URBAN VACATION HINTERLANDS: FOUR BRITISH COLUMBIA CITIES AS EXAMPLES

by

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ABSTRACT

The vacations of 991 families from the cities of Kamloops, Vernon, Kelowna, and Penticton were investigated to determine the travel patterns and vacation activities. The data, collected through the use of questionnaires, were analysed on the bases of socio-economic variables and cities of residence in order to define inter-city and inter-class differences, and then statistically tested to determine their significance. The results of the study indicate that few differences of practical significance exist between the sample groups from the four cities, but that the objectives and durations of vacations were related to both occupation and family size. Analysis of the gross directional movements from sample area indicated that significantly non-random patterns existed, but testing of the vacation destination data revealed that the vacation hinterlands of all groups were coincident. Distance exponents obtained from a set of gravity models indicated that distance should not be treated as a continuous factor in the analysis of vacation travel. Vacation equipment ownership was shown to be independent of occupation, family size, and city of residence, while accommodation patterns were independent of the latter.

Examiners:

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July, 1969. J. H. Ross.

CHAPTER I

INTRODUCTION

Within the last century large numbers of rural people have abandoned intimate relationships with the soil and flocked to urban centres to take up new occupations. The monotony and repetition which has been forced upon them as a result of increasing mechanization, combined with increased leisure time and improved means of transportation, have provided these people with reasons and opportunities to leave their urban environment for recreation. This movement

> . . . should be considered as belonging to the wider contemporary phenomenon of population movement to and from the big centers. . . . In the dynamics of city life the demand for recreation represents a reaction against the psychophysical complexity of life introduced by centralization and industrialization and reveals a tendency to reverse the prevailing spatial relations. It is an attempt to balance the centrifugal diffusion . . . in the hope of restoring, of "recreating", health, energy, and mental equilibrium.[1]

The field of recreation has been studied by scholars of many disciplines, usually from one or the other of two viewpoints. There are those who study the subject to determine how recreation benefits the participant (the recreator), and those who wish to determine the value, extent, or implications, of the recreational experiences of the public. The recreation geographer, bound by his discipline to the study of phenomena interacting in their spatial settings, usually studies the distribution and movement of recreators. This study is designed to investigate the vacation travels of a group of residents

(the vacationers) drawn from four medium-sized southern British Columbia cities. Data concerning the subject's 1968 vacations were collected, computer processed and analysed, and then statistically tested by the researcher.

The remainder of this introductory chapter will consist of a review of the literature relevant to the topic, a statement of the problem, the definition of terms to be used in the thesis, and the method to be used in investigating the problem. Chapter Two will be concerned with the four cities and the socio-economic characteristics of the selected subjects, while the third section will discuss the travel patterns observed. The examination of accommodation preferences and vacation activities forms the fourth portion of this thesis, while the summary, conclusions, and implications of the findings constitute Chapter Five.

Review of the Literature

The study of recreation has not been neglected by geographers, who, since the publication of K. C. McMurry's "The Use of Land for Recreation"[2] in 1930, have investigated and discussed a great number of topics. As Wolfe[3] noted, however, the majority of the writings in recreational geography have been those of B. A. and M. A. candidates who later go on to the study of "more serious subjects, such as the distribution of oil refineries in Mesopotamia". Consequently, although the study of recreation undoubtedly encompasses the most central concepts of geography, writings on the subject are difficult to

find in the leading geographic journals. Mitchell[4] notes that only fifty-six appeared between 1930 and 1967. The fact that many recreation geographers are publishing in journals not considered to be 'geographical' probably contributes to this situation.

McMurry,[5] generally conceded to be the first of the recreation geographers, was apparently inspired by the increasing awareness of the limited amount, and consequent spiralling costs, of waterfront recreation land. He set out a role for geographers to play in the conservation battle: mapping and studying the relationships between wildlife and the land in order to make the best possible use of the marginal agricultural areas which were then being abandoned. By 1935 attention had encompassed the rapidly growing phenomenon of tourism. Brown,[6] in the examination of what was "virtually a virgin field" investigated various techniques for estimating the number of tourists visiting a given area, and commented on some of the methods used to determine their expenditures. This was one of the first articles to discuss such methodology, and introduced many of the techniques used today. Carlson,[7] writing in 1938, set out the history of tourism in New Hampshire, recorded the changes in transport patterns attributable to the increasing popularity of the automobile, and discussed the impact of these changes on tourist accommodation preferences and the distribution of summer homes. Then, in accord with the regional approach of the period, he launched into a regional description of the area under study. These early studies set the tone for much of the recreation geography

which was to follow, and are significant as the first to examine one of the more complex of the man-land relationships, the phenomenon of recreation.

Unfortunately, however, they also illustrate the trilogy which recreation geography has become, the often separate fields of recreation land use, tourism, and regional recreation. These emphases have seldom been united into a 'total geography', but have tended to remain as separate entitites which appear consistently in the literature. Unless the three are tied together there would appear to be little hope for the survival of recreation geography among the other geographic fields.

Many of the more recent studies in recreation geography have evolved little beyond that of Carlson. Most can be placed into one of the above-mentioned groups, recreational land use,[8] tourism,[9] and regional recreation,[10] or into a fourth which is characterized by 'state of the union' summaries.[11] An exciting new group dealing with differing levels of perception of recreation resources is now emerging,[12] while works concerned with recreation administration are being published in increasing numbers.[13]

The role that geographers should play has not been a neglected topic. Murphy,[14] has written on this subject, as have Morrison,[15] Wolfe,[16] McMurry and Davis.[17] The essence of these writings indicates that the study of recreation encompasses all aspects of geography. In Wolfe's words:

> Economic geographers can find scope for research in recreation; but so ... can specialists in human, cultural, regional, historical, political, and urban geography, in land use, geomorphology, climatology, biogeography, transportation, cartography, conservation, water resources, and regional science. If anything in the gamut of geography has been missed in this catalogue, it too will almost certainly find some application to the field of outdoor recreation.[18]

Recreation geography has traditionally been regarded as a branch of economic geography and, as such, has looked to economics for much of its theory. The works of Clawson,[19] Knetsch,[20] Stevens,[22] Brown et al,[23] Crutchfield,[24] Foster[25] and Seckler[26] have cast new light onto the problems of evaluation of recreation experiences, the first step that must be taken before recreational land use can effectively be compared with alternative uses.

Transportation of recreators has received attention from economists concerned with the evaluation of recreational experiences[27] and from geographers seeking to understand the spatial implications of recreation movements. Among the contributions of the latter are those of Wolfe,[28] Stanton,[29] Ellis,[30] Van Doren,[31] and Deasy and Griess.[32]

The involvement of private and government research organizations in recreation has become increasingly evident in recent years. "The establishment in the United States in 1952 of Resources for the Future, Inc. was the turning point in the history of recreational studies".[33] Since that time recreation research has been spurred by the Resources for Tomorrow Conference held in Ottawa in 1961, the publications of the Outdoor Recreation Resources Review Commission,[34] the Canada

Land Inventory conducted under the authority of the Agricultural and Rural Development Act and the publication of The Administration of Outdoor Recreation in Canada.[35] Interesting and provocative studies in perception of recreation,[36] recreation land pricing,[37] sociological aspects of recreation,[38] recreation administration[39] and future recreation problems[40] have maintained interest in the study of recreation.

Two major concepts of recreation geography appear to have been neglected. First, analysis of the function of the intervening distance between the homes of the recreators and the recreational resources has been inadequately investigated. It seems surprising that more geographers have not built upon the foundations laid down by Zipf[41] in 1946. Although doubt has been cast on the validity of the application of physical laws to social phenomena, it would seem that the gravity model would be helpful in analysing recreation travel. Indeed, Ellis and Van Doren concluded that their approach, by the use of a systems theory model, "in no way obsoletes the gravity model ... for modelling small simple systems".[42] The simplicity of the gravity model, combined with the availability of statistics regarding recreational travel, make it one of the most fitting for analysis of vacation travel. As Ellis and Van Doren point out, this model is most applicable in the center of a uniform, infinite plain where movement can occur in all directions, and if each origin or destination in the equation can be assigned its own set of distance exponents. Second, the vast majority of the recreation research studies conducted have been based on data which has been

collected at the recreation site itself, and then related to the origins of the recreators. As both Campbell[43] and Mitchell[44] have pointed out, this approach, if used exclusively, is fallacious. "The greatest need for recreational opportunities is in or near urban centers where people can readily avail themselves of these opportunities".[45] Research oriented towards the comprehension of urban recreation demands and opportunities may well prove to be the catalyst needed to unite the fields of tourism, outdoor recreation, and recreational land use.

The Problem

The major aims of this study are to define and characterize the nature and areal extent of the vacation travels of a sample of urban families, and to search for meaningful relationships between various facets of vacation behaviour and social and economic attributes. The most basic of these general aims is that of delimiting the areas from which the vacation resources of a number of selected cities are drawn. A subsidiary of this aim is to identify the vacation sites, and types of sites, most frequented. The second major aim of the research is to determine whether or not the shape and size of the above-mentioned areas, or the nature of the vacationer's use of their resources, differ according to the social and economic characteristics of the vacationers. The final aim is to examine the relationships between the distance factors involved in vacation travel. The association between population, distance and visitation rates will be investigated where possible by the application of a mathematical model in an attempt to reaffirm empirical

relationships noted by other researchers, notably Catton[46] and Ellis and Van Doren.[47]

The degree to which vacationers respond to the environment in which they place themselves is extremely difficulty to determine. It is evident, however, that varying levels of response, apparently influenced by experiential background, occupational class, and personality differences, do occur. For example, Sonnenfeld[48] found village, age, and sex differences in the choice of preferred environment, while Priddle[49] reported marked variation in the levels of wilderness perception of groups from different backgrounds.

