiator in the treaty process, I witnessed the direct impact that major legal decisions had on provincial negotiation mandates.<sup>68</sup> State bureaucracies, like legal systems, maintain their effectiveness through stability. The introduction of substantial changes to the administration of lands and resources based on complex and abstract arguments from common law will only ever be accepted by civil servants following clear directives from an acknowledged authority (such as the courts, or by Ministers of the Crown). Given the absence of understanding of Aboriginal rights fifty years ago, however narrowly interpreted and poorly applied today, Aboriginal law has made inroads towards the ultimate goal of reconciliation with Indigenous law and, thus, must be supported and its problems, which I highlight later in this chapter, addressed.

There is no simple definition of the scope and extent of Aboriginal rights in Canadian law. Over the past four decades, these rights have been defined by justices at the Supreme Court of Canada (SCC) through a series of legal tests flowing from the long-term occupancy, social organization and practices of distinctive cultures of various Aboriginal peoples. For Slattery (2000:198): the doctrine of Aboriginal rights: "...defines the constitutional links between aboriginal peoples and the Crown and governs the interplay between indigenous systems of law, rights and government (based on aboriginal customary law) and standard systems of law, rights and government (based on English and French law)."<sup>69</sup> But while Aboriginal rights are well-

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<sup>68</sup> Although I note that, as former federal chief negotiator Douglas Eyford, observed "there is a widely held view that federal policies lag behind legal developments" (Eyford, 2015:10).

<sup>69</sup> It must be emphasized here that John Borrows' (2010:24) view that characterizing the source of Indigenous systems of law as based solely on customary law is incomplete and can be misleading as "...not all Indigenous laws are customary at their root or in their expression, as people often assume".

understood conceptually, how Indigenous peoples' relationships with culturally significant plants and how any associated "...activities, practices and claims fall within this class of constitutionally protected rights" (CJ McLachlin in *R v Van der Peet* [1996], para 251) remains unclear. In fact, Aboriginal rights law appears to be preoccupied with hunting and fishing rights.

One way to begin to understand the scope of Aboriginal rights related to plants in BC would be to establish if any such rights were legitimately extinguished by the Crown at the time of contact. The colonial policy of the British Crown (deriving from the Royal Proclamation of 1763) directed that only the Crown could acquire lands from Indigenous peoples, and then only by treaty (Tennant, 2011). While early contact between the British and First Nations in eastern North America yielded several nation-to-nation treaties, treaty making elsewhere in Canada was not comprehensive: most of the historic treaties were not properly implemented or upheld and many First Nations were not given the opportunity to engage in treaty-making. In BC the majority of First Nations did not engage in any treaty discussions prior to the majority of their lands being pre-empted by incoming waves of European settlers (Foster & Grove, 2003).<sup>70</sup> Treaties that were signed in BC, mainly the 14 "Douglas treaties" on Vancouver Island, made only an indirect acknowledgement of First Peoples' plant use and management, and these referred enigmatically to "enclosed fields" (which were neither properly identified nor surveyed)

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<sup>70</sup> As McLachlin summarizes in *R. v. Vanderpeet*: para 273: "An early governor, Governor Douglas, pronounced a policy of negotiating solemn treaties with the aboriginal peoples similar to that pursued elsewhere in Canada. Tragically, that policy was overtaken by the less generous views that accompanied the rapid settlement of British Columbia. The policy of negotiating treaties with the aboriginals was never formally abandoned. It was simply overridden, as the settlers, aided by administrations more concerned for short-term solutions than the duty of the Crown toward the first peoples of the colony settled where they wished and allocated to the aboriginals what they deemed appropriate. This did not prevent the aboriginal peoples of British Columbia from persistently asserting their right to an honourable settlement of their ancestral rights --- a settlement which most of them still await."

to be retained by the signing communities.<sup>71</sup> In the Straits Salish region, while there were many “cultivated fields” within the territories of the Douglas treaty groups, none of these were fenced in the manner of European-style enclosure (Lutz, 2020).<sup>72,73</sup> Several Straits Salish groups, including some heads of T’Sou-ke family groups were signatories to these documents.

The Douglas treaties have largely confused, particularly with regard to plant practices, rather than clarified understanding about Aboriginal or treaty rights within the Straits Salish region (D. Harris, 2009). At best, they are seen as an acknowledgement by the signatories of a willingness for peaceful relations and a sharing of some lands (Vallance, 2016). Further, while there are indirect references to plant practices (e.g., the “enclosed fields” reference and the payment of blankets in reparation for the destruction of the Straits Salish extensive camas fields), the treaties are silent on continuing access to and stewardship of the almost 100 other species of native plants that were culturally significant to T’Sou-ke and other Straits Salish groups. According to Borrows (2018: 63) “any silence in treaty agreements should be construed as leaving intact all original Indigenous entitlements.” The first colonial government and many

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<sup>71</sup> My great, great grandfather Joseph W. McKay was one of the translators and a witness to several of the Douglas treaties and 33 years later, in a letter in 1888 to Dr. J.S. Helmcken he reflected: “Mr Douglas made no ~~there was~~ ~~no~~ purchase of the ~~lands~~ country from the Indians. They ~~Indians~~ were told that ~~the Co.~~ only such places as they had occupied and improved ~~were properly to~~ belonged to them, that in addition to their garden patches and village sites some of the lands contiguous to their Villages would be reserved to them and the rest of the country would be open for sale to white settlers... You will remember that the Districts for which Indians received payments in blankets were the main producers of the kamas root for the whole surrounding country. The destruction of this plant by cattle and sheep caused a great loss to the Songhees Saanich and Sooke Indians as it was ~~to their~~ the ~~principal~~ most important article of trade which they had to offer in dealing with the neighbouring tribes. Hence the expediency of ~~making~~ giving the ~~them~~ above named Indians a valuable consideration for the loss ~~which~~ sustained ~~of~~ in their kamas trade” (Vallance 2016:90-91).

<sup>72</sup> None of the cultivated root gardens or camas fields nor the majority of village sites noted by Pemberton (1852) and others at T’Sou-ke were surveyed or set aside for T’Sou-ke. They are private residential lands today.

<sup>73</sup> From the earliest accounts, the cultivated fields of the Straits Salish, for example, were noticed and commented on, such as by Captain Vancouver writing in 1801 (pp. 63&11) “The summit of the [Vancouver] island presented nearly a horizontal surface...on an extensive lawn covered with luxuriant grass, and diversified with an abundance of flowers...as if it had been planted for the sole purpose of protecting from the Northwest winds this delightful meadow...It is also possible, that most of the clear places may have been indebted, for the removal of their timber and underwood to manual labor.” Also, see (Beckwith, 2004).

subsequent provincial governments ignored the policy for treaty-making and chose instead to presume the lands in this region were empty and, therefore, free for the taking. Thus, the fact remains that, in BC, Aboriginal rights and title to lands and resources were never clearly and finally extinguished.<sup>74</sup>

The cumulative effect of the *Indian Act* and other colonial legislation on generations of Indigenous peoples is devastating, and how this legislation served to undermine Indigenous people's relationships to plants is profound (Turner & Spalding, 2018).<sup>75</sup> Undermining access to plant harvesting sites and associated practices was done by:

- imposing foreign political and land/resource tenure structures on Indigenous communities;
- limiting economic participation of Indigenous peoples;
- removing Indigenous people from their extended and diverse traditional territories to tiny reserves;
- barring Indigenous people's access to legal redress;
- outlawing Indigenous people's governance structures;
- separating Indigenous children from their families;
- suppressing Indigenous people's languages, traditional education and knowledge, through imposing residential schools, adoption and foster care; and
- undermining Indigenous women's knowledge and status within and outside of their communities.<sup>76</sup>

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<sup>74</sup> "Put simply, Canada's Aboriginal Peoples were here when Europeans came and were never conquered." *Haida Nation v. British Columbia* [2004] 3 SCR 511, para. 25. As Borrows and Rotman (2012:98) state: "The courts have held there was no widespread extinguishment of Aboriginal rights through military conquest, occupation or legislative enactment. As the Supreme Court has observed, 'European settlement did not terminate the interests of Aboriginal peoples arising from their historical occupation and use of the land. To the contrary, Aboriginal interests and customary laws were presumed to survive the assertion of sovereignty...' (*R. v. Mitchell*, [2001] S.C.J. No. 33, [2001] 1 S.C.R. 911 (SCC) at para. 8)".

<sup>75</sup> From 1850-1973, Aboriginal and treaty rights in Canada were handled through various policies and legislation formalized in the *Indian Act* of 1867. This legislation sought to clarify Aboriginal rights and title, through the wholesale appropriation of Indigenous lands and resources, and to assimilate Indigenous peoples into the colonial governing structure of Canada through a series of racist policies that amounted to genocide (Canada, 2015).

<sup>76</sup> For a larger discussion of this see: (Coulthard, 2014; Napoleon, 2009).

From the beginning of first contact with European newcomers until the present day, Indigenous groups in BC pursued negotiation, legal challenges and direct action to address their legal interests in the land and resources of this region (Egan, 2009).<sup>77</sup>

Since the *Calder* case affirmed the existence of Aboriginal rights and title, guidance and parameters regarding how to interpret these rights have been provided through several cases deliberated by the SCC.<sup>78,79</sup> Various rulings outline: standard evidentiary criteria that First Nations must meet to establish their rights; obligations that the public governments can perform to uphold the honour of the Crown and avoid infringing on these rights; and conditions under which the Crown might legally infringe rights. In the highly regulated and formal conversation of the Court, it is the Indigenous Applicant's responsibility to introduce evidence to define the Aboriginal right, and if the right is established, it is up to the Crown to prove that the right was clearly and plainly extinguished.<sup>80,81</sup> If the right was not extinguished, it is the Applicant's responsibility to prove that the right was infringed, and if it was, the Crown must prove that the infringement was justified. If a right is established, a high standard has been set to prove that the right had been extinguished prior to the passing of the *Constitution Act 1982*, such that the sovereign's intention must be clear and plain and cannot simply rely on the fact that the Crown regulated activities in First Nations territories without acknowledging Aboriginal rights (J.

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<sup>77</sup> While they were barred from using the Canadian Courts for several decades, once BC First Nations were again granted access to the court system, they recommenced their long legal journey to have their rights fully recognized within Canada's legal and political structures (Cole & Chaikin, 1990; Wickwire, 2019).

<sup>78</sup> *Calder v. BC (AG)* [1973] SCR 313

<sup>79</sup> *Baker Lake (Hamlet) v. Canada (Minister of Indian Affairs and Northern Development)* [1979]; *Calder v. BC*; *R v. Sparrow* [1990] 1 SCR 1075; *R v. Vanderpeet* [1996] 2 SCR 507; *R v. Gladstone* [1996] 2 SCR 723; *Delgamuukw v. British Columbia*, [1997] 3 S.C.R. 1010; *Mitchell v. M.N.R.*, [2001] 1 S.C.R. 911, 2001 SCC 33; *R. v. Sappier*; *R. v. Gray*, [2006] 2 S.C.R. 686

<sup>80</sup> As Reynolds (2018:102) notes that in this instance: "The Truth and Reconciliation Commission said that the existing law was manifestly 'unjust' and recommended reform."

<sup>81</sup> See *R. v. Côté* SCC [1996]; also, C.J.C. McLachlin's comments in *R. v. Mitchell*, 2003 at para. 10

Borrows & Rotman, 2012:103).<sup>82</sup> As noted earlier, due to the limited legislation dealing with native species of plants in general, the public governments would be hard-pressed to prove that they clearly and plainly intended to extinguish these rights through legislation.<sup>83</sup> In treating native plants and forests as property of the assumed sovereign state, it appears that rights associated with Indigenous plant use were dismissed as incidental. Frequently in Canada, Indigenous plant practices were presumed to be replaced by domestic plant farming and gardening in the European style, and by manufactured industrial materials; in short, they were ignored, not extinguished.<sup>84</sup> I will now turn to describing the types of legal rights that sit along a spectrum of Aboriginal rights established in Aboriginal law, and the types of evidence of Indigenous plant practices that might be submitted to support these claims.

#### **4.4 Categories of Aboriginal Rights**

In Aboriginal law, judges identify applicable law by “determining the legal norms that apply to the historical facts that have been ascertained by evidence” (McNeil, 2017:102). Ethnographic, historical, archaeological, geographical and linguistic research compiled and provided by expert witnesses is used extensively in attempts to recast practices, customs and traditions into the vernacular of Aboriginal rights jurisprudence (Hunn, 1999; Lane, 1977; Miller, 2011; Rush, 2020; Tobias, 2010). Given the poor understanding and documentation of the specifics of Indigenous tenure systems at the time of contact, and the ensuing undermining of Indigenous legal, political and educational structures, research into proving Aboriginal rights has become a complex and painstaking historical analysis synthesizing different types of evidence from community experts and from various academic disciplines. Independent academic research

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<sup>82</sup> See *R. v. Sparrow* SCC [1990] 1 SCR 1075

<sup>83</sup> This statement can only be proved through a more refined analysis of public lands acts than offered here.

<sup>84</sup> As observed by Reynolds (2018:86): “In view of the general denial of the existence of Aboriginal rights and title prior to the *Calder* case in 1973, it is unlikely that governments intended to extinguish them.”

provided by expert witnesses on social organization (including political, legal and economic institutions), kinship relations, symbolic systems, toponomy, history, archaeology, traditional ecological knowledge and traditional plant management provides important context from which the judiciary can adapt and apply the principles and precedents found in common law to new contexts, such as those considered in Aboriginal law (McNeil, 2017). In this section, I discuss how ethnobotanical and ethnoecological evidence can contribute to defining different categories of rights to access, use, and management of plants.

#### 4.4.1 Specific and Generic Rights

Slattery (2000) categorizes Aboriginal rights as being either specific or generic (see Table 3.1). Specific Aboriginal rights are expressed in activities (not relationships or philosophies), which are elements of “a practice, custom or tradition integral to the distinctive culture of the aboriginal group claiming the right”<sup>85</sup>. Generic rights are categorized as those held by all Aboriginal groups, providing they satisfy certain legal criteria, as they are “determined by general principles of law rather than aboriginal practices, customs and traditions” (Slattery, 2000:211). Slattery (2000:213) uses Aboriginal title as a prime example of a generic right as, while certain features of Aboriginal title might vary from group to group, the standard criteria of the right are the same wherever it occurs, and he emphasizes that “as jurisprudence evolves,” what might be a specific right today may evolve into a generic right.

Specific Aboriginal rights are divided into three distinct groups. Site-specific rights would be rights associated with a definite tract of land, but that do not quite meet the evidentiary standards of Aboriginal title. In the Straits Salish context, this might be associated with swidden agricultural practices for enhancing and maintaining berry patches (e.g., oval-leaved blueberries;

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<sup>85</sup> *R v. Sparrow* [1990] 1 SCR 1075 [para 46].

Saskatoon berries) or harvesting and processing a medicinal plant such as devil’s-club growing in a specific ecosystem that might have been used and tended by more than one Aboriginal group but not handed down as property to individuals.<sup>86</sup> The second type are floating rights that, while land-based (such as harvesting rights for tule or cattail for mats and bags, or false hellebore (*Veratrum viride*) for medicine), may be associated with a particular habitat or a plant species and not necessarily a particular site or tract of land. The third type of specific Aboriginal rights

Table 4.1 Spectrum of Aboriginal Rights Related to Plant Practices

Spectrum of Rights	Potential Examples of Plant Practices, Customs, Traditions
Cultural rights	Rights not tied to the land itself—e.g., intellectual or language rights to Indigenous plant knowledge, names, medicines, technology, ceremonies, etc.
Floating rights	Rights associated with land, but not necessarily with a particular site such as a habitat or plant species—e.g., rights to harvest western red cedar; basket grasses, some medicines.
Site-specific	Rights associated with a specific place, but that may not meet the evidentiary standards of Aboriginal title—e.g., berry gardens; cattail or tule harvesting sites that were regularly used but shared with other groups
Non-exclusive	Irregular use over shared areas, e.g., harvesting medicinal plants occasionally in shared territories
Non-depletable	Not applicable. All plants species and plant communities are depletable.
Depletable	Plant practices associated with plant species and plant communities must be monitored and considered vis-a-vis conservation and restoration of the resource.
Exclusive	Proof of regular and exclusive use by the Claimant has been established (e.g., owned camas fields, root gardens, named places, trails, village sites)

are cultural rights—rights that are not tied to the land itself (such as the canon of T’Sou-ke plant knowledge, or language and kinship rules), but are reflected in the intellectual knowledge and language of an Indigenous group.

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<sup>86</sup> Although this might be better argued as a joint title; see Chief Justice Lamer in *Delgamuukw* para. 833

In Aboriginal law, Aboriginal rights can also be characterized as exclusive or non-exclusive to a particular group, and depletable or non-depletable rights help to define the degree of authority that the Court believes an Indigenous group has in exercising these rights (Slattery, 2000). If a First Nation proves exclusive rights to particular lands (by establishing regular use over defined lands), they can, potentially, exercise Aboriginal title, while non-exclusive rights (from irregular use over undefined lands) will have more legal constraints on them, and have a lower threshold for infringement by the Crown. A depletable right, such as the right to harvest fish, plants, game, and minerals would also be affected by whether it is an exclusive or non-exclusive right. An exclusive right affords a First Nation a degree of authority in controlling access to a depletable resource, or set of resources within an area (as is the case of *Tsilhqot'in* title). A non-exclusive right is more complex, however, as the other users of the resource (as witnessed within fisheries debates in BC waters over the past few decades) are managed through a federal or provincial legislative authority which considers the interests of several stakeholders, alongside of the Aboriginal right.<sup>87</sup> Hence, a specific, non-exclusive, depletable right (e.g., the right to pick berries within a registered provincial Tree Farm, providing the licensee is not engaged in tree harvesting or silviculture, and with the discretion of the licensing body) is a much less valuable right than a generic, exclusive right to a given territory (e.g., the right to manage through self-government all resources within an Aboriginal title area).<sup>88</sup> As with every step of Aboriginal rights deliberations, ‘the devil is in the details.’ Evidence for Aboriginal rights is always described in terms of practices, customs, traditions and uses. The potential for these practices to be grounded as Aboriginal title depends on the degree to which these can be directly

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<sup>87</sup> See (D. C. Harris & Millerd, 2010).

<sup>88</sup> Even though the current jurisprudence constrains Aboriginal title with Crown authority, the spirit of authority for title is much stronger than usufructuary rights (McNeil, 2015).

tied to a definite geographic place and then, on the proof of intensity, regularity and continuity of practices, customs and traditions linked to a place or territory prior to the assertion of British sovereignty.

#### 4.4.2 Aboriginal Title

Long considered to be the most potent of Aboriginal rights, Aboriginal title is “a species of rights”, because it is a right to the land itself, and proof of Aboriginal title must meet stricter tests of evidence (Borrows and Rottman 2012:155).<sup>89</sup> Title lands will host many different types of uses and practices—not simply hunting or fishing or plant gathering. As summarized in *Tsilhqot’in* (at para 73): “Aboriginal title confers ownership rights similar to those associated with fee simple title including: the right to decide how the land will be used; the right of enjoyment and occupancy of the land; the right to possess the land; the right to the economic benefits of the land; and the right to pro-actively use and manage the land.” Following from *Delgamuukw*, the *Tsilhqot’in* [at para.56] decision confirms that a “territorial use-based approach” be adopted when establishing Aboriginal title, which overruled the Province’s assertion that “only specific, intensively occupied areas can support Aboriginal title” such as a fishing rock or a salt lick used by game [para 60].

Aboriginal title is unique, in that although it is similar to a private property interest, it is communally held and inalienable except to the Crown and then can be alienated only through clear and plain intention to extinguish title. The legal test for title requires proof not just of basic

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<sup>89</sup> See *Baker Lake v. Canada*; *Delgamuukw v. British Columbia* [1997]; *R. v. Marshall*; *R v. Bernard* [2005] SCJ 44, [2005] 2 SCR 220 (SCC); *Tsilhqot’in Nation v. British Columbia* [2014]

occupation at the time of asserted sovereignty, but of *exclusive* occupation (McNeil, 2015).<sup>90,91</sup> Exclusive occupation—evidence that would be sufficient to prove Aboriginal title—turns upon the degree and regularity of a people’s uses of defined lands, and evidence that the group held exclusive control at the time of sovereignty.<sup>92</sup> In many respects, the definition of Aboriginal title as expressed in the *Tsilhqot’in* decision is much like the definition of a customary landscape defined by Olwig, because the identification of these land rights arise from prior and ongoing occupation, social organization and a mosaic of customary uses and practices [*Van der Peet* test para 74]. When undertaken carefully and respectfully, plant research can be a powerful voice in translating plant use and stewardship into cross-cultural frameworks such as ‘cultivation complexes’; ‘comparative food systems’; ‘ecosystem management’ and ‘customary landscapes’ that furnish the arguments for title rights (Hunn & Meilleur, 2010; Robbins & Bendle, 2020).

#### **4.5 Meeting the *Van der Peet* Test with Plants**

*R. v. Van der Peet* identifies ten factors (see Table 4.2) to consider when determining whether a practice, custom or tradition meets the criteria of the constitutionally protected rights outlined above. This test has been used most often in determining specific rights, particularly in regard to hunting and fishing, and although criticized by many (including the dissenting judges in the original decision) it continues to be the base test applied in Aboriginal rights cases (Reynolds, 2018).<sup>93</sup> The majority of this test is designed to define the proposed right under

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<sup>90</sup> As established in *Delgamuukw v. British Columbia*, [1997] 3 SCR 1010.

<sup>91</sup> As stated by Chief Justice McLachlin “There must be a strong presence on or over the land claimed, manifesting itself in acts of occupation that could reasonably be interpreted as demonstrating that the land in question belonged to, was controlled by, or was under the exclusive stewardship of the claimant group (in McNeill 2015:828).

<sup>92</sup> *R. v. Marshall; R. v. Bernard* [2005] SCJ 44, [2005] 2 SCR 220 (SCC) para 73-74. While a group claiming title may use lands in ways that differ from traditional practices, the “group may not ruin the land or render it unusable for its original purpose,” so while this is a stronger legal right, it still tethers the First Nation to the Court’s understanding of “the fundamental nature of the group’s attachment to the land” (Slattery 2000:212).

<sup>93</sup> Plant related cases mostly focus on issues around timber harvesting: establishing commercial rights to harvest timber (*R. v. Sappier; R. v. Gray*), challenging Crown consultation with respect to Forestry; (*Haida Nation v.*

review, with the remaining criteria providing guidance to the judges to interpret the evidence before them with an open mind. Academic evidence drawn from multiple sources and based on recognizable data collection standards is used extensively in these cases and is applied according to accepted, orthodox methods of academic and legal discourse (McNeil, 2017; Miller, 2011; Robbins & Bendle, 2020; Tobias, 2010). The following paragraphs identify the more compelling features of ethnobotanical and ethnoecological research that make these effective as evidence of plant customs and practices to meet the *Van der Peet* test for Aboriginal rights. I will first discuss those criteria designed to specify the right (listed in the green section of Figure 3.2) and then examine the guidance on liberal interpretation of the evidence (listed in blue).

The first step in this process is to define the precise nature of the Aboriginal right, such as: the right to harvest certain species of plants for ceremonial purposes, the right to harvest cedar bark for commercial purposes (e.g., basketry or textiles for sale), or the right to practise controlled landscape burning to improve camas production of cultivated fields [para 51-54]. Precision here is a significant criterion as the outcome of the decision is based on whether or not the claimant has sufficient evidence to persuade the Court of the legitimacy of that specific right. As seen in the *Van der Peet* final decision, while all of the SCC judges acknowledged a right to fish for food, social and ceremonial purposes, the majority were not convinced that this right extended to fishing for commercial purposes, which was the right under claim. Ethnobotanists have documented and continue to produce extensive data about Indigenous practices, beliefs, and uses associated with plants prior to and after contact with Europeans. This compendium of material can be used to precisely define a wide spectrum of rights, from rights to use and harvest certain

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*BC*); protecting CMTs as heritage sites (*Kitkatla v. BC*) or cutting down trees in parks as treaty rights (*R. v. Sioui*).

species all the way to supporting claims of Aboriginal title (Rush 2020). The additional criteria used to further define the right are not mutually exclusive in that the types of ethnobotanical evidence I present below can support several of the test criteria at once.

Table 4.2 The Van der Peet Test

Summary of test for identifying cultural distinctiveness arising from the Van der Peet decision	
Test	Criteria for defining the right
<b>Precision</b> [para 51-54]	The nature of the claim being made in determination of the Aboriginal right must be identified precisely.
<b>Centrality</b> [para 55-59]	The practice, custom or tradition must be of central significance to the distinctive culture of the Aboriginal society.
<b>Continuity</b> [para 60-67]	Those customs or traditions which are classified as rights must have continuity with practices existing prior to contact.
<b>Specificity</b> [para 69]	Rights are determined on a group by group basis; they are specific to the Aboriginal community claiming the right.
<b>Not Incidental</b> [para 70]	The right must be of independent and integral significance to the aboriginal society; not merely incidental to custom.
<b>Distinctive</b> not necessarily Distinct [para 71]	The right must be proven to be distinctive to that group but not distinct as an activity
<b>Rights arise from prior occupation AND social organization, culture</b> [para 74]	Courts must look both at the relationship of an Aboriginal claimant to the land and at the practices, customs and traditions arising from the claimant's distinctive culture and society.
<b>Aboriginal Perspective</b> [para. 49-50]	Perspective of Aboriginal peoples themselves must be taken into account and in ways that are cognizable both within Aboriginal culture and to the Canadian legal system.
<b>Evidence</b> [para 68].	Courts must be generous when interpreting Aboriginal evidence. The evidence provided from pre-contact times will not conform to the evidentiary standards found in other branches of law.
<b>European Influence</b> [para 73]	European influence cannot be used to deprive an Aboriginal group of an otherwise valid claim to Aboriginal title.

While Aboriginal title requires proof of exclusive occupation, most Aboriginal rights jurisprudence to date focuses on clarifying specific practices, customs and traditions that were integral to the Aboriginal culture at the time of the assertion of Crown sovereignty (Reynolds 2018). In BC, the year 1846 is pivotal to this discussion because it was when the Oregon Boundary treaty was signed between the United States and Canada along the 49<sup>th</sup> parallel, with

the territory to the north being controlled by fur traders and ultimately the Canadian government, and the south claimed by the United States (Foster & Grove, 2003). In *Vanderpeet*, the court struggled with the problem of freezing rights at a certain date in history prior to which existed a putative “pristine aboriginal society” (see para. 168). In Ontario, Quebec and the Maritimes, where European settlement occurred much earlier than in the West, the acknowledged contact date is up to 300 years older than in BC. My discussion in Chapter 3 reinforces the view of the court in *Vanderpeet* that isolating a fixed date of the assertion of Crown sovereignty is somewhat arbitrary (see para 167). In BC, contact from the 18<sup>th</sup> century with European diseases, followed by engagement with the European maritime trade, heavily impacted NWC peoples’ relationships to plants, particularly women’s work with many plants used for food, fibre and textiles prior to 1846. Fixating on one date of contact or for the assertion of European sovereignty can misdirect attention away from practices that were important prior to that date and only lapsed due to the impact of creeping colonialism occurring before the Crown believed it asserted sovereignty in 1846. Any focus on a single date also inhibits the ability to acknowledge practices and rights that are integral to Indigenous societies that grow after contact. For Borrows (2019:30-31), SCC decisions such as *Van der Peet* and *Pamejewan* created a misleading “fiction that said Aboriginal rights could only be recognized and grow if they arose prior to European contact” and that this “form of constitutional originalism is contrary to Canada’s living tree jurisprudence.”<sup>94</sup> Further, the colonial activities that are associated with ‘contact’ change over time, impacting different

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<sup>94</sup> The living tree doctrine in Canadian law allows our Constitution to “change and evolve over time while still acknowledging its original intentions” (Centre for Constitutional Studies, University of Alberta <https://ualawccsprod.srv.ualberta.ca/2019/07/living-tree-doctrine/>). Chief Justice McLachlin [*Reference Re Same Sex Marriage*, 2004 SCC] further expanded on this metaphor to address the problem of freezing social institutions, gender roles, and concepts in law, stating that the Constitution is a living tree by which we progressively interpret, accommodate and address “the realities of modern life”.

aspects of Indigenous lifeways during different periods. Disproportionate focus on one single date of contact is not only arbitrary and misleading, it also fails to consider how new expressions of contact between Indigenous peoples and the state continue to undermine Indigenous people's legal rights today.

As examined earlier, even though early ethnography on the NWC seldom focussed on people/plant relationships, information about these relationships can be drawn referentially from this research (Barnett, 1955b; Collins, 1974; Cruikshank, 2007; Gunther, 1927; Hill-Tout, 1978; Jenness, 2016; Rozen, 1985; Suttles, 1974; Suttles & Lane, 1990). Further, in recent decades, the large collection of ethnobotanical research conducted throughout the Pacific Northwest (including research in Alaska, Yukon, British Columbia, Washington State and Oregon), reveals what species were used generally before and after contact (see Chapter 2), how they were harvested and used, and how Indigenous people modified plant communities, ecosystems and landscapes as a means of cultivating these important resources (Deur & Turner, 2005; Gill, 1983; Gunther, 1973; Norton, 1979a, 1979b, 1985; H. I. Smith, 1928, 1997; Steedman, 1930; Turner & Bell, 1971; Turner, Davidson, & Enrico, 2004; Turner & Efrat, 1982; Turner & Hebda, 1990, 2012; Turner et al., 1983). In this and other respects, plant use is helpful in precisely framing customs, practices and traditions that are specific to the claimant group within quantifiable terms that are familiar to the Court.

Ethnoecologists situate human plant management activities on a cultivation continuum where different cultures or sub-cultures manage stages of ecological succession to produce greater or more predictable yields of plants or plant parts (M. K. Anderson, 2005; Berkes, 2012; Deur, 2005; Ford, 1985; Turner, 2014; Turner, Deur, & Lepofsky, 2013b). From this vantage point, plant harvesting and cultivation can be seen as the “human appropriation of the net

primary product of photosynthesis”, whereby human actions that promote the photosynthetic activity of plants as a means of enhancing plant products for harvest is the basic mechanism of all agriculture (Weis, 2012:119). By managing biodiversity, nutrient flows, plant and animal interactions, water and other inputs, humans through coordinated and systematic social actions have impinged on and shaped natural ecosystems to a greater or lesser degree for millennia all over the globe (Boivina et al., 2016; Ellis & al, 2021; O’Flaherty, 2000). This cultivation continuum, then, stretches from what O’Flaherty (2000:21) calls ‘ecological agriculture’, where diversity and yield are managed through time within the limits of productivity of a local ecosystem, to “disturbance” or industrial agriculture which involves a “dramatic redesign of ecological relations to provide for the growth of crop species, and at rates of growth, that could not be found in the local ecology without human addition of external inputs.”<sup>95</sup> Explaining the Straits Salish cultivation practices in this context provides evidence of the centrality, continuity and specificity of these plant practices.

The *Van der Peet* test is designed to build a precise evidentiary picture of the legal right, in this case Indigenous use of native plants. It makes sense to describe practices and customs unknown to the common law in order to legitimize them as Section 35 rights. To that end, plants and plant parts can be counted, described, measured and mapped using standard scientific, botanical methods. Plant knowledge from both scientific (historic and contemporary botanical information) and Indigenous knowledge systems can be cross-referenced and these often support and enhance each other (Armstrong, Miller, McAlvay, Ritchie, & Lepofsky, 2021; Cuerrier, Turner, Gomes, Garibaldi, & Downing, 2015; Lepofsky & Lyons, 2013; Nolan & Turner, 2011).

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<sup>95</sup> External inputs into industrial agro-ecosystems beyond the genetically selected seeds or other propagules of the crops themselves, include: chemical fertilizers, pesticides, fossil fuels for equipment, importing of water and labour, and industrial technology see (Saje, 2012).

Early general ethnographies and archaeological research have proven to be an important corroborator of the more recently collected ethnographic, ethnoecological and ethnobotanical research (Norton, 1985; Turner et al., 2020). Ethnobotanical analysis, then, can link plant use to the Indigenous practices, customs and traditions found at the time of contact, while still acknowledging changes in those practices due to an assortment of influences, often from changes and restrictions, such as the banning of landscape burning, imposed by the public governments. (M. K. Anderson, 2005; Boyd, 2021; Deur & Turner, 2005; Turner, 2005, 2014).

Models of harvesting rates for different species can be established by measuring how long it takes for an average adult harvester to pick a litre of berries from a productive berry patch or to dig 25 kilograms of root vegetables from an estuarine root garden, and comparing these figures against noted village population figures from ethnographic or historic records (Deur & Turner, 2005; Norton & Gill, 1981). In chapters 2 and 3, I introduced how this method was effectively applied by Turner (2019b) to establish the extent of stinging nettle, cattail and cedar harvests and Ames and Shepherd (2019) to better appreciate how the NWC peoples organized and orchestrated the complex labour task of building Big Houses. This quantitative feature of ethnobotanical methodology is particularly compelling as revealing the quantities and extent of use of particular plant species supports the centrality and integrality of an associated practice, custom or tradition (Hunn, 1999).