Although the motives of vacationers are not well understood what most people seem to want is "a change of scenery - both physical and social -- and ... an opportunity to relax, forget the daily routine, and explore new environments".[50] To the country dweller the city offers unfamiliar sights, noises, smells, and sounds, while the country proffers a like array to the urbanite. In view of these circumstances it does not seem unreasonable to expect country residents to spend at least part of their vacations in cities and urban dwellers to visit more rural surroundings.

Webber[51] has added a new dimension to the study of vacationing families by suggesting that the vacation offers an opportunity for the restructuring of family role relationships. On vacation, he claims, the father has an opportunity to reassume the dominant role which has been relegated to the mother due to his preoccupation with his job away from

home. The "strengthened intrafamily ties can contribute to the father's own sense of parental adequacy and to the children's sense of parental respect and love".

Definition of Terms as Used In This Study

The belief that there is more to a vacation than the 'on site' experience, and the opinion that many people recreate in surroundings which have not usually been considered as conventional recreation settings, are inherent in the design of this study. As Campbell[52] has so clearly indicated, there has been no effort made by geographers to distinguish between the 'recreator' *per se* and the 'vacationer', although a great deal of research has been conducted without making any distinction between the groups. He suggests that the differentiation can be made on the basis of expenditures, period of free time, distance travelled, activities engaged in, and patterns of movement involved. While the distinction is imperative, it is suggested here that it be made only on the basis of the period of free time available for recreation, and that the other criteria are too definitive to allow the recreators themselves to decide whether they have been participating in 'recreation' or on a 'vacation'. By arbitrarily assigning them to one category or another the researcher is unnecessarily imposing his own set of values.

It has been assumed that people are recreating when they are away from their usual environments, and that as the concept of 'vacation' varies with each individual the only stipulation placed upon it should be

that the vacation must occur away from home and must occupy a period of not less than four days. This definition removes the 'long weekend' from consideration and focusses attention on the more significant periods of recreation. A number of families in the sample group maintained summer residences which were occupied for extensive periods. These periods were included as vacations, even though it might be argued that after a protracted stay a summer cottage comes to be considered as home.

The area through which the vacationers travelled has been termed the 'hinterland', a concept which has been familiar to geographers for many years, usually in connection with port and transportation studies. Here the concept is similar; it refers to the area in which the vacation resources are utilized by the vacationers under study. The term 'consumed' would appear apt in this context were it not for the fact that the resources are left but little impaired by the users.

To overcome the necessity of enumerating the complete range of activities participated in by a particular group of families the term 'interaction' was assigned to include all their vacation activities, from camping and swimming to sightseeing and shopping. The term 'vacation patterns' has been used to represent the set of interactions which best characterize the vacations of each of the subgroups studied.

During the process of coding the questionnaire responses the data were categorised into four groups (unskilled, skilled, professional,

and retired) according to the occupation of the family head. Family size groups, formed after preliminary data tabulation, involved the placement of families in the small, medium, and large categories. These two groupings were then used as socio-economic variables in the study.

Method

In the selection of the cities from which the subjects were to be drawn three criteria were considered; accessibility, city size, and proximity. First, the study cities had to be so located that their residents might have equally good access to a large potential vacation hinterland in all directions, in order that their travels might be as little influenced by topography as possible. Because of the mountainous terrain of British Columbia this criterion had to be modified to mean that each city should be served by a good highway system which allowed movement in at least four general directions. Second, the cities had to be large enough to possess truly urban characteristics, yet small enough to be readily sampled in order to minimize the time and costs of data collection. Of the thirty-two cities in British Columbia eleven have populations falling within the 10,000-25,000 range. Cities of less than 10,000 were considered to have too many rural characteristics, whilst the four of more than 25,000 were felt to be so large as to be beyond the sampling capability of one researcher. Lastly, proximity of the cities was necessary to minimize the travel involved in data collection. When

the cities of British Columbia were screened on these criteria only four, Kamloops, Vernon, Kelowna and Penticton, satisfied all requirements and were subsequently accepted as suitable sample cities.

Data Collection

The difficulty and cost of interviewing a sufficiently large number of families to allow statistically reliable analyses on the bases of occupational, family size, and city groupings of the data ruled out individual interviewing techniques and left only the possibility of employing questionnaires. The four main types of probability sampling, random systematic, stratified, and cluster, were assessed as to their utility for this particular study. Stratified sampling was selected as the most suitable, and a questionnaire (Appendix A) was prepared. In November, 1968, it was pretested in Victoria with the aid of public school officials. Questionnaires were distributed to two grade nine classes, taken home and completed with the aid of the parents, and returned to the schools where they were collected by the researcher. Inspection of the returns indicated that any difficulties the subject families had in filling out the questionnaires could be resolved by a short introductory statement, and that the sample sizes required for statistically reliable analyses were approximately 100 in each of the family size, occupation, and city groups.[53] The main study, conducted December 1-15, 1968, employed the same techniques, with the questionnaires being dis-

tributed to randomly selected classes of grade seven, nine, and eleven students in each of the four cities. This method, while having the disadvantage restricting the population to which the results of the study are directly applicable, enables a single researcher to collect a great deal of simple objective information very quickly and economically.

Data Analysis

The data were divided into two groups, one composed of frequency counts representing the presence or absence of an activity or article, and the other concerned with actual values, the number of vacations taken, for example. Contingency and phi coefficients were used to investigate relationships in the frequency data and to assess the degrees of association between variables.[54] The interval data were analysed by difference of means and difference of proportions techniques[55] and tested by two-tailed tests to determine their significance.

In other studies multiple regression analysis has been used to help 'explain' participation rates in outdoor recreation, ostensibly as an aid to later prediction, but itsuse was not considered suitable for the purposes of this study because most of the data collected were post facto. There is little point in predicting either the number of vacations to be taken or their total length if the only available information concerns events occurring on those vacations. It was felt that in an exploratory study simple analyses would suffice.

The significance level was chosen to be . 05. Although the

relatively large numbers of cases involved make it difficult to determine whether a result is of practical or only statistical significance, it was believed that the calculation of contingency and phi coefficients would allow this question to be answered. Consequently, any statistical significance mentioned in the following analyses may be considered to be reliable at the .05 level.

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53 The question used as the criterion for establishing the necessary sample sizes was Question C, "How many vacations have you taken with one or both of your parents this year?" Ninety-eight responses would have yielded a reliable sample on this basis, but in the main study allowance was made for a low rate of questionnaire return due to possible absenteeism attributable to winter weather conditions and Christmas examination pressures. A target of 400 completed returns in each community was set in the hope that such a number would allow a later analysis on city-socio-economic groups to determine whether or not vacation patterns varied significantly from group to group within the same city, and from city to city within each group. To further this aim approximately 600 questionnaires were distributed in each city, with equal proportions going to each of the grade levels. The reactions of the school administrators varied from those who wished all their pupils to have the experience of completing a questionnaire to those who resented the intrusion on school time. Naturally, the resulting rates of return also differed, ranging from a poor 32% in Kamloops to a more reasonable 54% in Penticton, although none reached the expected rate. Explanation of the variation in the rates of return is difficult, however it is felt that the heavy snowfall which occurred on the morning the Kamloops returns were collected might partially explain the low return. Interestingly, the returns from the three grade levels were similar, being 300, 332 and 359 for grades seven, nine and eleven respectively. The unequal numbers of completed questionnaires from the four cities pose no real problem as far as this study is concerned, merely making some sample groups more reliable than others (even the lowest at .05, however), but ruled out the possibility of later analysis of the data by city-socio-economic groups.

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CHAPTER II

THE SAMPLE CITIES AND SUBJECTS

The extent and configuration of an urban vacation hinterland, and the nature of its vacationer-resource interactions, may very well be influenced by the character of the urban center and the social and economic qualities of its residents. For this reason it is necessary to determine the magnitude of any non-random deviations observed during examination of descriptive measures, for example, labour force and population distributions, which may introduce variations during later stages of the analysis. This chapter of the thesis examines each of the sample cities and their sample groups, isolating the significant differences which occur.

The Sample Cities

The four cities selected as bases for the study, Kamloops (actually composed of the city of Kamloops and the town of North Kamloops), Vernon, Kelowna, and Penticton are situated in the south-western interior of British Columbia (Figure 1). All are served by an adequate system of major highways which permits travel in all directions with a minimum of inconvenience. Kamloops is served by both the Canadian National and Canadian Pacific railway companies' main lines, which provide good passenger service, whilst the other cities are provided only with freight service. Both Kamloops and Penticton have airports, while Vernon and Kelowna have not.

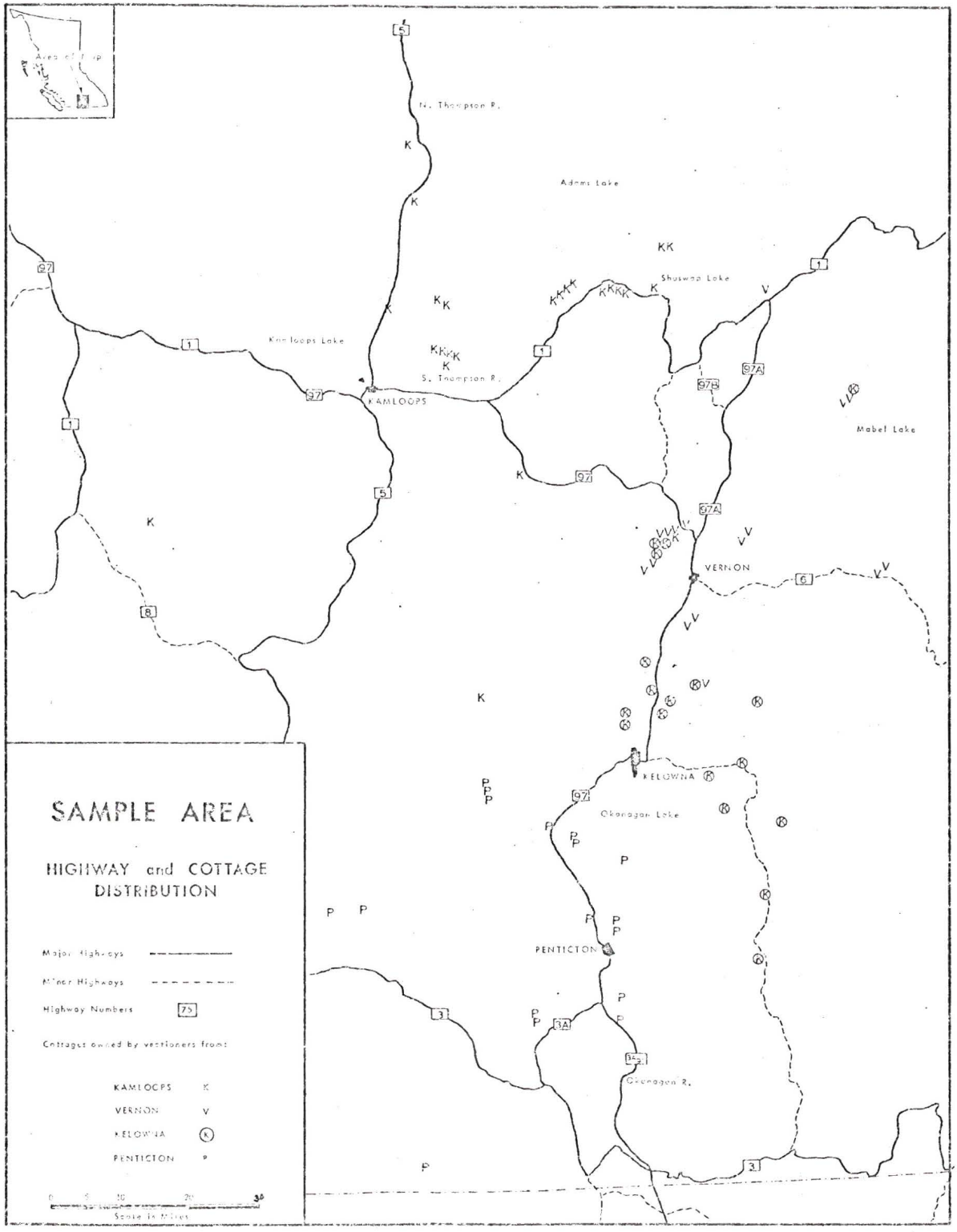


Fig. 1. Location of the sample cities and the main highway network. Cottage distribution shown by symbols.

Labour Force

The labour force statistics (Table 1, Figure 2) indicate that the occupational structure of the cities is quite similar, apart from the primary industry sector. Analysis of the raw data on labour force groupings, omitting the primary sector, indicated a highly non-random distribution however. Subsequent calculation of the contingency coefficient showed that only 3.5 percent of the variance was predictable, indicating that the variance was of only statistical significance. A similar analysis on data concerning the primary industry employment, on the other hand, yielded a coefficient of .656 with a predictable variation of forty-three percent. As the primary industry labour force comprises only 5.4 percent of the total, the conclusion that there were few practial differences appeared justified. To check this conclusion another "contingency coefficient" was calculated, this time for the total labour force. The resulting figure was .235, which indicated that the total amount of variance explainable on the basis of city groupings was 5.5 percent.

Tourism

The contribution of tourism to the economy of each city is difficult to determine because it is not tabulated separately in any of the statistics which are readily available. Most of the tourist-catering jobs are probably concealed within the community, business and personal service sector in labour force statistics. To overcome this difficulty and to find a method of comparing the tourist economies of the four cities an index was

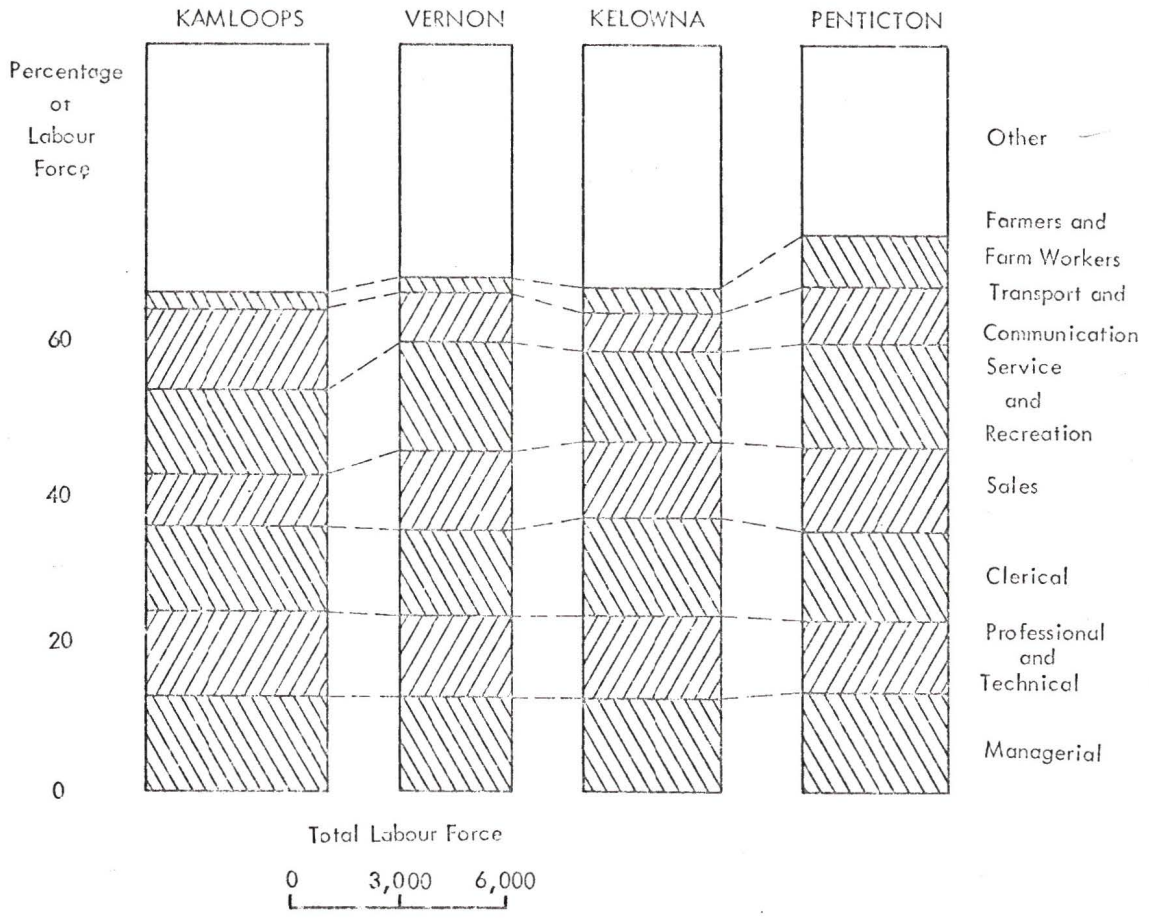
TABLE 1. -- LABOUR FORCE OF THE SAMPLE CITIES BY INDUSTRY GROUPS 1961

Industry	Kamloops	Vernon	Kelowna	Penticton	Average
	Percent	Percent	Percent	Percent	Percent
Agriculture	1.1	1.6	2.7	6.9	3.1
Forestry, fishing, trapping	2.7	2.6	1.0	.9	1.8
Mines, quarries, oil wells	1.0	.2	.2	.4	.5
Manufacturing	10.7	13.7	16.3	8.5	12.0
Construction	7.2	5.6	7.7	8.2	7.2
Transportation	18.8	9.9	7.9	10.2	12.3
Trade					
Wholesale	4.4	7.8	9.1	8.3	7.1
Retail	13.8	18.0	14.9	15.5	15.3
Finance, insurance & real estate	3.8	3.2	4.7	4.3	4.0
Community business & personal service	24.5	25.9	26.3	26.6	25.7
Public Administration & defense	8.6	7.9	6.3	7.8	7.7
Other	3.6	3.6	2.9	2.4	3.3
Total*	100.0	100.0	100.0	100.0	100.0

Source: British Columbia Bureau of Economics and Statistics, Regional Index of British Columbia, (Victoria: Queen's Printer, 1966), pp. 118, 134, 147, 378.

* The labour force totals of the four cities are: Kamloops 6,012; Vernon 3,612; Kelowna 4,394; and Penticton 4,770.

LABOUR FORCE - BY OCCUPATION



Source: Calculated from the Census of Canada, 1961, Vol. 3, Pt. 1, T. 11.

Fig. 2. Labour force by occupation groups, 1961.

calculated by comparing the number of hotel and motel units available in each city with the population of that city. Indices (Table 2) were calculated for all British Columbia cities in the 10,000-25,000 population range, in order that comparisons might be made between the sample cities and the rest. The indices of the sample cities were all well above the total mean, with that of Penticton being almost twice those of the others. Penticton's share of the tourist trade apparently is much largerthan that of Kamloops, Vernon, or Kelowna, all of which appear to have larger tourist economies than the average for British Columbia cities in their size range.