Although plants do not preserve well in most archaeological sites, an archaeobotanical analysis of a 10,700 year old wet site on southern Haida Gwaii revealed how even minute plant remains can help corroborate the time depth of people's relationships with individual species

(Cohen, 2014).<sup>96</sup> Similarly, measurement and analysis of the scars of culturally modified trees (CMTs) for several species (but especially for western redcedar) are regularly used as evidence of depth and intensity of occupation by Indigenous groups of particular geographic areas (Earnshaw, 2016, 2017, 2019; Eldridge, 1997).<sup>97</sup> As discussed in the T'Sou-ke case study, working from botanical understandings of plant morphology and ecological succession, ethnobotanists explain how Indigenous groups managed forest succession to increase the size and fruiting of plants through a variety of practices forged over time and specifically adapted to a group's home territory. In this way, archaeological and historical ecological evidence can reinforce that practices familiar to many groups are nevertheless distinctive to the claimant group, and that evidence of plant processing and management also suggest the centrality of the practice.

An analytical device used to distinguish a sub-group of particularly significant plant species as specific, central, integral, and distinctive is to assess whether it is a “cultural keystone species”— meaning a species that indelibly shapes the cultural identity of a people and without which the culture would be organized much differently. Garibaldi and Turner (2004) devised six indicator factors (based on use, linguistic factors, role in ontology, resilience to change, unique position, and replaceability) that help quantify the importance of key plant species to a cultural group. This method tries to identify the most culturally significant plant species for a particular group and assigns a significance rating to all plant species used by a group (Garibaldi, 2009; Garibaldi & Turner, 2004). I will revisit this assessment in Chapter 5 but, generally, cultural

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<sup>96</sup> Cohen (2014) examined the remains of 23 plant taxa from 14 different families in the form of wood, charcoal, seeds, and additional plant macrofossils to reveal paleo-plant use at a summer processing site as well as some of the wood-splitting and processing technology used by the Haida from that early period.

<sup>97</sup> Species such as western hemlock, western redcedar, yellow cedar, Douglas fir, lodgepole pine, Trembling aspen (*Populus tremuloides*), and Paper birch (*Betula papyrifera*).

keystone species analysis can be used to demonstrate the centrality and distinctiveness of the right to the Indigenous group, as well as establishing the regular use criteria required for grounding Aboriginal title. This analytical method provides evidence to support an argument stating that certain plant practises were not incidental to other more integralcultural practices, customs or traditions, but were ones “that truly made the society what it was” (Justice Lamer *R. v. Van der Peet*, [1996] para 55).<sup>98</sup>

According to *Van der Peet* [para 69], rights must “be specific to the aboriginal community claiming the right.” One can see that the specificity of evidence required to prove an Aboriginal right within this test could be an obstacle when attempting to bring archival/ethnographic evidence of the plant practices of women into a legal argument. For example, the perfunctory assignment of women’s plant activities by Boas as the performance of the duties “of a good housewife” can be read as a dismissal of these practices as being not distinct, central nor integral to an Indigenous claimant. As I have discussed earlier, these deep systemic biases about the nature of women’s domestic and child care work are pernicious throughout the archival and ethnographic literature. These claims cannot go forward, then, without a full explanation of the ecosystem, plant morphology, forest ecology and phenological knowledge, as well as the social rules and infrastructure required to support plant practices, such as I have introduced earlier. Overlooking the canon of T’Sou-ke plant knowledge and associated labour practices (including gender division and specialization), property rights, and governance rules only limits the

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<sup>98</sup> That said, according to the legal test, a practice must be considered to be independent and not integral to another more central practice. Many plant practices related to technology might be argued as incidental to customs that are more central to Indigenous societies such as fishing (e.g., using hemlock, cedar, willow, stinging nettle, rose, and bull kelp to build fish hooks, nets and weirs); or feasting (e.g., using cedar to build a myriad of implements and gifts to support governance activities associated with the potlatch)—practices that have to some degree fallen away since the introduction of industrial materials for construction in these technologies and the suppression of the inter-generational transfer of knowledge through residential schools and habitat destruction.

understanding of how unique and essential these relationships with plants were to the political economies of the region prior to the colonial era.

Another source of information that reveals specificity and centrality of a practice is the analysis of Indigenous plant names (see Appendix A for T'Sou-ke plant names). Linguistic classification structures and names for plants (referred to as folk taxonomies) and plant practices provide a compelling source of evidence as to which plants were important to a given group at the time of contact and how the use and management of different species are ordered within a linguistic framework (Turner, Burton, & Eijk, 2013). Of the over 2300 vascular plant species native to British Columbia, only about 400 species are culturally significant enough to be named at a generic level in one or more Indigenous languages (Turner 2014). The degree of specificity of an Indigenous name associated with a plant species and its plant parts reflects the cultural significance of the plant (Hunn & Brown, 2011; Turner, 1988). This level of specificity reinforces that a practice is “independent and integral to the aboriginal society, not merely incidental to another custom” (*R. v. Van der Peet*, [1996] [para 70]). Even W.C. Grant, whose descriptions of the T'Sou-ke were usually dismissive and racist, begrudgingly acknowledged the precision of their plant knowledge:

The savages have a name for every flower, for every tree, and for every herb of the field; even the male and female of various plants are frequently distinguished by them by different denominations: to this knowledge of the names they hold an equally general knowledge of the uses to which the plants may be applied, and this knowledge they make use of not only in healing diseases, but in preparing and administering the most subtle poisons. (Grant, 1857:304)

In folk classification systems, patterns of over- and under-differentiation of terms for plant species can provide evidence for integrality of plant use (e.g., the eight different terms for parts of western redcedar in SENĆOŦEN indicate its significance to Straits Salish peoples) (Montler, 2018; Turner & Hebda, 2012:59). Similarly, the elaboration of vocabulary for different uses of

plants can help to establish their centrality to the group (Turner, Burton, et al., 2013). The time depth of plant use, and sharing of plant knowledge across groups, can be traced to the linguistic root of plant terms within proto- and neighbouring languages (Turner, 1974 2014). Turner (see also, 2014:117-190) testified in the *Tsilhqot'in* trial that it takes generations to acquire traditional ecological knowledge sufficient to allow a group to safely use the plants and plant parts within an ecological zone, and then to name these within the Indigenous language. While she was cross-examined at length on the methods by which she arrived at a timeline for the acquisition of ecological knowledge, the trial judge found her research credible and accepted her opinions.<sup>99</sup>

Ethnobotanists integrate botanical and ecological research to better understand pre-colonial, domesticated landscapes. Like animals, plants sense and respond with intention to their surroundings, but unlike animals, plants are not mobile, so must devise other ways to protect themselves or expand their habitat (Atchison & Head, 2017; Mancuso & Viola, 2015; Pitt, 2017). While plant populations, through wind pollination, or seeds scattered through animal feces, or by attaching themselves to animals, can move great distances and colonize new environments, individual plants or plant groupings are literally rooted in place. A plant usually reacts to changing environments by altering its growth rate or its direction of growth, or its reproduction strategies (Judd, Campbell, Kellogg, Stevens, & Donoghue, 1999; Pitt, 2017). As a result, plant communities or patterns of plant use and management practices can, with some caution (Lepofsky, Heyerdahl, Lertzman, Schaepe, & Mierendorf, 2003), serve as physical markers of past use and stewardship practices by humans over time and geographic regions (Lepofsky & Lyons, 2013; Lyons et al., 2018). More importantly, while the seral expression of plant communities is variable within ecosystems, the membership of plant species associated with

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<sup>99</sup> *Tsilhqot'in Nation v British Columbia* [2007] para 672-678.

each ecosystem will change only under radical intervention (such as the draining of a wetland, removal or replacement of all of the native soil or paving over of a meadow). As I demonstrated by using terrestrial ecosystem data in Chapter 2, consistency of the preferences of stable plant communities can be employed to predict the location of culturally important plant species within known ecosystems.

On the other hand, the location of an ecosystem or plant and soil anomalies can be an indication of past human cultivation. These physical remnants (see Table 4.3) are studied by historical ecologists to better understand plant use prior to European settlement. Two prominent examples of this in Straits Salish territories are the presence of Garry oak savannahs with associated camas prairies in the Coastal Douglas-fir Biogeoclimatic Zone, and the presence of dark soils (reflecting a higher nutrient value within the soil of an ecosystem than would normally be found, thereby indicating human input or assistance). In the first example, throughout Straits Salish territories we find the extension of Garry oak woodlands into the Coastal Douglas-fir zone which was clearly accomplished by regular, coordinated and systematic burning to enhance camas production (Beckwith 2004). The remnant Garry oak meadows of southern Vancouver Island and the Gulf and San Juan Islands, for example, reveal indicators of a cultivation complex for the enhancement of camas production and some berry species over thousands of years (Turner & Peacock, 2005; Weiser & Lepofsky, 2009). In the second example, research along the central coast of BC reveals that over millennia of repeated occupation at beach village sites, Indigenous peoples developed plant and shellfish harvesting and processing practices that enhanced nutrient-limited ecosystems, thus rendering the associated forest environment more productive (Hoffman, Gavin, & Starzomski, 2016; Lepofsky et al., 2017). Mary George's account (introduced in Chapter 2) of levelling the ground, covering with seaweed and burning

Table 4.3. Plants Don't Forget: Indicators of anthropogenic uses on the landscape  
 (this table was compiled by P. Spalding with assistance from N. Turner and Emma Lowther, also see Lowther (2022) and Deur (2000, 2005).

Type	Possible indicators of human/plant relationships	Examples
Soil: Anthropogenic evidence	<ul style="list-style-type: none"> <li>Dark soils and a thickened upper soil horizon (A horizon)</li> <li>Rich humus layer in bald depressions</li> <li>Shell fragments and/or fire cracked rocks</li> <li>Hearth features/pit oven</li> <li>Village Sites</li> </ul>	<ul style="list-style-type: none"> <li>top layer of thick humus;</li> <li>evidence of fire, high nitrogen in soil</li> <li>reddening colour and angular breaks)</li> <li>Charcoal deposits/concentration of bones/ash; pollen</li> <li>unusual land forms, flattened areas, rectangular depression, sand/shell middens</li> </ul>
Root garden Evidence	<ul style="list-style-type: none"> <li>Culturally important species evident with a denser production of bulbs</li> <li>Estuarine habitat near village sites</li> <li>Remnants of "levelling" to encourage springbank clover and other spp.</li> </ul>	<ul style="list-style-type: none"> <li>clover, silverweed, camas, bracken fern, chocolate lily, riceroot</li> <li>if not outcompeted</li> <li>terracing, dykes, rock walls, built-up soil</li> </ul>
Forest Structure: Succession	<ul style="list-style-type: none"> <li>Woodland traces</li> <li>Species diversity in riparian areas</li> <li>Concentration of culturally important species</li> <li>Afforestation</li> <li>Evidence of Fire/Burning</li> <li>Health and size of trees near village sites</li> <li>Remnant prairie vegetation</li> </ul>	<ul style="list-style-type: none"> <li>maples, Garry oaks, arbutus in conifer forests</li> <li>riceroot, silverweed, Pacific hemlock parsley along the Sooke river estuary</li> <li>willow, bracken, nettles, onions, barestem parsley, crabapple, bitter cherry, highbush cranberry, salal, salmonberry, soapberry, thimbleberry, trailing blackberry, red huckleberry</li> <li>absence of old growth stumps</li> <li>charcoal on bark of older trees</li> <li>possible stumps for salal, huckleberry, blueberry production</li> <li>chocolate lily, camas, cow-parsnip, wild caraway, barestem parsley, California oat grass; small Garry oaks next to a few larger well-established ones</li> </ul>
Plants	<ul style="list-style-type: none"> <li>Anomaly in morphology,</li> <li>Varieties within species</li> <li>Larger fruits from recent pruning/coppicing</li> <li>Bark Stripping</li> <li>Location Anomalies</li> <li>Anomalies in branching:</li> </ul>	<ul style="list-style-type: none"> <li>stingless nettle stems,</li> <li>camas (<i>C. quamash</i> vs. <i>C. leichtlinii</i>)</li> <li>oceanspray, berry spp., willow, rose cedar; Douglas-fir; bitter cherry; (cambium) alder; pine, crabapple</li> <li>Pacific yew trees at beach sites</li> <li>Mature cedar with extensive and low lateral branching in currently closed canopies</li> </ul>

over camas fields is an excellent example of how T'Sou-ke peoples enhanced the soils and cleared areas to produce bigger and more numerous camas bulbs.

To be classified as a right in the *Van der Peet* [para 60-67] test, a custom or tradition must also reveal “continuity with practices existing prior to contact”<sup>100</sup>. The continuity test has two parts: first the claimant must show that the practice existed prior to contact with Europeans, and second that the modern expression of this practice can reasonably be regarded as a continuation of the pre-contact practice.<sup>101</sup> Certainly, the methods of reading forests for past human management as discussed above is one way of identifying continuity. Archival records contain many direct and secondary references to plants, plant practices, cultivation and stewardship (Lutz, 1995; Suttles, 2005; Wolsak & Turner, 2014). This is particularly poignant in the many references to verdant fields, meadows, and gardens found within what would otherwise have been dense forests throughout southern Vancouver Island. For example, the first European settler in Sooke, Captain W.C. Grant, observed the following:

“My gardener tells me that with the soil and climate of this island he would not despair of bringing to perfection any plants that can be grown in Europe...At Syusun [T'Sou-ke village] there is a fine plain of 3500 yards [about 3.2 kilometres] in extent by an average breadth of 500 yards [just under 0.5 kilometre]...At Soakes [Saseenos] village a small river discharges itself up which the tide runs to a distance of 2 miles...Between this and the mouth of the river the natives have several little gardens in which they grow considerable quantity of potatoes, carrots and turnips...These are situated on little nooks of flat land framed at the bends of the River, the great majority of which are covered by water in winter...” (Grant, 1849:3-4).

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<sup>100</sup> Fortunately, as Borrows and Rottman (2012) note, C.J.C. Lamer found in *R. v Cote* that “...the concept of continuity does not require aboriginal groups to provide evidence of an unbroken chain of continuity between their current practices, customs and traditions, and those which existed prior to contact” (p. 127) [and] “...[T]he fact that a particular practice, custom or tradition continued following the arrival of Europeans, but in the absence of the formal gloss of legal recognition from the European colonizers, should not undermine the protection accorded to aboriginal peoples. Section 35(1) would fail to achieve its noble purpose of preserving the integral and defining features of distinctive aboriginal societies if it only protected those defining features which were fortunate enough to have received the legal approval of British and French colonizers.” (p. 98).

<sup>101</sup> *R. v. Desautel* Introduction.

Here and elsewhere, Grant (1857) refers to both what are likely large camas fields (and /or possibly bracken fern) around the Sooke Basin, with deep soil that he refers to as a “thick vegetable mould”, as well as estuarine root gardens along the river, in which T’Sou-ke had incorporated European vegetables into existing root gardens (Grant, 1849). Early naturalists in the Northwest region, such as Archibald Menzies, David Douglas, and Robert Brown, documented the plant species and habitats they encountered on their visits to the NWC, as well as noting many of the Indigenous uses for these plants (Balfour, 1924; Brown, 1868; Douglas, 2011). For example, in 1868, on his trip from Port San Juan to Sooke, botanist Robert Brown (1868:10) notes that as they move south out of Pacheedaht territory the vegetation changes from timbered forest with a “thick undergrowth of salal” to “a back ground of bald rolling hill country, and slopy park-like openings, stretching down to the water's edge,” until they finally “camped on a grassy meadow where a creek flows in at Otter Point.”<sup>102</sup> Grant also noted Otter Point as being called by the T’Sou-ke as Klowikk and containing “a series of irregular patches of cleared land extending for a distance of about 2 miles from the Sea Coast” with the Otter Point site itself interspersed with bigleaf maples, a marshy swamp and a terraced area with predominantly Pacific crabapple trees “giving to the whole the appearance of a straggling Orchard” (Grant, 1849:1). As colonial surveyors geographically reorganized BC by “flattening space, compartmentalizing it, renaming it, and assimilating these representations into the geometry of the Cartesian grid”, they found their bearings by describing landscape features and the vegetation

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<sup>102</sup> Pacheedaht linguist, the late John Thomas, recalled stopping here (Tugwell Creek) as a child with his family on their way by canoe to Victoria. He recalled that large patches of cattail, tule and basket sedge are found here, and also where the best pit-cooking rocks could be found along the beach; they stopped to camp at Whiffen Spit, where the children played with toy canoes in the sheltered waters (N. Turner, personal communication 2021). This site was noted as a camping spot and a shelter place by Frank Planes in the T’Sou-ke traditional use study.

in this strange new world, and many of these descriptions unconsciously reveal landscape management practices of the Indigenous occupants (Brealey, 2002:10).<sup>103</sup> For example, in a letter to A. Barclay about his mapping of ‘available’ lands for settlement around Sooke, J.D. Pemberton (1852) wrote:

The Vallies & low lands are exceedingly fertile the fern & brambles in them growing occasionally as high as 9 ft...In the neighbourhood of Soke there may be in all 5000 acres [2023 hectares] or nearly 8 square miles [almost 21 square kilometers] improvable woodland from which however a deduction should be made of 400 acres [162 ha] open unwooded land close to Capt<sup>n</sup> Grants House before alluded to...A canoe can be paddled for 2 miles up the river, the banks are pretty & thickly wooded, 30 acres [12 ha] or so cultivated by Indians...

The woodlands referred to by Pemberton are not a natural climax (coniferous) forest in either the Coastal Western Hemlock or Coastal Douglas-fir Biogeoclimatic Zones but would have been kept at that seral stage through landscape burning or other anthropogenic means. With regard to the 400 acres of unwooded areas pre-empted by Grant, very likely these would have been camas or even bracken cultivation areas actively tended by T’Sou-ke, as throughout southern Vancouver Island at that time, the cleared Garry oak meadows were favoured for pre-emption by Settlers (Beckwith, 2004; Grant, 1849, 1857; Hendrickson, 1975). The “30 acres or so cultivated by Indians” alongside the river would again very likely refer to the estuarine root gardens of species such as springbank clover, northern riceroot, Pacific silverweed and the more recently introduced potatoes, turnips and carrots. Combined with vegetation and ecosystem data, these historic observations provide a rich source of information from which to reconstruct landscapes as they were at the time of contact and how these changed over time. Of course, text excerpts provide only tantalizing glimpses into the pre-contact world of Salish cultivation and

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<sup>103</sup> For example, surveyor John Trutch’s descriptions of ‘burnt pines’, ‘berry fields’, ‘natural’ pastures and ‘Indian trails’ on Lulu Island, BC, provide an independent glimpse into Coast Salish customary landscapes of the early colonial period (Trutch, 1859; Turner, 2019b).

plant harvesting, tending and use, but the integration of archival, ethnographic, linguistic, archaeological and ecological sources from different time periods are illustrated on a customary landscape map as presented in Chapter 3 (see Figure 3.2), it reveals the complexity of plant use in customary landscapes.

All human groups have deep cultural connections with plants and plant products and the traditions associated with these are not static (Martin, 1995; Minnis, 2000). As seen above, linguistic analysis can reveal how plants or plant practices can be adopted into a culture through trade, influence of neighbours, or women marrying into communities from other language areas. Before and after the 1846 European settlement date, Indigenous peoples modified their plant practices with the use of industrial materials for tools, incorporation of new species such as potatoes into existing root cultivation complexes, and cultivation and harvesting of plants for trade in Settler, rather than Indigenous, trade networks (Suttles, 1987b; Turner, 2019a)<sup>104</sup> Making the connection between past and present expressions of the same overall plant practices, particularly when those practices were suppressed or abandoned due to lack of access, is tricky. In fact, this is where the momentum of the *Van der Peet* test becomes destructive. The overpowering emphasis on precisely articulating Aboriginal rights as specific, central and distinctive practices that are obviously linked to the pre-1846 past, narrows what is presented about human-plant relationships and, I believe, ultimately contradicts the large and liberal view of the evidence required to understand the fullness of these relationships. So, while the *Van der Peet* [para 73] test states that “...European arrival and influence cannot be used to deprive an aboriginal group of an otherwise valid claim to an aboriginal right”, whether research is accepted

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<sup>104</sup> Incorporation of metals in Indigenous tools was noted by 18<sup>th</sup> century explorers. These were incorporated through the long-established trade routes.

by a SCC judge is open to many subjective factors within the justice's understanding of a culture's ability to accept a practice or relationship with a species through cultural diffusion, particularly in times of profound social disruption.<sup>105</sup>

For example, how we address the significance of the potato (*Solanum tuberosum*) within deliberations on Aboriginal rights is not at all straightforward. Recall, above that W.C. Grant noted T'Sou-ke's cultivated root gardens containing, amongst other vegetables, potatoes, along the Sooke River. The humble potato, first domesticated by Andean Indigenous peoples some 8000 years ago and brought to Europe in the mid-sixteenth century, is now almost a cultural keystone species of the world (Earle, 2020). It was introduced to the Coast Salish through trade with other Indigenous groups and the Hudson's Bay Company at, and in some cases before, contact with Europeans (Suttles, 1987b). Similar to its adoption in Europe, the potato was quickly incorporated into the cultivation practices of Salish peoples in part because the propagation methods were very similar to those of other native root vegetables, such as wapato (*Sagittaria latifolia*) and camas (*Camassia* spp.) (Proctor, 2013).<sup>106</sup> The definition of the Salish word for wapato—**ska,'us**—was expanded to include potato. Can we see potato cultivation as a customary right, then, or if we are defining an Aboriginal right to root cultivation, can we use potatoes as one of the examples of this? Was potato cultivation a result of European or of Andean influence? While not unique to Straits Salish, the quick adoption of this plant and its edible tubers, like so many other culturally important species, was facilitated by local exogamy, where women's knowledge and activities spread quickly due to the mobility of upper-class Salish

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<sup>105</sup> Cultural diffusion is an anthropological term referring to the spreading or sharing of practices, knowledge, or pieces of a culture with others.

<sup>106</sup> According to Brown (1868:380) potato cultivation practices were widely known along the coast and regulated by families where in one village he visited a chief would walk amongst the houses "shouting in a stentorian voice 'Eat the little potatoes, keep the big ones for seed; eat the little potatoes, keep the big ones for seed!'"

women, and existing practices and sites of root cultivation (Suttles, 1987b). Were the T'Sou-ke's cultivated patches of potatoes noted historically along the river also native root gardens that were overlooked by early explorers? In this instance, where do Straits Salish and European cultural influences begin and end, and why does it matter so much?

Bringing together emic perspectives about human relationships with plants into the language of social science is an important part of what ethnobotanists do. Ethnography textualizes oral knowledge, thereby modifying an oral tradition into a written text. Done well, ethnographic interviews reveal the specifics of plant use over time as well as present a version of the current perspectives of Indigenous peoples. Yet, however sensitively we frame Indigenous knowledge into the language of ethnobotany, we are always presenting a translation of Indigenous people's perspectives. This evidence cannot be confused with or take the place of including "the perspectives of aboriginal peoples themselves" (*R. v. Vanderpeet* [para 49-50]). Inclusion of both ethnographic evidence and Indigenous expert witnesses in Aboriginal law has had mixed success in Aboriginal rights cases (J. Borrows, 2001; Miller, 2011). For example, in the *Delgamuukw* trial, Justice McEachern dismissed much of the ethnographic and Indigenous expert witness evidence as being unclear even though the *Van der Peet* [para 68] test clearly directs judges to "be generous when interpreting Aboriginal evidence," as "evidence from pre-contact times will not conform to the evidentiary standards found in other branches of law." On the other hand, in the *Tsilhqot'in* proceedings, trial judge Justice Vickers was much more open to this form of evidence and accepted a range of Indigenous expert witness knowledge as well as ethnographic and ethnobotanical descriptions about Tsilhqot'in cultivation practices around the Mountain potato (*Claytonia lanceolata*).

## 4.6 Discussion

The general pattern of European elites accumulating land by dispossession through enclosure of commonly managed lands has a deep and violent history in Europe, where it has been referred to as a “revolution of the rich against the poor” (Polanyi 1944:37).<sup>107</sup> From the 14<sup>th</sup> to the 19<sup>th</sup> centuries, the conversion of common tilled lands, and common forests and fens, to enclosed private lands for control by a small ruling elite across Europe provoked considerable rebellion and violence by the people who had relied on and managed these lands and resources as “commons” for thousands of years (Bromley, 2007; Harvey, 2005; Holzl, 2010). Removing common lands to private ownership in Europe and later in North America, India, and other British colonies was justified by the assertion of sovereignty and by claiming that the commons were waste lands requiring the management of an enlightened sovereign<sup>108</sup>(Armitage 2012; Gregory 2001).

The legal and political significance in Western discourse of *cultivation*, understood as humans’ domestication and hybridization of plant species and agrarian uses of land cannot be

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<sup>107</sup> As Polanyi (1944:37) describes, “The lords and nobles were upsetting the social order, breaking down ancient law and custom, sometimes by means of violence, often by pressure and intimidation. They were literally robbing the poor of their share in the common, tearing down the houses which, by the hitherto unbreakable force of custom, the poor had long regarded as theirs and their heirs’. The fabric of society was being disrupted.”

<sup>108</sup> For example, to illustrate these views, here is a transcript of Joint Indian Reserve Commissioner Archibald McKinley’s attempts to present Queen Victoria’s message to the Musqueam in the late 1870s: “I (she said) will send my laws to their country I will make them do well. I will send white people among them who will build towns and mills open Farms plant grain and vegetables when my poor Indians will know and understand how to work like the rest of my people they will leave off their evil habits [fighting and slave making] and they will live happily with my people. They will be well clothed well fed and happy by their own industry I will give all the land which has heretofore been laying useless to a wise man who will be Governor of British Columbia. He will sell land to my white people the money he may get for such lands he will lay out for the purpose of building Bridges making roads for the benefit of both Indian and white man. The Governor of B.C. will give land to the Indians also. He will give them all they can cultivate but will not give them land to lay idle.” (Harris 2002:108)

overstated. For 17<sup>th</sup> century colonial philosopher John Locke, “a property claim depended on the mixing of land with labor, and the ‘taming’ of nature” (Blomley, 1998:573). A fixation on the labour and the efficiency of field agriculture and farming colours the test for Aboriginal title with its emphasis on the degree and intensity of use of definite tracts of land. Undeniably, the T'Sou-ke plant use complex maintains many redundancies with many plant species being highly valued for providing the same or similar products, and with some favoured plants requiring an extensive habitat that is largely left alone until needed. During the height of European imperialism, an essential justification for seizing Indigenous lands and resources and usurping powers of Indigenous governments was that Indigenous economies, based upon fishing, hunting and gathering were unnecessarily consumptive of land. As Locke opined,

“I aske whether in the wild woods and uncultivated wast of America left to nature, without any improvement, tillage or husbandry, a thousand acres yield the needy and wretched inhabitants as many conveniencys of life as ten acres of equally fertill land in Devonshire where they are well cultivated? (Armitage, 2012)

Locke’s labour theory was used and extended by Swiss jurist, Emer de Vattel and others as a “theoretical justification for the foundations of property-holding in the imperial context” (Armitage 2012:18). As the expansion of the British empire accelerated, if Indigenous groups left only “feint traces on the landscape, these were superficial signs to be taken for vacant possession, tacit invitations to colonial possession and appropriation” (Gregory, 2001:95). When he considered the meaning of cultivation at the *Tsilhqot’in* trial [para 682-683], Justice Vickers agreed with a growing body of scholarship asserting that while Indigenous peoples in what is now BC did not practice agriculture in the way of Europeans, they did maintain complex relationships with lands, plants and animal species that included sustainable cultivation and harvesting, strict access rules, taboos, protocols and ceremonies (Ames, 2005; Blukis Onat, 2002; B. Smith, 2010; Turner & Peacock, 2005).

By disrupting Western biases toward field agriculture, ethnoecologists reveal the instability of a justice system that approaches Aboriginal rights from a legal and political foundation of *terra nullius*.<sup>109</sup> The work of ethnoecology and ethnobotany helps to unravel and challenge outdated theoretical assumptions about ecology, plant use, cultivation and ecosystem productivity. While the T'Sou-ke and other Indigenous groups do not need to have their ancient and enduring relationships with edible root species defined as a type of agriculture, this analysis serves to problematize the systemic bias foundational to Canadian common law: that field agriculture (and its efficiencies) is of greater value than perennial cultivation of root species and that fee simple title is the highest form of property tenure. Ethnobotanists, through careful analysis of archival and ethnographic records, together with interviews with Indigenous cultural experts, help to balance an ethnographic record that was heavily biased toward male-dominated Indigenous activities, such as fishing, hunting, and monumental wood technology. As shown in Chapters 2 and 3, knowledge about plants and plant management and the complex and central role of women in these historic customary landscapes are required to support legal arguments, political negotiations and the daily exercise of place-based, cultural plant practices (Turner et al., 2020).

Lawyers for the Claimant in the *Tsilhqot'in* trial were the first in British Columbia to effectively incorporate “regular use and management of plant resources” in their arguments to prove sufficient occupation through which to ground Aboriginal title (Robbins and Bendle 2020:325). In supporting claims of Aboriginal title (and, indeed, for all Aboriginal rights),

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<sup>109</sup> The term *terra nullius* (translating to empty lands) refers to the illegal occupation of European colonial governments by erasing or figuratively emptying out Indigenous laws and tenures within territories desired by European settlers. See John Borrows (2015) for a discussion of how, the *Tsilhqot'in* decision supposedly refutes the concept of *terra nullius*, while continuing to uphold the Crown's assertion of sovereignty.

ethnobotanical and ethnoecological research provides a robust data set for contextualizing specific practices that denote regular, coordinated and planned use of plant resources within claimed territories. Ethnobotanical research, at once, provides clear evidence of Indigenous plant stewardship, tending, and cultivation while challenging the standard of agrarian species domestication of plants and animals as the measure of whether lands and associated resources were occupied and used at the time of initial European settlement. When woven together with all of the other evidence in that trial, title was proved within a core area of *Tsilhqot'in* territory, and usufructuary rights were also proved beyond the core area. As litigation within this area of common law proceeds, it seems likely that ethnobotanical research will continue to support claims of Aboriginal rights and, ideally, expand the scope of these rights in Aboriginal law (Robbins and Bendle 2020).

And yet, the burden of proof required of the plaintiff by the justice system requires a level of evidentiary data that is time-consuming and unjustifiably expensive to produce.<sup>110</sup> The heavy reliance on extensive amounts of quantitative data to prove or disprove a narrowly defined point of law seems a poor solution for the timely resolution of Aboriginal rights. While transforming traditional plant knowledge into the language of social science can serve as a bridge to cross-cultural understanding, by doing so, ethnoecologists are also forced to exclude knowledge that is not cognizable within the Canadian court system (Hunn, 1999). The *Van der Peet* test, while acknowledging the importance of the Aboriginal point of view, steers evidence towards specific cultural practices with a handful of plant species that were and continue to be used most

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<sup>110</sup> As Reynolds (2018:99) compares the difference between the change in Aboriginal title litigation from *Calder* to *Delgamuukw*: The [*Delgamuukw*] trial lasted 374 days, compared with 5 days for *Calder*. The trial decision was 394 pages long compared with *Calder's* 35 pages. There were 61 witnesses giving very detailed evidence on genealogy, anthropology, and history as no admissions were made by the Crown on occupancy [as they were in *Calder*]. This complexity and expense is typical of modern cases and is a major factor inhibiting them.

intensively, such as western redcedar. The Haida Nation very effectively used evidence about their long and varied relationship with western redcedar to prove a Haida right to harvest cedar, and also to show that the Crown had failed in its fiduciary duty to consult with them (Rush, 2020).<sup>111</sup> Unfortunately, the high bar in Aboriginal law for detailed justification that a right maintains continuity and proportionality<sup>112</sup> with a pre-contact practice limits the number of plant species that can be successfully argued as “truly making the society what it was” (Rosenberg & Woodward, 2015). Essentially, this focus further valorizes cultural keystone species while overlooking the hundreds of other plant species of importance to Indigenous communities. The logical extension of this quest for precise clarification of customs results in a frozen reconstruction of plant practises that often overlook two centuries of cultural change and resilience through the radical changes in and adoption of new plant practices, territorial alienation, and ecological degradation (Turner, Spalding and Deur, 2020).

Aboriginal law relies heavily on judicial law-making, where judges at the SCC play the primary role in deciding what is and is not a constitutionally protected Aboriginal and/or treaty right. Indigenous people’s role in this process is a limited one and the orthodox communication of the Court does not encourage productive cross-cultural communication between First Nations and the Crown. For Christie (2019:266), “the ongoing objective of the Courts of Canada [is] to finish the colonial project of the state” through the biases of a mostly white, middle class, middle-aged male.<sup>113</sup> Bryan (2000 20-21) observed that “[j]udges are ill-placed to render judgment on the practices of another culture,” and Canadians should not accept the “abdication

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<sup>111</sup> *Haida Nation v. British Columbia* (Minister of Forests).

<sup>112</sup> *Lax Kw’alaams Indian Band v. Canada* [para 8].