TABLE 2. --TOURIST ACCOMMODATION INDICES

Cities	Population 1966	Hotel and Motel Units	Units per 1,000 people
Dawson Creek	12,392	431	34.7
Kamloops	22,078	891	40.4
Kelowna	17,006	760	44.6
Nanaimo	15,188	548	36.0
Port Alberni	18,538	446	24.0
Penticton	15,330	1,244	79.8
Prince George	24,471	535	21.8
Prince Rupert	14,677	211	14.3
Trail	11,600	167	14.3
Vernon	11,423	464	40.6
Average			35.0

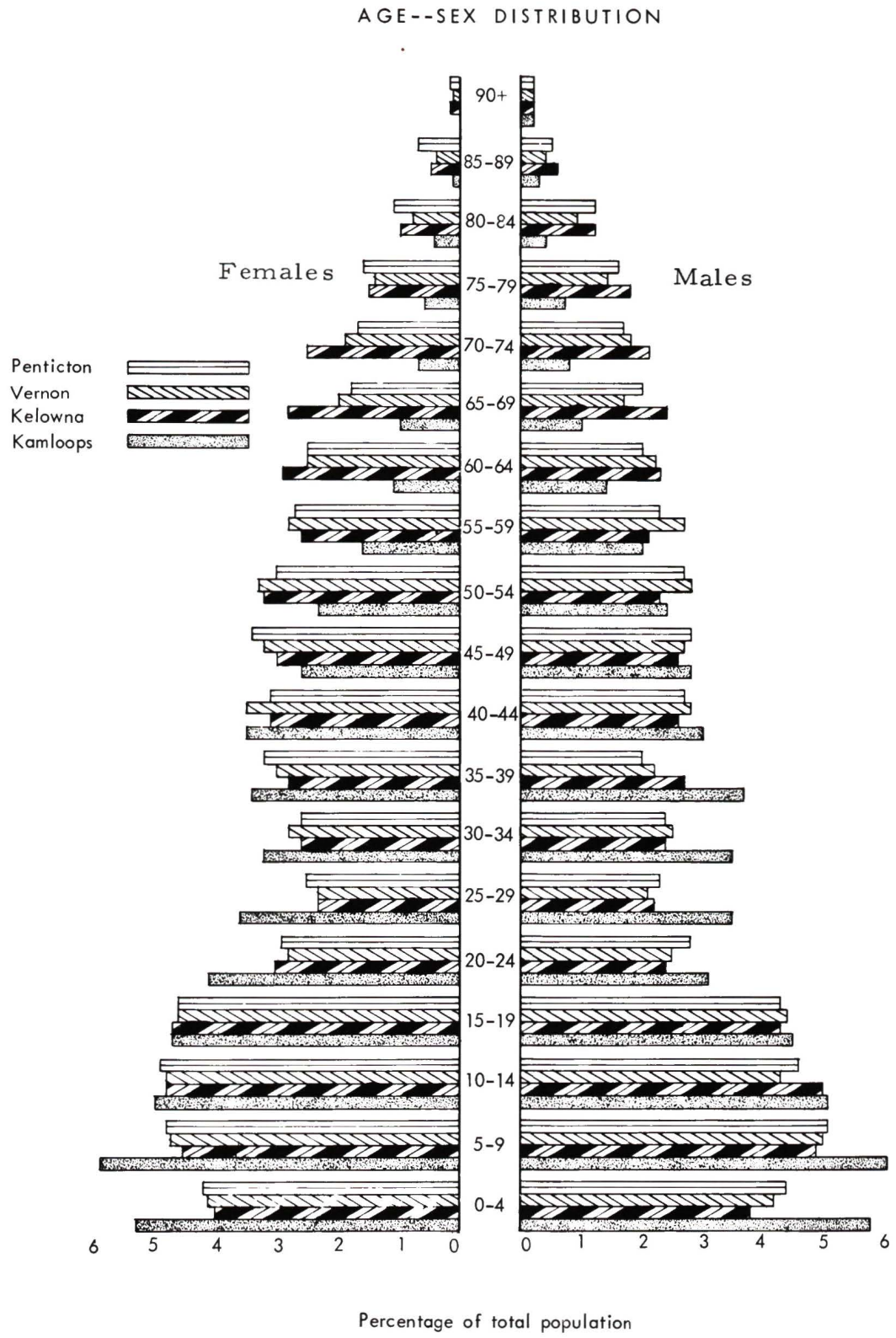
Source: British Columbia Bureau of Economics and Statistics, Regional Index of British Columbia, (Victoria: Queen's Printer, 1966), pp. 88, 210, 136, 149, 280-281, 324, 380, 447, 492, 521.

Age Structure

The age structures of Kelowna, Vernon, and Penticton are remarkably similar, the mean age of their residents being within the range of 34 to 36, with a coefficient of variability ranging from .685 to .700 (Figure 3). Kamloops, on the other hand, has a younger population with a mean age of 28.07 years and a variability of .744. More detailed inspection shows that Kamloops has a much larger proportion of its residents in the zero to fifteen and twenty to forty-five age groups than the other cities, and a far smaller proportion in the fifty and over groups.

The Sample Families

The sample groups drawn from each of the cities showed remarkably few statistically significant differences. The average family size varied from 5.14 to 5.50, the only significant difference being that the families from Kelowna were slightly larger than those from Vernon. Analysis of the raw data on family size (Table 3) yielded a contingency coefficient of .153, indicating that only about two percent of the variation in family size could be explained by knowing which city's sample group was under consideration. This amount was so small that for all practical purposes the family size of each city was said to be similar. Analysis of the occupational groups (Table 4) revealed even smaller differences, and once again the cities were declared similar. In fact, the only real difference of practical significance discovered



Source: Census of Canada: 1966.
Population, Vol. I, Table 22.

Fig. 3. Age-sex distributions in the sample cities, 1966.

TABLE 3. --FAMILY SIZE GROUPS[1]

Group	Persons per family	Kamloops	Vernon	Kelowna	Penticton	Total
		Number of Families				
Small	fewer than 4	14	33	19	30	96
	4	37	46	49	87	219
Medium	5	56	48	68	78	250
	6	28	54	59	72	213
	7	20	27	30	37	109
Large	more than 7	22	14	26	23	85
	not stated	13	2	2	1	18
Total		190	225	253	323	991
Average Family Size		5.15	5.14	5.50	5.23	5.27

during analysis of the data on the basis of city groups was that the mean total vacation time of Kamloops families was markedly greater than that of families from the other three cities. The Kamloops mean was 12.26 days, while those of Vernon, Kelowna, and Penticton were 8.85, 8.71, and 8.43 respectively.

TABLE 4. -- OCCUPATIONAL GROUPS

Group	Kamloops	Vernon	Kelowna	Penticton	Total
unskilled	22	35	41	57	155
skilled	106	130	141	156	533
professional	61	59	62	101	283
retired	1	4	7	7	16
not stated			2	2	4
Total	190	225	253	323	991

The increasing incidence of paid vacations will undoubtedly lead to a larger number of vacationing families and, consequently, to an escalation of the demand for vacation resources. In order to more fully understand the present demand it is useful to examine and compare vacationing and non-vacationing families, and to inspect the stated objectives of those who took vacations.

Vacation Incidence

At the outset of the study it was hypothesized that family size would be one of the main determinants of vacation characteristics. This hypothesis was upheld insofar as the average family size increased as vacation incidence decreased (Table 5). The only statistically significant finding to emerge from this anlysis, however, was that families which took three vacations are smaller than those which did not take vacations. The differences in mean number of vacations per family were found to be unreliable.

Duration of Vacations

The duration of vacations was also related to family size in that smaller families spent more time away from home. Error of the means tests revealed significant differences between the number of days on vacation for each group, with the average total vacation time of both small and medium-sized families being far greater than that of the larger families. These relationships are summarised in Table 6 where the numerals refer to the means of the three family size groups, and '>'

TABLE 5. -- VACATION INCIDENCE

Group	Percentage of the sample taking				Total	Mean Number of Vacations
	No vacation	One vacation	Two vacations	Three vacations		
			Occupation Groups			
Unskilled	39.6	46.3	12.1	2.0	100	.74
Skilled	25.8	52.6	16.9	4.5	100	1.00
Professional	22.1	42.1	22.9	12.9	100	1.27
Retired	40.6	40.6	15.6	3.1	100	.81
			Family Size Groups			
Small	26.0	46.1	19.45	8.1	100	1.10
Medium	27.8	50.3	16.4	5.4	100	.99
Large	35.3	40.0	20.0	4.7	100	.94
			Total Sample			
	27.8	48.0	17.8	6.4	100	1.12

means 'greater than'. For example, the correct interpretation of the first relationship would be that the average number of days spent on the first vacation by medium sized families is significantly greater than the number spent by small families.

Income, as represented by occupational group, also appeared to be highly related to the number of vacations. Generally speaking, the more skilled the family head, the more vacations taken (Table 5). Analysis of the raw data indicated a significantly non-random distribution, but the proportion of the variance that can be attributed to occupational level is only 4.27 percent, hardly an amount of practical significance. The duration of these vacations illustrates a similar pattern in that the less skilled the family head, the less time spent on vacation. Analysis

TABLE 6. --MEAN DURATION OF VACATIONS BY FAMILY SIZE GROUPS IN DAYS

Group	First Vacation	Second Vacation	Third Vacation	Total
	Days	Days	Days	
Small (S)	6.91	2.17	.78	9.86
Medium (M)	7.07	1.93	.50	9.50
Large (L)	4.78	1.14	.14	6.06
Significant relationships between means, where > means "greater than".				
	M > S	S > M	S > M	S > L
	S > L	S > L	S > L	M > L
	M > L	M > L	M > L	

reveals highly significant differences between the various occupation groups, as shown in Table 7.

TABLE 7. --MEAN DURATION OF VACATIONS BY OCCUPATION GROUPS IN DAYS

Group	First Vacation	Second Vacation	Third Vacation	Total
Unskilled (U)	5.01	.89	.20	6.10
Skilled (S)	7.25	1.90	.32	9.47
Professional (P)	7.31	2.78	1.27	11.36
Retired (R)	5.06	1.00	.21	6.27
Significant relationships between means, where < means "less than".				
	U < S	U < S	U < P	U < S
	U < P	U < P	S < P	U < P
		S < P		S < P
		R < P		R < S
				R < P

Vacation Objectives

It seemed reasonable to expect that families of different size and occupation groups would express different objectives when asked why they were going on vacation. Analysis of these data (Table 8) on the basis of occupation indicated a definite non-random distribution of responses, however, calculation of the contingency coefficient indicated that only 2. 01 percent of the variance was predictable if one knew the

TABLE 8. -- VACATION OBJECTIVES BY OCCUPATION

Group	Holiday*	Visit	Holiday and Visit*	Other	Total
	Percent	Percent	Percent	Percent	Percent
Unskilled	28. 3	24. 2	39. 2	8. 3	100
Skilled	32. 8	12. 4	44. 6	10. 2	100
Professional	36. 7	15. 0	39. 6	8. 7	100
Retired	15. 8	28. 9	47. 4	7. 9	100

* The term 'holiday' is used here to denote a vacation which has recreation as its main aim, in contrast to vacations oriented towards business, shopping, visiting, etc.

occupation of the head of the vacationing family. When analysis was conducted on the basis of the family size groups (Table 9) no significant relationships were observed. The data were also grouped on city of residence, number of vacations taken, and parties which camped versus parties which did not. Statistically, but not practically, significant non-random distributions were found for these three groups. It would appear from these analyses that little knowledge of vacation objectives can be gained by knowing either the occupation or size of any vacationing family, and

that prediction must be based on other variables. Some of this uncertainty may be attributable to the general nature of the responses required by the questionnaire, while more is probably due to the complex, often unstructured, decision to take a vacation.

TABLE 9. --VACATION OBJECTIVES BY FAMILY SIZE

Group	Holiday	Visit	Holiday and Visit	Other	Total
	Percent	Percent	Percent	Percent	
Small	30.9	15.6	46.3	7.6	100
Medium	34.5	15.5	40.6	9.4	100
Large	31.0	12.6	39.1	17.3	100

Résumé

The four cities selected as bases for the study resemble one another to a remarkable degree. Analyses of the labour force and age distribution data revealed few deviations that might not be explained by chance factors, indicating that for all practical purposes the cities might be considered as almost identical on these measures. All four were shown to have an important tourist-serving sector, with that of Penticton being far stronger than those of Kamloops, Vernon and Kelowna. The sample families, analysed on the bases of family size and occupation, were found to be similar. Family size was found to be related to vacation incidence, while both family size and occupation of the family head affected the duration of the vacations taken. It was also evident that knowledge of the socio-economic class of the vacationing family

would be of little help in predicting vacation objectives.

The most significant figures to emerge from this section of the analysis were those representing the proportion of the vacationers who reported "visiting" as a factor in vacationing. The vacationers in this category, 57.6 percent, may be contrasted with the 53.8 percent reported by the authors of an urban based investigation of outdoor recreation demand[2] and the 55.0 percent reported by researchers collecting data at border crossings.[3] Testing of these proportions indicated that the discrepancies might very well be attributable to random sampling error, and that the true proportions may very well be equal. The indication that the three studies were in general agreement on this important conclusion must be emphasized. At any rate, the number of vacationers reporting that their vacations involved a significant amount of visiting indicates that this facet of vacationing, which is often overlooked by recreation researchers, would merit further investigation.

References

1 The choice of intervals for the family size groups was made difficult by the abnormal distribution observed. Standardisation of the data was completely out of the question, leaving only the possibility of attaining reasonable groups by trial and error methods. Group I was formed after preliminary data tabulation, while the other two groups were finally determined after analyses had shown that positioning the interval at seven family members maximised the differences between groups. The assymetrical distribution is regrettable, but unavoidable.

2 "Participation in Outdoor Recreation ...", op. cit., p. 47.

3 Tourist '63, op. cit., p. 50.

CHAPTER III

EXTENT AND CONFIGURATION OF THE HINTERLANDS

The most geographic aspects of vacationing are probably the patterns of travel described by the vacationers: the distribution of destinations, the routes taken to these destinations, the distance travelled while on vacation, and the location and duration of pauses in this travel. The task at this point in the study was to determine whether or not these spatial patterns varied significantly from one socio-economic group to another. In order to answer this question the 1,021 vacations observed were divided into three groups: first, those involving instances in which the vacationers travelled directly to their destinations and then returned by the same routes; second, those in which the vacationing family travelled to their destination by one route and returned by another (that is, on a circle route), and third, those in which the family either stayed at home, left North America, or vacationed in the wilds. The ninety-seven vacations in the third group were excluded from the analysis due to the difficulty involved in tracing vacation movements from the sparse information provided, while the reported travels of the other two groups were submitted to a distance simulation program which computed the minimum possible road mileage travelled by each family.[1] During the calculation of the distances travelled it was assumed that each party travelled from point to point by the most direct highway route, although in reality this

was not likely to have been the case in many instances. The amount of under-prediction occurring due to this assumption, however, probably did not distort the results to any great extent.

Before coding of the questionnaire responses fifty-eight locations were established to approximate the destinations that would be named by the subjects. The closer areas of the continent were assigned more reference points than the farther ones on the assumption that they would be visited more often: British Columbia, for example, received twenty, while the Maritime Provinces were assigned only one. Following tabulation of visitation frequencies for each location, maps were prepared to indicate gross directional travel flows, to aid in the delimitation of the hinterlands, and to indicate the number of nights spent in each location. Later stages involved the analysis of the distance travelled both by family size and occupational groupings, and the application of a gravity model to extrapolated study data. Each of these steps will be discussed in more detail below.

Directional Flows

Maps illustrating gross directional flows were prepared from data concerning the destinations stated by the vacationers, and were considered necessary in order to determine whether or not the relative distances to the main east-west transport routes, Highway 1 and Highway 3, showed any marked influence on the travel directions chosen. If this were the case, one would intuitively expect Kamloops and Penticton to have much stronger flows to both eastward and westward destination

areas, and the other two cities to illustrate stronger attractions to the north and south. In this instance the data were grouped on the basis of sample city and not on socio-economic groups. The proportions of each city's sample that travelled in each of the cardinal directions (not including those vacationers going to another sample city) were isolated and tested against the total sample, to assess their significance. The differences evident when the data are presented cartographically (Figure 4) may be somewhat misleading. The only significantly non-random deviations are: the Kelowna-east movement, which is much stronger than expected; the Kelowna-south, which is much weaker; the Penticton-east, which is markedly below the normal; and the Penticton-west which is extremely strong. As might be expected, a definite east-west relationship dominates the directional flows, accounting for 76.9 percent of the total movement (Table 10). Proximity of the

TABLE 10.--GROSS DIRECTIONAL TRAVEL FLOWS

Direction of Destination	Kamloops Percent	Vernon Percent	Kelowna Percent	Penticton Percent	Average Percent
East	29.3	20.9	36.4	19.6	26.3
North	20.2	15.4	14.0	12.4	15.1
West	43.4	49.4	44.6	60.8	50.6
South	7.1	14.3	5.0	7.2	8.0
Total*	100.0	100.0	100.0	100.0	100.0

* Number of vacations tabulated: Kamloops, 99; Vernon, 91; Kelowna, 121; Penticton, 153.

cities to an east-west highway does not appear to be of major importance, as evidenced by the strong east-west relationships of Kelowna, however, there appears to be a constant increase in the proportion of vacationers with northern destinations as one moves north. Directional flows to the south, on the other hand, have no similar progression. Data necessary for the explanation of the variations observed were not collected for this study, however, because much of the vacation is oriented toward the visiting of friends and relatives, it is postulated that previous migration patterns may play a large part in the determination of directional flows.

Areal Extent of the Hinterlands

In the preparation of maps to aid in the delimitation of the hinterlands the data used were those presented by the subjects in answer to the question, "Did you have a definite destination in mind before you left home?" Of the 1,021 vacations reported 989 had definite destinations, of which only 873 were stated. These were coded according to their proximity to the fifty-eight destination areas mentioned above, and were then used as data for hinterland definition. Tables indicating the number of visits to each area were constructed on the bases of cities of origin, occupational groups, and family size groups. The tables were analysed to determine whether the movements of these groups were, as hypothesized, significantly variant. Results of the analysis failed to support this hypothesis, and consequently, the agglomerated data were

mapped as one sample to portray the areal extent of the hinterland of the four cities (Figure 5). The most evident feature of the map is the general decrease in visitation as one progresses from west to east, an observation that leads one to conclude that the distance between the source and destination may be of critical importance. Further observation, however, indicates that this general trend does not hold true for the closer destination areas, nor for areas in the United States. Another salient feature of the map is the dominance of larger cities over smaller ones, almost regardless of their distance from the origin of travel. Clearly, distance was not the only factor at play in the choice of vacation destinations.