<sup>113</sup> It is, as Christie states (2019:67) “...the application of a liberal democracy to Indigenous communities—to communities with collective histories, identities, and social mechanisms predating the emergence of the Canadian legal system.”

of responsibility for political questions by legislative bodies as they attempt to off-load the difficult questions on courts.” Indeed, when we confirm rights within a legal system built upon the colonial assumption of British sovereignty and *Indian Act* political organization, how can we expect anything but the extension of colonialism masquerading as reconciliation?<sup>114</sup> For example, in *R. v. Vanderpeet* Chief Justice Antonio Lamer (para 63) reinforces an earlier decision from the High Court of Australia (*Mabo v Queensland (No 2)* [1992] HCA 23), where he concludes that:

. . . when the tide of history has washed away any real acknowledgment of traditional law and any real observance of traditional customs, the foundation of native title has disappeared. A native title which has ceased with the abandoning of laws and customs based on tradition cannot be revived for contemporary recognition.<sup>115</sup>

I find this conclusion troublesome. What exactly is the “tide of history”, and who decides when it has washed away any real observance of law or custom? Aboriginal law has been successful in bringing focus to Aboriginal rights and title through exercises of being precise and specific and then declaring what is distinctive and central about Indigenous practices. At the same time, it has struggled with understanding and working with the Aboriginal perspective particularly of Indigenous laws, worldviews and continuing legal rights. Too often Aboriginal law fails to use a large, liberal and generous view of evidence, and is challenged in recognizing the adaptability of Indigenous social organization in past and contemporary times. In British Columbia, the tide of history took the form of an enormous wave of settlers who flooded the province in their search for agricultural land, lumber, fish, gold, and places to establish their cities and towns, and, in so doing, overwhelmed the legal institutions and customary landscapes

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<sup>114</sup> As Christie (2015:763) suggests, this only serves to perpetuate the “legal historical fiction...that Aboriginal title...actually crystallized as a burden on Crown title at the assertion of Crown sovereignty.”

<sup>115</sup> Brennan J. in *Mabo* at p. 60.

of Indigenous peoples. Obviously, T'Sou-ke and other Straits Salish peoples did not agree to the colonial project which, in the instance of plant relationships, forced the majority of their members to sever their rights and responsibilities—their covenants of reciprocity—with many of the culturally significant species and plant communities within their territories. While today they may not have access or the same active legal power over their customary landscapes, to suggest that they “abandoned” their laws with respect to plants would be false and misleading.

#### **4.7 Conclusion**

In this chapter, I have explored the general applications of ethnobotanical and ethnoecological research to support the identification of Aboriginal rights in the Canadian Court system and, in particular, in the context of the Straits Salish peoples' relationships with native plants. The legal culture in BC has come a long way toward fulfilling Queesto's wish that, “before too long we'll have our own Indian lawyers to look after our interests” (Jones & Bosustow, 1981:55). The highly orthodox, rhetorical structure of the Court has allowed for deliberation of the nature and extent of Aboriginal rights, and the process of these arguments highlights historical oversights, profound gaps in logic, and inherent cultural biases within Canada's legal system. BC now has many prominent Indigenous lawyers who are, at once, working within and challenging the common law, yet, the journey through Aboriginal rights litigation is far from over, particularly as this relates to people's rights to plants and their habitats. With half a century of legal effort to define Aboriginal rights, I feel we should be closer to recognizing Section 35 rights as they relate to Indigenous peoples' relationships with plants. Yet, Aboriginal law is strangely silent when it comes to deliberating on Indigenous rights to plants and, more importantly, management of the ecosystems and customary landscapes within which these plants reside.

Unfortunately, contrary to Queesto's wish, we have not indigenized the common law in a meaningful way. This is evidenced in how public governments receive the important clarifications from legal decisions such as *Delgamuukw* or *Tsilhqot'in* as a ceiling of rules and criteria under which modern legal rights must be contained (J. Borrows & Rotman, 2012). This objective of limiting rights to the narrowest possible reading of a legal decision, leads to a disturbing lack of creativity when trying to establish linkages or parallels between how Indigenous law and Aboriginal law could work in harmony to support plurality within legislation, regulations, policies, or programs between governments. I believe that, by and large, the *Van der Peet* test is only capable of recognizing Indigenous relationships with a few highly significant plant species, so now, as before, the test is of limited assistance to Indigenous peoples as they move to resurge their connections to the full suite of culturally important plant species and habitats throughout their territories. Moreover, the test is adept at recognizing intensive plant relationships that are significant to food, social or ceremonial practices, but is challenged when recognizing rights to plants for commercial uses or a broader right to manage or co-manage plants, ecosystems, forests, and lands.

In supporting claims of Aboriginal rights, ethnobotanical and ethnoecological research provides a robust data set for contextualizing specific practices that denote regular, coordinated and planned use of plant resources within claimed territories. This research, compiled over decades from the canon of T'Sou-ke plant knowledge discussed in Chapter 2, documents local experiences of (in large part) women's activities in relation to broader scholarship about plant use and management. Ethnobotanical research could act as a powerful medium in Aboriginal law cases through which to overcome gender biases about plant use and to better understand a more complete picture of the Straits Salish and other Indigenous societies in BC. Examining this

research in the context of broader academic ethnobotanical scholarship challenges the unfounded justifications about land and resource use that established a standard of agrarian species domestication of plants and animals by which to measure whether lands and associated resources were owned or governed by the nations who lived there.

In light of the information introduced in Chapters 2 and 3, the T'Sou-ke's production of impressive surpluses of plant products into specialty foods, medicines and lightweight textiles should be reconsidered in the context of commercial practices.<sup>116</sup> Processed and manufactured plant products were stored in large quantities for subsistence during low production periods (e.g., during the winter season and years of low productivity for particular species), and also for a substantial trade activity--again to offset food instability as well as to bring in favoured items from outside the T'Sou-ke territory (Suttles, 1960). The convention of gifting surpluses of plant products to kin and affines during bumper periods functioned as a form of social credit that could be reclaimed when needed. These were not incidental pastimes of the T'Sou-ke, but occupied a tremendous amount of focus, planning and time throughout the year and are amply supported by their social institutions.

My research also finds that the T'Sou-ke managed their relationships with plants on a territorial basis, and through laws arising from covenants of reciprocity with plants, they governed themselves around access to and use of culturally important plant species. Whether they were actively cultivating a species using intensive cultivation strategies, or working with the unique structure of a plant to harvest parts while keeping the plant alive, or stewarding a mature forest to ensure that culturally important plants could be harvested when needed, the governance

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<sup>116</sup> Fresh fish, the focus of the *Van der Peet* case was not a specialty item amongst the nations of the NWC, and it is unlikely that it would have been a regularly traded item prior to the encounter with European settlers.

and laws around these activities needs to be acknowledged in Aboriginal rights law. The ethos, laws and protocols discussed in Chapter 3 might be used to define an Aboriginal right to exercise a traditional plant practice in a particular place, but limiting our understanding of these unique and complex human/plant relationships to a few plant practices focused on a few species, would overlook the acknowledgement of more substantive rights of T'Sou-ke governance over their territories. Particularly, when we reduce our focus of analysis to searching only for plant practices that look and feel like “field agriculture” within a snapshot in time, we concurrently reduce the number of solutions that can support key Indigenous relationships with the plant species within the ecosystems we all share.

The re-examination of the meaning behind the markers of Indigenous place through the recognition of customary landscapes, specifically with the assistance of detailed ethnobotanical research and traditional ecological knowledge has the potential to re-frame how evidence of land use and occupancy is presented in legal contexts. The *Tsilhqot'in* case moved beyond conceiving of Aboriginal title as found only in specific, intensively occupied areas, yet, the emphasis in Aboriginal law remains on identifying bounded areas of cultivation and on archaeological evidence of historic sites of significance which, I believe, reflects a very Western conception of property. My understanding is that while some Straits Salish laws have been associated with camas beds, root gardens, and berry patches, many other laws rest in relationships to species found in mature forests where plants are stewarded differently than in fields or coppiced patches. Furthermore, many Indigenous laws are bound in covenants of reciprocity with plants and are found with the species and ecosystems that they occupy, not necessarily to bounded places or sites (as is so frequently the case in Canadian common law).

The disproportionate role that the non-Indigenous legal system has played in legitimizing Indigenous legal rights is at the heart of what needs to change in order to move forward with reconciliation (J. Borrows, 2010). As Christie (2019:121) points out, what is most puzzling to Indigenous peoples is that at “...the foundation of the Canadian law of Aboriginal rights - the Crown’s place as sole sovereign authority is ‘unquestioned,’ its power over Aboriginal peoples simply a given around which all else must revolve.” Why do Indigenous peoples have to prove their rights and sovereignty to the Crown instead of it being the other way around? In Canada, the emerging academic field of Indigenous law is ‘pressing back with insight’ about these erroneous assumptions and widening the debate of issues in a multi-juridical forum that is much closer to a form of inter-societal law than we have witnessed to date (Christie 2015). The greater recognition of Indigenous legal systems, and the rights and obligations around (among other areas of life) lands, animal and plant species, is fundamental to moving forward in a manner that can accept and reconcile more than one legal system in the same geographic area and with respect to the same ecosystems and species.

It is lamentable that native plants, Indigenous use and stewardship of native plants, and women’s roles in all of this have been so overlooked within both state legislation and in Aboriginal rights jurisprudence. On the other hand, this empty space creates an opportunity to proceed with innovation and in a manner that properly acknowledges Indigenous laws and incorporates broader Indigenous interests in plant species, communities, ecosystems and customary landscapes. The inter-societal discussion between Canadian common law and Indigenous law that needs to occur about plant management rights can commence with how the ancient and ongoing relationships between Indigenous peoples and all of the plant species that they used, cultivated and stewarded can be legally acknowledged now and in the future. In order

to support Indigenous peoples to “begin the task of digging below the level of legal tests and rules by asking questions about how concepts like ‘justice,’ ‘fairness,’ and ‘reconciliation’ fit into how the Court was operating”, however, an understanding about what is different, unresolved and unsettled between the common law and Indigenous law is required (Christie 2019:22). In the next chapter, I will explore whether and how ethnobotany and ethnoecology research can support the resurgence of Indigenous legal orders.

## Chapter 5

### Rooted in Laws: Recognizing Indigenous laws relating to plants through Customary Landscapes



#### Highlights

If some Indigenous laws rest in relationships with certain plant species, how, then, can ethnobotany and ethnoecology help to support Indigenous people's quest to bring the Indigenous legal orders from the past into working laws of the present so that Indigenous laws coexist and communicate with the common law?

- Making legal space for Indigenous laws
- Broadening understanding of the scope of Indigenous rights to plants and ecosystem management
- Supporting the decolonization of Aboriginal law with help from ethnobotany/ethnoecology
- Connection between Indigenous legal orders and plants, lands and resources governance

## 5.1 Introduction

Well, all of this happens in a longhouse. Now the longhouse, to our people, is a very sacred place...Now, if I was to challenge...if a person was to come to me and say he was a Hereditary Chief of a certain place, now he'd have to do it in the longhouse. And when he goes into that longhouse, there'd be Hereditary Chiefs from the whole...the better part of the southern end of the Island; they'd all be in that longhouse. Then he has to prove then where his bloodline comes from, who he is, and why he's Hereditary Chief. And if you are not a Hereditary Chief, and you don't prove that you...who you are, you're in bad trouble, because that's where the law really came down, is in the longhouse. And there would be Hereditary Chiefs from other Reserves standing up and saying, "Well, just hold everything here, now. This is not right." So, if you are a Hereditary Chief, and you say you are, you'd be better be, because otherwise you'd get hauled up in the longhouse. Kwakiuk, Chief Frank Planes (05-23-1996).

During several interviews conducted from 1994 to 2002, the late Kwakiuk, T'Sou-ke hereditary chief (and SI,ÁM), Frank Planes shared his knowledge of traditional law, lifeways and governance of the T'Sou-ke nation. The quote above summarizes several important characteristics of traditional Coast Salish laws. First, the traditional institution where Salish laws are deliberated is the Big House. Second, the authority for delivery of those laws is held by hereditary chiefs. Third, the acknowledgement of hereditary chiefs is formally approved and witnessed by other heads of families throughout southern Vancouver Island who are knit together by ancient and enduring kin ties. Finally, important social institutions, such as whether or not an

individual can hold a hereditary chief title, are not a rigid, fixed right but can be discussed and debated. Like their mother, Ida Planes, before them, Chief Frank Planes and one of his

Photo withheld for reasons of copyright.

*Figure 5.1 The Planes Family. **Ida Planes** (eldest daughter of Andrew Lazzar and Annie Jones, sister of Queesto), with her 2<sup>nd</sup> husband Gustav Planes and 6 of her 10 children. Ida was a cultural leader and expert basket maker. **Frank Planes** stands next to his mother who is holding Jack Planes (who also became of Chief of T'Sou-ke, as did his sons Andy and Gordon). **Alice Planes** is standing next to her stepfather. The occasion is the first All Sooke Day where Jack was declared as Best Sooke Baby. Also, in the picture are Germaine, Joseph and Louis Planes. Photo credit: Sooke News Mirror Aug 5, 2015.*

sisters, Alice, were kept home from residential school by their grandfather, Hereditary Chief Andrew Lazzar (Frank Planes 12-07-97). Throughout his childhood, Frank was sent by his mother and his grandfather to be trained by the “old chiefs” from T'Sou-ke, Tsawout, Songhees, Ditidaht and Pacheedaht (where he was trained by Chief Queesto) in the ways and rules of the T'Sou-ke and neighbouring nations. As Chief F. Planes (05-23-1996) observed:

I was sent to these places. These places were...I didn't really realize it at the time; as a small child, you don't really realize all these sort of things, where you're sent to do specific things. But now, when I look back at the whole thing, I know I was being trained to do these things. As you went to each Nation, the chiefs and elders would tell

you the way things should be done: how you work with nature, how you manage your area, how you manage the fish, the wildlife that... the animals on earth. This was taught me as a small boy. You would get some from this chief, you would get some from that chief, you would get some from the next chief; all their information was there. We were taught never to over-harvest anything.

In this chapter, I explore the connection between Indigenous legal orders and the culturally significant plant species of Indigenous Peoples within a customary landscape.<sup>117</sup> As discussed in Chapter 3, I use landscape to mean land shaped by customary laws that are monitored and adjudicated by community assemblies—an assemblage of land governed by the laws of an assembly (Olwig, 2016). In the case of T'Sou-ke, at the time of contact with Europeans, some areas and resources within this landscape were owned by the heads of families, others by T'Sou-ke people in common, others by corporate groups amongst Straits Salish extended families, and other areas were fully managed as a commons by sharing and regulating more generally with neighbouring groups (Suttles, 1974). The rights and responsibilities associated with the human-plant relationships within these landscapes were managed through laws that were maintained and developed within the kin-based, house structure of Straits Salish peoples since time out of mind. In this system laws are not only found in practices, or enacted in formal buildings, but also have a spatial component within territories and are situated in real places (Basso, 1996; Braverman, Blomley, Delaney, & Kedar, 2014). I maintain that laws also rest in species—those plant species with whom humans collaborate to support each other and share their gifts. As I have demonstrated in previous chapters, the customary landscape encountered by early European settlers was anthropogenic and regulated by communities whose

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<sup>117</sup> When I refer to legal systems and legal orders, I use Val Napoleon's definitions to distinguish these terms, where she states, "I use the term 'legal system' to describe state-centred legal systems in which law is managed by legal professionals in legal institutions that are separated from other social and political institutions. In contrast, I use the term 'legal order' to describe law that is embedded in social, political, economic, and spiritual institutions (Napoleon, 2009:236)."

adaptive local practices and socio-political organization defined their communities and, over time, these communities shaped the plant communities and ecosystems around them. The laws governing these pre-colonial landscapes extend far beyond regulating utilitarian practices. They encompass T'Sou-ke individual and family rights and obligations to plants, animals, fish, and lands that pre-exist any assertion of colonial legal and governance structures. How, then, do T'Sou-ke people transform the legal orders from their past into working laws of their present so that they may coexist with the common law?

Ethnobotany and ethnoecology research presented in Chapters 2 and 3 reflect the deep relationships that T'Sou-ke and other Salish peoples have with each other, with a huge variety of plant species, and with their territories for centuries. These human/plant relationships impacted ecosystems in a unique way and T'Sou-ke legal principles, obligations and rights are embroidered into the lands and resources throughout their entire territory. The relationships among individuals, plant communities, extended families, animal and fish populations, other Straits Salish groups and neighbouring non-Straits groups all contain important information about how T'Sou-ke traditionally organized themselves to live sustainably within a multi-species living space. The T'Sou-ke canon of knowledge of over 100 culturally important plant species, then, is much more than a list of practices and customs that served a discrete and limited utilitarian purpose in a distant and very different past. This knowledge contains wisdom and guidance about proper behaviour towards and relationships between humans, plants, animals, and ecosystems. What matters is not that T'Sou-ke continue to use these species in the exact manner or even at the exact place that they did five generations ago, but that the knowledge of their past and present relationships with these native plant species lives on (even if some of these

relationships currently reside in the safe storage of texts) and that T'Sou-ke wish to continue exercising their rights and responsibilities to them into the future.

In this chapter I first examine how Indigenous legal orders are embedded within the relationship among Indigenous peoples, their belief systems, communities, ecosystems and plant species. Second, I introduce the work of two Salish legal scholars in order to indicate the emerging contemporary framework of Salish legal orders. Similar to the common law system, only Indigenous legal experts can define the scope and content of Indigenous laws. Third, in the context of this resurgence scholarship around Salish legal orders, I suggest how ethnobotanical research and ethnoecological research might support the important role of Indigenous laws within and outside of the Canadian law. In this regard I indicate the difference between Indigenous and Settler legal ethics as these relate to environmental/ecological management. At the end of the chapter, I note potential concerns around the relationship of laws when differing, and sometimes competing, plant and ecosystem values are considered within the same legal conversation. While the path to equality is achieved through different methods and procedures for protecting Indigenous plant values and ongoing use than those of other Canadians, it is essential that these alternate paths be agreed to as being equal.

## 5.2 Indigenous Law and Plant Relationships

The history of the interface of Europeans and the common law with aboriginal peoples is a long one. As might be expected of such a long history, the principles by which the interface has been governed have not always been consistently applied. Yet running through this history, from its earliest beginnings to the present time is a golden thread—the recognition by the common law of the ancestral laws and customs the aboriginal peoples who occupied the land prior to European settlement. (CJ McLachlin, *R. v. Van der Peet*, [1996] 2 S.C.R. at para 263) .

Nonetheless, recognition is but one step in finding a solution for moving forward. There remains the need for Indigenous peoples to indigenize and reassert their own ways of knowing, and the need for all peoples, including Indigenous peoples, to work towards decolonising existing legal theory and legal application (Ruru, 2012:38).

As Ruru states, there is a pressing need for all peoples to decolonize legal theory and application and, in Canada, a step towards doing this is by first understanding more about the nature of Indigenous law and then by making space for Indigenous peoples to re-establish and grow their legal orders. As identified in Chapter 4, a continuing challenge for the Canadian courts in Section 35 jurisprudence is in considering the Aboriginal legal perspective. The Honourable Chief Justice Lance Finch reflected on this problem when he suggested that “...there is no inherent limit to the ways in which Canadian and Indigenous legal orders may be mutually enriched and harmonized” (Finch, November 2012.:2.1.3). He further proposes that along with Aboriginal law’s “duty to approach questions of interpretation generously, the duty to consult and the duty to accommodation” should be added: “the duty to learn” or “at the very least, to holding ourselves ready to learn” (Finch, November 2012.:3-4). So, instead of trying to confine the legal space within which Indigenous laws might find expression, Finch and Ruru ask that we expand that space to ensure that Indigenous laws have room to be appropriately recognized, reclaimed and restored in communities.

Indigenous legal orders are autonomous and independent legal entities held by the Indigenous peoples who maintain them. Over the past three decades, scholarship around Indigenous legal traditions has made an overdue introduction into the legal discourse, and this is working to decolonize fundamental assumptions and perspectives within Aboriginal rights law in Canada (J. Borrows, 2010, 2019a; Christie, 2019; Friedland & Napoleon, 2015; Mills, 2010; Napoleon, 2015; Napoleon, 2009; Napoleon & Friedland, 2016). As a multi-juridical state, Indigenous legal scholars assert that, rather than trying to fill the empty box of Section 35 rights with definitions mined primarily from Canadian jurisprudence, we must recall that the source of Aboriginal law is found in Indigenous legal orders that are ‘unknown to English law’—the ancestral laws referred to by McLachlan above. As Ruru observes, however, picking up “the golden thread” requires that Indigenous peoples re-connect with and assert their own laws. Following from this important work, the Canadian legal system and its practitioners need to better understand the sources and expressions of Indigenous legal orders both on their own terms within Indigenous communities and as they relate to intersocietal law between Indigenous nations and the Canadian state.

#### 5.2.1 Sources of Indigenous Laws relating to Native Plants

Embedded within the stewardship of plant resources over customary landscapes are Indigenous laws. For Borrows (2010:23-58) the source of Indigenous legal orders includes: *sacred*, *natural*, *customary*, *deliberative*, and *positivistic* legal foundations. Legal orders, or agreed upon legal behaviour with respect to plants, might be found in sacred activities, such as stories revealing the intimate, but not always easy, relationships among humans, plants and the supernatural such as the Coast Salish Legend of the Star Husbands (see Figure 5.2).

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*Figure 5.2 The Story of the Star Husbands (as told to Robert Brown by Tomo, from Cowichan; Beckwith 2004:257)*

Once on a time long ago (this was in the days no more remembered, when the heavens were nearer earth, and the gods were more familiar – it never happens nowadays), two Tsongeisth [Songhees] girls were gathering gamass [camas], at Stummas (near Elk Lake, Vancouver Island), and after the manner of the gamass-gatherers they camped on the ground during the season. One night they lay awake, looking up at the bright stars overhead, thinking if their lovers, and such things as girls, Indians or English, will talk about. The Indians suppose the stars to be little people, and the region they live in to be much the same as this world down below. As one of the girls looked up at the little people twinkling overhead, one said to the other, looking at Aldebaran, the red eye of the Bull, "That's the little man to my liking; how I would like him for my lover!" "No," said the other, "I don't think I should: he's too glaring and angry-looking for me. I am afraid he would whip me. I would better like that pale, gentle-looking star, not far from him."

And so the gamass-gatherers of Stummas talked until they fell asleep. But as they slumbered under the tall pines, Aldebaran and Sirius took pity on their lovers and came down to earth, and when the girls awoke in the morning it was in Starland, with their lovers by their sides, in the country up in the sky. For a while all went well and happily, until, after a manner of their race, they wearied to see their friends at Quonsung ("The Gorge," in the Victoria Arm) and Cheeuth (Esquimault) and their gentle husbands grew sad at their melancholy wives.

One day one of the sisters came upon the other busily engaged in Starland, and she said "What are you doing, sister?" "I am twisting a rope," she said; "a rope of cedar bark, by which to get back again to Quonsung. Come sister, our husbands are asleep, help me." So the sisters fell to work, and while their husbands slept they wrought, until they had twisted a rope long enough, in their opinion, to drop themselves down to earth again. This they concealed in the woods, and then commenced to dig a hole in the vault of heaven with a pointed stake. For many days they dug, until they heard a hollow sound, and then they knew that they were nearly through; and next day they finished their work (at a fitting time), and saw the clouds beneath, but the earth was a long way down. All this time their husbands were out hunting, or asleep in the lodge. They then fastened a stick transversely over the hole, and to this they attached the rope, and commenced to slide down.

For long they slid, but yet did not come to the earth, and they began to fear for the results, for the rope was nearly ended, but Satitz (the east wind) took pity on them, and blew them to the earth, and they knew not what had happened, but on recovering their senses they found themselves near the valley of the Colquitz – not far from their own home – with the rope lying beside them. So they coiled it up, and Haelse ["Supreme Being"] made it into a hill as a monument (today known as Knockan Hill): to remind mortals not to weary for what is not their lot. And after this the girls went back to Quonsung, and became great medicine women, but remained single, all for love of the "little people" above.

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The story of the Star Husbands (represented by Mars and Venus) is a very widespread narrative with over 100 versions of the story from across North America including the T'Sou-ke, not only emphasizes the centrality of root digging and fibre manufacturing for women, but also of the real and complex connections between humans and the supernatural world (Turner 2014). Even while acknowledging the bonds to the Sky People, however, the story tells about the primacy of the

sisters' home territory and how eventually they risk much to return to their own lands and community.

Stories are also conveyed through dances such as the Stump face man in the Kwakwaka'wakw, Atlágimma dance (an intricate dance about the consequences of overharvesting and the actions taken on the advice of various plant and animal species to repair harm to the environment) (Turner et al., 2020); ceremonies (the Salish First Salmon ceremony where, by protocol, the first catch is laid out on cedar and sword fern fronds) (E. Claxton & Elliott, 1994), or, the Kwakwaka'wakw cedar bark ceremony (Turner, 1998b); rituals (the widespread Indigenous practice throughout British Columbia of praying to a plant before harvesting any of its parts), and songs (Frank Planes recounted several times how women would sing T'Sou-ke songs as they paddled out of Sooke Harbour) (Turner, 2014). Within these stories are teachings about socially accepted ways of behaviour and obligations—essentially embedded within these stories are laws.

Laws are also found in philosophies about, observation of, or interaction with, the natural world and the way that these relationships inform human behaviour and laws. For example, using the Anishinaabe “Rabbits and the Roses” story (see Figure 5.3), Borrows (1997) frames it as a legal case to reveal how the philosophies of respect, interconnectedness, observation, stewardship and individual responsibility toward the group are all foundational to Anishinaabe law. At the end of the story, the Anishinaabe trickster, Nanabozho, instructs the gathered animals

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Figure 5.3 Anishnaabeg Story of the **Rabbits and the Roses**. (Reproduced from Borrows 1997: 459-460)

In the Bear case, the bears, bees, and hummingbirds all felt that something was wrong. Roses were once the most plentiful flower to be found. Their presence lighted the forests and fields, and their rich colours blanketed the earth. Yet, in all their brilliance no one really paid much attention to them. Eventually, they became much less visible. Their numbers decreased and their bright shades paled. As the flowers became fewer and fewer, the rabbits became fatter and fatter.

Still, no one noticed. There were always cycles. Life perpetually underwent periods of abundance and scarcity. The time came, though, that the Anishinabe also felt that something was not right. It was hard to say what. They knew that the bear's flesh did not taste as sweet. The bears could not find much honey anymore, and what they did find was very bland. The Anishinabe blamed the bears for not being as industrious in their search for honey. In turn, the bears blamed the bees and hummingbirds. No one could figure out what was happening.

Then, one summer there were no roses. The animals grew weary. At last everyone became alarmed. In great desperation a meeting was called. Everyone was invited and a great council ensued. It was decided that all the winged creatures would search the earth for a single rose. Months went by and, finally, a

hummingbird discovered a solitary rose perched on the sides of an escarpment. It gently removed the rose from its perch and cradled it back to the council place. When everyone was assembled they asked the rose to tell what happened.

In a voice that was weak from hanging on for life, it said: 'The rabbits ate all the roses.' The council exploded with anger. The bears, wolves, and lynxes seized the rabbits. They grabbed them by their ears and batted them around. The attack stretched the rabbits' ears and split their mouths in two. The enraged mob might have killed them but the rose was heard once more. 'Had you cared for and watched over us, we would have survived. But you were unconcerned about us. Our destruction was partly your fault. Let the rabbits go.'

The animals who had rashly judged the rabbits were all ashamed, so they freed them. No one spoke or moved. Nanabush stood and addressed the silent crowd. 'We need the roses, and roses need us. They performed their duty to us, we did not do the same for them. Within our place, everything is dependent upon everything else. The loss of even one inevitably affects the well-being of the rest. The delicate balance between us must be preserved. You can take the life of plants but you cannot give them life.'

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and humans to remember that... "We need the roses and the roses need us." Not only does this story reflect the importance of stewardship and responsibility towards an abundant and even commonplace plant such as wild roses (*Rosa* spp.), but that it is everyone's responsibility to show care towards the roses in order for the roses to return their respect in supporting human and animal life.<sup>118</sup> As Turner (2014b: 232) explains, "Storytelling is about conveying truths at a metalevel and is therefore highly important as a means of transmitting critically important ideas and information in a given cultural context." Key to understanding a widespread Indigenous

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<sup>118</sup> In June, across Canada (except for Nunavut), along roads, ditches, streams and fields, wild roses bloom in splendid abundance. They are named in virtually every Indigenous language across the country.

community of practice associated with the rules, protocols, and rights to native plants and their habitats is comprehending the dependence of the relationship, or the covenants of reciprocity, between humans and plants. Values of sustainability related to land and resource practices and ownership rights are enshrined in customary law through storytelling and ongoing deliberation within communities (in Straits Salish communities, often in Big House ceremonies where rights are approved through formal witnessing), and these customs necessarily change over time and varying circumstances (Miller, 2001; Morales, 2014).

The remaining two sources of laws—deliberative and positivistic—are not found in texts or research, but are actualized within contemporary, community-based processes. Deliberative sources of laws might be legal rights resulting from the processes of discussion and debate flowing from Indigenous governance, such as in Big House ceremonies or band council decisions, or in dispute resolution processes engaged in by community members (Miller, 2001). Positivistic sources may be found in rules interpreted by acknowledged community experts or cultural specialists (such as the teachings of Agnes George or Chief Frank Planes) authorized to discuss the protocols and laws either based upon their specialized knowledge or by their political status (such as the head spokesperson of a Straits Salish family group). Ethnobotany relies heavily on individuals with specialized cultural knowledge from which to understand systems of traditional plant knowledge including many protocols, rights and rules related to plants and relationships between peoples that involve plants.<sup>119</sup> Indeed, the past recording of wisdom and knowledge from T'Sou-ke and other Straits Salish experts is the primary source of information

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<sup>119</sup> These individuals are sometimes referred to as 'cultural refugia' as they hold and have preserved detailed cultural knowledge (such as about plants) that was known to all community members prior to the colonial period (Turner, 2005).

about T'Sou-ke relationships with plants described in Chapters 2 and 3.<sup>120</sup> In order to be translated into legal orders for T'Sou-ke, however, ethnobotanical texts require interpretation and adaptation by living T'Sou-ke people participating in their own community governance structure.

To facilitate this transition from sources of laws into active legal orders, Borrows (2019) suggests that communities identify and build from the ethics or principles that lie within these various sources. This approach does not rely on strict representations of Indigenous laws as they were at the time of contact, or as they are expressed within texts that document stories, songs, ceremonies, etc., but assumes what Christie (2019: 263) calls, “the existence of meaning-generating Indigenous collectives at pre-contact and presumes these capacities for meaning-generation persist” through the colonial and post-colonial periods, and it defines Indigenous self-determination. Neither does this approach recognize the Canadian state as the “supreme authority within a territory” (Christie, 2011:332). Rather, as independent peoples, Indigenous groups continue “to build and maintain worlds of meaning about themselves, as the *power* to do so cannot be taken by another (short of complete genocide)” (Christie, 2011:342). The result of this approach is a regeneration of various branches of Indigenous law germinating from their strong associations with the roots of legal orders and developed through the careful reflection of present-day Indigenous peoples (J. Borrows, 2019a; Mills, 2016; Napoleon, 2013). In this way, Indigenous legal orders push beyond injustices within Canadian law resulting from the limiting

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<sup>120</sup> Much of the information that we have today around Straits Salish plant knowledge comes from documented teachings of: Christopher Paul, Elsie Claxton, Violet Williams, Mary Thomas, Dave Elliott Sr., Mary George, Agnes George, Ida Planes, Frank Planes and Susan Lazaar.

of all discussion around Indigenous rights to those areas defined as legitimate within the context of the sovereign state.

### **5.3 Resurgence of Straits Salish Laws**

See, when they started electing chiefs, and they stopped all the potlatches, you weren't allowed to have a potlatch, and then they started electing chiefs, that got rid of a lot of longhouses. Because what were they used for anymore? They weren't allowed to use them. So, they just went to ruin. So, that's the way both of our longhouses went... That's right. Weren't allowed to even meet in them, not even hold a meeting in them!... In fact, you weren't allowed to hold a meeting in your home. If there were more than—I forget what it was. You'd have to find that out too, how many people in the house at one time that were non-residents. You could be packed off to jail. Only for religious purposes you could meet, so when you'd have a meeting and a policeman would be coming up the road, you'd all start singing hymns. I've seen them do it, I didn't sing any hymns myself, but I seen them do it. But that's the way it was, it was just the law. And that just wasted those longhouses, just shut them right out. (Frank Planes, 02-03-00).

The T'Sou-ke were forced to transition from a hereditary government to an elected band council system when the federal government imposed an Indian band chief in 1929, followed by the Band's first election in 1931 (Sooke Museum, 1999). Since that time the overwhelming majority of band chiefs have also been hereditary chiefs. Notable exceptions to this are Chief Andrea Cooper and Chief Linda Bristol. In 1977, Andrea Cooper became one of the first woman chiefs in BC. Among her many initiatives, she partnered with the Sooke Region Museum to undertake a genealogy project that later helped reinstate status and rights to many T'Sou-ke women and their families after the passage of Bill C-31 (Sooke Museum, 1999:339). Linda Bristol, another T'Sou-ke leader and teacher of T'Sou-ke heritage, arts, culture and language became Chief in 2000 and established the Sum-SHA-thut primary school on reserve (Peers, 2018).

Although T'Sou-ke extended families continued to live and hold potlatches in big houses during the early part of the 20<sup>th</sup> century, as indicated by Frank Planes in the above quote, by the 1950s these structures had become unsafe and were dismantled. The last potlatch located in a T'Sou-ke big house was hosted by the George family at their longhouse in 1921 (Peers, 2018). In spite of this impediment to maintaining traditional laws and governance, as well as the brutal effect of residential schools and other *Indian Act* directives, the T'Sou-ke have continued to exercise the spirit and principles of their hereditary system. This is made possible, in part, by the tight kin network on southern Vancouver Island, so that even without their own physical structure, T'Sou-ke still participate in business that can only be conducted in the Big House (such as naming ceremonies) in neighbouring communities. In 1928 (see Figure 5.4), Andrew Lazaar and his daughters participated in a spirit dance at the Esquimalt Big House (Peers, 2014). More recently, the late Linda Bristol and her mother hosted a mortuary potlatch in 1981, with 400 invited guests, to honor her father at the Sooke Community Hall (Peers, 2018). In the 1980s, the current Chief Gordon Planes received his hereditary name, *Hya'kwacha* – his Great Grandfather's name from Scianaw – also at a ceremony conducted in the Big House at Esquimalt.