Important Stopping Places

Data concerning the number of nights spent in each of the destination areas were grouped according to family size and occupation and submitted to the chi square test to determine whether or not significantly non-random distributions existed. Contrary to the original hypothesis both distributions appeared to be random, revealing that these variables had little effect on either the places families went or the length of time they spent there. Figure 6 was prepared from the combined data to indicate the magnitude of each destination area's contribution to the vacation experience of the total sample. It is evident that this map resembles the last one very closely. The population of the destination area again appeared to have some influence over the

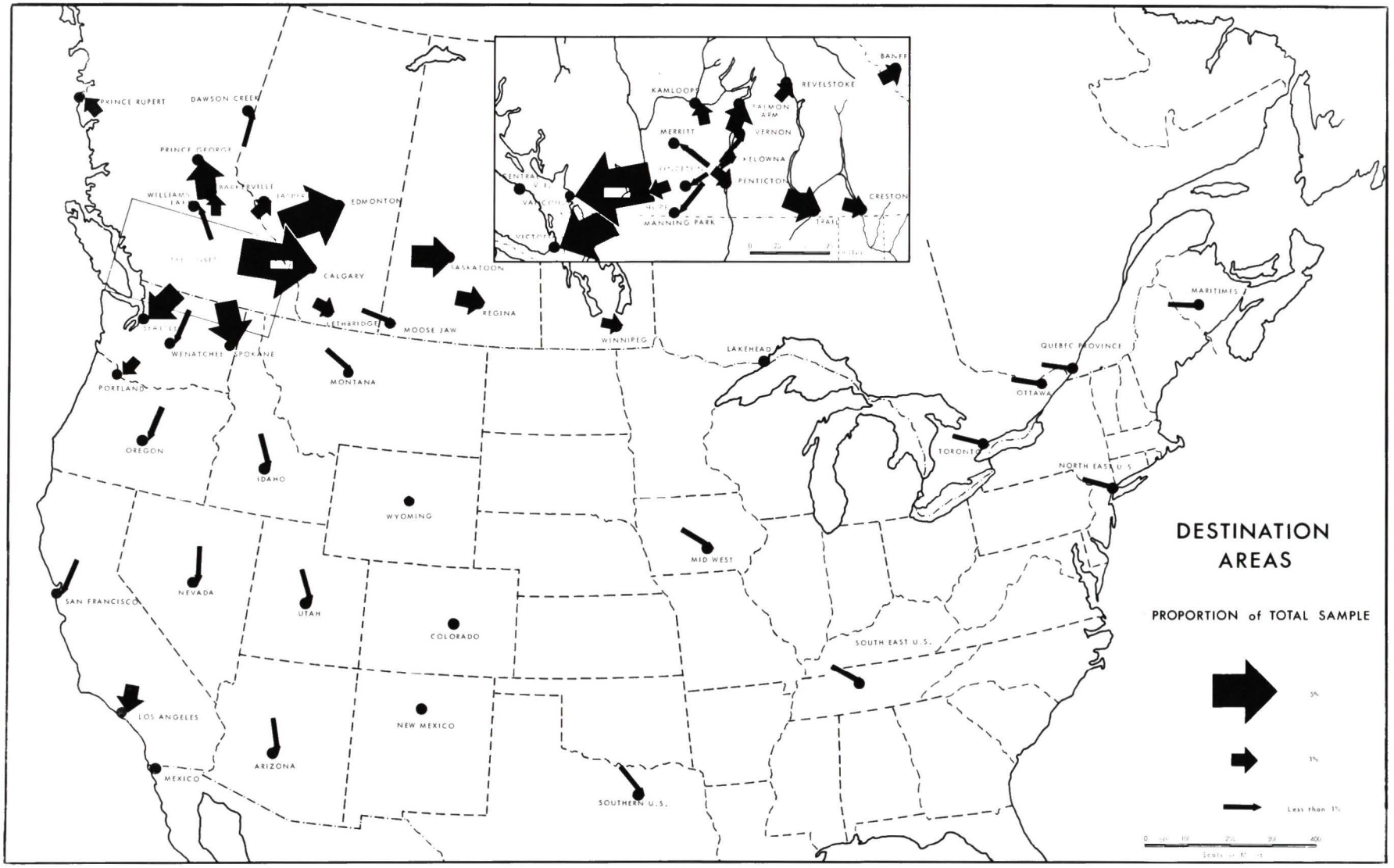


Fig. 5. Proportion of the total sample travelling to each destination area.

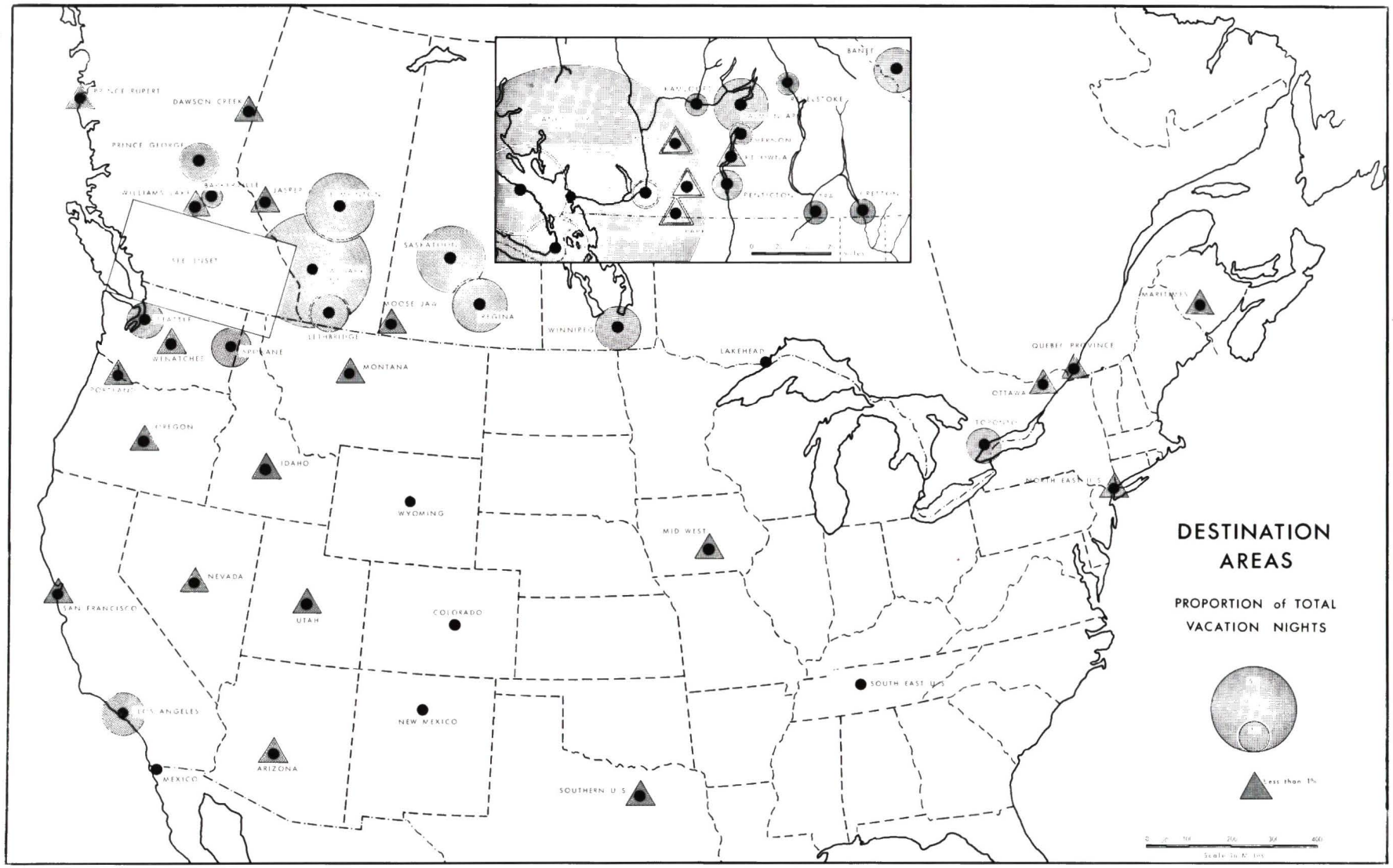


Fig. 6. Proportion of the total vacation experience contributed by each destination area.

number of vacationers attracted, as did the distance of the destination from the point of origin. The most marked contrast is the dominance of Vancouver over Seattle. One would expect that the larger population of the latter would overcome the slightly increased distance and prove Seattle to be of equal or greater importance. That this is not the case leads one to ponder on the effect that the International Boundary has on vacation travel. The prominence of Salmon Arm, Banff, and Los Angeles, which were of minor importance on Figure 5, as important areas for the vacationers is striking.

Distances Travelled

Almost two-thirds of the families who gave adequate route information travelled by direct route (Table 11), indicating that they had some definite reason for vacationing, other than travelling. These people, as might be expected, reported travelling significantly fewer miles than those who took circle routes, where ostensibly exploration

TABLE 11.--DIRECT AND CIRCLE ROUTE DISTANCES

	Average Distance Travelled	Standard Deviation	Coefficient of Variability	Number of Vacations
Direct Route	599	808	1.35	408
Circle Route	1,076	981	.91	210
Average	761	899	1.18	618*

* This figure is less than the total number of vacations because some families gave incomplete descriptions of their routes and were omitted from this part of the analysis.

and sightseeing played an important part. The average distance reported by the total sample was almost 200 miles greater than that of the subjects of another study[2] who averaged 574 miles per vacation. Analysis indicated that this difference was statistically reliable.

Contrary to the original hypothesis, occupational groups appeared to yield few significant variations in distance travelled while on vacation, either on direct or circle routes (Table 12). The ubiquity of automobiles, and the fact that they cost relatively little to operate, undoubtedly contributed to this finding. The only statistically defensible

TABLE 12.--DISTANCE TRAVELLED BY OCCUPATION GROUPS

Group	Number	Average Distance	Standard Deviation	Coefficient of Variability
		Circle Routes		
Unskilled	24	865	809	.94
Skilled	117	1,060	837	.79
Professional	69	1,222	1,177	.96
Retired	0	-	-	-
		Direct Routes		
Unskilled	55	785	1,057	1.35
Skilled	225	776	860	1.11
Professional	124	1,065	653	.61
Retired	4	912	859	.94

conclusions reached during this segment of the analysis were: professional families travelled farther on direct routes than the families of skilled workers; large families travelled the least distance on circle routes; and less than small families on direct routes (Table 13).