Photo withheld for reasons of copyright.

*Figure 5.4 Andrew Lazaar with his daughters Mary and Susan (Cum-Chiat-Sia) in 1928. They are dressed in ceremonial regalia (made from cedar bark, wool and feathers) for the occasion of a spirit dance celebration at the Esquimalt Big House. Peers Sept 3 2014. Sooke*

Because all these lower nations on the lower Vancouver Island, we're all relatives. Chiefs marrying chief's daughters and all that sort of thing, they're all tied together. We're all tied together, it's strong, it's unreal. (Frank Planes 04-10-2001:21).

While the T'Sou-ke have not yet shared their customary legal orders in a formal academic way, Indigenous legal scholars from their close neighbours and relatives within the WSÁNEĆ and

Hul'qumi'num First Nations are working to restore legal traditions within those Salish communities. Given the close kinship, linguistic, cultural and political ties between WSÁNEĆ and T'Sou-ke, I believe that WSÁNEĆ legal scholar Robert Clifford's (2011:1v) insights and perspectives on WSÁNEĆ legal orders reflect T'Sou-ke laws with respect to "mutual responsibilities in relation to ecology." To get a sense of the T'Sou-ke Indigenous legal framework within which their relationships with plants might relate, I also draw upon Sarah Morales' research into Hul'qumi'num legal traditions as there are strong cultural and kin inter-relatedness (see Figure 5.5), as well as similar ecologies and cultural plant use and management systems between the T'Sou-ke First Nation and the Hul'qumi'num (Morales, 2014). The Hul'qumi'num origin story recounted by Curtis reinforces the foundational kin ties between T'Sou-ke and Hul'qumi'num peoples, even though they do not share a language and territory in same manner as with other Straits Salish groups. The story also emphasizes very symbolically how different players (high status men, high status women, slaves, etc.) each bring their own roles and contributions to these household relationships between communities, and even explains what happens when the marriage dissolves (the T'Sou-ke woman returns to her community, without destroying the inter-community ties). Clifford and Morales emphasize that the laws of their communities are rooted in relationships with ancestors, kinship and land. As described in Chapter 3, T'Sou-ke plant relationships are immersed within the web of social organization, family relations, hereditary property rights, spirituality, ecology and food production. As Napoleon (2013) explains, these kin networks encode peoples' legal obligations and go far beyond the reserve boundaries set out by the *Indian Act* to include deep relationships with groups in neighbouring territories (e.g., among T'Sou-ke, WSÁNEĆ and Hul'qumi'num First Nations). Exploring and illustrating normative legal patterns within these fundamental community and

Figure 5.5 Hul'qumi'num Origin Story (Curtis, 1913)

In the beginning of things, StúfSiin [Cowichan] dropped down out of the sky upon the earth at the foot of the mountain Swúkus, where there is an open swampy place called Shwúnum. In his right hand was a spear, in his left a rattle. His face was like the mask now used to represent him.

Then SiyálufSu fell down in the same place. He had bow and arrows, a net for catching deer, and a rattle, and his face was quite different from that of the first man, being like the mask that now represents SiyalufSii. Next came Hwnam, with a fish-hook and a rattle, and a masklike face. The other two said to him: "You have a fish-hook, therefore you had better go down beside the salt water, where you can use it. Besides, your clam-shell rattle might frighten the salmon when they come into our river. We do not desire you to remain here." So Hwnam went down to [Malahaht] on the west side of Saanich inlet. The next man to fall out of the sky was Swutiln, and his coming made the earth shake, so that, though he dropped at Tlpálaq on Chemainus bay, the other three knew that a fourth man had come upon the earth. Swiitun brought with him a bed with raised ends, and he moved to Tsiuhum, a small island near Chemainus bay. Kolémiilth dropped to the earth at Tlahotun, the open slope at the deep pool not far above the mouth of Cowichan river. He had a small round stick and some paint, for he was a medicine man and could cure disease by marking lines on the body of the sick. QuthafSa descended at the same place, and the two lived there. They were the men who invented the fire-drill, and the pitfall for deer.

Now at Saaq [Sooke inlet] lived Ti'kámiit, who had come to the earth even before StúfSiin. He had a daughter, and hearing of StúfSiin, how he hunted and killed deer and elk, dried their hides, and constructed a house of skins, he one day said to her: "You know nothing. You are lazy. This is not good. You ought to make something for me to wear. But you do not know how. You are very lazy. Now, there is a man called StúfSiin. Go and find him, and try to marry him, and make a good wife for him."

So the girl set out. She climbed the mountains to the north, and at last, looking down, she saw smoke. She descended to the place and found a large house made of skins.

She thought: "This must be the house of which my father told me." There was no one at home, so she entered,

secretly glad that nobody was there to prevent her. After a while StúfSiin returned with a deer on his back, which he dropped outside, laying his bow and arrows beside it. Then he went down to the river to bathe before entering the house. Returning from his bath, he saw with surprise that a woman was there. He thought, "Where did that woman come from?" For there had never been a woman in that vicinity. He said to himself, "It must be the daughter of some great chief in another country." Then he spoke aloud: "I should like to know whence you come. I know all these men here have no daughters. You must have come from another country. And since you have come into my house, you must be the daughter of a chief. I myself am a high man, and if you come here, your father must be a chief." He was somewhat angry.

Said the woman: "I do not belong here. I am from Sáaq, where my father lives. He is a chief. He was on this earth before you were. He told me to come here to find you, if your name is StufSiin. So I found your house. If you like me, and take me to be your wife, my father will be glad. I will bring two slaves."

"Where are/our two slaves?"

"Never mind where they are, I will bring them. Answer me now if you will take me."

"Well, then, I will take you," said he. "Your father is a high man and I am a high man, so I will take you."

"It is good, Stutsiin," she answered. "I will go out and call my slaves."

"And I," said he, "will cook the deer and give you food."

The woman went out and called the two slaves who had accompanied her, each carrying a basket of dried salmon and a roll of [tule, cattail or cedar] matting. "I give you this fish," she said; "you eat the fish, and I and the slaves will eat the meat." So it was done, and they were happy at the marriage feast. She lived with Stutsiin, and after a while she had a daughter, whom they named TiititSiilwiit. Their second daughter was Sakaisls, and the third child was a boy, TitSiiltiin. These children all died, and Stutsiin said to his wife: "You had better go back to your father. Our children all are dead."

So the woman returned to Sáaq.

inter-tribal relationships, then, should help in framing legal orders for the T'Sou-ke, while not prescribing exactly how these will be manifested in current times.

Morales' (2014) research examines in-depth how the maintenance of right relationships in the Salish world achieves political and legal harmony among individuals, families, other species, the land and the more than human world. Morales discusses two organizing categories of the Hul'qumi'num legal tradition.<sup>121</sup> The first is an overarching ethos referred to as *snuw'uyulh* and the second is a group of family laws. The Hul'qumi'num authorities whom Morales (2014:209) consulted about Salish legal orders describe *snuw'uyulh* as "a way of living a good life", an aspired to condition which is intimately tied to proper relations between humans, the natural world and the spiritual world. The path to achieving *snuw'uyulh* is found in seven teachings which must be followed together. These teachings are organized as: 1) *Sts'lhnuts'amat* ("Kinship/Family"); 2) *Si'emstuhw* ("Respect"); 3) *Nu stl'i ch* ("Love"); 4) *Hw'uywulh* ("Sharing/Support"); 5) *Sh-tiiwun* ("Responsibility"); 6) *Thu'it* ("Trust"); and 7) *Mel'qt* ("Forgiveness"). Similar to Indigenous groups elsewhere in Canada, the Coast Salish are traditionally an oral culture so these teachings are embedded within stories, family crests, dances, songs, monumental and ritual art, and customs (Miller, 2001; Morales, 2014; Napoleon & Friedland, 2016). Implicit within these media are laws supporting harmony within and between families and communities, respect for all living and non-living things, the necessity of

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<sup>121</sup> Before exploring Morales' principles of the Hul'qumi'num legal tradition, I introduce the terms used by Hul'qumi'num speakers into the T'Sou-ke context with caution. While the strong and ancient relationships between T'Sou-ke and Malahat are witnessed in both of their First Ancestor stories, the ongoing social, kinship and political ties that they share, and the similar geographies and ecosystems of their homelands, they do not share the same language. This is also a function of my own limitations as a non-SENĆOŦEN speaker, and as a cultural outsider, I have limited understanding of this important knowledge. I have not found equivalent terms to the ones explored by Morales in SENĆOŦEN, but I suggest that the corporate culture shared by high-born families across the Salish world (discussed by Morales, and also highlighted by Chief F. Planes above) would have allowed for the sharing of these organizing legal principles.

showing love for each other, the fair balancing of individual and community needs, the necessity of being trustworthy in order to properly witness legal and governance deliberations in the Big House; and the ability to forgive so that within a kinship-based governance structure trouble in an extended family does not grow from a small conflict into the fracturing of the whole community.<sup>122</sup>

Clifford's legal case analysis focuses on the WSÁNEĆ legal response to an oil spill in an important salmon bearing river that is situated within WSÁNEĆ territory and is also adjacent to T'Sou-ke territory. In the quest to recognize and resurge WSÁNEĆ legal orders, Clifford conducts an in-depth comparison of several WSÁNEĆ creation stories that contemplate how correct relationships between WSÁNEĆ and the environment should be conducted. Within these stories he finds a predominant theme which emphasizes "a deep relationality between the WSÁNEĆ people, the Earth, and other elements of creation," particularly from direction given through the many teachings of the creator, XÁ,EL,S (Clifford 2014:85). By examining WSÁNEĆ transformation sites and the teachings associated with these, Clifford concludes that the emphasis on observing proper relationships with the environment and the more than human world through protocols and responsibilities is very different from the common law's emphasis on authority over lands and resources through jurisdiction. By first focussing on and upholding the lessons of right relationships within WSÁNEĆ stories, Clifford believes it is possible to identify the harm done to WSÁNEĆ peoples and their relationships within their territories. Only then, he says, can we consider what an appropriate remedy might be to address the harm done to

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<sup>122</sup> To illustrate this last central teaching, Morales (2014:239) cites a Hul'qumi'num story, where Willie Seymour explains his grandfather's interpretation of this law, "I don't ever want to see hurt grow within my family...He told us that *ti'yu-xween* starts from a little speck. Not taking care and it grows and grows and it starts to involve a lot more people. It becomes negative. It becomes attacking."

these relationships, including to WSÁNEĆ people's environmental responsibilities throughout their territories. Clifford's methods for identifying harm and considering remedies are in stark contrast to the standard punitive remedy that the perpetrator of the fuel spill was required to pay through the Canadian court system.

The Salish laws discussed by Morales and Clifford reveal how Indigenous laws, expressed in various ways, are more descriptive than prescriptive. Through metaphor, allegory and parables, they reveal the principles of proper relationships between humans and all biotic, abiotic and metaphysical aspects of Coast Salish worlds. For several reasons but most obviously due to the oppressive influence of colonialism, these scholars do not present their research as a complete representation of either the WSÁNEĆ or Hul'qumi'num legal orders. Indeed, as discussed in Chapter 3, it is the accommodation of plurality within Coast Salish social organization and governing structures that has nourished their resilience to incursions of imperialism since the arrival of Europeans. Plurality is also embraced within the Salish legal system as it is up to each extended family (traditionally led by the SI,ÁM but today may also include band council members, dispute resolution appointees, or cultural specialists, etc.) to interpret and apply these laws appropriately within dynamic socio-cultural contexts (Miller 2001). For Morales (2014: 203) "legal pluralism is recognized within the Hul'qumi'num legal tradition, and...this tradition allows for varying customs and practices within the Coast Salish World." Thus, while customary laws still hold relevance in Indigenous governance, so too do laws arising through deliberation within the decision-making structures of band and tribal council governments.<sup>123</sup>

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<sup>123</sup> Indeed, as part of his analysis of the South Island Tribal Justice Project, Bruce Miller cautions around trying to re-valorize long ago customs which hold little or no relevance to contemporary Salish people and communities (Miller, 2001).

## **5.4 Ethnobotany, Ethnoecology and the Resurgence of Indigenous Legal Orders**

What contribution can ethnobotany and ethnoecology research make towards supporting the role of Indigenous laws within First Nations communities and in the important conversations between Indigenous and Canadian laws? My research finds that, historically, the T'Sou-ke did not simply use different plant species, but actively managed their productivity and adjusted and stewarded ecosystems to ensure the predictability of dependable and abundant plant production. Can my research into T'Sou-ke plant relationships, then, help the T'Sou-ke, and other Straits Salish groups, rebuild their own legal orders around plant species, communities and habitats? Ethnobotanists develop a layered and nuanced understanding of human relationships with plants that incorporates an emic perspective while also employing a cross-cultural lens of the principles of plant management that are shared by many human groups. Plant knowledge is drawn from critical analysis of interviews, the ethnographic record, explorers' accounts, stories, ecological research, archaeology and linguistics. As presented in Chapters 2 and 3, we find ample evidence of resource stewardship relationships in T'Sou-ke and other Straits Salish territories, where people managed culturally significant plants and plant communities in various habitats and locations during different seasons each year. Some of these practices are unique to T'Sou-ke and their Straits Salish neighbours. However, many of the T'Sou-ke plant-enhancement practices (such as burning, weeding, pruning, coppicing, and transplanting) are so prevalent amongst Indigenous peoples throughout the world that they can be classified as principles of Indigenous resource management (Turner, 2003, 2008). Likewise, the harvesting, processing and storage methods for different types of plants and the belief systems in which these activities are embedded show striking connections with those of other Indigenous peoples in Canada and elsewhere (Berkes, 2012).

This observation in no way suggests a cultural homogenization of plant knowledge amongst Indigenous groups, but instead highlights a community of practices relating to plants that is fundamentally different from industrial practices associated with human plant relationships. This community of practices has much more in common with the customary laws found in pre-enclosure Europe, than with the agro-industrial approaches to land and plant management supported by contemporary state societies. Hence, instead of seeing Indigenous practices as distinct, isolated or random, their consistency through time and space reveals the agency of the people employing such practices to cultivate and steward the resources within their home territories (Berkes, 2012). It suggests a knowledge transfer between groups across long distances resulting in the adoption of principles, activities and rules that made sense locally (Turner 2014). Two primary factors make plant use unique to individual Indigenous groups: 1) living within the limits of ecology; and 2) social and spiritual influences. Living within the climate, geology and soils of specific ecosystems limits or favors different forms of plant tending across a customary landscape. Particularly, prior to the adoption of industrial technology, in a time where people did not rely on goods flowing through a global economy, the need for human groups to bear in mind the limitations of their home ecosystems would have been paramount. The Straits Salish (and all of the First Nations in Canada) could not simply move on to the next territory if they exhausted the resources within their own territories, because all of the land in North America was occupied and defended by some other group. That said, humans do not base all of their decisions solely upon natural world limitations. Social factors, such as innovative, charismatic and powerful individuals, or cultural or spiritual associations with the more-than-human world also influence whether or not a plant use, practice, or set of beliefs is established or adopted into a group.

The manner in how these ecological, social and metaphysical influences are twined together shapes a group's canon of native plants that are deemed culturally significant. The overarching ethos found in many stories about appropriate relationships with plants across most, if not all, Indigenous communities is based on maintaining this mutual relationship of respect for stewarding and protecting their homeland and the species within it no matter how common, small or seemingly insignificant (Kimmerer, 2017a; Turner, 2005). This ethos also forms the base of the covenants of reciprocity between plants and people within the Straits Salish world. In the elders' interviews from the T'Sou-ke traditional use study, individuals re-stated many times how they were taught by elders to respect the environment as reflected in the following observation by Chief Frank Planes (1996) when he discusses culturally important bulrush (*Typha latifolia*) and tule (*Schoenoplectus acutus*) species:

They don't look like much. A tule swamp can...can look just like a bunch of bulrushes and...and weird-looking weeds and that sort of thing. But it's home to so many different little things that everything depends on everything and that's exactly what it is. So, if you...if you destroy this sort of thing, you're...you're not only destroying that one little thing, you're destroying everything that follows it! Every living creature that follows that little swamp you destroyed! So, I...I have a hard time with people that say, "Oh well, that's the only thing we got to look at." It's not the only thing. You...you have to see the whole picture to be able to pick out the odd little thing that may be a little worse than the first. But it's all interconnected – everything! You might find some that do a little worse than the others. Sure! That's only natural. But the whole picture is the whole picture and that's exactly what counts!

Bringing forward the ethnobotanical and ethnoecological research discussed in Chapters 2 and 3 to explore the legal orders related to plants, it is helpful to frame this scholarship into the following categories: 1) kincentricity and animism; 2) natural rules; 3) social constraints and protocols; and 4) property rights. Traditionally in Straits Salish culture and with many Indigenous Peoples throughout the world, relationships with plant species are governed by

principles of kincentricity and beliefs in animism, as well as by natural rules, social constraints and social protocols for conserving, managing and sharing plant resources.

#### 5.4.1 Kincentricity and Animism

[Cum-Chiat-Sia] Susan [Lazaar] loved handwork, the feel of the cedar bark, of the tules or bull rushes... She knew just what the right texture was, and where to find it, and she never failed to give thanks to the tree when she asked the cedar to give up some of its bark for her use. A spiritual woman, she addressed the sun each morning, as she set about the start of her day (Sooke Museum, 1999:366).

Humans, plants, animals, and abiotic features are all integrated within the metaphysical world of the T'Sou-ke and other Indigenous peoples (Atleo, 2011; Turner, 2005; Viveiros de Castro, 1998). In the Salish world, these kin relations also extend to sites of transformation, where XÁ,EL,S transformed former people into significant sites and species, and whose associated stories guide the living (Laurie, George, & George, 1988). Animism acknowledges that there is a sentient life force running through everything whereby every activity has a perceived spiritual function reflecting the power and influence found in plants, animals, rocks, and water (Viveiros de Castro, 1998). This life force must always be acknowledged and respected or other lifeforms will withdraw themselves as supernatural beneficiaries and may even actively harm those who do not engage in respectful relationships (Atleo, 2011). For example, among T'Sou-ke's Salish neighbours (the Skagit – *see Figure 1.1*):

Berries, like other foods, were regarded as provided only through the assistance of a guardian spirit. One spirit supplied the song to make the berries grow, together with the knowledge of how to burn an area of forest in a carefully controlled way. The Upper Skagit were well aware that berries grew much more abundantly in burnt over sections. (Collins, 1974:57).

As introduced in Chapter 3, WSÁNEĆ and other Straits Salish observe the relationship between the ripening of salmonberries and other berries in May and June with the singing of Swainson's

thrush, where the thrush's song is "what puts the colour into the salmonberries" (Turner & Hebda, 2012:27).

As discussed in Chapter 3, the traditional conservation practices of the Straits Salish rest upon a network of social, economic and spiritual relationships with affinal, consanguineal, and non-human kin within particular customary landscapes. For Indigenous groups throughout Canada and beyond, the acknowledgement of these relationships permeates their formal and informal rules and cultural behavior. First and foremost, these relationships to the spirit world, to ancestors, family, ecosystems, species and physical places define a profound sense of home and identity (Basso, 1996; Cruikshank, 2007; Thornton, 2012). In relation to traditional plant use over millennia, this mesh of mutual relationships also would have resulted in increasing the overall productivity of these human/plant relationships by favoring practices that boost abundance, predictability, accessibility and quality of key species while, at the same time, observing respectful relations that would "insure sustainable supplies and reduce risks due to natural variations" (Thornton, 2015:221). As Frank Planes (05-23-96:2-3) said:

...we were taught to manage our resources, to work with nature. That was...the only thing we were...that was stressed most was that, working with nature. It didn't matter what you worked with on...in your territory or wherever you would be, was to work with nature. As long as you worked with nature, you didn't go wrong.

The stewardship ethic embedded within these kin relationships with the more than human world ensures both stable and productive relationships during a person's lifetime and also the provision of an intact territory for the next generation (Kimmerer, 2017a, 2017b; Turner, 2003). Awareness of the correct behavior and mutual respect defining kincentric relationships with favoured plant species, helps to indicate the underlying laws of customary landscapes as they were in the past and how they might be expressed in the future.

#### 5.4.2 Natural Rules

By promoting principles of sustained ecosystem stewardship, traditional ecological knowledge of Indigenous peoples can be viewed as compatible to current scientific understandings of ecosystems, sustainability science and resilience theory (Ellis & al, 2021; Hausheer, 2016; Minnis & Elisens, 2001; Trosper, 2009). Clearly, many rules associated with proper relationships towards plant species and communities develop from very practical considerations based on empirical observations of the life cycles and seasonal behaviour of plants within their habitats. As discussed, in Chapters 2 and 3, patterns of influencing and enhancing plants and their ecosystems extend to broader concepts of horticulture, but can also be simply an effective and non-invasive way to work with a plant's morphology for a specific optimal purpose (e.g., western redcedar bark can be stripped only when the sap is rising in the Spring, while harvesting stinging nettle for fibre works well in the Fall, when the stalks are tougher and the fibre can be easily separated). The manner in which Straits Salish household and family groups traversed their defined territories in coordinated seasonal movements to engage in harvesting, cultivation, plant processing and habitat management activities would have required planning and organization according to deep cultural ecological knowledge. Further, these strategies are embedded within social structures, which include criteria for selective harvesting, and methods (such as ownership rights and distributed harvesting) that regulate resource access, use and stewardship (e.g., landscape burning, and common vs. family resource rights to root gardens, berry patches and cedar stands) (Beckwith, 2004; Lertzman, 2009; Turner, 2021). Prior to contact, Straits Salish participated in their own unique blend of fishing, hunting, cultivation, harvesting, and trading to support their economies within a range of cultural, ecological, and demographic factors. Plant rules and protocols would have arisen from an overall ethic towards

the natural world and the species within it, as well as to reflect the beneficial ways of handling particular, favoured plant species to optimize their usefulness for people. Coordinating the balance between conservation of plants and promotion of uses requires social constraints to counteract human behaviour that would upset this balance (Beckwith, 2004; Gunther, 1927, 1973; Kareiva et al., 2007; Lepofsky & Lyons, 2013; Norton, 1979b; B. Smith, 2010).

Ethnoecological research helps to reveal that in the case of plants, these social constraints amongst Indigenous peoples are arrived at through a strong base of empirical observation, experimentation and knowledge of plant and ecosystem ecology.

#### 5.4.3 Social Restrictions and Protocols

Indigenous plant knowledge, and the practices therein, departs from science, however, by being grounded in human and more-than-human relationships, not only in objective observations. Social restrictions can be seen in the regulation of behavior. One example of behavior regulation would be taboos (referred to in Chapter 2). For example, amongst the Straits Salish, the association between bracken fern and snakes results in many taboos around digging this important root vegetable (Turner & Hebda, 2012). Guidance about appropriate behaviour toward and formal protocols governing human/plant relationships is found in stories where, as Turner (2014b:289) concludes: "...ancient and time-honoured stories serve to connect people to their communities, their ancestors, and their environments, engendering respect, appreciation, and right ways of behaviour." T'Sou-ke elders interviewed in the Te'Mexw traditional use study fondly recollected the importance of storytelling in their childhood and how their elders were always telling stories (Te'Mexw Treaty Association, 2019). For example, Agnes George remembered, as a child, how much she enjoyed falling asleep in her grandfather's Big House at Songhees while he told the old stories (T'Sou-ke-Elders, 1977).

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Figure 5.6 *Sister Snail and the Blackberries* from *T'Sou-ke Legends* (Laurie et al., 1988).

One time Quatee [Mink] was thinking about a way that he could get some berries. He had a lot of sisters. He told them, "All right sisters, I'm going to take you out where you can get some berries." All the sisters grabbed five or six baskets and put them on the canoe. Quatee took them to a place where they could pick berries, blackberries. Everyone got basketfuls, loaded them in the canoe and started for home. Quatee had branches piled up in front of him where he was paddling, as soon as he got to the point where he wanted to be, he threw the brush overboard every once in a while. When all of it had been thrown out, Quatee made a noise.

"Did you hear that? There's a war canoe coming. It's going to chase us. We better paddle as hard as we can. We will go to shore and all take to the woods. I'll stay in the canoe and fight."

The women were paddling and paddling to the beach and all got out. His sister the snail never reached the woods. Quatee started eating the berries. He was so excited he wanted to eat all he could. One of the sisters had a bone in her basket. He started using it for a spoon to eat the berries. He swallowed the bone in his excitement.

He called his sisters, "You all can come back now." All the sisters were in the woods. "Quickly, I'm sick.

I've got to go home quick. You heard the war canoe coming? Can you hear?" They all came back. There was Quatee. His face was red from all the berry juice he poured all over his head. He told his sisters to go in the woods and get some skunk cabbage. They came back and tied it on his head. He says, "Maybe there's some berries in there. Pour them on the skunk cabbage on top of my head." They picked them up and poured them over his head. The berry juice went down over his head. He was sick looking. "Put me in there and lay me down." They laid him down and started paddling as fast as they could. When they got home, he was a sick man. They packed him into the house. One of his sisters was a doctor. He says, "One of you go and get my sister the doctor."

"I come here to tell you your brother is very ill." She got excited, her brother was sick. She went to see him and she touched him and he said to his sister, "No, no, that's sore. A war canoe hit me." She didn't touch it. She knew that it was the bone that he swallowed. The youngest sister [snail] that watched him told her other sisters, "You know this is all not true. You know how he's always telling a lie. I was watching. He ate all the berries and he poured all the juice on his head, he threw all that wood out in the water and stole everything."

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Often in stories, a trickster figure is employed to illustrate behavior that is greedy, wasteful, or thoughtless, such as in the story in Figure 5.4. Amongst the Coast Salish, Mink is a trickster figure, similar to Raven in the north and Coyote to the east. In the story of *Sister Snail and the Blackberries*, Mink tricks the T'Sou-ke berry pickers so that he can hoard all of the berries for himself (Laurie et al., 1988). The antithesis of Mink's behaviour is that of the woman berry pickers who work together industriously to fill many baskets with blackberries for their households. Finally, the story is completed by the little snail who, unable to run with the women

into the woods, is a witness to Mink's deceit and selfish gorging, and later Snail speaks the truth of Mink's greedy behaviour to her human and animal sisters. The behaviour by tricksters is presented as sometimes dangerously deceitful or ridiculous, and at other times helpful and insightful (Napolean, 2015). These stories not only illustrate acceptable and unacceptable behaviour from which to form right relationships towards plants, humans, other animals, and the supernatural, but they often reveal how these relationships are ambiguous and nuanced, requiring reflection and discussion based upon agreed upon ethics to choose the appropriate behaviour or remedy for the situation at hand (J. Borrows, 2019a).

As discussed in Chapter 3, the authority for monitoring and guiding behaviour in traditional Salish society also comes from the authority of hereditary chiefs, or individuals within high-born families. In historic times, harm caused by minor infractions of plant use would have been dealt with internally by families (likely by women who were the teachers and primary stewards of human plant relationships and the ones who carried the rights for and tended family plots), or, perhaps, left to the more-than-human world to deliver retribution. Major infractions with respect to boundaries associated with home territories, shared areas between and within territories and owned family plots would have been guided by the laws of the Big House. Rules related to plant species or specific land areas, such as rights to exclusive or priority use and having those rights formally witnessed by the heads of other families, would promote order and good relations as populations densified and, also, when populations were decimated by introduced disease or other factors (Boyd, 1999; C. Harris, 1994; Suttles & Lane, 1990). For example, the marriage rules outlined in Chapter 3 have helped diffuse intergroup, tribal or regional tension by knitting extended families together through mutual responsibilities and shared rights of access. Indeed, in the past up and down the NWC, often conflict or warfare

arising from boundary issues were finally resolved through well-placed marriage unions (Donald, 1997).<sup>124</sup> Whether it be through reluctance to upset the balance between the human and the more than human world, or the importance of maintaining harmony within families and communities, social restrictions and protocols help humans live in peace. The documentation by ethnobotanists of these social constraints and the associated behaviour is useful in understanding local plant knowledge systems, and also of how these stewardship values and conservation practices merge and diverge across cultural groups.

#### 5.4.4 Land and ownership laws

The Straits Salish peoples have and continue to hold a firm legal conception of ownership, which was noted by many early Europeans who first encountered them. Families own stories and songs, dances, regalia, the boards to their section of shared houses, berry patches, clam gardens and root gardens. It is beguiling to apply terms such as property rights when referencing traditional laws of the Straits Salish, yet the term property has specific connotations in the common law that do not capture all of the nuance of Straits Salish legal relationships. While there is no doubt that aspects Straits Salish land and resource laws include concepts of alienability, transferability, exclusivity, they also embrace intricate understandings of common pool resource stewardship, access and distribution. Suttles (1987b:147) explains land property rights amongst the Straits Salish in the context of cultivation, ownership and plant tending:

Ownership of patches may not be necessary to cultivation but caring for plants usually is, and the two—ownership and plant-tending—seem to be related. Among the Straits people, whose territory extended in the San Juan and Gulf islands, families owned not only camas beds but clam beds as well. In both cases they took some care of their property. In camas beds they kept the ground loosened up so as to make digging easier, and one informant spoke of burning off the bed after digging. In clam beds they

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<sup>124</sup> As such, divorce, while legally accommodated in pre-contact times, would have been reluctantly acquired because all of the rights associated with the union would be returned to each side of the family (Suttles, 2005).

sometimes took out the bigger rocks; one old Samish woman supervised the digging in her horse-clam bed, not allowing anyone to leave broken shells in the sand. Such beds and patches were property of upper-class families. Ownership was through inheritance, but I suspect that an investment of labour helped maintain it (Suttles 1987:147).

Ownership and tending can be expressed as rights and responsibilities towards certain plant species and places. It also reflects the legal concept of ‘improvement’, so pivotal to Canadian common law. Underlying the exclusive rights to a place or species must be an agreed upon system that acknowledges ownership and sets out expectations for stewardship. In order for ownership to function without frequent and violent conflict, people must agree together on the tenure system that allows for some individuals or groups to hold exclusive rights to an area or resource that they may tend, improve, exclude others from and pass along to their descendants. In this sense, then, T’Sou-ke pre-colonial plant relationships embodied not only covenants of reciprocity to plants, but also to other humans. As emphasized by Chief F. Planes earlier, in Straits Salish society, and throughout the Pacific NWC, these tenure rights are traditionally discussed, transferred and witnessed in the Big House. In the past this is where having a ‘history’ (as opposed to the commoners and slaves who were seen to have lost their history ) was an essential requirement for membership to the property-owning class.<sup>125</sup>

Land was divided into individual plots in these prairies, marked by sticks at the four corners. A daughter inherited the right to obtain roots from one plot from her mother. It was not necessary for women to live in the village...located at the prairie areas in order to harvest a crop. Use rights came from widely distant villages to the plot of their mother...each plot was from three to four acres in size. The roots grew “thick like onions...” (Collins 1974:55).

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<sup>125</sup> According to Suttles (1960:297), “In native theory the lower class consisted of people who ‘had lost their history,’ that is, people who had no claim to the most productive resources of the area and no claim to recognized inherited privileges, and who furthermore ‘had no advice,’ that is, they had no private knowledge and no moral training.”

As noted in the quote above and in Chapter 3, throughout the Coast Salish world rights to owned root garden (camas, bracken, and wapato) plots were passed on and maintained through marriage within corporate groups following strict kinship rules (Beckwith, 2004; Kennedy, 2000; Norton, 1979b; Suttles, 1987b). These marriages provided legal access for the newlyweds into the broader Salish prestige and trading economy, providing they continued to observe regulatory gift exchanges (with interest) that guided relations between in-law groups (Collins, 1974). Prior to the full imposition of the Canadian state, a powerful chief could expand his resource rights or holdings by marrying more than one wife. As one would expect from a governance system formed around extended family political units, the legal orders that lie within Salish kinship rules are rich and would have linked people's relationships with plants through property, marriage and inheritance rules. The application of kinship rules is further clarified by the values embedded within stories such as introduced above (c.f. Figure 5.4), and the values found within them would have legally guided plant use and habitat management for millennia. In this system the authority of hereditary chiefs is assumed and while qualifying to be considered the hereditary chief was dictated by bloodlines and gender, as Frank Planes (05-23-1996) clarifies, there were also protocols to selecting which individual could best fulfill the role of SI,ÁM:

We have to choose among our young men, which one of them is going to be the most responsible, the most honest, the most caring. All these things make a big difference; they make a big difference in what knowledge he has. I mean you can't just take a person who doesn't care. Caring is a thing that is most looked at in the...I guess I could say, "Hereditary qualifications". If you care enough about your people, you will not do them wrong, because, after all, you are the boss; you have to care enough. A Hereditary Chief should always say, "My people". He doesn't treat his people like they're nobody; he treats them with respect, he makes fair decisions. These things all have to come in under the qualifications of a Hereditary Chief. You have to be a person of good will.

Of all of the categories that traditional Straits Salish laws can be seen to be organized, land law and ownership rights, particularly those associated with the real places of food production, are the most similar to property rights in Canadian common law. Nonetheless, these legal concepts

are property-like, or *sui generis* “in a class of their own”, and not necessarily property in the common law context (Reynolds, 2018:117). Of course, in the Straits Salish world, inter-woven with various forms of land and ownership rights are laws governed by principles of kincentricity and beliefs in animism, natural rules, social constraints and social protocols for conserving, managing and sharing plant resources. So, in a similar vein to my discussion about the danger of applying labels such as agriculture, or garden on to Indigenous land and resource stewardship, we need to show restraint in labeling Indigenous land law concepts with restrictive definitions from the common law, as these may serve only to limit the potential of resurging Indigenous laws.

## **5.5 Discussion**

Indigenous law, then, is found in rules and protocols set by councils, customs and stories, but it also rests in relationships with culturally important plant species. Some of these relationships have been played out in specific locations and sites for thousands of years, while others are connected to species that for a host of reasons, which I introduced in Chapters 2 and 3, are not always found in the same place. I believe that the Canadian legal system currently has an easier time accepting legal rights to places, particularly places or sites that can be surveyed, bounded and mapped, rather than to species which are much trickier to predictably locate. Yet, as scholars like Olwig (1996, 2009) and Blomley (2003, 2007) point out, English common law was not solely based upon the rights of private property owners but originally upheld the rights of the commons, including people’s relationships with species. I take heart from this knowledge, as it is a reminder of the possibility of state common law systems to grow and change.

While ethnobotanical and ethnoecological research can offer something to both Aboriginal rights law and Indigenous law, the contributions to each are quite different. In Aboriginal rights law, the ethnobotanist is providing narrowly defined evidence of past practices

and sites for which the rules are rigid and, in fact, would not accept aspects of ethnobotanical and ethnoecological research, such as European gardening practices that have been incorporated into Indigenous cultures or how introduced plant species (e.g., common dandelion, *Taraxacum officinale*, and the potato) have been absorbed into Indigenous plant practices during the past two centuries. While both common law and Indigenous law can draw upon ethnobotanical and ethnoecological research to support understanding of Aboriginal rights and Indigenous laws, researchers in these fields approach and use this knowledge in ways that make sense within the internal rules of their own legal discourse. Like laws anywhere, Indigenous legal orders do not require an external, objective source to explain or prove their existence. These laws live within communities of people and must be continually re-interpreted in the context of new social and environmental problems that arise. Indigenous laws exist to help communities maintain order or resolve disorder in the present; they provide guidance for people to seek and live within a justice arising from agreed upon virtues. The historical, academic summaries of past plant practices usually found in ethnobotanical research and highlighted in Aboriginal rights cases may or may not hold relevance to this process.

Indigenous legal scholarship focusses on rules and protocols within relationships that are informed but not enslaved by the past (L. Borrows, 2021; Mills, 2018). By exploring human relationships with plants and plant communities, ethnobotany and ethnoecology research can support current deliberative processes in communities to clarify and re-encounter their customary legal landscapes. By understanding specific relationships between Indigenous groups, plants, plant communities and ecosystems, ethnobotanical research can be used to identify the harm that has been inflicted on Indigenous peoples and culturally significant plants as a result of colonialism (see Turner and Spalding 2018; Turner, Spalding and Deur 2020). Ethnobotany moves across local descriptions about plant species and sub-species, the unique ecosystems within which they live and the distinct uses by people of these plants to broader cross-cultural

analysis such as: plant use by Indigenous peoples regionally, or non-industrial root cultivation practices globally, or variable uses of a single species like stinging nettle by different groups. The ability to be both specific and local and to also chart broader patterns of shared understanding and practices with plants can help inform the resurgence activities within Indigenous law described above.

As I have discussed within the Straits Salish world of plant use, the rights associated with native species and the rules, responsibilities and protocols connected to those rights, are significant for sketching in the customary landscape for T'Sou-ke and other Straits Salish groups. Traditionally this landscape was established through “practices of normative deliberation and decision making...” where those who were vested with decision-making provided guidance to community deliberations for group behaviour which all were required to observe (Webber in Clifford 2014:87). Ideally, then, communities can use this research by and for their communities' new governance arrangements that consider Indigenous laws alongside of Canadian state law.

Too often, gender politics undermine Indigenous women's legal rights in Canada. In commenting on the role of gender and power in rebuilding Indigenous legal traditions Napoleon (2013:146) observes:

On the subject of gender, one of the key issues is the inclusion of Indigenous women. If one examines the Aboriginal rights and title case law and discussion, it appears that Indigenous women have been erased off both the land and the legal landscape. It is as if women did not have an important and active presence on the land. The literature and images of Indigenous peoples focus almost entirely on males and their activities – hunting, fishing, and trapping. In this colonial mythology, women's role is restricted to dealing with what the men bring home from the hunt (Napoleon, 2013).146

As I have shown earlier, by not looking back into deep history it is a challenge to properly understand the fullness of plant use, management, and governance and women's roles in the same. In particular, women's roles in plant harvesting, cultivation, stewardship, trading,

management and property ownership should be firmly situated within both Aboriginal and Indigenous law (Napoleon, 2009). At the same time, applying a rigid historical perspective based upon our understanding of traditional Coast Salish gendered governance roles must not be used to lock women out of positions of leadership or decision-making within contemporary governance structures (L. Borrows, 2021; Gunn, 2019; Morales, 2019; Napoleon, 2009). Present-day values, circumstances, and challenges will necessarily influence, adapt, or replace traditionally held practices and rules related to plants or any other part of Indigenous worlds. By building from the bedrock of Salish principles stemming from ancestors, kinship and land, as well as sources such as the canon of plant knowledge, people throughout the Coast Salish world can consider, discuss and negotiate how these ethics and philosophies are expressed as agreed upon understandings of proper relationships in contemporary society.

In this respect, Canadian law's living tree doctrine can provide important direction to Indigenous law, as well as the common law. In Indigenous law, where legal systems have been suppressed and discouraged, the living tree is an encouraging metaphor through which to honour and expand Indigenous legal orders as societies change over time. Indigenous law is regenerating all over Canada and not simply by supporting the historical, traditional practices associated with customary legal orders, or, even by unquestioningly accepting the opinions of one or two citizens because of their status. While customs and traditional practices provide continuity to societies over time, rigidly clinging to the original application of these practices is potentially dangerous, because internal oppression and power imbalances exist in all communities, including Indigenous ones (Napoleon, 2009, 2013). As Miller (2001:56) notes: "Current efforts to understand aboriginal practice are only of use if they can be comprehended and applied across the community, regardless of what might once have been the practice or the cultural ideal."

Decisions to embrace varying customs or to adapt ancient values to new customs must begin with Coast Salish communities, not with the Canadian judicial system. Ethnobotanical and ethnoecological research might help with this, in providing specific applications of Indigenous legal orders that inform legal processes in an intersocietal legal setting. For example, exploring customary social organization of different classes of Straits Salish women in relation to camas harvesting and annual landscape burning can provide examples of how proper and complex kin relationships were traditionally organized as a way to maintain predictable, sustainable and abundant camas harvests. Considering this understanding in relation to foundational values that inform WSÁNEĆ or Hul'qumi'num law today (such as, kinship, respect, love, sharing, responsibility, trust, and forgiveness), Indigenous law practitioners might then examine the harmful consequences that disruption of this social, kinship and tenure system relating to camas had and continues to have on Indigenous food sovereignty, social identity, or Indigenous management of Garry oak meadows. In this sense, while the foundation of WSÁNEĆ or Hul'qumi'num laws relating to property and camas meadow management may be rooted in the past, justice is only found in living communities. Following from this, then, legal remedies might be considered that resonate with contemporary Coast Salish peoples and reflect their current relationships and future aspirations within the restoration of Garry oak ecosystems and the production of camas. From this legal platform, then, Indigenous law might begin to analyse the nature and understanding of harm, and how that harm may eventually be remedied in an appropriate cultural context that is also recognized by the Canadian state.

I believe that, with respect to plants and ecosystems, the most fundamental divergence between Indigenous law and Aboriginal law lies in the determination of what is significant enough to be legally considered. The emphasis in Aboriginal law on practices and the legal right to continue to exercise a practice, rather than on supporting the long-term relationships with culturally important species, is a large departure in understanding of Indigenous laws. Furthermore, the

stress placed upon presenting the most important practices with the species that are central and distinctive to T'Sou-ke and other Indigenous cultures—species most integral on a sort of taxonomic structure of a culture—does not adequately represent or support the fullness of T'Souke's relationships with plants and their habitats. Canadian federal and provincial legislation tends to protect the rarest or most endangered plant and animal species and to manage apex predators within ecosystems, but not much else. In the past, many plant species listed in Appendix A would have been used as needed or infrequently, but their significance as a medicine or as an alternate food or technology source would have been nonetheless high (Turner 2014). Put another way, historically, many culturally important plant species were not used every day, but when needed, their use was essential and could mean the difference between life and death. As I emphasized earlier, it is the many redundancies built into the T'Sou-ke canon of plant knowledge that make it so effective for the survival of large populations over millennia.

Frequently in Indigenous stories from groups across Canada, the hero is not a human, or a charismatic apex predator such as bear, eagle or wolf, but a humble one-time hero, such as snail, muskrat, mole, frog, otter, hummingbird or even the common wild rose, whose insight, bravery or some other quality successfully resolves a difficult problem, or teaches humans a fundamental lesson about natural, human and metaphysical relationships (Napoleon & Friedland, 2016). I take from this consistent narrative that all of the plants in T'Sou-ke's canon of plant knowledge have, and continue to need, legal protection because, no matter how unassuming, now or in the future any of these species may be required to complete an important task that sustains the web of community cultural and ecological relationships. As Chief F. Planes emphasized: "...the whole picture is the whole picture and that's exactly what counts!" While I do not see this divergence as insurmountable, the differences between Indigenous legal principles, grounded in kincentricity and animism, and Canadian legal principles, founded on principles from Enlightenment

philosophy and the control of nature, must be recognized and carefully considered, because this dissonance affects what is legally recognized and protected.

Further, due to the crushing impact of colonialism many of these species that were once commonly used are no longer or infrequently used today. Even though, as in T'Sou-ke, there is increasing interest in re-connecting with their canon of plant knowledge and the species associated with it, in some communities, Indigenous knowledge of native plants is often limited to a few practicing individuals and is mostly stored in texts. Does this mean that the hundreds of plant species that Indigenous peoples have had limited access to both physically and due to the obstruction of the intergenerational transfer of knowledge, are legally swept out of their culture because they do not meet an externally imposed threshold of significant use? I think not. The findings of the Royal Commission on Aboriginal Peoples and the Truth and Reconciliation Commission call for a much larger acknowledgement and accommodation of Indigenous cultural and resource interests (Canada, 2015; Dussault & Erasmus, 1996). It took millennia for the laws associated with the canon of knowledge supporting T'Sou-ke plant relationships to be established. If these relationships have become frayed over the past century due to external factors beyond the control of T'Sou-ke and other Indigenous peoples, then in keeping with the spirit of reconciliation, one would think that *more*, not *less*, support should be offered to legally strengthen these human rights to plants. Developing from Christie's point earlier, I agree that so long as these plant relationships are known to one or more Indigenous individuals, then the power to maintain worlds of meaning about these relationships cannot be taken by another.

## **5.6 Conclusion: Whose laws prevail?**

Whether we conceive of indigenous legal orders as operating in conjunction with or as a component of the Canadian common law, or as separate legal orders that run parallel to the common law, the reality is that the distinct legal systems will inevitably have to bump up against or interact with one another in some fashion (Clifford 2014:81).

Balancing the legal traditions between two political worlds—Indigenous and Settler—in an equitable manner that fully respects the intention of our Constitution is a challenge. Napoleon

(2013:137) sums up this task as developing a legal framework that Indigenous peoples might use to reflect the diverse “laws of decentralized (i.e., non-state) Indigenous peoples,” while also allowing for reconciliation of those laws with a centralized state and legal system. The field of Indigenous law is growing rapidly wherein scholarship and teaching push beyond the hegemonic notion that law originates with the nation state.<sup>126</sup> Key to establishing a harmonious relationship between Indigenous legal orders and Canadian law are many considerations related to the harmonization of laws, such as: whose legal orders do we follow within particular geographic areas or circumstances; who defines key legal concepts such as: sovereignty, Indigenous, culture, law, economic development, environmental assessment, community benefits and self-determination; and then, beyond that, how do we weave these pivotal terms into our shared understanding of governance, property, and inter-societal law (J. Borrows, 2010, 2019a)? Crown sovereignty in British Columbia remains an assertion with no clear and plain transfer of powers to either the British Crown or the Government of Canada (J. Borrows, 2015b; Christie, 2015; McNeil, 2016). While we know that many plant species were extensively managed by Indigenous peoples prior to and after contact, there is almost no acknowledgement of how these rights and responsibilities, and the accompanying Indigenous legal orders, can speak to Canadian law, legislation or governance. On what authority, then, does the Supreme Court of Canada get to define the rules of justifiable infringement of plant interests, and paramountcy of laws in the absence of full Indigenous participation in this process?<sup>127</sup>

I have discussed several ways that ethnobotanical and ethnoecological research can support work to resurge Indigenous legal orders. Ethnobotany provides details of historic and

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<sup>126</sup> A prime example of this is the University of Victoria’s Joint Degree Program in Canadian Common Law and Indigenous Legal Orders.

<sup>127</sup> For a fuller discussion of this, see Borrows (1999) and (2015b).

contemporary relationships with plants and the principles, rules and protocols within the same. It describes the fullness of reciprocal relationships that cover metaphysical, ecological, governance and legal relationships between humans and plants. Documented information about Indigenous plant uses and stewardship can be used by communities to re-establish relationships with plant species and to support their ongoing management through Indigenous laws and governance. The plant-use and management research described in Chapters 2 and 3 reveals the intensive and extensive relationships between distinct cultural groups, kin—whether they be “two-legged, four-legged, scaled or winged, or rooted and covered with leaves”—and spiritual entities that guide and demand responsibilities of all human beings within ecosystems (Turner, 2008:47). By discussing these important human relationships with plants in terms of the canon of Indigenous plant knowledge, covenants of reciprocity with certain plant species and customary landscapes we are introduced to a more explicit understanding of how Indigenous laws shaped plants, plant communities, and ecosystems since deep time.

This understanding opens a door through which the Canadian state can take a small step forward towards reconciliation, bearing in mind that only a small number of native plant species that are threatened with extinction or are seen as commercially important are currently given any form of legislated protection in Canada. The Indigenous knowledge associated with thousands of native plant species across Canada and the legal relationships represented in that knowledge also need to be recognized in common law, legislation, policy and programming. More to the point, instead of Indigenous people having to prove their interests in these plant species, the Crown should assume that relationships with all of the species of culturally important native plants are significant to Indigenous peoples until they are formally told otherwise by Indigenous people. As discussed in Chapter 4, the State can use the absence of legislation relating to this area as an

opportunity to create an inclusive legal and political space through which to work collaboratively with First Nations to legally observe and support culturally important plant species, the rights of Indigenous peoples to continue using them, and the rights of Indigenous governments to co-manage these plant species and their habitats within their territories, now and into the future.

That said, in no way do I wish to downplay the scale of the task involved in restoring Indigenous legal orders relating to plants and their habitats and the additional work of harmonizing Indigenous and Canadian laws (Napoleon, 2013). The complex endeavour of restoring or establishing legal orders requires that we return to the concept of creating legal space as a way of addressing these challenges. Expanding political and legal space begins with the recognition of the authority of Indigenous peoples to re-define their own legal relationships with plants, ecosystems and their management. Yet, who holds the foremost authority in present-day Indigenous communities: hereditary chiefs; band councils; tribal councils? What role do plant specialists play in harvesting and management plans? How does each community balance economic development and environmental interests? How can communities build capacity to review and restore traditional laws and governance structures? In this context, legal space is much more than drafting new laws and policies. Here, creating legal space includes time and financial resources. Time and funding to reflect and deliberate on past plant practices and what these mean in the present and might mean in the future. Time and funding to apply a gendered approach to including the important contribution of women's plant knowledge are central to drafting Indigenous legal orders (Gunn, 2019; Morales, 2019; Turner, 2006b): time and funding to examine the traditional roots of plant practices without becoming suffocated by the biases of un-reflected traditionalism.

Moreover, even with the challenging internal task associated with restoring Indigenous legal orders, the identification of the relationship of laws between Indigenous groups and the federal and provincial governments is another large-scale undertaking. Whose laws apply where? A simplistic and flawed approach to deciding whose laws prevail is to suggest that Indigenous laws should apply on treaty and reserve lands, and provincial and federal laws apply everywhere else. Yet, through most of British Columbia in particular, that scenario ignores unceded Indigenous lands and many of the unique human/plant relationships outside of treaty and reserve lands. Of course, laws between jurisdictions should complement each other and good governance dictates that any form of legal vacuum is a situation to be avoided. Figuring out whose laws regarding plants and their habitats apply where; however, and how jurisdictional disputes are settled, requires analysis, discussion and debate. Self-government negotiations begun through the BC treaty process and also with the department of Indigenous Services Canada have yet to fulfil any promise of fair and balanced jurisdictional harmonization. Any stewardship or ownership of plants and habitats off treaty settlement or reserve lands is firmly viewed by the public governments as their sole authority where, in the instance of a conflict, state laws prevail, such as in the Maa-nulth, Tla'amin and Nisga'a final agreements and the Te'mexw Agreement-in-Principle (British Columbia, Canada, & Maa-nulth, 2009; British Columbia, Canada, & Nisga'a, 1999; British Columbia, Canada, & Tla'amin, 2016; Te'mexw Treaty Association, 2015).

Yet, using the T'Sou-ke as an example, their two tiny Indian reserves (and the expanded treaty settlement lands offered through the treaty process) contain only a fraction of the plant species of traditional significance to them (Te'Mexw Treaty Association, 2019). As I have argued throughout this dissertation, T'Sou-ke traditional governance and laws regarding plants and their habitats extend throughout their territory. The likely or possible location of Aboriginal title lands

would be situated around Sooke Basin and up the coast along to Point No Point. The map presented in Chapter 1 (Figure 1.3) of various tenures asserted by the Crown throughout T'Sou-ke territory, however, shows a dense labyrinth of private fee simple lands, as well as other Crown tenures which severely limits T'Sou-ke's continuing access to their culturally important plants. If Aboriginal title were to be declared in some or all of this area, it would inevitably supplant the Crown's wrongfully asserted sovereignty over lands that are now considered to be private property, thereby changing non-Aboriginal peoples' relationship with Aboriginal title lands (J. Borrows, 2015a).<sup>128</sup> The *Tsilhqot'in* title case did not include private lands to be considered for review, yet for many areas of the Province, such as T'Sou-ke territory, the potential declaration of Aboriginal title over private lands is a complex but realistic possibility (J. Borrows, 2015a). While it is beyond the scope of this research to speculate about how Aboriginal title might be reconciled with fee simple interests and other Crown grants in T'Sou-ke territory, Borrows' (2015a:134) analysis of this potential in BC indicates: a) there are several options to accommodate fee simple interests and Aboriginal title within the doctrinal framework of intersocietal law; and b) protection of fee simple interests and Aboriginal title within a novel governing system in BC requires a nuanced approach that will need to draw upon "great legal imagination and creativity."

Furthermore, as I have concluded elsewhere, a missing component in co-management partnerships between Indigenous Peoples and public governments is an effective, consensual dispute resolution process (Spalding, 2020). The legal perspective that underlying radical title is held by the Canadian state, who can therefore invoke final decisions on centuries-old debates is

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<sup>128</sup> As Borrows (2015a:109, 111) emphasizes, although subject to inherent limits, "...Aboriginal title is a prior and senior right to land in British Columbia due to its Constitutional protection under Section 35, unlike private property rights which are not protected under the Constitution and are derived from 'faulty Crown grants.'"

viewed by many Indigenous peoples as arrogant, false and unyielding. Rather than opening up creative ideas for co-management, joint jurisdiction, and harmonization of laws, this approach appears to entrench the Canadian court system as the primary avenue to acknowledge Indigenous rights and self-governance and resolve disputes of the same.

As the Courts have directed, we do not need to go through the expense and stultifying pace of case law to respect and support Aboriginal rights, including Indigenous relationships to plants and their habitats (C. Harris, 2002a). Rather, consideration of how Indigenous laws and the Common law can work together can be built into legislation or co-management agreements through informed discussion and negotiation. Plants, their uses and habitat management make a grounded, tangible example from which to develop case studies, policies, and laws that truly reflect the multi-juridical nature of Canada's legal system. While we can anticipate that these discussions will be rich with debate, they need not be fraught with the type of debate that always necessitates intervention by Supreme Court judges.

## Chapter 6

Conclusion: Starting from a Mutual Love of Plants



### Highlights

- Cumulative effects of overlooking Aboriginal rights to plants
- Challenges in moving beyond the courtroom into political acknowledgement of Indigenous plant and ecosystem management
- Findings of this research: canons of knowledge, covenants of reciprocity, customary landscapes
- Finding our way forward

## **6.1 Death by a Thousand Cuts: Cumulative effects of overlooking Aboriginal Rights**

Up in the mountains here is the Sea to Sea Greenbelt Park. They wanted to open it about two to three years ago, maybe more. And they came to me and our Council and said, 'Hey! We want you to be here when we cut the ribbon and open the gate and open the park!' And I said, 'Well, for one thing, you should have called us before you decided to do that, because you never even came and knocked on our door and said, 'Hi.' And now, you want us to go and bang a drum with you and celebrate this day.' And I said, 'We can't do that.' The other thing is, is that's our hunting ground. That's where we get our food and bring back to our people to eat. Now, if you open that up, we haven't even had that dialogue, because we have that right to feed our people. And we have our rights that we feel will be infringed if we haven't had that dialogue yet. So, they put that on hold.(Planes, 2017)

In his statement above, current T'Sou-ke Chief Gordon Planes articulates the profound frustration felt by Indigenous peoples regarding communication and consultation around the infringement of Aboriginal and treaty rights in the face of new activities affecting lands, plants, animals and customary landscapes. Canadian common law has produced a tool for identifying, discussing, and proving Aboriginal rights within what Christie (2015, 786) refers to as the "exceedingly narrow confines" of a court system built upon colonial jurisprudence. Yet, recognizing the scope of legal rights for Indigenous peoples and outlining the fiduciary obligations of the Crown does not necessarily clarify the full expression of these rights. Often, the public governments have found ways to work around these obligations by superficially acknowledging and accommodating Aboriginal and treaty rights without any meaningful engagement with First Nations. Over the course of fifty years of Aboriginal rights litigation, the Court has encouraged, cajoled, and directed the parties to clarify these rights through political solutions such as good faith negotiations, yet authority over most of the lands and resources in present-day British Columbia remains in a state of deep confusion (J. Borrows & Rotman, 2012;

C. Harris, 2002b; Trosper, 2009).<sup>129</sup> The dialogue with First Nations that Chief G. Planes correctly identifies as essential is, surprisingly, still the most frequently overlooked activity amongst the Crown's fiduciary duties towards First Nations.

In this research, I examined how my own and others' ethnobotanical and ethnoecological research can help to decolonize the Crown legal systems that limit Indigenous peoples in regenerating their relationships with native plant species and the ecosystems within which they are situated. The academic overview of T'Sou-ke's relationships with culturally important plant species and customary landscapes presented in Chapters 2 and 3 charts a general picture of plant use and management over time. Based on this analysis, I conclude that not only were T'Sou-ke self-governing at the time of contact, but that they maintained laws governing their relationships with the plants listed in Appendix A and T'Sou-ke controlled access to these species throughout their territories. These legal interests in culturally important native plants, while heavily disrupted due to the imposition of Crown and fee simple tenures, continue to this day. In Chapters 4 and 5, I established that human-plant relationships are indicators of legal rights protected by both the Canadian Constitution and through T'Sou-ke's ancient laws that are being revitalized through the work of Indigenous legal scholars and their community partners.

The historical assertion of Crown sovereignty is so tightly woven into Canadian governance structures, policy, law, politics, and political theory that Canadians are often blind to its ongoing implicit impact on every aspect of Indigenous lifeways (Shaw 2008). Decolonization efforts must consider how Crown sovereignty has undermined First Nations' connections to

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<sup>129</sup> Alfred and Corntassel suggest that the outlay of extensive resources through which to litigate claims is not only bankrupting First Nations but also providing a "politics of distraction" that further alienates Indigenous peoples from their unceded lands and resources (Alfred & Corntassel, 2005; Corntassel, 2012).

species, places, and landscapes since the time of contact. As Shaw (2008:153) observes, it is insufficient to simply recognize cultural differences and aspirations in the Canadian Constitution. Rather, we must consider and explore how even the “politics of recognition” of Indigeneity within existing governance structures—institutions that are based on a historic assertion of British sovereignty—perpetuate the violent effects of sovereignty (Coulthard, 2014). Several influential public reports provide a public call to action on the myriad of outstanding issues between the Government of Canada and Indigenous Peoples, yet, the public governments appear to be stuck at talking about the problems of post-colonialism and reconciliation rather than taking concrete actions on accommodating Aboriginal Rights in legislation and policy.<sup>130</sup> As Shaw (2008:149) astutely points out, pushing beyond mere recognition of the problems is required because adjusting the edges of sovereignty to allow for more inclusion of Indigenous political and social concerns without properly addressing the wider issues of how Crown sovereignty was originally asserted may simply re-inscribe colonialism by “crafting solutions to problems of the past rather than responding to emerging political possibility.”

If T’Sou-ke’s Aboriginal or Treaty rights to plants were affirmed by the Common Law Court, how might these rights be defined? Are they Aboriginal rights or Treaty rights? In the case of the Douglas treaties, the vague, template wording and starkly different recollections and interpretations by the relevant parties of what these documents mean, makes a declaration of any specific treaty rights speculative (Vallance, 2016). The treaties seem to generally refer to T’Sou-ke rights to their food sovereignty (hunting, fishing and ‘fields’) as well as to their village sites. The enclosed fields described in their Douglas treaty could refer to the bounded areas of camas,

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<sup>130</sup> Royal Commission on Aboriginal Peoples (1991), the Truth and Reconciliation Commission of Canada (2015), and the United Nations Declaration on the Rights of Indigenous Peoples (2007).

bracken fern and other edible root vegetable species owned and tended by T'Sou-ke women and to their owned berry patches.

Given the template wording of the treaty, however, coupled with Kennedy's (2001) conclusion that Douglas "failed to comprehend" the tenure system of Straits Salish land and resource ownership, my inclination is that the treaty is silent on the majority of rights and responsibilities between T'Sou-ke and the culturally important plants outlined in Chapters 2 and 3. Given the reluctance of the public governments to acknowledge Aboriginal rights, the likely way to declare interests in plants and plant habitats as constitutionally protected Treaty rights or Aboriginal rights or both is to have them reviewed and decided upon by the Canadian judiciary. As discussed in Chapter 3, similar to the *Tsilhqot'in* claim, T'Sou-ke may choose to bring forward evidence of plant use as part of a more comprehensive claim for Aboriginal title. Or possibly, T'Sou-ke may claim plant uses as part of their right to continue their distinct mode of life, including reasonable access to the native ecosystems for all of the culturally significant plant species listed in Appendix A for the purposes of cultivating, harvesting, tending, processing, manufacturing, recreation, teaching and trading. Of course, given the pattern to date of Court decisions, the legally acknowledged rights could also be defined more narrowly to include only some plant species decreed as essential and the agreed upon practices associated with the same. As I have discussed, this very conservative approach of relying on Supreme Court judges to define these rights is unjustifiably costly for First Nations and biased toward the Canadian judiciary to describe the nature and scope of these rights.

Certainly, the Aboriginal right to 'gather' native plant products seems to be generally acknowledged within and outside of treaty rights, so long as these practices are for food, social or ceremonial purposes and do not interfere with other government objectives. Any proposals

forwarded outside of that very narrow description are conjectural, which is part of the challenge to including Indigenous legal plant interests in current governance and planning processes. It is difficult to protect something for which the parties—state governments and First Nations’ governments— do not have a shared definition or that cannot accurately be described against other values or resources for which the state governments assume a regulatory role. As a form of interim relief to this dilemma, in *Haida*, the Supreme Court of Canada provided clarity on the duty for the public governments to consult with First Nations “...as a protection for asserted rights, pending negotiation of treaties or litigation to establish their validity (Reynolds 2018: 145).”<sup>131</sup> The degree of the state government’s fiduciary obligations, the steps required in fulfilling the duty to consult, and the exact meaning of mandated behaviour, obligations and conduct have mostly been disagreed upon between public and First Nation’s governments.<sup>132</sup>

The recent decision in the claim brought by Blueberry River First Nation from northeastern BC, provides important insights and potential guidance for how consultation around customary plant use landscapes might proceed in T’Sou-ke territory. I am mindful that the case and resulting decision are very complex and, because the court examines and interprets wording that is specific to Treaty 8, not all conclusions and reasoning from the decision can be applied to T’Sou-ke’s legal interests in plants around claimed Aboriginal rights. I note, however, that in defining rights, what constitutes infringement of a right and how such an infringement might be justified, Madame Justice Burke relied on case law that addressed clarification of both treaty *and* aboriginal rights that are constitutionally protected.

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<sup>131</sup> *Haida Nation v. British Columbia* (Minister of Forests)

<sup>132</sup> This fiduciary duty involves 3 components: 1) *behaviour* that is honourable, diligent and purposive; 2) *obligations* stemming from a debt of gratitude to First Nations for sharing lands and resources; and 3) *conduct* involving consultation, accommodation, and valid justification when infringement occurs (Reynolds, 2018).

In Chapters 3 and 4, I discussed how failure to understand the cumulative effects of early colonialism on women's plant practices generated misunderstanding of the legal significance of T'Sou-ke's relationship with around a hundred plant species and their ecosystems. Most of the government decisions examined in the Blueberry River trial were made during recent decades when decision makers were aware of their constitutional duty to uphold the Crown's fiduciary obligations to Indigenous peoples. In her judgement of this complex case, Madame Justice Burke found the discharge of the Province of BC's fiduciary duties toward the Blueberry River First Nation to be "seriously wanting" [para.1826] on several fronts. She found that the Province did not manage the cumulative effects of government approvals for industrial development and, as a result, the Blueberry River nation would not be able to continue "meaningfully exercising its treaty rights in its territory" [para.1809]. She points out that the government's persistent behaviour of redirecting Indigenous interests and concerns about industrial development to other government officials or planning tables to be "perfunctory" and furthermore, that "this conduct substantially frustrates the purposes of a solemn promise" to uphold the Crown's fiduciary obligations to Indigenous peoples [para.1779].

This decision exposes the Province's emphasis on making land-use decisions that are piecemeal and that prioritize industrial development and plantation forestry over other objectives that First Nations and Canadian society have for lands and species. The decision recognizes the profound power imbalance between the Province and First Nations across BC, including T'Sou-ke, where First Nations' resources and their capacity to engage in consultation processes are substantially lower than the provincial government (and, by extension, federal and municipal governments). Justice Burke deliberated at length on the Province's loose exercise of its control

over lands and resources without properly addressing its solemn duty to protect the interests of Indigenous peoples “...especially when the level of Crown discretion leaves these interests open to government ineptitude or misconduct” [para 90].

In the 1990s, when I began work in BC treaty negotiations as an assistant negotiator for the provincial government, I was assigned to the Te'mexw treaty table, of which T'Sou-ke is a member. At that time, the provincial and federal governments distinguished the work in treaty negotiations from court action by insisting that treaties and all associated agreements were 'forward looking' to build new relationships of reconciliation with First Nations and, therefore, were not going to specifically address reparation for past injustices. The past was the job of the courts, should First Nations choose to follow that route. Since that time, I note that, according to Nichols (2019:40), the courts have also adopted the approach of re-directing the focus of reconciliation onto the future in an apparent effort to “...somehow escape the realities of its past.”<sup>133</sup> As I have shown, for T'Sou-ke, while frozen snapshots of plant use or historic gender roles should in no way limit the possibilities of how these connections may be legally addressed or expressed now or in the future, the history of T'Sou-ke plant use and management necessarily weighs heavily on how they negotiate their reconnection with plant species and ecosystems. Thus, the resurgence of legal orders around plants, their use and management must neither be enslaved by the past, nor ignore it.

In this respect, the 2007 United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) can contribute to Aboriginal law in Canada, and specifically here to the legal issues around Indigenous plant use and management. With respect to management of plants, lands and other resources, Article 27 of UNDRIP can help the Crown with the

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<sup>133</sup> See *Beckman v. Little Salmon/Carmacks First Nation*, 2010 SCC 53 at para 10, [2010] 3 SCR 103.

interpretation of Aboriginal rights to plants within the context of recognition of Indigenous laws, self-government and shared governance arrangements as it states:

States shall establish and implement, in conjunction with indigenous peoples concerned, a fair, independent, impartial, open and transparent process, giving due recognition to indigenous peoples' laws, traditions, customs and land tenure systems, to recognize and adjudicate the rights of indigenous peoples pertaining to their lands, territories and resources, including those which were traditionally owned or otherwise occupied or used. Indigenous peoples shall have the right to participate in this process (J. Borrows, 2019b:33).

Encouragingly, the Province of BC has taken important steps towards formally supporting UNDRIP Article 27 by creating the *Declaration on the Rights of Indigenous Peoples Act* (2019) followed by a public action plan, published in 2022. Both the legislation and policy arising from this response establish a formal framework for reconciliation by which the Province of BC wishes “to create a path forward that respects the human rights of Indigenous Peoples while introducing better transparency and predictability in the work we do together” (P. o. British Columbia, 2022). It is far too soon to predict whether this legislation and action plan will yield the justice demanded by Indigenous peoples, or if it will be an effective medium for acknowledging and protecting plant rights. Nonetheless, given this hopeful and bold move forward by the provincial government, I consider here how the primary findings of my research might help in the ongoing interpretation of Aboriginal rights to plants, their management, and the resurgence of Indigenous laws around the same.