TABLE 13. --DISTANCE TRAVELLED BY FAMILY SIZE GROUPS

Group	Number of Vacations	Average Distance	Standard Deviation	Coefficient of Variability
		Circle Routes		
Small	64	1,087	924	.85
Medium	128	1,131	1,039	.91
Large	18	650	559	.86
		Direct Routes		
Small	137	981	965	.98
Medium	238	813	813	1.00
Large	33	776	294	.38

Distance- Population Relationships

The number of vacationing families from each sample city who visited each of the reference destinations was converted into a "raw number of visitors" figure and then extrapolated to account for the total population of each city (Equation 1). The resultant figure was input to the gravity model (Equation 2) with the populations of the base cities, the populations of the destination areas, and the actual road distances between each city and each destination. The resulting equations were solved for the exponent (Figure 7), yielding a value for each city-destination pair. Destination areas more than 1,517 miles distant from the sample cities were excluded from the analysis because the number of families visiting them was insufficient for statistical reliability. In total, fifty-nine city-destination area relationships were considered. When inspected visually the exponents appeared to fall into

(1) $$EV(I, J) = \frac{POP(I) \times OV(I, J)}{S(I) \times AFS(I)}$$

where: 'EV(I, J)' refers to the expected number of visits between city I and destination J, 'POP(I)' to the population of city I, 'OV(I, J)' to the observed number of visits between city I and destination J, 'S(I)' to the sample size of city I, and 'AFS(I)' to the average family size of city (I).

(2) $$EV(I, J) = \frac{POP(I) \times POP(J)}{D(I, J)^{X}}$$

where: 'EV(I, J)' refers to the expected number of visits between city I and destination area J, 'POP(I)' to the population of city I, 'POP(J)' to the population of destination J, 'D(I, J)' to the distance between city I and destination area J, and 'x' to the exponent necessary to solve the equation.

three well defined groups, the first ranging from zero to 150 miles, the second from 151 to 950 and the third extending up to 1,517. Regression lines calculated for these three groups (Table 14, Figure 7) had distinctive intercepts and slopes. The standard errors of groups

TABLE 14. --DISTANCE EXPONENT REGRESSION LINES
0-1, 517 MILES

Group	Range of Distances	Y Intercept	Slope	Standard error of Y	Number of city-destination pairs
1	0-150	4.08	-.0152	±.075	12
2	151-950	2.84	-.0011	±.244	42
3	951-1,517	3.09	-.0004	±.010	5

All equations are of the form $Y = A + BX$; where Y is the exponent and X is the distance.

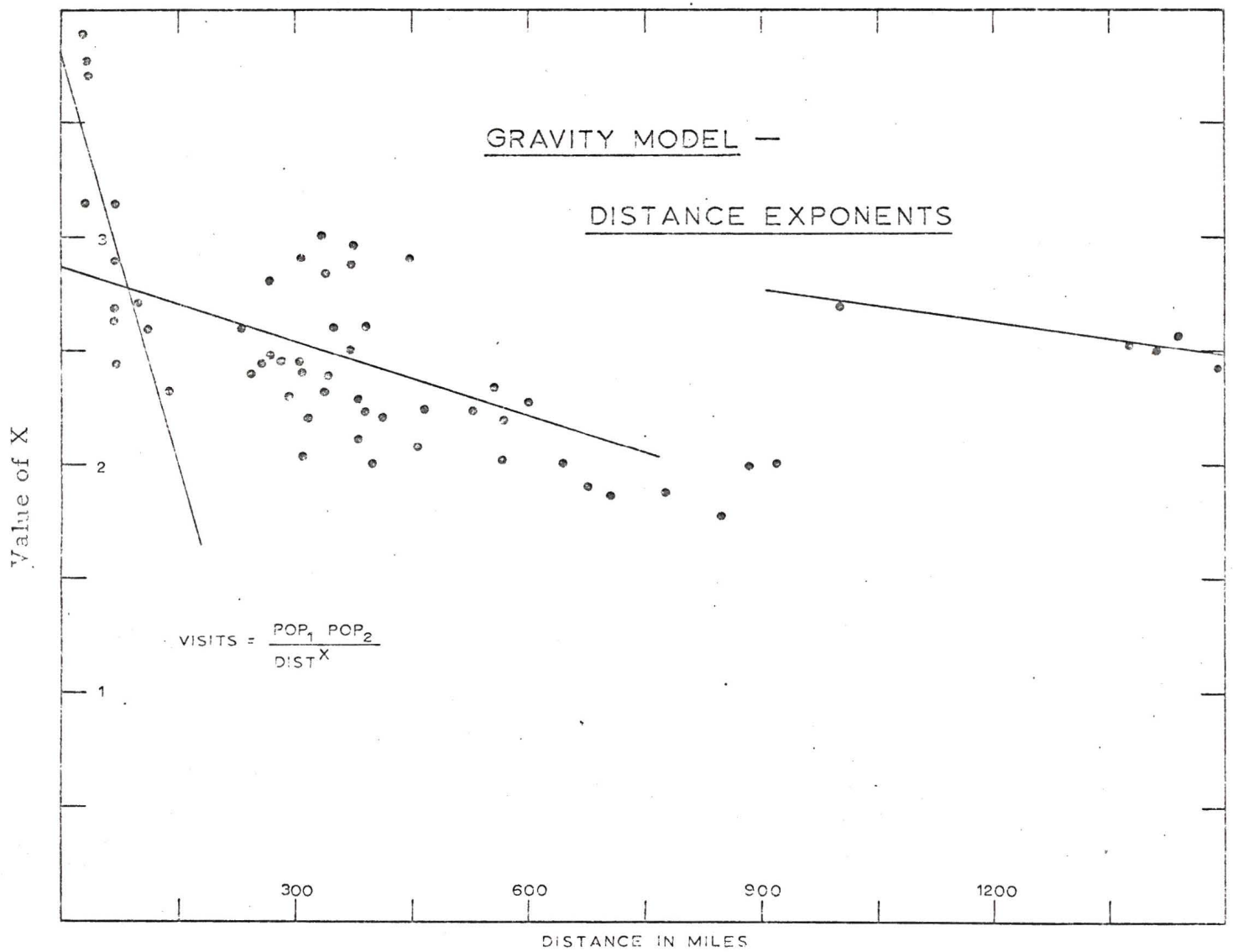


Fig. 7. Gravity model distance exponents plotted against inter-city distances.

one and three were relatively small, indicating exponents in close agreement with the regression line, however, that of the second group indicated that considerable dispersion was present (the degree of dispersion may be assessed by the correlation coefficients between exponents and distance; -.989, -0.677, and -.993 for the three groups respectively). Closer inspection of the second group of exponents indicated that they might well be divided into two subgroups, such subdivision being justified on the grounds that eleven represented relationships between Canadian cities and United States destination areas. Recalculation of the regression line (2A) on this basis improved its fit to the data, increasing the correlation coefficient to -.796, in effect increasing the predictive ability of the line (Table 15). The data omitted (Group 2B) showed almost no relationship between distance and the value of the exponent, having a correlation of only +.166, which indicated that the distribution was almost random.

TABLE 15. --DISTANCE EXPONENT REGRESSION LINES 151-950 MILES

Group	Range of Distances	Y Intercept	Slope	Standard error of Y	Number of city-destination pairs
2A (Can.)	151-950	2.65	-.0009	-.134	31
2B (U.S.)	151-950	2.61	-.0004	-.178	11

All Equations are of the form Y = A + BX; where Y is the exponent and X the distance

The action of the exponent is such that its value increases as the number of visits between two cities declines (all other variables being held constant) and vice-versa, yielding an inverse measure of attraction. Although transformations of the visitation figures might improve the fit of the data, the simple equation appears to explain a great deal of the variation, and successfully unites the factors of population and distance in the prediction of visits.[3]

It appears from Figure 7 that destination areas in the 120-150 and 495-950 mile ranges have above average attraction for vacationers, while those in the 0-120, 150-494, and over 950 ranges are less favoured. Although the necessary explanatory data is lacking it is conjectured that areas within 120 miles of the sample cities are familiar to the vacationers as a result of day and weekend excursions, while the decision to travel more than 150 miles away from home involves the consideration of a different set of factors than a trip for less than 150 miles. The increased resistance of distance at the 150-mile mark may well represent some sort of perceptual threshold, which must be overcome before a family will travel farther. Then, once this barrier has been overcome, the importance of distance as a retarding force appears to diminish until the next barrier, the 950-mile mark, is reached. The final regression line appears to illustrate a like set of forces, however the certainty with which it may be treated is much less than either of the other two lines due to the small number.

of city-destination pairs used in its computation.

Résumé

The patterns of recreation movement described by the sample groups were observed to differ significantly when city groupings were analysed, but only insofar as the gross directional movement was concerned. No characteristic destination areas were delimited on either occupational or family size groupings, however, the combined data set indicated a definite relationship between the factors of population of the destination area and the intervening distance when presented cartographically. The distances travelled by the vacationers, when analysed on the bases of their socio-economic groups, were in general agreement with the results reported by a previous study, in which data gathered from individuals was utilised.[3] It was notable that distances travelled on direct routes were significantly shorter, but more variable, than distances travelled on circle routes. The investigation of distance-population relationship by application of a simple gravity model, commented on below, appeared to account for many of the discrepancies noted cartographically, and set forth three regression lines which were quite well fitted to the data.