## 6.2 Findings of this research

The backgrounding and diminishing of traditional plant use and the complex relationships among Indigenous peoples, plants and their habitats was largely imposed by Settler populations, early academics, and colonial governments. The materialist, utilitarian view of plants that privileges human needs over those of all other beings coloured colonial land and resource policies, including as a means of expeditiously appropriating terrestrial lands and resources as private and crown-owned property (Turner 2014; Turner and Spalding 2018; Spalding 2020). As I have discussed, rights and obligations towards native plant species, and also women's interests in native plants and their management, have been largely ignored in law, governance and, even for a long time, in academia. Using T'Sou-ke Nation as an example, my research brings these important human plant relationships to the foreground as a means to identifying the ongoing legal rights relating to plants and ecosystems that were never surrendered through treaties or otherwise.

These findings have particular significance today because the central role of native plants and Indigenous women's knowledge and activities in propagating, harvesting and managing culturally important species has been, and continues to be, heavily impacted by industrial logging, mining, agriculture, oil and gas extraction, and residential development in BC. A burgeoning area of scholarship is pushing beyond the analytical boundaries of economic growth and employment to apply a gendered lens to the particular impacts of the extractive industries on Indigenous women (Gunn, 2019). Morales (2019) identifies five different areas of resource development impacts deeply felt by Indigenous women: personal safety; health; environmental destruction; threats to culture; and economic loss. While maintaining personal safety impacts all areas of life, the last four impacts have particular relevance to plant harvesting and management.

My research suggests that lack of access to culturally important plant species resulting from land and resource dispossession is a huge barrier to the continued exercising of legal rights and obligations to over 100 native plant species throughout T'Sou-ke territories, increasingly so at a time where I observe that women especially are trying to re-establish connections with these plants as acts of political, economic, and cultural resurgence.

### 6.2.1 Canon of Plant Knowledge

In Chapter 2, I discussed in detail that, in order to manage the variable abundance of culturally important plants in their territories, the Straits Salish amassed a vast knowledge of plant species, forest ecology, plant communities associated with particular ecosystems, forest succession and phenology. I applied Suttles' (1962) concept of "coping with abundance" in the context of T'Sou-ke's ethnobotanical plant-use and management. I found in the pre-colonial world of the Straits Salish, the variable temporal and geographic availability of plant species for food, technology, spiritual and medicinal resources throughout their territories was a fundamental influence on their unique and resilient social structures, kinship patterns and resource management. I showed that the unique preferences of different plant species would have required the application of a continuum of plant management strategies at a range of scales of time and space, allowing for intensive, bulk harvesting of some species and highly selective and careful harvesting for others. Using terrestrial ecosystem mapping reinforced the fact that there is huge variability of plant communities in T'Sou-ke territory based on soil, climate, aspect, water and geography. I showed that with T'Sou-ke management of variable plant abundance in order to survive and thrive in the same territory for hundreds, if not thousands, of years in places not highly disturbed by industrial uses, these plant communities remain today and the uniqueness of their habitat and life cycles provides important information about the social and physical

infrastructure required to support Indigenous relationships with a selection of favoured native plants.

The canon of knowledge associated with native plants and their unique Indigenous uses is undeniably and categorically the intellectual property of the Indigenous peoples – in this research the T’Sou-ke and other Straits Salish peoples – who built these knowledge systems over millennia. I showed that the extensive knowledge held by T’Sou-ke of plant morphology and phenology, as well as of forest succession and ecosystems, was much more than a list of popular plants and their uses; it forms the base of plant and forest ecological knowledge required to manage and steward plants, and to enhance their abundance and quality, within a wide spectrum of habitats. For this reason, I chose to describe this knowledge system as a “canon of knowledge”, that includes all of the related and sophisticated botanical and other knowledge related to plants developed and exercised by T’Sou-ke throughout their territory over centuries. Regardless of whether some of these human-plant relationships have been interrupted or reduced as a result of colonial actions and other changes over time, this entire knowledge system stands as a testament to the deep and enduring bonds between T’Sou-ke and other Straits Salish groups and the ecosystems and plants of their territories.

### 6.2.2 Covenants of Reciprocity

I also discuss in this dissertation (Chapter 2 and 3) how this canon of plant knowledge reflects Kimmerer’s (2017) “covenants of reciprocity” between humans and favoured plant species. These covenants, or agreements, regulate human/plant relationships in a manner that at once promotes and manages abundance of culturally important plants and plant products within ecosystems that are highly variable. The covenants or collaborations with plant species can range from actively managing plants (e.g., for the cultivation of particular edible root species) to

simply being careful to leave a mature forest intact so that certain, specialized plant materials are available when required. Like any agreement, these covenants include give and take: the giving of gifts to humans and acceptance of responsibilities to plants in return. The relationships reflected in these agreements are most often built upon behaviour that involves persuasion and coaxing of plants rather than coercion and force. In explaining her concept of the “covenant of reciprocity” Kimmerer (2017a:371) recounts an Anishinaabeg prophecy that:

...tells us that we must make a choice between the path of materialism and greed that will destroy Earth, or the spiritual path of care and compassion, of *mno bmaadiziwin*, the good life. We know which path we want, but we are told that we cannot simply walk forward. Instead, the people of the Seventh Fire must walk back and pick up the covenant of reciprocity what was left for us along the ancestors’ path: fragments of land and shreds of story; to retrieve our language, ceremonies, and spiritual ways; to pick up our relatives, the other species who have been harmed and cast aside. Only when we have reclaimed what was lost and put it in our bundles can we walk down the green path of life together, all the world’s people, immigrants and indigenous, for the same Earth sustains us all. This teaching is not for a return to a romanticized past, but to recover spiritual, cultural, and relational elements of that past so we can go forward.

Likewise, Coast Salish cultural leader, Pierre Simon, indicated that the life force and intelligence that runs through everything has the ability to reacquire lost knowledge or forgotten memories from the spirit world (Carlson, 2010). Similar to how I have used the concept of “canons of plant knowledge”, I appreciate how Kimmerer underscores how these covenants can be picked up and embraced again so that Indigenous peoples can take their place alongside “all the world’s people” on equal terms.

T’Sou-ke relationships with the unique terrestrial ecosystems of southern Vancouver Island are embroidered throughout the Straits Salish landscape where the original people first fell from the sky and were then directed by the teaching of XÁ,EL,S, protected by guardian spirits and locked into reciprocal covenants with kin and affines, including plant and animal species. T’Sou-

ke women and men – nobles, commoners, and slaves – worked with patience, skill, knowledge and diligence to support a system of production and exchange of foods and materials that dependably met the needs of subsistence and provided substantial surpluses. The T'Sou-ke traditional economy required a flexible social network that valued the independence of household groups while equally promoting a fundamental ethic of cooperation and collaboration, as required.

At the time of contact of Straits Salish peoples with Europeans in the 1790s, the existence of a robust surplus local trading economy and the ability of households to split off and later come together in collaboration were highly effective strategies for both surviving and thriving in the unique ecosystems within and around the Salish Sea, even after the stress of a catastrophic disease epidemic. One goal for building a vast surplus economy was probably the avoidance of a once-in-a-generation famine. Other equally important goals that enabled and promoted these strategies, however, were the pursuit of prestige and standing amongst the corporate elite, as well as the supplication and appeasement of XÁ,EL,S and the multitude of guardian spirits present in plants, animals, mountains, rocks and water.

### 6.2.3 Customary Landscapes

Humans, then, are not only entangled with plants, but as observed throughout this dissertation, we also impact and are impacted by the habitats, ecosystems and landscapes in which we share multi-species living spaces (Tsing, 2015). The third major concept that I use in explaining Indigenous plant use and management as this relates to law, is 'customary landscape'. I maintain that the canon of plant knowledge and the covenants arising from these important human/plant relationships ultimately were imprinted throughout Indigenous territories to form what Olwig (2016) calls "customary landscapes", meaning an assemblage of land governed by

the laws of an assembly. Here, “landscape” is defined as an expression of a relationship between a collection of people, lands, and species through customs and practices that are regulated by their community polity. In order to see and understand T’Sou-ke customary landscapes with respect to plants, I contend that one cannot simply look at a single plant species, or a specific site, but rather at the traditional tableau of customs and practices that served as a body of unwritten laws binding a community together to manage how lands, species and places were shared and regulated. Furthermore, these customary laws are not fixed forever but are shaped through deliberation and precedence, just as the adaptive local practices associated with unique ecosystems and plant communities shape communities and the physical landscapes surrounding them.

Indigenous and Canadian legal systems draw upon many sources of laws, including traditions of customary law, where we maintain links to the past through custom, but are still capable of adapting and developing laws to meet the demands of the present. The reconciliation process between Indigenous Peoples and Canada is, at once, a legal activity, a political activity, and a practical resurgence activity<sup>134</sup>. Rights associated with Indigenous people’s relationships with plants are maintained through laws, political discourse, and every-day and resurgence practices. In this research, I reviewed rights to plant species, rights to special plant places and, finally, in resource governance – interests in the landscapes embracing how these plant species have evolved and been stewarded by the T’Sou-ke and other Indigenous peoples over centuries. I considered the social, physical and metaphysical infrastructure required to support plant use, cultivation, stewardship, manufacturing and trading activities associated with plants. This

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<sup>134</sup> See (L. B. Simpson, 2017) and (Corntassel, 2012).

required acknowledged rights and obligations based on ethics and values that were shared, taught and legally enforced amongst the T'Sou-ke and their neighbours and kin. All of this legal activity reflects sovereignty and, I contend, reveals a clear role in management and stewardship of at least 100 different plant species and their habitats across T'Sou-ke territory: relationships that were not voluntarily relinquished to support European colonization. Most importantly, the synchronicity between T'Sou-ke's canon of plant knowledge and the covenants of reciprocity between humans and plants and also within and between vast kin and affinal networks across the Coast Salish world all are imprinted across the species, habitats and ecosystems of a customary landscape.

#### 6.2.4 Aboriginal Law

In Chapter 4, I assessed how T'Sou-ke plant use can be supported by Aboriginal law and I proposed that many aspects of T'Sou-ke plant use and stewardship readily meet the tests laid out in the *Van der Peet* decision<sup>135</sup>. I explore the connection between culturally-important plant species and Indigenous Peoples, the cultivation of terrestrial landscapes and legal evidence of Indigenous land and resource tenure in British Columbia. I indicate current challenges faced by T'Sou-ke Nation in exercising plant-associated rights throughout their territory and outline how the current test for proving Aboriginal rights is problematic. As I have shown, the T'Sou-ke have an abundance of rich evidence of their native plant use and their laws and governance associated with the same. I contend that the obvious and long-standing Indigenous management of plant species and various ecosystems on southern Vancouver Island supports a very significant claim of legal rights and I believe that my research is broadly applicable to other First Nations in BC

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<sup>135</sup> *R v. Vanderpeet* [1996] 2 SCR 507

and beyond. Yet, building a reasonable case to support this plant use and management within the confines of the reductive language of the common law places a much heavier burden on the Indigenous claimants to prove their rights to plants, than it does on the Crown to prove the same. As such, the test needs to expand to better incorporate Indigenous law and its *sui generis* nature, in a manner befitting the goal of an intersocietal or multijuridical court.

I also maintain that viewing Indigenous plant use through the narrow lens of Western legal understandings of private property, efficient land-use, and agriculture undermines the T'Sou-ke customary landscape and continues to alienate women, in particular, from their long-term relationships with plants and an important part of their cultural identity. I caution that while applying Western agricultural terms such as “horticulture”, “orchard”, or “garden” can help to elevate the status of some forms of Indigenous use of certain plant species, these terms can also diminish those plant stewardship practices that do not fit within an academic notion of agriculture. The problem with this agricultural taxonomy is that these terms are often associated with a one-way evolutionary model of human economy and social organization, akin to 18<sup>th</sup> century notions of societal development, that devalues most forms of Indigenous land and resource management as rustic and primitive while reinforcing biases that European style agricultural practices are sophisticated, advanced, and efficient (Ames, 2005; B. Smith, 2010). As I have shown, redundancy of plant use – by valuing and stewarding several species within a habitat to accomplish the same objectives – is an important feature of traditional Straits Salish plant use. Similarly, working with a plant’s morphology or unique habitat may not produce the density of plant products that is found with agricultural products, but this plant use strategy supports the continuing presence of that species within plant communities of unique ecosystems, allowing Straits Salish peoples to live sustainably within their territories for millennia. As the

primary harvesters, cultivators, and plant processors, T'Sou-ke women played a foundation role in maintaining and stewarding various plant species and ecosystems that were of particular cultural significance to T'Sou-ke lifeways. Historically, because Indigenous women's tremendous activities associated with plants were classified as unsophisticated domestic chores, the canon of complex plant and ecological knowledge associated with T'Sou-ke and other Indigenous plant use was overlooked until recently.

A current challenge for Canadian law and policy makers is to reconcile the direction provided by Section 35 of the Canadian *Constitution* with Canadian common law and Indigenous laws so that governance models supporting legal pluralism can be established within the Canadian polity. By acknowledging and understanding racist and sexist biases embedded within cherished concepts such as sovereignty, private property, agriculture, and development, we can argue for shifting this worldview to accommodate different histories, differing ways of knowing the landscape and the plant species within it, and associated systems of rights to use and manage these resources. As legal arguments can carry us only so far, political negotiations need to be open to expanded definitions of rights, ownership, and plant management that go beyond the tenure systems of private property or centralized government. The threat of legal action regarding Aboriginal and treaty rights will continue to be an effective buttress motivating the parties to engage in robust political negotiations around co-management of these plant species. Ideally, the recognition and understanding of Indigenous laws and traditions related to plant use in British Columbia and elsewhere will increasingly influence legal culture so that these issues can be deliberated in a truly inter-societal legal court.

### 6.2.5 Indigenous law

The T'Sou-ke Nation, historically and today, are norm creating, generating and interpreting people as reflected in their distinct social organization adapted and adjusted by their members through many changing social and ecological variables over centuries. The re-examination of the values, rules, protocols, customs and practices associated with markers of Indigenous plant use throughout Straits Salish landscapes, specifically with the assistance of Indigenous knowledge holders, as well as ethnohistorical, ethnobotanical, and traditional ecological knowledge, re-frames how evidence of land use and occupancy is presented, and, ultimately, how we might all govern these resources together. For the T'Sou-ke, laws around plants are not limited to certain traditional practices, or to specific sites or places; law also rests in species or in the long-term relationships that people have with culturally important plant species. As such, the normative ordering of T'Sou-ke laws relating to their plant use and management must be judged on T'Sou-ke terms, not by Canadian legal terms. Picking up from Kimmerer's (2017) suggestion above, walking back and reclaiming the important teachings and laws from the past can help Indigenous peoples move forward as equal partners in a multi-juridical legal system. My research indicates rich possibilities for the resurgence of Indigenous legal orders in relation to native plants and ecosystem management.

I assess how ethnobotany and ethnoecology can support the resurgence of Indigenous law relating to Coast Salish and other Indigenous peoples in Canada. In particular, I identify sources where traditional laws relating to plants are found and I highlight the importance of taking a wholistic approach to native plant management using the full canon of knowledge for traditional plant use in order to resurge Indigenous laws. It is imperative that we not limit the potential for protecting and regulating the use of culturally important plant species by confining our solutions

to fit within the colonial legal land management framework. Ultimately, co-management or Indigenous governance over culturally important plants may necessarily extend to parks, lands currently managed under various Crown licenses, private fee simple lands and foreshore lands.

Several Indigenous scholars situate their analyses for shared laws and governance in the features and processes from the natural world, where the principles upon which social and ethical relationships can be forged are found in the interrelationality between humans and the more-than-human world<sup>136</sup> (J. Borrows, 2019a; Christie, 2019; Coulthard, 2014; Mills, 2018). For example, in defining his concept of grounded normativity, Coulthard (2014:13) says, “land . . . can teach us about living our lives in relation to one another and the natural world in nondominating and nonexploitative terms.” Borrows (2018) describes the dynamic, renewing quality of Indigenous laws even while they are “rooted in the ecosystems of places.” And while Christie (2019) advocates the grounding of analysis in the natural world, he emphasizes that all of the meaning generated from these observations stem from socio-cultural settings, and that we must avoid the injustice of one meaning-generating community imposing its social reality of the natural world onto another meaning-generating community. These approaches diverge significantly from a fixed and unchanging view of ethical relationships based on the European notion of natural justice which reveres so-called universal (as opposed to local) principles of law or science, and regulates society through the threat of objective punishment. This growing area of law also presents an important opportunity to resurge legal orders specific to women and plants, as well as to bring a gendered lens into environmental planning.

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<sup>136</sup> Also see Christie’s (2019:6-7) concept of methodological naturalism, where he advocates the grounding of analysis in facts and processes in the natural world to join “the political with the cultural, placing both in a frame that permits their study in an objective manner, and opens the door to questions about how one can go about making sense of the domestic law of the state meant to remove the perspectives – the forms of meaning – generated by Indigenous peoples.”

I also highlighted how the differences between Indigenous legal principles grounded in kincentricity and animism and Canadian legal principles founded on ideas from Enlightenment philosophy and the control of nature must be recognized and carefully considered, because this dissonance affects what is legally recognized and protected. Indeed, the approaches taken by many Indigenous legal scholars, while distinct from each other in important ways, are also similar to the concept of the moral landscapes of customary law presented by Olwig (2009:13) where a community's landscapes are a regulated connection to ecosystems, practice, and "...subjective, 'morally conscious', mutual restraint." At the same time, none of scholars cited above suggest that we govern according to un-reflected custom without the assistance of philosophical reason. Rather, they submit that intersocietal law, and the governance that flows from it, must balance culturally relative interests between different communities and at different scales within the larger nation state. Using ethnobotanical research such as that explored in this dissertation can help provide a solid foundation from which to initiate these intersocietal conversations, both in common law and in policy and political negotiations. Starting from a mutual respect and desire to steward unique ecosystems and their plant communities is an excellent way of finding common ground from which to establish shared or harmonized legal and governance models.

### **6.3 Next Steps: Work to be done**

When I teach ethnobotany to undergraduates, I include a class called "Apprenticing to Plants" and this is probably the most popular lesson. I use stinging nettle as my teaching plant, because it is a plant that is used by many cultures – from North America to Britain, to China and India – to make fibre using the ancient and dependable practice of twining. In cracking open the stalk, removing the pith and then rolling the remaining fibres in to long strands that are then twisted around each other to form a strong, tight cord, the students are able to learn from the

plant by working with its morphology and reflecting on its structure. A full lecture talking about the significance and applications of bast fibre practices throughout the world, cannot replace simply making this easy and incredibly strong twine from a plant that is often eradicated with herbicides as an annoying weed. The activity invites students to feel connected to their own ancestral plant practices while drinking stinging nettle and mint tea.

Twining, like braiding, is also an effective way to introduce stinging nettle twine as a metaphor for plurality (J. Borrows, Chartrand, Fitzgerald, & Schwartz, 2019; Kimmerer, 2013). Amongst the T'Sou-ke, for example, nettle, cattail, and cedar twining were used to solve all sorts of technological challenges. A person could twine two fine threads of nettle for intricate sewing or multiple cords of inner cedar or willow bark could be twined into thicker cord to build nets or to tie up a boat. The technology is effective either as a single strand or as multi-ply cord or rope, depending on the job and plant materials at hand. Likewise, in a multi-juridical country such as Canada, sometimes Indigenous law needs to focus only on one community and the discrete issues amongst its membership, while at other times it needs to twine together with larger tribal groups, and with the common law, civil law and/or international law, to address broader legal problems. The combination and approaches of these laws need to be at once sensitive to individual legal needs in communities, and agile enough to collaborate and inform in an intergovernmental and multi-juridical setting.

I believe we can encourage new synergies for co-management of native plants and ecosystems at the intersection between ethnobotany, ethnoecology, social-ecological systems theory, Indigenous law, and common law. These new relationships could transform ecosystem and landscape management in BC and contribute to building robust institutional arrangements between First Nations and public governments through which to steward native plants and plant

habitats. My research concludes that culturally-important plant species of Indigenous peoples must be situated within a larger system of collective resource or co-management in BC and the rest of Canada. This wider governance would very likely include co-management of fish, game and fungi species, although consideration of this broader framework is beyond the scope of my research.

As suggested by Borrows and Rotman (2012:271-272), recognizing difference in a synchronous political framework is one of Canada's great strengths, but in the context and history of Indigenous-state relations, this is not a straightforward goal. The scholarship associated with Indigenous peoples' plant use and plant management has tremendous potential to help inform the political space within which First Nations and public governments can creatively explore new relationships that address multiple sources of authority and management regarding single tracts of land and their diverse biotic and abiotic resources. These new relationships might take the form of nation-to-nation agreements, government-to-government (including provincial and municipal) co-management agreements, and informal arrangements between corporations, groups, and/or individuals. This space for negotiating co-management arrangements, however, must recognize as its foundation an informed historical, legal and political perspective when attempting to build new, equitable relationships regarding Indigenous peoples' plant use and plant management. Proactive political acknowledgment of ancient authorities found in Indigenous plant knowledge and wisdom, alongside of respect for legal obligations, will help Indigenous groups to push back against government standards or entrenched biases that exclude Indigenous ways of knowing and managing plants, plant habitats, and landscapes. In this new precarious environment of remnant forests and intense industrial development, changing world climate patterns, and uncertain political and economic institutions, we must remember that there

will be no clear or single co-management arrangement between Indigenous and non-Indigenous communities in BC.

My research situates Indigenous plant use in a social and legal context of governance and ecosystem management, but this is only a first step. I have not identified specific mechanisms through which these legal rights or Indigenous authorities around plants and ecosystems can be managed. This will be no small task. Many people will have concerns — some justified and some not — about how legislation and management processes can accommodate multiple knowledge systems, categorically different human-plant relationships, governance frameworks and legal orders. Here, I do not offer a specific integrative framework that will ensure that Indigenous and public government legislative and regulatory systems around native plant management are built upon agreed upon principles and do not create a legal vacuum across jurisdictions. I am hopeful, however, that the work being undertaken to address the challenges associated with pluralism in Canadian law (J. Borrows, 2010) will ensure that law and policy around native plant management can be supported in a multi-juridical fashion such as to protect Indigenous interests and to decolonize environmental law.

While the Courts have provided leadership and some direction regarding the reconciliation of Aboriginal rights and title, the legal process can only ever provide a limited tool through which to resolve these outstanding issues (Poelzer & Coates, 2015). Harris (2002:297) concludes that the Supreme Court can lead, but cannot force, public opinion, and that they will “...return the issue to the theatre where, finally, it has to be resolved, that is, to the realm of politics and negotiation between the parties involved.” To date, however, the legislation, policies and formal negotiation structures requiring consultation and engagement with First Nations in BC often

appears to be more of a reluctant response by the public governments to legal decisions rather than a sincere attempt to show leadership towards reconciliation with Indigenous peoples.

Notwithstanding the caution and care required in using traditional ecological knowledge outside of its community context, there is great potential for creating strong intergovernmental (between First Nations and public governments) processes around native plant and ecosystem monitoring, assessment, planning and restoration. The terrestrial ecosystem database and mapping system developed and maintained by the provincial government was very useful in my research, helping to establish the variability of plant communities within T'Sou-ke territory, as well as providing predictive capacity, to aid in identifying where culturally important plants would likely be located now and in the past. With care and dialogue, this plant and ecosystem data system could be enhanced to help support Indigenous interests in environmental monitoring, assessment, planning and restoration activities. I must stress that I am not suggesting that Indigenous people's interests in culturally important plants can be considered and accommodated solely through technical, mapping exercises that inform provincial decision makers about locations of Aboriginal rights. Rather, I contend that this mapping can help support the government-to-government dialogue and negotiation around plant communities of importance to Indigenous peoples, other British Columbians or both. Expanding the values within the terrestrial ecosystem mapping database to highlight plant species and habitats of significance to First Peoples could be an important step in decolonizing the Province of BC's environmental assessment and management practices and datasets.

The outcomes of these new connections could include the affirmation of Aboriginal rights and title as well as a pathway to decolonization of landscapes and to greater reconciliation between Indigenous peoples, settler communities, and native plants and plant habitats.

Reimagining the conventional assumptions of sovereignty and political hierarchy within ancient human-plant-landscape relationships can take inspiration from many examples of both successful and failed attempts at reconciliation. In turn, the cultivation of diverse, contemporary human-plant relationships can contribute to the discourse on cultural resurgence, respect for Indigenous knowledge, management of common-pool resources, and joint exclusivity, helping these tools to support a workable shared future for resource use and management in Canada. I highlight the lack of discussion and analysis about infringement of Aboriginal and treaty rights on private lands, and the consequences of this silence for T'Sou-ke and other Straits Salish nations in maintaining and regenerating their relationships with plants. Further, if there is a wider applicability of Aboriginal rights to plants throughout T'Sou-ke territory, does this confer a responsibility on the public governments to restore plant habitats that have been destroyed by industrial activities? This would seem a logical and fair extension of this action. My hope is that this research contributes to the larger discussion of acknowledging Indigenous people's distinct and culturally relative rights and principles with respect to native plants, while strengthening and growing the ties that bind all British Columbians together.

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## Appendix A: Ethnobotany Summary Table for T'Sou-ke Plant Relationships

The table presented on the following pages is an annotated synthesis of ethnobotanical, botanical, and ecological research conducted by several experts. Information in the *Species* and *Habitat* columns is provided by Hitchcock and Cronquist (2018) and Klinkenberg(2020). To learn the authorities for plant names, please refer to the E-Flora BC website <https://ibis.geog.ubc.ca/biodiversity/eflora/>. The *Straits Salish Names* are provided by Turner (2014) in her detailed table: “Names of Native Plant Species in Indigenous Languages of Northwestern North America.” (University of Victoria D-space database). Unless otherwise specified, the names are from the Straits Salish names are from the SENĆOŦEN language. The references for this extensive research can be found here: <http://dspace.library.uvic.ca/bitstream/handle/1828/5091/Appendix%20B%20%20UVicSpace%20Indigenou%20names%20of%20native%20species%20BIG.pdf>. Information provided in the *Cultural uses overview* column was provided by the following sources: (Chipps-Sawyer, 2007; Gunther, 1927, 1973; Johnson, 1990; Jolley, 2000; T. Lantz & N. Turner, 2003; Suttles, 1974, 2001; T'Sou-ke-Elders, 1977; Te'Mexw Treaty Association, 2019; Turner, 2014; Turner & Bell, 1971; Turner & Hebda, 1990; Turner et al., 1983)

Species	Straits Salish Names	Habitat	Cultural uses overview
<b>Marine Plants</b>			
<i>Fucus gardneri</i> and related spp. – Rockweed or Seawrack (Fucaceae)	t'əlát <sup>th</sup> -əlch; OR k <sup>w</sup> 'éłqəq	On rocks at intertidal zone	Medicine: Leaves used as a salve for wounds by squeezing the fluid sacs onto cuts and blisters
<i>Nereocystis luetkeana</i> – Bull kelp (Lessoniaceae)	qw'áłəng'	On rocks, forming dense beds in subtidal zone; quiet bays and inlets	Technology: Stipes used for fishing line, hollow bulb for oil storage; mold for skin ointment, and fitting tree knot halibut hooks; stalks cured for fishing lines and rope, fronds wrapped to keep fish cool in boats
<i>Porphyra abbotiae</i> – Red laver seaweed or “edible seaweed” (Bangiaceae)	ləq'əs	On rocks in lower intertidal and subtidal zone	Food: Seaweed picked and eaten, dried in cakes; used for trade or sale harvested in late June and July in historic period for sale in Chinatown, Victoria; elsewhere eaten traditionally
<i>Ulva lactuca</i> and related spp. – Sea lettuce (Ulvaceae)	kw'eqəq	On rocks in lower intertidal and subtidal zone	Food: Seaweed picked and eaten fresh, dried in cakes;
<i>Zostera marina</i> – Eel grass (Zosteraceae)	chələm	Sheltered subtidal flats and growing along the coasts-- in beds in sandy ocean bottom in lower intertidal and subtidal zones	Food: White leaf bases and rhizomes were eaten, and rhizomes and leaves were used to flavor meats in pit ovens; Technology: leaves used to collect herring eggs
<b>Lichens</b>			
Lichens: "Old Man's Beard" ( <i>Usnea</i> spp.) (Usneaceae)	sməxt'aləs ( <i>general term for several lichens</i> )	Growing on tree branches and boughs of various species; common in coastal forests	Technology: Important traditional wound dressing material ("Indian bandage"); baby diapers; sanitary napkins
<b>Mosses</b>			
Mosses, general (various species, incl. <i>Hylocomium splendens</i> , <i>Rhytidadelphus</i> spp., <i>Sphagnum</i> spp.) (Bryophytes)	q'ə'chi7 ( <i>general term for several mosses</i> )	Moss species are found in virtually every ecosystem in T'Sou-ke territory. Prefers shaded forest floor, logs, etc.	Technology: Used for wiping salmon, diapers, sanitary napkins, etc.; large quantities formerly used; no specific places

Species	Straits Salish Names	Habitat	Cultural uses overview
<b>Ferns and fern allies</b>			
<i>Adiantum aleuticum</i> – Maidenhair Fern (Pteridaceae – Maidenhair Fern family)	tung <sup>w</sup> elchin ( <b>Lummi</b> ) ‘hair medicine’	Moist stream sides, seepage areas, often shaded; found throughout T'Sou-ke territory in almost every terrestrial ecosystem	Medicine for dancers and athletes to make them light-footed; for strength and endurance; Stems used as a hair tonic
<i>Athyrium filis-femina</i> – Lady Fern (Polypodiaceae Polypody family)	ləq'ləq'əy'	Moist to wet ravines, rocky ledges, avalanche tracks, streambanks, forest edges and openings in the low land and montane zones	Food: used to cover and flavour food in steaming pits
<i>Dryopteris expansa</i> – Spiny woodfern (Dryopteridaceae – Wood Fern family)	tsáq <sup>w</sup> a ( <b>Klallam</b> )	Shaded, swampy forest areas, with skunk-cabbage (lady fern); rotten logs in forest (wood fern)	Food: Rootstocks formerly an important feast food; pit-cooked; obtained on special trips into the mountains
<i>Equisetum hyemale</i> – scouringrush, or branchless horsetail (Equisetaceae – Horsetail family)	<u>x</u> q <sup>w</sup> əł, [? x <sup>w</sup> k <sup>w</sup> əłʔəʔ]	Moist alluvial forests, riverbanks, roadsides, clearings, and forest margins in the lowland, steppe and montane zones	Technology: Used for polishing wooden objects utensils and knitting needles. Medicine: Used as a tea for a sore throat
<i>Equisetum telmateia</i> – Giant horsetail (Equisetaceae – Horsetail family)	sxəm'xəm' - sxəm'xəm' (cf. xem 'heavy')	Moist banks, seepage areas, ditches	Food: Young shoots eaten fresh in spring; Technology: Stems used for sandpaper, for polishing wood, stone
<i>Polypodium glycyrrhiza</i> – Licorice fern (Polypodiaceae – Polypody family)	tl'əsíp	Dry and seasonally wet rocks, trees, ad soil humus in the lowland and montane zones	Food: Rhizomes dried and used as a sweetener. Also chewed as an appetizer, especially by children. Medicine: Roots infused in tea to treat sore throats, coughs and other respiratory ailments.
<i>Polystichum munitum</i> – sword fern (Dryopteridaceae – Wood Fern family)	sthxéləm	Rich, moist soil moist and mesic forests in the lowland and montane zones	Food: Rootstocks very probably cooked and eaten; used to line pit cooks and flavour the steaming food
<i>Pteridium aquilinum</i> – bracken fern (Dennstaedtiaceae – Bracken fern Family)	səqéen ( <i>leaves</i> ); skwáilʔəxw ( <i>rhizomes</i> )	Dry to wet forest margins, peat bogs, clearings, roadsides, burns, dry openings in forest and meadows from the lowland to the subalpine zones	Food: Rhizomes formerly pit- cooked and eaten, plants cultivated similar to camas patches; leaves used in pit cooks to protect and flavour food

Species	Straits Salish Names	Habitat	Cultural uses overview
<b>Trees -- Cone Bearing</b>			
<i>Abies amabilis</i> – Amabilis fir; <i>Abies grandis</i> – Grand fir (Pinaceae – Pine family)	sq <sup>w</sup> əméy’əqs (poss. <i>A. grandis</i> )	Drier sites (Grand fir) moist to mesic slopes and rivers terraces interior lowland and montane zones (Coastal Douglas-fir Zone). (Amabilis fir) Moist to mesic forests with deep, well-drained soils in the lowland to subalpine zones Coastal Western Hemlock Zone	Technology: wood used for fuel, pitch blisters used as a glue; Medicine: needles used in tea (source of vitamins); pitch used in salves
<i>Callitropsis nootkatensis</i> – Yellow Cedar (Cupressaceae – Cypress family)	páshələq <sup>w</sup> (cf. -eq <sup>w</sup> 'head')	Wet to mesic slopes and bogs in the lowland, montane, and subalpine zones. Upper elevation forests	Technology: wood highly prized and used to make a variety of tools; Inner bark used for weaving capes and blankets; wood to make paddles, bows, fish spears
<i>Picea sitchensis</i> – Sitka spruce (Pinaceae – Pine family)	t’thq’éʔ-ılch	Moist areas in coastal forests, esp. on flood plains and shores	Food: Hard pitch sometimes chewed as gum; Technology: Roots sometimes used for basketry; wood for paddles and oars; pitch used for patching canoes
<i>Pinus contorta</i> – Lodgepole and Shore pine (Pinaceae – Pine family)	ʔishipt ( <b>Ditidaht</b> ) (also <i>P. monticola</i> ); OR chabsapt ( <i>all pine trees</i> )	Wet to dry bogs, lower slopes and high river terraces in the lowland, montane and subalpine zones	Food: Pitch chewed as gum; good tasting; inner cambium pulled off in strips and eaten in the Spring; Technology: pitch rubbed on canoes and baskets for waterproofing; pitch and pitchwood used as fuel for a hot fire
<i>Pinus monticola</i> – White pine (Pinaceae – Pine family)	qw’əyəʔləs-əlch, qw’əyəʔləs-əlp ‘dancing plant/tree’	Moist to dry slopes in the lowland and montane zones	Technology: Pitch used for waterproofing, like lodgepole pine pitch
<i>Pseudotsuga menziesii</i> – Douglas-fir (Pinaceae – Pine family)	ch’sey’ (cf. ch’say?)	Moist to dry slopes, river terraces and flats in the lowland and montane zones	Technology: Bark and wood used as fuel; Thick bark considered an excellent fuel; boughs used for bedding, scrubbing and temporary shelters; sapling wood for spear and dipnet handles, barbecuing sticks, poles for canoes, etc.; pitch for waterproofing, and for torches

Species	Straits Salish Names	Habitat	Cultural uses overview
<i>Taxus brevifolia</i> - Pacific yew (Taxaceae – Yew family)	tí'əng'q'-íłch	Moist to mesic slopes and creek sides in the lowland and montane zones. Sporadic in moist shaded forests	Technology: Wood used as material for digging sticks; Tough wood used for implements of many kinds: wedges, digging sticks, bows, paddles, mat-creasers, mat needles, fishhooks (steamed, bent)
<i>Thuja plicata</i> – western redcedar (Cupressaceae – Cypress family)	xpéy', xpéy (wood, tree); slówi? (inner bark); p'alay' (outer bark)	Common on moist forested sites and near watercourses, esp. at lower elevations; while individual cedar trees may be found throughout T'Sou-ke territory, large stands of fine, healthy cedar would be limited to moist, shaded forests	Technology: Split roots and branches used for basketry ( <i>shisháłh</i> famous for this); sapwood for basketry slats; inner bark for mats (to cover floors, sitting, etc.) baskets, capes and other clothing, twine, and blankets, baby diapers; branches and bark twisted into rope; young roots used in salmon traps; wood for house planks, posts, totem poles, canoes, storage boxes and containers; also for fuel, firedrills; bark for slow matches
<i>Tsuga heterophylla</i> – Western hemlock (Pinaceae – Pine family)	t <sup>th</sup> q'i-íłch	Fairly dry to wet sites; well adapted to grow on humus and decaying wood; shade tolerant	Technology: Bark used for reddish or brown dye, used to colour fishnets, branches dipped into streams for herring spawn
<b>Trees – Broad-leaved</b>			
<i>Acer glabrum</i> – Douglas maple (Sapindaceae – Soapberry family)	t'ekaiyexłp (Lummi)	Moist to dry forests and dry rocky slopes in the lowland and montane zones	Technology: wood made into knitting needles, as well as into miniature paddle replicas and sewn onto dancer's regalia, Medicine: bark used in tea infusions
<i>Acer macrophyllum</i> – Bigleaf maple; 'paddle tree' (Sapindaceae – Soapberry family)	t <sup>th</sup> thé?-əlch, sts'áłəp	Moist to mesic forests and open slopes in the lowland and montane zones; prefers alluvial soils and flood plains	Food: used to flavour and wrap meat in pit cooks and for fuel. Technology: wood made into paddles, spindle whorls, dishes, spoons, combs, cattail mat creasers, rattles, adze handles and other tools. Medicine: leaves boiled in a tea for sore throats
<i>Alnus rubra</i> – Red alder (Betulaceae – Birch family)	sq <sup>w</sup> álng-əlch	Moist, rich woods, clearings, alluvial plains, lakesides	Food: Inner bark eaten in spring; fuel; Technology: Bark used for red dye; wood used as fuel, especially for smoking fish; wood for carving masks, dishes; "cones" dried and used as fuel
<i>Arbutus menziesii</i> – Arbutus (Ericaceae – Heath family)	q <sup>w</sup> əq <sup>w</sup> əy-íłch	Dry Douglas-fir woods, rocky outcrops	Technology: Hard wood used to cover boat keels or sterns to protect them; also used for spoons; Medicine: bark boiled in a tea for headaches

Species	Straits Salish Names	Habitat	Cultural uses overview
<i>Corylus cornuta</i> – Beaked hazelnut (Betulaceae – Birch family)	q <sup>w</sup> p'áx <sup>w</sup> , qopáx <sup>w</sup> ( <i>nuts</i> ); qwp'áxw-ílch ( <i>bush</i> )	Mesic sites in the lowland and montane zones	Food: Nuts roasted and eaten; Technology: wood can be used to make arrow shafts
<i>Malus fusca</i> – Pacific crabapple (Rosaceae – Rose family)	qéʔáx <sup>w</sup> ( <i>fruit</i> ); qáx <sup>w</sup> iʔ-ílch ( <i>tree</i> )	Moist to wet thickets, alluvial flats, lakeshores, marshes, fens; grows only in wetland areas	Food: Fresh fruit eaten. Fruits packed in oil or water and stored in waterproof boxes or baskets for winter consumption, often a feast food; Technology: hard wood used to make various tools; Medicine: bark boiled as a tea
<i>Populus balsamifera</i> – Black cottonwood (Salicaceae – Willow family)	chə <sup>w</sup> 'n-əlp, chə <sup>w</sup> 'n-əlch	Moist alluvial floodplains, lake edges, swamps	Technology: fluffy fruits use as stuffing; sticky buds may have been used as a caulking agent; Medicine: resin from the buds likely used with grease as a skin salve
<i>Populus tremuloides</i> – Trembling aspen (Salicaceae – Willow family)	q <sup>w</sup> 'íy'əl'əsh-əlch, q <sup>w</sup> 'íy'əl'əs-əlp 'dancing plant/tree'	Moist to dry ravines, characteristic in early succession forests. It grows in wet sites often with cottonwood, willow, and red-osier dogwood	Medicine: Bark used in infusions for various medicines
<i>Prunus emarginata</i> – Bitter cherry (Rosaceae – Rose family)	t'ələm ( <i>bark</i> ); sk <sup>w</sup> t <sup>th</sup> əng'-ílch, skwthəngílch ( <i>tree</i> ); chichx ( <i>cherry bark pitch</i> )	Moist open deciduous woods	Food: Cherries eaten occasionally, but small and often bitter; Technology: Bark stripped and used in cedar basketry as decorative overlay; Medicine: the bark used in tea infusions for various ailments
<i>Quercus garryana</i> – Garry oak (Fagaceae – Beech family)	chəng'-əlch	Meadows found in fairly open forests with an understory composed of shrubs and/or wildflowers and other herbaceous plants	Food: Nuts very likely eaten; there is ethnographic and archaeological evidence in Salish groups farther south that oak acorns were ground into and used as flour; Medicine: bark used in various medicinal teas
<i>Frangula purshiana</i> – Cascara (Rhamnaceae – Buckthorn family)	q'éyχəlp OR q'éyχílch	Moist alluvial flats, open woods	Medicine: Bark collected in strips, boiled and ingested as a medicine (laxative)
<i>Salix</i> spp.: <i>S. lucida lasiandra</i> ; <i>S. scouleriana</i> , <i>S. hookeriana</i> – Willows; (Salicaceae – Willow family)	sχ <sup>w</sup> ələʔ-ílch reefnet-plant/tree' ( <i>willows, gen. but espec. S. lucida lasiandra</i> )	Moist, swampy thickets, lakeshores, creekbanks; beach sites	Technology: Inner bark stripped and used extensively for cordage, esp. for reef nets

Species	Straits Salish Names	Habitat	Cultural uses overview
<b>Shrubs and Woody Vines</b>			
<i>Amelanchier alnifolia</i> – Saskatoonberry (Rosaceae – Rose family)	schíʔsəng, schíchsən ( <i>berries</i> ); schiʔsən-íłch ( <i>bush</i> )	Dry to mesic, open rocky slopes, bluffs, gullies, thickets, forest margins in lowland to sub-alpine zones	Food: Berries eaten, fresh or dried; Technology: hard wood of the stems used to make arrow shafts; Medicine: bark used with other species for a medicinal tea
<i>Arctostaphylos uva-ursi</i> – Kinnikinnick (Ericaceae – Heath family)	tʔíkʷən	Sandy beaches, gravelly banks, rocky outcrops	Food: Berries eaten; cooked in fat. Leaves smoked as a tobacco
<i>Cornus sericea</i> – Red-osier dogwood (Cornaceae – Dogwood family)	nekʷim s̥xeli-əlch	Moist clearings and thickets near water; swamps	Technology: The woody stems were made into knitting needles. Medicine: the bark, when soaked in warm water induces vomiting
<i>Gaultheria shallon</i> – Salal (Ericaceae – Heath family)	tʔeqəʔ, stʔeqəʔ ( <i>berries</i> ); tʔqeʔ-íłch ( <i>bush</i> )	Very common along coastline and in moist forest sites with hemlock and cedar	Food: Berries eaten, fresh or dried and mashed into cakes; leaves used in pit ovens to protect and flavour the food; branches with leaves used as a whip to process soapberries; Medicine: possibly leaves were chewed and applied to cuts
<i>Holodiscus discolor</i> – Oceanspray (Rosaceae – Rose family)	qʔeyʔtʔth-əlch	Dry to mesic bluffs, rocky slopes, clearings, thickets, forest edges and open forests. Low to middle elevations	Technology: Wood used as material for digging sticks, clam skewers, bows, harpoon shafts, salmon barbecuing sticks, cambium scrapers, halibut hooks, cattail-mat needles, knitting needles and other tools; Medicine: dead florets boiled as a medicinal tea for diarrhea; phenological indicator for timing of sockeye salmon run
<i>Lonicera involucrata</i> – Black twinberry (Caprifoliaceae – Honeysuckle family)	chʔixʷiitsapt ( <b>Ditidaht</b> ) 'monster's/ghost's plant'	Moist forests and thickets in the lowland, steppe and montane zones	Medicine: buds eaten or bark rubbed on body- used in tonics
<i>Mahonia spp.</i> – dull-leaved Oregon-grape ( <i>M. nervosa</i> ); tall Oregon-grape ( <i>M. aquifolium</i> ) (Berberidaceae – Barberry family)	səniʔ ( <i>berries</i> ); səniʔ-íłch ( <i>bush</i> )	Mesic to dry open or closed forests in the lowland and montane zones	Food: Berries eaten, alone or mixed with blueberries or huckleberries; Technology: the bark of the roots and stems used to make a yellow dye; Medicine: Berries used as an antidote to shellfish poisoning

Species	Straits Salish Names	Habitat	Cultural uses overview
<i>Rhododendron groenlandicum</i> – Labrador tea, or Hudson’s Bay tea (Ericaceae – Heath family)	méq <sup>w</sup> əm-ti ‘swamp tea’	Peat bogs, fens; moist water inundated soils	Food/medicine: Leaves used to make a beverage tea (also considered medicinal)
<i>Ribes bracteosum</i> – Grey currant, or Stink currant (Grossulariaceae – Currant or Gooseberry family)	spət <sup>th</sup> (cf. (berries); spət <sup>th</sup> -ilch (bush)	Rich, shaded soil along creeks, and in swamps, with salmonberry and skunk cabbage	Food: Berries eaten, usually fresh, not dried; the name translates to <i>spət<sup>th</sup></i> ‘sour, mousey smell, like a tomcat or skunk’
<i>Ribes divaricatum</i> – Coastal black Currant or Gooseberry (Grossulariaceae – Currant or Gooseberry family)	qémk <sup>w</sup> (berries); qəm <sup>w</sup> -ilch (bush)	Gravelly shores and moist clearings; moist to mesic thickets, meadows and open woodlands and forests in the lowland zone	Food: Berries eaten fresh; often picked green and allowed to ripen (found only in a few places); also boiled and dried into cakes; the roots were boiled with cedar and rose roots and twined into rope
<i>Ribes lacustre</i> – Prickly currant or swamp Currant or Gooseberry (Grossulariaceae – Currant or Gooseberry family)	kamelch (Lummi)	Moist streambanks, open woodlands, forest margins and rock outcrops in the montane to alpine zones	Food: Small black berries eaten occasionally fresh, but spines considered very poisonous
<i>Ribes sanguineum</i> – Red-flowering currant (Grossulariaceae – Currant or Gooseberry family)	x <sup>w</sup> ix <sup>w</sup> k <sup>w</sup> (berries); x <sup>w</sup> ix <sup>w</sup> k <sup>w</sup> -ilch (bush)	Moist forests and shoreline thickets, often on rotten logs and stumps	Food: Berries eaten fresh and dried into cakes possibly mixed with other berries such as salal. Breaking off the boughs believed to cause rain
<i>Rosa gymnocarpa</i> – Dwarf wild rose, or baldhip rose (Rosaceae – Rose family)	qəmi?-ilch, qəmiy-ilch, yástən; qəl’qúilch	Dry to moist open forests, forest edges, thickets and clearings in the lowland and montane zones	Food/spiritual: Fruits eaten occasionally, but spines considered very poisonous. It is a highly spiritual plant and brings strength and spiritual protection to various rites of passage rituals
<i>Rosa nutkana</i> – Nootka wild rose (Rosaceae – Rose family)	qél’q (flowers); qəl’əq (fruit, hips); qəl’əq-ilch (bush) ( <i>R. nutkana</i> , <i>R. gymnocarpa</i> )	Moist thickets along shorelines, creeks, lakes and marshes	Food: Fruits eaten occasionally as a tea, but care must be taken not to eat the seeds as they have irritating hairs; Technology: used to make reef nets and rope
<i>Rubus leucodermis</i> – Blackcap (Rosaceae – Rose family)	nəq’í t <sup>th</sup> q <sup>w</sup> am’ə?	Clearings, rocky areas and burns; needs the open canopy of an early successional forest	Food: Berries eaten, fresh and dried; mixed with trailing blackberries

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<i>Rubus parviflorus</i> – Thimbleberry, or Red-cap (Rosaceae – Rose family)	t'əq <sup>w</sup> əng, t'əqum ( <i>berries</i> ); t'əq <sup>w</sup> əng-ılch, t'əqumiłch ( <i>bush</i> ); thəʔthq'i OR t'əqti'ən ( <i>edible sprouts</i> )	Moist open forests, thickets, lake edges and shorelines	Food: Tender young shoots peeled and eaten with dried salmon roe in Spring; berries eaten fresh in early summer. Technology: large leaves can be used to dry berries on; Medicine: leaves boiled in a tea
<i>Rubus spectabilis</i> – Salmonberry (Rosaceae – Rose family)	ʔəliləʔ, liləʔ ( <i>berries</i> ); liləʔ-ılch ( <i>bush</i> ); thəʔthq'i ( <i>edible sprouts</i> )	Very common in moist thickets along the coast, in swamps, marshes, creeksides, lake shores, and open woods	Food: Tender young shoots peeled and eaten) with dried salmon roe; berries eaten fresh in early summer
<i>Rubus ursinus</i> – Trailing wild blackberry (Rosaceae – Rose family)	sqw'ələlngəxw, sqw'əlngəxw ( <i>berries</i> ); sqw'ələlngəxw-ılch, sqw'əlngəw-ılch ( <i>plants</i> )	Common in woods, clearings and thickets from low to mid elevations	Food: Berries eaten, fresh and dried; mixed with blackcaps
<i>Sambucus racemosa</i> – Red elderberry; <i>Sambucus cerulea</i> – Blue elderberry (Adoxaceae – Adoxa family)	t'thiwəq', t'thiwəq' ( <i>berries</i> ); t'thiwəq'-ılch ( <i>bush</i> )	Moist coniferous forests, clearings, shorelines	Food: Berries cooked into a sauce and eaten, often with blueberries or other berries; Medicine: used to help hasten childbirth
<i>Shepherdia canadensis</i> – Soapberry (Elaeagnaceae – Oleaster family)	sx <sup>w</sup> əsm ( <i>berries and whip</i> ); sxwəsm-ılch ( <i>bush</i> )	Salt marshes, flood plains, river estuaries, sandy shorelines. Found only in limited ecosystems within Straits Salish territory, including East Sooke	Food: Berries picked in a few prize areas and traded by mainland Salish or from Vancouver Island Snuneymuxw; considered quite scarce now; whipped to make “Indian ice cream,” a favourite feast food
<i>Spiraea douglasii</i> – Hardhack (Rosaceae – Rose family)	teet'th-əłp	Fens, swamps, bogs, streambanks, lake margins, and moist to wet thickets and open forests in the lowland and montane zones	Technology: Hard straight branches are the best wood for salmon spreaders. Wood can be hardened over a fire to make blades, halibut hooks, cambium scrapers and other tools
<i>Symphoricarpos albus</i> – Waxberry, or Snowberry (Caprifoliaceae – Honeysuckle family)	pəpq'əyas-ılch 'little white revenge berries' ( <i>berries</i> ); pəpq'əyas-ılch ( <i>bush</i> )	Mesic to dry meadows, disturbed areas, grasslands, shrublands, and forests in the lowland, steppe and montane zones. Very common	Spiritual/Medicinal: Ghost berry; used by gravediggers to ritually cleanse their hands; used medicinally as an astringent
<i>Vaccinium alaskaense</i> – Alaska Blueberry (Ericaceae – Heath family)	biishapx ( <i>berries</i> ); biishapxapt ( <i>bush</i> ) ( <b>Ditidaht</b> )	Moist, shady coniferous forest, clearings; found in NW edge of territory only	Food: Berries eaten fresh and dried whole over a smoky fire (with some of the leafy branches); sometimes dried with other blueberries

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<i>Vaccinium myrtilloides</i> – Velvetleaf, or Canada blueberry (Ericaceae – Heath family)	ləw'qim' (berries); ləw'qim'-ilch (bush)	Dry to mesic forests and clearings on sandy and rocky soils and hummocks in bogs in the montane zone	Food: Berries eaten fresh and possibly dried if enough picked
<i>Vaccinium ovalifolium</i> – Oval-leaved blueberry (Ericaceae – Heath family)	ləw'qim' (berries); ləw'qim'-ilch (bush)	Mesic to wet forests and opening, and bogs in the lowland to subalpine zones--usually grow at higher elevations than Alaska blueberries	Food: Berries eaten fresh and dried whole over a smoky fire (with some of the leafy branches)
<i>Vaccinium ovatum</i> – Evergreen huckleberry (Ericaceae – Heath family)	yiʔxəm' (berries); yiʔxəm'-ilch (bush)	Moist, shade coniferous forest, clearings	Food: Berries picked in fall and eaten fresh; some people harvest the branches as floral greens
<i>Vaccinium oxycoccos</i> – Bog cranberry (Ericaceae – Heath family)	qʷəm'chál's, qʷəm'cháləs (berries); qʷəm'chal's-ilch, qʷəm'chaləs-ilch (plant)	Bogs in the lowland and montane zones	Berries picked in late fall from boggy meadows and eaten fresh or lightly cooked and stored in water; “special” food of “high-class people”
<i>Vaccinium parvifolium</i> – Red huckleberry (Ericaceae – Heath family)	sqw'əqwchəs (berries); sqw'əqwchəs-ilch (bush)	Any peat bogs and fens; Coniferous forest, often at forest edges and under canopy openings low to middle elevation	Food: Berries eaten fresh, but more often dried and mashed into cakes. Also dried whole over a smoky fire (with some of the leafy branches); sometimes mixed with salal for flavouring
<i>Vaccinium uliginosum</i> – Bog blueberry (Ericaceae – Heath family)	mal'səng (berries); mal'səng-ilch (bush)	Bogs, dry to wet rocky areas, boggy forests in the lowland to alpine zones	Food: Berries eaten fresh or dried for storage
<i>Viburnum edule</i> – Highbush cranberry (Adoxaceae -Adoxa family)	Qwemtsuls <b>(Hul'qumi'num)</b>	Wet to moist stream banks, swamps and forests in the lowland and montane zones in fresh to very moist soils	Food: Berries eaten and purchased through trade

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<b>Herbaceous Plants</b>			
<i>Achillea millefolium</i> – Yarrow (Asteraceae – Aster family)	tí'əlíq <sup>w</sup> -l̥p, tí'əlíq <sup>w</sup> -əłp	Mesic to dry coastal bluffs, meadows, grasslands, rocky slopes and open forests in all vegetation zones	Medicine: Leaves chewed to soothe tooth aches. Used in a tea infusion for colds and other ailments
<i>Achlys triphylla</i> – Vanilla leaf (Berberidaceae - Barberry family)	səq <sup>w</sup> shən	Common on sandy, or gravelly soil in openings and on alluvial flats and salt marshes	Medicine: boiled on the stove to freshen the house
<i>Allium cernuum</i> – Nodding onion (Liliaceae – Lily family)	sq <sup>w</sup> 'ə́x <sup>w</sup>	Moist to mesic open or closed forests in the lowland and montane zones	Food: Bulbs eaten; formerly pit-cooked with game, seal or ducks
<i>Aquilegia formosa</i> – Red columbine (Ranunculaceae – Buttercup family)	leymtə	Mesic to moist meadows, rocky slopes, thickets, clearings, roadsides and open forests	Medicine (spiritual): a plant that will bring you good luck and protect you.
<i>Apocynum cannabinum</i> – Indian-hemp, and/or <i>Apocynum androsaemifolium</i> – spreading dogbane (Apocynaceae – Dogbane family)	ts'tchámukw (Songish)	Dry roadsides, fields, meadows and open forests in the lowland to subalpine zones	Technology: the tough fibres on the stem were used for fibre, and twining elements
<i>Asarum caudatum</i> – Wild ginger (Aristolochiaceae – Birthwort family)	t'thet'thlétən' 'heart-shaped'	Moist to mesic forests in lowland and montane zones, shade tolerant and prefers broad leaved forests. Sparse in coniferous forests	Food/Spiritual: Sweet tasting plant that is considered to be an important spiritual and good luck plant
<i>Camassia</i> spp. – Blue camas ( <i>C. quamish</i> ) and giant camas ( <i>C. leichtlinii</i> ) (Asparagaceae – Asparagus family)	qwláʔəl, sqwláal, qwláʔl ( <i>plant</i> ), qwláal ( <i>bulb</i> )	Grassy slopes and meadows; low to middle elevations	Food: Bulbs pit-cooked and eaten; made into a molasses; highly valued as a trade item
<i>Carex obnupta</i> - Swamp “grass”; slough sedge, <i>C. rostrata</i> – Beaked sedge, <i>C. sitchensis</i> and other, similar sedges) (Cyperaceae – Sedge family)	tí'ətí'	Shaded swamps, marshes, riverbanks and alluvial forests in the lowland zone	Technology: Used for Basket grass and twined elements

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<i>Chamaenerion angustifolium</i> – Fireweed (Onagraceae – Evening Primrose family)	siʔyaʔilch ( <b>Klallam</b> ); ʔaʔadakqii ( <b>Ditidaht</b> ) ‘fire on the top part’	Mesic open forests, thickets, meadows, roadsides, burns, clearings and waste places in all vegetation zones	Technology: Stalks used as a fibre in clothing as the warp fibre for dog wool blankets, including the Pithy inner part of young shoots eaten in spring; Deer who browse on fireweed have sweeter meat
<i>Clinopodium douglasii</i> – Yerba buena (Lamiaceae – Mint family)	til-ilhch	Mesic to dry open coniferous forests in the lowland and montane zones	Food: Leaves used as a tea, thought to be good for blood, good smelling
<i>Conioselinum gmelinii</i> – Pacific hemlock-parsley (Apiaceae – Parsley family)	Shewuq ( <b>Hul’qumi’num</b> )	Moist to mesic coastal bluffs, sandy beaches, tidal marshes and bog woodlands in the lowland zone; common along the coast in BC	Food: root vegetable; short taproot can be cooked and eaten similar to a garden carrot
<i>Cornus canadensis</i> – Bunchberry (Cornaceae – Dogwood family)	hast’aach ‘bright crotch’ ( <b>Ditidaht</b> )	rotten logs and bases of cedar trees in moist clearings and open forests Jordon Meadows	Food: Berries eaten raw occasionally
<i>Fragaria</i> spp. – wild strawberries ( <i>Fragaria chiloensis</i> , <i>F. vesca</i> ;; <i>F. virginiana</i> ) (Rosaceae – Rose family)	t’il’əqʷ ( <i>berries</i> ) ( <b>Songish</b> ); t’il’əqʷ-łch ( <i>plant</i> ) ( <i>all wild strawberries</i> )	<i>F. chiloensis</i> is found on upper beaches, and coastal rocky areas; the other species are found in open woods and clearings	Food: Berries eaten fresh; dried leaves made into a beverage tea
<i>Fritillaria affinis</i> – Chocolate lily (Liliaceae – Lily family)	ts’áliqʷ; stł’əłts’əłəqʷ’əs	Dry to mesic grassy bluffs, meadows and open forests in the lowland and steppe to lower subalpine zones	Food: Bulbs steamed (pit cooked) and eaten as a source of carbohydrates
<i>Fritillaria camschatcensis</i> – Northern riceroot, Mission bells, "Indian rice" (Liliaceae – Lily family)	ts’áliqʷ; stł’əłts’əłəqʷ’əs; kʷaxapx̄	Moist tideflats, meadows, open forests, rocky beaches and streambanks in the lowland to subalpine zones Jordon Meadows	Food: Bulblets steamed (pit cooked) and eaten as a source of carbohydrates
<i>Goodyera oblongifolia</i> – Western rattlesnake plantain (Orchidaceae – Orchid family)	skʷ’əłkʷ’əłəx ‘it’s got spots’	Dry to moist, mossy forests in the lowland, and montane zones	Medicine: Leaves chewed and applied to blisters and sores. Salve can be applied to sore muscles. Leaves can also be used in a tea infusion to soothe sore throats
<i>Grasses, general</i>	sáxʷəl ( <i>grass, gen.</i> ); ( <i>Note: wheat is ləwan: Raphia farinifera</i> – sqʷáthən)	Various open canopy, meadows and grassland habitats	Technology: Used as a fuel and for laying food on. Used in twining and basketry

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<i>Heracleum maximum</i> – Cow-parsnip (Apiaceae – Parsley family)	yáɫəʔ	Moist openings and meadows, low to high elevations	Food: Young budstalks and leafstalks peeled and eaten in spring, dipped in sugar
<i>Leymus mollis</i> – American or wild dune grass (Poaceae – Grass family)	słək <sup>w</sup> ey', słək <sup>w</sup> eʔi (see also under <i>Grass, gen.</i> )	Moist to mesic sandy or gravelly beaches and shoreline forests in the lowland zone; common in coastal BC	Technology: tough green leaves were attached to the sides and bottom of the leads of reef nets and willow fish traps to camouflage and lead fish into the nets
<i>Lilium columbianum</i> – tiger lily (Liliaceae – Lily family)	ts'ág <sup>w</sup> it	Mesic open forests, roadsides, clearings, thickets and meadows in the lowland and steppe to alpine zones	Food: Bulbs steamed and eaten
<i>Lonicera ciliosa</i> – Orange honeysuckle (Caprifoliaceae – Honeysuckle family)	q'ítəʔəy'n-əɫp OR q'ít'ə 'swing'; OR q'ít'ə ʔə tsə spəlq <sup>w</sup> it <sup>th</sup> əʔ 'swing of the screech owl/ghost'	Mesic to dry thickets in the lowland and montane regions. Grows on trees and stumps	Food: Children sometimes enjoy the nectar of the flowers by biting into the nectar pouch and sucking out the sweet fluid. Medicine: Strong love medicine (makes you want to cling to someone just as the vine clings around the tree)
<i>Lomatium nudicaule</i> – Wild Parsley (Apiaceae – Parsley family)	q'əx <sup>m</sup> ín; cf. sq'əx 'to put a curse on someone'	Dry, open or sparsely treed sites; low to middle elevations; scattered	Medicine/ceremonial: Important medicinal herb. Also used ceremonially, such as the First Salmon Ceremony and boiled on stove to purify a house; prevents people from causing a curse; protective
<i>Lysichiton americanus</i> – Skunk-cabbage (Araceae – Arum family)	t <sup>th</sup> ák <sup>w</sup> ʔiʔ	Swamps, wet ditches and moist forests in the lowland and montane zones	Technology: Leaves used to wrap food in pit cooks; "Roots" formerly cooked to flour-like consistency and eaten
<i>Maianthemum dilatatum</i> – wild lily-of-the-valley, or false lily-of-the-valley (Liliaceae – Lily family)	x'xkón'e (Lummi)	Mesic to wet forests in the lowland and montane zones	Medicine: Leaves chewed and applied to wounds to cleanse and heal
<i>Monotropa uniflora</i> – Ghost pipe, or Indian-pipe (Ericaceae – Heath family)	shiwəʔ ʔə tɫ' stqeyəʔ 'wolf's urine'	Mesic to moist forests in the lowland and montane zones	Medicine: boiled in water and then rubbed on to muscles that require strengthening
<i>Oplopanax horridus</i> – Devil's-club (Araliaceae – Ginseng family)	q <sup>w</sup> áʔp-əɫch	Moist, rich woods, clearings, alluvial plains, lakesides	Medicine: Used as a medicinal tea to use as a blood thinner and to treat a variety of ailments including rheumatism

Species	Straits Salish Names	Habitat	Cultural uses overview
<i>Perideridia gairdneri</i> – Wild caraway (Apiaceae – Parsley family)	sháwəq, sékwəq, shəwqéen? ( <i>wild Daucus carota, and Tanacetum vulgare</i> ); OR sqəw'théen; OR seʔkwəq ( <i>poss. also Conioselinum</i> )	Moist to dry meadows and woodlands in the lowland and montane zones	Food: People ate the roots in large quantities, raw or steamed in pits
<i>Plantago major</i> – Broadleaved plantain, or common plantain (Plantaginaceae – Plantain family)	słéwən ʔə tsə sʔəʔénəx <sup>w</sup> 'mat/mattress/bed of the frog'	Salt marshes, upper beaches, tidal flats	Medicine: Leaves chewed and applied to wounds to cleanse and heal
<i>Rumex aquaticus</i> - Indian rhubarb (Polygonaceae – Buckwheat family)	t'əmásə, t'maásə, t'am'asə	Moist open forests, thickets, lake edges and shorelines	Food: Young budstalks and leafstalks peeled and eaten in spring
<i>Schoenoplectus acutus</i> – Tule, Round-stem bulrush (Cyperaceae – Sedge family)	skwaləl'	River banks, flood plains, lake edges	Technology: Leaves used in basketry and mat making and cordage
<i>Trifolium wormskioldii</i> – Springbank clover (Fabaceae – Pea family)	k <sup>w</sup> łái'shən	Salt marshes, upper beaches, tidal flats	Roots formerly steamed and eaten; carefully cultivated
<i>Typha latifolia</i> – Cattail (Typhaceae – Cattail family)	st <sup>th</sup> éʔqən 'something with hair on the top'; słéwən 'wall mat, cattail mat'	Rich, moist soil in disturbed sites, esp. around villages	Technology: leaves used in basketry and mat making (for sleeping mats, room dividers, seasonal house walls); fresh shoots eaten in Spring
<i>Urtica dioica</i> – Stinging nettle (Urticaceae – Nettle family)	ts'áx, t <sup>th</sup> əx-t <sup>th</sup> əx; OR t <sup>th</sup> əxtən 'poison/stinging'	Moist, rich woods, clearings, alluvial plains, lakesides	Food: fresh leaves were made into a beverage tea. Technology: Used to make cordage and other fibres, including warp fibres for weavings
<i>Veratrum viride</i> – False hellebore (Liliaceae – Lily family)	q <sup>w</sup> ən-əlp	Moist to wet meadows, streambanks, swamps, thickets and open forests from the lowland to alpine zones	Medicine: Extremely poisonous. Used by steeping the rootstocks in a bath and soaking in it
<i>Vicia nigricans</i> ssp. <i>gigantea</i> – giant vetch (Fabaceae – Pea family)	(s)nən'x <sup>w</sup> ł-łłch 'canoe plant'; OR t'əlngəx <sup>w</sup> él'chəng (cf. st'élngəx <sup>w</sup> 'medicine' – when used as a hair tonic)	Moist to mesic upper beaches, streambanks, meadows, clearings, thickets, forest edges and openings in the lowland zone	Medicine: used by canoe pullers for protection and strengthening. Used as a hair tonic and bathing



Appendix C: Sample Area of Plant Species of Cultural Significance to T'Sou-ke: Indicator Species by Ecosystem (Meidinger et al., 1998)

#	Site Code	Site Series	BEC/Variant	Habitat Zone	Plant Species of Cultural Significance: Indicator Species		
					Tree Layer	Shrub Layer	Herb Layer
1	AF1	BaCw-Foam flower  Amabilis fir-Western redcedar-Foamflower	CWH mm1	3	( <i>Abies amabilis</i> ) amabilis fir ( <i>Tsuga heterophylla</i> ) western hemlock ( <i>Thuja plicata</i> ) western redcedar ( <i>Pseudotsuga menziesii</i> ) Douglas-fir	( <i>Mahonia nervosa</i> ) dull Oregon-grape ( <i>Rubus spectabilis</i> ) salmonberry ( <i>Vaccinium parvifolium</i> ) red huckleberry ( <i>Vaccinium alaskaense</i> ) Alaska blueberry	( <i>Achylys triphylla</i> ) vanilla leaf ( <i>Athyrium filis-femina</i> ) lady fern ( <i>Blechnum spicant</i> ) deer fern ( <i>Cornus canadensis</i> ) bunchberry ( <i>Polystichum munitum</i> ) sword fern
2	AF2	BaCw-Foam flower  Amabilis fir-Western redcedar-Foamflower	CWH mm2	3	( <i>Abies amabilis</i> ) amabilis fir ( <i>Chamaecyparis nootkatensis</i> ) yellow cedar ( <i>Pseudotsuga menziesii</i> ) Douglas-fir ( <i>Thuja plicata</i> ) western redcedar ( <i>Tsuga heterophylla</i> ) western hemlock	( <i>Rubus spectabilis</i> )-salmonberry ( <i>Vaccinium alaskaense</i> ) Alaska blueberry ( <i>Vaccinium parvifolium</i> ) red huckleberry	( <i>Achylys triphylla</i> )—vanilla leaf ( <i>Athyrium filis-femina</i> ) lady fern ( <i>Blechnum spicant</i> )—deer fern ( <i>Polystichum munitum</i> )—sword fern
3	AM	Arbutus - Hairy manzanita	CWH xm1	1	( <i>Arbutus menziesii</i> ) arbutus ( <i>Pinus contorta</i> ) lodgepole pine ( <i>Pseudotsuga menziesii</i> ) Douglas-fir ( <i>Tsuga heterophylla</i> ) western hemlock	( <i>Gaultheria shallon</i> ) salal ( <i>Holodiscus discolor</i> ) oceanspray ( <i>Mahonia aquifolium</i> ) tall Oregon-grape	( <i>Achillea millefolium</i> ) yarrow ( <i>Camassia quamish</i> ) common camas ( <i>Fragaria</i> spp. <i>F. vesca</i> ; <i>F. virginiana</i> ) wild strawberries ( <i>Lilium columbianum</i> ) tiger lily ( <i>Plantago major</i> ) rattlesnake plantain ( <i>Zigadenus venenosus</i> ) meadow death-camas
4	AP1	HwBa - Pipecleaner moss  Western hemlock – Amabilis fir-Pipecleaner moss	CWH mm1	3	( <i>Abies amabilis</i> ) amabilis fir ( <i>Pseudotsuga menziesii</i> ) Douglas-fir ( <i>Thuja plicata</i> ) western redcedar ( <i>Tsuga heterophylla</i> ) western hemlock	( <i>Gaultheria shallon</i> ) salal ( <i>Mahonia nervosa</i> ) dull Oregon-grape ( <i>Vaccinium alaskaense</i> ) Alaska blueberry ( <i>Vaccinium parvifolium</i> ) red huckleberry	( <i>Achylys triphylla</i> ) vanilla leaf ( <i>Cornus canadensis</i> ) bunchberry ( <i>Blechnum spicant</i> ) deer fern
5	AP2	HwBa - Pipecleaner moss  Western hemlock – Amabilis fir-Pipecleaner moss	CWH mm2	3/4	( <i>Abies amabilis</i> ) amabilis fir ( <i>Chamaecyparis nootkatensis</i> ) yellow cedar ( <i>Pseudotsuga menziesii</i> ) Douglas-fir ( <i>Thuja plicata</i> ) western redcedar ( <i>Tsuga heterophylla</i> ) western hemlock ( <i>Tsuga mertensiana</i> ) mountain hemlock	( <i>Gaultheria shallon</i> ) salal ( <i>Vaccinium alaskaense</i> ) Alaska blueberry ( <i>Vaccinium membranaceum</i> ) black huckleberry ( <i>Vaccinium ovalifolium</i> ) oval leaved blueberry ( <i>Vaccinium parvifolium</i> ) red huckleberry	( <i>Achylys triphylla</i> ) vanilla leaf

#	Site Code	Site Series	BEC/ Variant	Habitat Zone	Plant Species of Cultural Significance: Indicator Species		
					Tree Layer	Shrub Layer	Herb Layer
6	AS1	BaCw-Salmonberry  Amabilis fir-Western redcedar-Salmonberry	CWH mm1	6	( <i>Abies amabilis</i> ) amabilis fir ( <i>Tsuga heterophylla</i> ) western hemlock ( <i>Thuja plicata</i> ) western redcedar ( <i>Pseudotsuga menziesii</i> ) Douglas-fir	( <i>Gaultheria shallon</i> ) salal ( <i>Rubus spectabilis</i> ) salmonberry ( <i>Vaccinium alaskaense</i> ) Alaska blueberry ( <i>Vaccinium parvifolium</i> ) red huckleberry	( <i>Achylys triphylla</i> ) vanilla leaf ( <i>Adiantum aleuticum</i> ) maidenhair fern ( <i>Athyrium filis-femina</i> ) lady fern ( <i>Blechnum spicant</i> ) deer fern ( <i>Cornus canadensis</i> ) bunchberry ( <i>Oplopanax horridus</i> ) devils club ( <i>Polystichum munitum</i> ) sword fern
7	AS2	BaCw-Salmonberry  Amabilis fir-Western redcedar-Salmonberry	CWH mm2	5	( <i>Abies amabilis</i> ) amabilis fir ( <i>Chamaecyparis nootkatensis</i> ) yellow cedar ( <i>Thuja plicata</i> ) western redcedar ( <i>Tsuga heterophylla</i> ) western hemlock	( <i>Vaccinium alaskaense</i> ) Alaska blueberry ( <i>Rubus spectabilis</i> ) salmonberry ( <i>Vaccinium parvifolium</i> ) red huckleberry ( <i>Vaccinium ovalifolium</i> ) oval leaved blueberry	( <i>Achylys triphylla</i> ) vanilla leaf ( <i>Athyrium filis-femina</i> ) lady fern ( <i>Blechnum spicant</i> ) deer fern ( <i>Oplopanax horridus</i> ) devils club ( <i>Veratrum viride</i> ) Indian hellebore
8	CD	Act - Red-osier dogwood  Black cottonwood-Red-osier dogwood	CWH xm1	2	( <i>Abies amabilis</i> ) amabilis fir ( <i>Acer macrophyllum</i> ) bigleaf maple ( <i>Alnus rubra</i> ) red alder ( <i>Picea sitchensis</i> ) Sitka spruce ( <i>Populus balsamifera</i> ) black cottonwood ( <i>Thuja plicata</i> ) western redcedar	( <i>Cornus stolonifera</i> ) redosier dogwood ( <i>Lonicera involucrata</i> ) black twinberry ( <i>Rubus spectabilis</i> ) salmonberry ( <i>Symphoricarpos albus</i> ) snowberry ( <i>Vaccinium parvifolium</i> ) red huckleberry	( <i>Equisetum telmateia</i> ) – giant horsetail ( <i>Maianthemum dilatatum</i> ) false lily-of-the-valley
9	CS	Cw – Slough Sedge  Western redcedar-Slough sedge	CWH xm1	6	( <i>Abies grandis</i> ) grand fir ( <i>Alnus rubra</i> ) red alder ( <i>Populus balsamifera</i> ) black cottonwood ( <i>Thuja plicata</i> ) western redcedar	( <i>Cornus stolonifera</i> ) red-osier dogwood ( <i>Lonicera involucrata</i> ) black twinberry ( <i>Oemleria cerasiformis</i> ) June plum ( <i>Ribes divaricatum</i> ) black gooseberry ( <i>Rubus parviflorus</i> ) thimbleberry ( <i>Rubus spectabilis</i> ) salmonberry ( <i>Vaccinium parvifolium</i> ) red huckleberry	( <i>Achylys triphylla</i> ) vanilla leaf ( <i>Athyrium filis-femina</i> ) lady fern ( <i>Carex obnupta</i> ) slough sedge ( <i>Chamerion angustifolium</i> ) fireweed ( <i>Conioselinum gmelinii</i> ) Pacific hemlock-parsley ( <i>Equisetum telmateia</i> ) – giant horsetail ( <i>Pteridium aquilinum</i> ) bracken fern ( <i>Polystichum munitum</i> ) sword fern ( <i>Maianthemum dilatatum</i> ) false lily-of-the-valley
10	DA	FdPI – Arbutus	CDF mm	2	( <i>Arbutus menziesii</i> ) arbutus ( <i>Pseudotsuga menziesii</i> ) Douglas-fir ( <i>Quercus garryana</i> ) Garry oak	( <i>Gaultheria shallon</i> ) salal ( <i>Mahonia nervosa</i> ) dull Oregon-grape ( <i>Holodiscus discolor</i> ) oceanspray ( <i>Rosa gymnocarpa</i> ) baldhip rose ( <i>Symphoricarpos albus</i> ) snowberry	( <i>Lonicera ciliosa</i> ) orange honeysuckle ( <i>Polystichum munitum</i> ) sword fern
		<b>Site Series</b>			<b>Plant Species of Cultural Significance: Indicator Species</b>		

#	Site Code		BEC/Variant	Habitat Zone	Tree Layer	Shrub Layer	Herb Layer
1 1	DC	FdPI – Cladina	CWH xm1	2	( <i>Arbutus menziesii</i> ) arbutus ( <i>Pinus contorta</i> ) lodgepole pine ( <i>Pseudotsuga menziesii</i> ) Douglas-fir	( <i>Arctostaphylos uva-ursi</i> ) kinnikinnick ( <i>Gaultheria shallon</i> ) salal ( <i>Holodiscus discolor</i> ) oceanspray. ( <i>Mahonia nervosa</i> ) dull Oregon-grape ( <i>Rosa gymnocarpa</i> ) baldhip rose ( <i>Rubus ursinus</i> ) trailing blackberry ( <i>Vaccinium parvifolium</i> ) red huckleberry	( <i>Achillea millefolium</i> ) yarrow ( <i>Chamerion angustifolium</i> ) fireweed ( <i>Pteridium aquilinum</i> ) bracken fern
1 2	DF	Fd – Sword fern	CWH xm1	2	( <i>Pseudotsuga menziesii</i> ) Douglas-fir ( <i>Tsuga heterophylla</i> ) western hemlock	( <i>Gaultheria shallon</i> ) salal ( <i>Holodiscus discolor</i> ) oceanspray ( <i>Mahonia nervosa</i> ) dull Oregon-grape ( <i>Rosa gymnocarpa</i> ) baldhip rose ( <i>Rubus ursinus</i> ) trailing blackberry ( <i>Symphoricarpos albus</i> ) snowberry ( <i>Vaccinium parvifolium</i> ) red huckleberry	( <i>Chamerion angustifolium</i> ) fireweed ( <i>Polystichum munitum</i> ) sword fern ( <i>Polypodium glycyrrhiza</i> ) licorice fern ( <i>Pteridium aquilinum</i> ) bracken fern
1 3	DM	DAM					
1 4	DS1	FdHw – Salal	CWH xm1	2	( <i>Alnus rubra</i> ) red alder ( <i>Arbutus menziesii</i> ) arbutus ( <i>Pseudotsuga menziesii</i> ) Douglas-fir ( <i>Thuja plicata</i> ) western redcedar ( <i>Tsuga heterophylla</i> ) western hemlock	<i>Gaultheria shallon</i> ) salal ( <i>Holodiscus discolor</i> ) oceanspray ( <i>Mahonia nervosa</i> ) dull Oregon-grape ( <i>Rosa gymnocarpa</i> ) baldhip rose ( <i>Rubus ursinus</i> ) trailing blackberry ( <i>Vaccinium parvifolium</i> ) red huckleberrys	( <i>Achylys triphylla</i> ) vanilla leaf ( <i>Chamerion angustifolium</i> ) fireweed ( <i>Polystichum munitum</i> ) sword fern ( <i>Pteridium aquilinum</i> ) bracken fern
1 5	DS2	FdHw – Salal  Douglas fir – western hemlock - Salal	CWH mm1	2/3	( <i>Pinus contorta</i> ) lodgepole pine ( <i>Pseudotsuga menziesii</i> ) Douglas-fir ( <i>Thuja plicata</i> ) western redcedar	( <i>Gaultheria shallon</i> ) salal ( <i>Vaccinium alaskaense</i> ) Alaska blueberry ( <i>Vaccinium membranaceum</i> ) black huckleberry ( <i>Vaccinium parvifolium</i> ) red huckleberry	
1 6	DS3	FdHw – Salal  Douglas fir – western hemlock - Salal	CWH mm2	3	( <i>Pinus contorta</i> ) lodgepole pine ( <i>Pseudotsuga menziesii</i> ) Douglas-fir ( <i>Thuja plicata</i> ) western redcedar ( <i>Tsuga mertensiana</i> ) mountain hemlock	( <i>Gaultheria shallon</i> ) salal ( <i>Vaccinium alaskaense</i> ) Alaska blueberry ( <i>Vaccinium membranaceum</i> ) black huckleberry ( <i>Vaccinium parvifolium</i> ) red huckleberry	
1 7	ES	Exposed Soil	CWH xm		( <i>Alnus rubra</i> ) red alder		( <i>Chamerion angustifolium</i> ) fireweed

#	Site Code	Site Series	BEC/ Variant	Habitat Zone	Plant Species of Cultural Significance: Indicator Species		
					Tree Layer	Shrub Layer	Herb Layer
18	FC	Fescue – Common camas	CWH xm1	1	( <i>Arbutus menziesii</i> ) arbutus ( <i>Pseudotsuga menziesii</i> ) Douglas-fir ( <i>Quercus garryana</i> ) Garry oak	( <i>Rosa gymnocarpa</i> ) baldhip rose ( <i>Rosa nutkana</i> ) Nootka rose ( <i>Symphoricarpos albus</i> ) snowberry	( <i>Achillea millefolium</i> ) yarrow ( <i>Brodiaea coronaria</i> ) harvest brodiaea ( <i>Camassia quamish</i> ) common camas ( <i>Fragaria</i> spp. <i>F. chiloensis</i> , <i>F. vesca</i> ,; <i>F. virginiana</i> ) wild strawberries ( <i>Lomatium</i> spp.) ( <i>Zigadenus venenosus</i> ) meadow death-camas
19	HD1	HwBa - Deer fern Western hemlock- Amabilis fir- Deer fern	CWH mm1	2	( <i>Abies amabilis</i> ) amabilis fir ( <i>Pseudotsuga menziesii</i> ) Douglas-fir ( <i>Thuja plicata</i> ) western redcedar ( <i>Tsuga heterophylla</i> ) western hemlock	( <i>Vaccinium alaskaense</i> ) Alaska blueberry ( <i>Vaccinium parvifolium</i> ) red huckleberry ( <i>Vaccinium ovalifolium</i> ) oval leaved blueberry	( <i>Achlyls triphylla</i> ) vanilla leaf ( <i>Cornus canadensis</i> ) bunchberry ( <i>Blechnum spicant</i> ) deer fern
20	HD2	HwBa - Deer fern Western hemlock- Amabilis fir- Deer fern	CWH mm2	2	( <i>Abies amabilis</i> ) amabilis fir ( <i>Chamaecyparis nootkatensis</i> ) yellow cedar ( <i>Pseudotsuga menziesii</i> ) Douglas-fir ( <i>Thuja plicata</i> ) western redcedar ( <i>Tsuga heterophylla</i> ) western hemlock	( <i>Vaccinium alaskaense</i> ) Alaska blueberry ( <i>Vaccinium parvifolium</i> ) red huckleberry ( <i>Vaccinium ovalifolium</i> ) oval leaved blueberry	( <i>Achlyls triphylla</i> ) vanilla leaf ( <i>Cornus canadensis</i> ) bunchberry ( <i>Blechnum spicant</i> ) deer fern
21	HK	HwFd – Kindbergia Western hemlock- Douglas-fir- Oregon beaked moss	CWH xm1	3	( <i>Alnus rubra</i> ) red alder ( <i>Pinus contorta</i> ) lodgepole pine ( <i>Pseudotsuga menziesii</i> ) Douglas-fir ( <i>Thuja plicata</i> ) western redcedar ( <i>Tsuga heterophylla</i> ) western hemlock	( <i>Gaultheria shallon</i> ) salal ( <i>Holodiscus discolor</i> ) oceanspray ( <i>Mahonia nervosa</i> ) dull Oregon-grape ( <i>Rosa gymnocarpa</i> ) baldhip rose ( <i>Vaccinium parvifolium</i> ) red huckleberry	( <i>Achlyls triphylla</i> ) vanilla leaf ( <i>Chamerion angustifolium</i> ) fireweed ( <i>Maianthemum dilatatum</i> ) false lily-of-the-valley ( <i>Polystichum munitum</i> ) sword fern ( <i>Urtica dioica</i> ) stinging nettle
22	HL	Hardhack- Labrador Tea	CWH xm1	6	( <i>Pseudotsuga menziesii</i> ) Douglas-fir ( <i>Thuja plicata</i> ) western redcedar ( <i>Tsuga heterophylla</i> ) western hemlock		( <i>Carex obnupta</i> ) Slough sedge ( <i>Menzies spirea</i> ) hardhack ( <i>Rhododendron groenlandicum</i> ) Labrador tea

#	Site Code	Site Series	BEC/ Variant	Habitat Zone	Plant Species of Cultural Significance: Indicator Species		
					Tree Layer	Shrub Layer	Herb Layer
2 3	HS1	HwCw – Salal  Western Hemlock- Western redcedar- Salal	CWH mm1	3	<i>(Pseudotsuga menziesii)</i> Douglas-fir <i>(Thuja plicata)</i> western redcedar <i>(Tsuga heterophylla)</i> western hemlock	<i>(Gaultheria shallon)</i> salal <i>(Mahonia nervosa)</i> dull Oregon- grape <i>(Vaccinium alaskaense)</i> Alaska blueberry <i>(Vaccinium parvifolium)</i> red huckleberry	<i>(Achylys triphylla)</i> vanilla leaf <i>(Cornus canadensis)</i> bunchberry <i>(Polystichum munitum)</i> sword fern
2 4	HS2	HwCw – Salal  Western Hemlock- Western redcedar- Salal	CWH mm2	3	<i>(Abies amabilis)</i> amabilis fir <i>(Chamaecyparis nootkatensis)</i> yellow cedar <i>(Pseudotsuga menziesii)</i> Douglas-fir <i>(Thuja plicata)</i> western redcedar <i>(Tsuga heterophylla)</i> western hemlock	<i>(Gaultheria shallon)</i> salal <i>(Vaccinium alaskaense)</i> Alaska blueberry <i>(Vaccinium ovalifolium)</i> oval leaved blueberry <i>(Vaccinium parvifolium)</i> red huckleberry	<i>(Polystichum munitum)</i> sword fern
2 5	LS	PI - Sphagnums Lodgepole pine - Sphagnums	CWH xm1	6	<i>(Pinus contorta)</i> lodgepole pine <i>(Thuja plicata)</i> western redcedar <i>(Tsuga heterophylla)</i> western hemlock	<i>(Gaultheria shallon)</i> salal <i>(Vaccinium oxycoccos)</i> bog cranberry <i>(Vaccinium parvifolium)</i> red huckleberry	<i>(Blechnum spicant)</i> deer fern <i>(Carex obnupta)</i> slough sedge <i>(Equisetum telmateia)</i> giant horsetail <i>(Juncus effuses)</i> common rush <i>(Kalmia microphylla)</i> western bog-laurel <i>(Lysichiton americanus)</i> skunk cabbage <i>(Pteridium aquilinum)</i> bracken fern <i>(Rhododendron groenlandicum)</i> Labrador tea
2 6	RC1	CwSs-Skunk cabbage  Western redcedar-Sitka spruce-skunk cabbage	CWH xm1	5	<i>(Abies grandis)</i> grand fir <i>(Acer macrophyllum)</i> bigleaf maple <i>(Alnus rubra)</i> red alder <i>(Picea sitchensis)</i> Sitka spruce <i>(Pseudotsuga menziesii)</i> Douglas-fir <i>(Tsuga heterophylla)</i> western hemlock <i>(Thuja plicata)</i> western redcedar	<i>(Gaultheria shallon)</i> salal <i>(Rubus parviflorus)</i> thimbleberry <i>(Rubus spectabilis)</i> salmonberry <i>(Vaccinium parvifolium)</i> red huckleberry	<i>(Achylys triphylla)</i> vanilla leaf <i>(Athyrum filis-femina)</i> lady fern <i>(Blechnum spicant)</i> deer fern <i>(Carex spp)</i> sedge spp <i>(Conioselinum gmelinii)</i> Pacific hemlock-parsley <i>(Equisetum telmateia)</i> giant horsetail <i>(Lysichiton americanus)</i> skunk cabbage <i>(Polystichum munitum)</i> sword fern <i>(Veratrum viride)</i> Indian hellebore

#	Site Code	Site Series	BEC/Variant	Habitat Zone	Plant Species of Cultural Significance: Indicator Species		
					Tree Layer	Shrub Layer	Herb Layer
27	RC2	CwSs-Skunk cabbage Western redcedar-Sitka spruce-skunk cabbage	CWH mm1	5	( <i>Abies amabilis</i> ) amabilis fir ( <i>Thuja plicata</i> ) western redcedar ( <i>Tsuga heterophylla</i> ) western hemlock	( <i>Rubus spectabilis</i> ) salmonberry ( <i>Vaccinium alaskaense</i> ) Alaska blueberry ( <i>Vaccinium ovalifolium</i> ) oval leaved blueberry	( <i>Athyrium filis-femina</i> ) lady fern ( <i>Blechnum spicant</i> ) deer fern ( <i>Carex</i> spp) sedge spp ( <i>Cornus canadensis</i> ) bunchberry ( <i>Lysichiton americanus</i> ) skunk cabbage
27	RC3	CwSs-Skunk cabbage Western redcedar-Sitka spruce-skunk cabbage	CWH mm2	5	( <i>Abies amabilis</i> ) amabilis fir ( <i>Tsuga heterophylla</i> ) western hemlock ( <i>Tsuga mertensiana</i> ) mountain hemlock	( <i>Rubus spectabilis</i> ) salmonberry ( <i>Vaccinium alaskaense</i> ) Alaska blueberry ( <i>Vaccinium ovalifolium</i> ) oval leaved blueberry ( <i>Vaccinium parvifolium</i> ) red huckleberry	( <i>Achylys triphylla</i> ) vanilla leaf ( <i>Athyrium filis-femina</i> ) lady fern ( <i>Blechnum spicant</i> ) deer fern ( <i>Carex</i> spp) sedge spp ( <i>Lysichiton americanus</i> ) skunk cabbage ( <i>Veratrum viride</i> ) Indian hellebore
	RE	RESERVOIR					
28	RF	Cw-Foamflower (Western redcedar-Foamflower)	CWH xm1	2/3	( <i>Abies grandis</i> ) grand fir ( <i>Acer macrophyllum</i> ) bigleaf maple ( <i>Alnus rubra</i> ) red alder ( <i>Arbutus menziesii</i> ) arbutus ( <i>Pseudotsuga menziesii</i> ) Douglas-fir ( <i>Thuja plicata</i> ) western redcedar ( <i>Tsuga heterophylla</i> ) western hemlock	( <i>Gaultheria shallon</i> ) salal ( <i>Mahonia nervosa</i> ) dull Oregon-grape ( <i>Rosa nutkana</i> ) Nootka rose ( <i>Rubus spectabilis</i> ) salmonberry ( <i>Rubus parviflorus</i> ) thimbleberry ( <i>Vaccinium parvifolium</i> ) red huckleberry	( <i>Achylys triphylla</i> ) vanilla leaf ( <i>Athyrium filis-femina</i> ) lady fern ( <i>Chamerion angustifolium</i> ) fireweed ( <i>Dryopteris expansa</i> ) spiny woodfern ( <i>Equisetum telmateia</i> ) giant horsetail <i>Oplopanax horridus</i> ) devils club ( <i>Polystichum munitum</i> ) sword fern ( <i>Pteridium aquilinum</i> ) bracken fern ( <i>Urtica dioica</i> ) stinging nettle
29	RI	Cw - Sword fern Western redcedar- Sword fern	CWH xm2	2	( <i>Alnus rubra</i> ) red alder ( <i>Pseudotsuga menziesii</i> ) Douglas-fir ( <i>Thuja plicata</i> ) western redcedar ( <i>Tsuga heterophylla</i> ) western hemlock	( <i>Gaultheria shallon</i> ) salal <i>Holodiscus discolor</i> ) oceanspray ( <i>Rosa gymnocarpa</i> ) baldhip rose ( <i>Mahonia nervosa</i> ) dull Oregon-grape ( <i>Vaccinium parvifolium</i> ) red huckleberry	( <i>Achylys triphylla</i> ) vanilla leaf ( <i>Polystichum munitum</i> ) sword fern
30	RS	Cw-Sword fern Western redcedar- Sword fern	CWH xm2	2	( <i>Abies grandis</i> ) grand fir ( <i>Alnus rubra</i> ) red alder ( <i>Pseudotsuga menziesii</i> ) Douglas-fir ( <i>Thuja plicata</i> ) western redcedar ( <i>Tsuga heterophylla</i> ) western hemlock	( <i>Gaultheria shallon</i> ) salal ( <i>Holodiscus discolor</i> ) oceanspray ( <i>Mahonia nervosa</i> ) dull Oregon-grape ( <i>Rosa gymnocarpa</i> ) baldhip rose ( <i>Rubus spectabilis</i> ) salmonberry ( <i>Rubus ursinus</i> ) trailing blackberry ( <i>Vaccinium parvifolium</i> ) red huckleberry	( <i>Achylys triphylla</i> ) vanilla leaf ( <i>Chamerion angustifolium</i> ) fireweed ( <i>Maianthemum dilatatum</i> ) false lily-of-the-valley ( <i>Monotropa uniflora</i> ) – ghost pipe ( <i>Polystichum munitum</i> ) sword fern ( <i>Pteridium aquilinum</i> ) bracken fern

#	Site Code	Site Series	BEC/Variant	Habitat Zone	Plant Species of Cultural Significance: Indicator Species		
					Tree Layer	Shrub Layer	Herb Layer
31	SC	Selaginella-Cladina	CWHxm1	1	<i>(Arbutus menziesii)</i> arbutus <i>(Pseudotsuga menziesii)</i> Douglas-fir	<i>(Arctostaphylos uva-ursi)</i> kinnikinnick <i>(Holodiscus discolor)</i> oceanspray	<i>(Achillea millefolium)</i> yarrow <i>(Camassia quamish)</i> common camas <i>(Lomatium utriculatum)</i> spring gold
32	SI	Sitka spruce - Salmonberry	CWHxm1	5	<i>(Acer macrophyllum)</i> bigleaf maple <i>(Alnus rubra)</i> red alder <i>(Picea sitchensis)</i> Sitka spruce <i>(Populus balsamifera)</i> black cottonwood <i>(Thuja plicata)</i> western redcedar	<i>(Ribes bracteosum)</i> stink currant <i>(Rubus spectabilis)</i> salmonberry <i>(Symphoricarpos albus)</i> snowberry	<i>(Achylys triphylla)</i> vanilla leaf <i>(Athyrum filis-femina)</i> lady fern <i>(Dryopteris expansa)</i> spiny woodfern <i>(Equisetum telmateia)</i> giant horsetail <i>(Oplopanax horridus)</i> devils club <i>(Maianthemum dilatatum)</i> false lily-of-the-valley <i>(Polystichum munitum)</i> sword fern
33	SS	Salmonberry	CWHxm1	5	<i>(Acer macrophyllum)</i> bigleaf maple <i>(Alnus rubra)</i> red alder <i>(Picea sitchensis)</i> Sitka spruce <i>(Populus balsamifera)</i> black cottonwood <i>(Thuja plicata)</i> western redcedar	<i>(Ribes bracteosum)</i> stink currant <i>(Rubus spectabilis)</i> salmonberry <i>(Sambucus racemosa)</i> red elderberry <i>(Symphoricarpos albus)</i> snowberry	<i>(Achylys triphylla)</i> vanilla leaf <i>(Athyrum filis-femina)</i> lady fern <i>(Dryopteris expansa)</i> spiny woodfern <i>(Maianthemum dilatatum)</i> false lily-of-the-valley <i>(Oplopanax horridus)</i> devils club <i>(Polystichum munitum)</i> sword fern
34	SW1	Sedge wetland	CWHxm2	6			<i>(Carex obnupta)</i> slough sedge <i>(Conioselinum gmelinii)</i> Pacific hemlock-parsley <i>(Juncus spp.)</i> rush species
35	SW2	Sedge wetland	CWHmm1	6			<i>(Carex obnupta)</i> slough sedge <i>(Conioselinum gmelinii)</i> Pacific hemlock-parsley <i>(Juncus spp.)</i> rush species

Habitat Zones:

1. Meadows, gentle slopes and ridge crests
2. Rainshadow forest
3. Coastal rainforest
4. Montane Forest
5. Riparian zones
6. Freshwater wetlands
7. Estuaries and salt marshes
8. Human occupation beach sites

Appendix D: Culturally Important Plants Present in the Sample Terrestrial Ecosystem Mapping (TEM) Area

Culturally Important Plants Present in the T'Sou-ke Sample TEM Area		
Trees	Shrubs	Herbs
1. ( <i>Abies amabilis</i> ) amabilis fir	1. ( <i>Mahonia nervosa</i> ) dull Oregon-grape	1. ( <i>Achylis triphylla</i> ) vanilla leaf
2. ( <i>Tsuga heterophylla</i> ) western hemlock	2. ( <i>Rubus spectabilis</i> ) salmonberry	2. ( <i>Athyrium filis-femina</i> ) lady fern
3. ( <i>Thuja plicata</i> ) western redcedar	3. ( <i>Vaccinium parvifolium</i> ) red huckleberry	3. ( <i>Blechnum spicant</i> ) deer fern
4. ( <i>Pseudotsuga menziesii</i> ) Douglas-fir	4. ( <i>Vaccinium alaskaense</i> ) Alaska blueberry	4. ( <i>Polystichum munitum</i> ) sword fern
5. ( <i>Chamaecyparis nootkatensis</i> ) yellow cedar	5. ( <i>Rubus spectabilis</i> )-salmonberry	5. ( <i>Achillea millefolium</i> ) yarrow
6. <i>Arbutus menziesii</i> ) arbutus	6. <i>Gaultheria shallon</i> ) salal	6. ( <i>Camassia quamish</i> ) common camas
7. ( <i>Pinus contorta</i> ) lodgepole pine	7. ( <i>Holodiscus discolor</i> ) oceanspray	7. ( <i>Fragaria</i> spp. <i>F. vesca</i> ; <i>F. virginiana</i> ) wild strawberries
8. ( <i>Tsuga mertensiana</i> ) mountain hemlock	8. ( <i>Mahonia aquilifolium</i> ) tall Oregon-grape	8. ( <i>Lilium columbianum</i> ) tiger lily
9. ( <i>Acer macrophyllum</i> ) bigleaf maple	9. ( <i>Vaccinium membranaceum</i> ) black huckleberry	9. ( <i>Plantago major</i> ) rattlesnake plantain
10. ( <i>Alnus rubra</i> ) red alder	10. ( <i>Vaccinium ovalifolium</i> ) oval leaved blueberry	10. ( <i>Zigadenus venenosus</i> ) meadow death-camas
11. ( <i>Picea sitchensis</i> ) Sitka spruce	11. ( <i>Cornus stolonifera</i> ) redosier dogwood	11. <i>Cornus canadensis</i> ) bunchberry
12. ( <i>Populus balsamifera</i> ) black cottonwood	12. ( <i>Lonicera involucrata</i> ) black twinberry	12. ( <i>Adiantum aleuticum</i> ) maidenhair fern
13. ( <i>Abies grandis</i> ) grand fir	13. ( <i>Symphoricarpos albus</i> ) snowberry	13. ( <i>Oplopanax horridus</i> ) devils club
14. ( <i>Quercus garryana</i> ) Garry oak	14. ( <i>Oemleria cerasiformis</i> ) June plum	14. ( <i>Veratrum viride</i> ) Indian hellebore
	15. ( <i>Ribes divaricatum</i> ) black gooseberry	15. ( <i>Equisetum telmateia</i> ) – giant horsetail
	16. ( <i>Rubus parviflorus</i> ) thimbleberry	16. ( <i>Maianthemum dilatatum</i> ) false lily-of-the-valley
	17. ( <i>Rosa gymnocarpa</i> ) baldhip rose	17. <i>Carex obnupta</i> ) slough sedge
	18. ( <i>Arctostaphylos uva-ursi</i> ) kinnikinnick	18. ( <i>Chamerion angustifolium</i> ) fireweed
	19. ( <i>Gaultheria shallon</i> ) salal	19. ( <i>Conioselinum gmelinii</i> ) Pacific hemlock-parsley
	20. ( <i>Rubus ursinus</i> ) trailing blackberry	20. ( <i>Lonicera ciliosa</i> ) orange honeysuckle
	21. ( <i>Ribes bracteosum</i> ) stink currant	21. ( <i>Polypodium glycyrrhiza</i> ) licorice fern
	22. ( <i>Kalmia microphylla</i> ) western bog-laurel	22. ( <i>Pteridium aquilinum</i> ) bracken fern
		23. ( <i>Brodiaea coronaria</i> ) harvest brodiaea
		24. ( <i>Lomatium</i> spp.)
		25. ( <i>Urtica dioica</i> ) stinging nettle
		26. <i>Carex obnupta</i> ) Slough sedge
		27. ( <i>Menzies spirea</i> ) hardhack
		28. ( <i>Rhododendron groenlandicum</i> ) Labrador tea
		29. ( <i>Juncus effuses</i> ) common rush
		30. ( <i>Carex</i> spp) sedge spp
		31. <i>Lysichiton americanus</i> ) skunk cabbage
		32. ( <i>Dryopteris expansa</i> ) spiny woodfern
		33. ( <i>Monotropa uniflora</i> ) – ghost pipe
		34. ( <i>Lomatium utriculatum</i> ) spring gold
		35. ( <i>Juncus</i> spp.) rush species