The model used in this study differed from the usual in that the equations were solved for the distance exponent.

The gravity model technique in recreational geography has usually been used in the prediction of recreationers, campers for example, going from a given city to a given resource site. The main

problem has been the difficulty involved in establishing a suitable index of attraction. In this case the use of destination area populations as indices was suggested by the observation that most of the vacations observed were oriented towards activities in urban areas. It should be noted, however, that use of a similar index of attraction in the study of vacation interchanges between areas that are not urban in character might well prove fallacious.

References

1 Modes of travel as a percentage of total travel were: auto, 88%; bus, 5%; train, 2%, plane, 4%. Additionally, many of the vacationing families reported travelling by boat (8% of the sample) but inspection of their patterns of movement revealed that almost all of these families had travelled on highway routes served by ferry systems. Inspection of the routes followed by those travelling by plane indicated that approximately one-third had left North America. Families travelling by 'other' means mentioned riding, hiking, and travelling in campers. The latter were included with automobile travel, while the riders and hikers, comprising 1% of the total, were not considered due to the local nature of their travels.

2 "Participation in Outdoor Recreation ...", op. cit., p. 43.

3 This model was also applied to data calculated from another study (Tourist '63, op. cit., p. 6.) which studied tourists entering British Columbia. The data were too scanty to permit more than one regression line to be drawn (there were only nine cases within 1,500 miles). The regression equation calculation was $Y = 4.30 + .0011$ and had a standard error of Y equalling .3477, which compares quite well with the equation $Y = 2.73 + .005$ (standard error of $Y = .388$) which was calculated for the 59 cases observed in this study. The Tourist '63 data represented only a portion of the total visits, not all of them as the extrapolated study data did, and consequently yielded a larger intercept. It should be noted that the standard errors of the regression lines, even though they appear to be small, represent sizeable numbers of vacationers when the resultant exponents are input to the model.

CHAPTER IV

VACATION FACILITIES AND ACTIVITIES

One of the basic aims of this study was to determine whether or not the vacationer's interaction with their hinterlands varied according to socio-economic attributes. The keys to achieving this aim lay in the identification and comparison of the various ways in which the subjects responded to the stimuli presented by the environments in which they vacationed, and in the choice of indices of such responses. The indices selected were: (1) the vacation equipment owned by the vacationers; (2) the type of accommodation utilized; and (3) the activities in which the subject families engaged while on vacation. This chapter of the thesis treats each of these indices in turn, displaying the data and pointing out significantly non-random deviations from the norm.

Vacation Equipment

The resource utilization of the vacationing families would intuitively appear to be related to their socio-economic characteristics and vacation equipment ownership patterns. Analysis of the equipment ownership data, however, (Table 16) revealed no differences between the occupational or family size groups which could not be explained by chance errors, leading one to the conclusion that vacation equipment ownership is unrelated to either of the two socio-economic factors considered. This conclusion is hardly surprising when one considers the wide range, in both quality and cost, of equipment available. The results of another

study[1] support this finding.

TABLE 16. --VACATION EQUIPMENT OWNERSHIP

Group	Tent	Tent Trailer	Trailer	Truck Camper	Boat
	Percent	Percent	Percent	Percent	Percent
			Occupation Groups		
Unskilled	33.6	5.4	8.1	10.1	24.8
Skilled	43.9	6.7	11.0	6.7	32.5
Professional	43.9	7.0	9.9	4.8	39.9
Retired	37.5	0.0	31.78	18.78	37.5
			Family Size Groups		
Small	40.4	4.8	8.9	8.7	32.6
Medium	42.5	7.7	12.2	5.4	34.1
Large	42.4	5.9	5.9	9.4	24.7
			Total Sample		
	41.8	6.0	10.6	6.9	32.8

As might be expected, the ownership of summer cottages is strongly related to the occupation of the family head (Table 17), while family size factors appear to have little bearing on ownership patterns.

One would expect cottage ownership patterns to remain relatively constant from city to city, however, analysis of the distribution of cottage owners (Figure 1) indicated significant differences between the number of cottages owned by the vacationers from each city. Strangely enough, the ratio of cottage owners declined as one moved southwards (Table 18), with the Kamloops and Vernon proportions being similar, and the Kelowna and Penticton ratios forming another pair, although the

TABLE 17. --VACATION COTTAGE OWNERSHIP BY SOCIO-ECONOMIC GROUP

Group	Number of cottages	Percent of sample
	Occupation Groups	
Unskilled	10	6.71
Skilled	48	9.44
Professional	44	16.23
Retired	3	4.76
	Family Size Groups	
Small	25	7.48
Medium	77	13.46
Large	7	8.23
	Total Sample	
	109	10.99

TABLE 18. --VACATION COTTAGE OWNERSHIP BY CITY

Group	Number of Cottages	Percent of Sample
Kamloops	31	16.3
Vernon	32	14.2
Kelowna	24	9.5
Penticton	22	6.8

difference between the Vernon and Kelowna ratios was not statistically reliable. The reasons for this trend in cottage ownership ratios were not apparent from the study data, however, it is hypothesized that the relative closeness of the two southernmost cities to acceptable waterfront

recreation areas compensates for their lower cottage ratios in that families living within the urban community are able to enjoy the benefits of a waterfront cottage without the additional cost.

Accommodation

Camping

Camping, either in the wilderness or in more civilized surroundings, offers vacationers one of the best opportunities to "get back to nature", to revert to the practices of the pioneers, albeit with many of the conveniences of the present age. In order to determine the extent of the vacationer's desire to seize this opportunity, the sample subjects were grouped on the basis of whether or not they had participated in camping during one or more of their vacations, and then subdivided into the socio-economic groups. Subsequent analysis (Table 19), indicated that camping incidence increases with family size, although the trend was not statistically significant, and that there was a reliable, though slight, agreement between occupation and camping. It is noteworthy that the relative position of the retired group on this measure is between the unskilled and skilled groups, a position in which it has been placed on other occasions in this study.

Analysis of the data concerning the number of nights spent in public and private campsites revealed that professionals spend significantly more time in private campsites than the unskilled. A positive correlation between income and length of stay appeared evident at first

TABLE 19. --PARTICIPATION IN CAMPING

Group	Percent campers	Percent not campers	Total
		Occupation Groups	
Unskilled	20	80	100
Skilled	31	69	100
Professional	34	66	100
Retired	25	75	100
		Family Size Groups	
Small	27	73	100
Medium	29	71	100
Large	34	66	100
		Total Sample	
	30	70	100

glance (Table 20), but statistical testing did not uphold its significance. Similarly, the apparent tendency for small families to camp longer than

TABLE 20. -- NUMBER OF NIGHTS SPENT IN CAMPSITES

Group	Public average	Private average	Number of Families Reporting
		Occupation Groups	
Unskilled	.70	.51	155
Skilled	1.13	1.02	533
Professional	1.05	1.53	283
Retired	.75	0.0	16
		Family Size Groups	
Small	1.06	1.04	316
Medium	1.05	1.12	572
Large	.76	.71	85
		Total Sample	
	1.03	1.06	

larger ones is statistically unreliable, the deviations being attributable to random sampling errors.

Private Cottages

Almost one-tenth[2] of all nights spent on vacation were passed in private cottages, so it can be seen that the cottage plays an important role in vacation accommodation patterns. As originally hypothesized, occupation level was highly related to this measure, with the professional group spending significantly more time in cottages than the skilled, and both of these more than the unskilled (Table 21). The only finding of significance when analysis was performed on the family size groups was that large families stayed in cottages fewer nights than medium-sized families.

TABLE 21. --NUMBER OF NIGHTS SPENT IN PRIVATE COTTAGES

Group	Average	Standard Deviation	Coefficient of variability
		Occupation Groups	
Unskilled	.21	1.40	6.67
Skilled	.87	4.13	4.75
Professional	1.01	3.51	3.48
Retired	.37	1.50	4.05
		Family Size Groups	
Small	.55	2.88	5.24
Medium	.95	4.03	4.24
Large	.36	2.32	6.44
		Total Sample	
	.76	3.54	4.46

Commercial Accommodation

The vacationers studied spent nearly one-fifth[3] of their nights away from home in commercial accommodation units. Although previous analyses indicated that the stopping places chosen did not vary significantly, it is evident that the length of stay patterns vary from one socio-economic group to another. Specifically, the length of time spent in motels appeared to increase according to income, and to decrease with family size (Table 22). Detailed analysis revealed that the families of the professional group definitely stayed longer than those of either the skilled or unskilled, while it was evident that the small family group registered the most time in motels.

TABLE 22. --NUMBER OF NIGHTS SPENT IN MOTELS

Group	Average	Standard deviation	Coefficient of variability
		Occupation Groups	
Unskilled	.57	1.51	2.65
Skilled	.99	4.15	4.19
Professional	1.66	4.26	2.57
Retired	1.19	2.70	2.27
		Family Size Groups	
Small	1.19	3.53	2.97
Medium	1.17	4.56	3.90
Large	.56	1.64	2.93
		Total Sample	
	1.10	3.83	3.48

The number of nights spent in hotels (Table 23) indicated similar, but less reliable tendencies. In this case the only relationships reliable at the .05 level were that the length of stay of unskilled and retired families was definitely shorter than that of skilled and professional families, and that large families did not stay as long as smaller ones.

TABLE 23. -- NUMBER OF NIGHTS SPENT IN HOTELS

Group	Average	Standard Deviation	Coefficient of variability
		Occupation Groups	
Unskilled	.17	1.02	6.00
Skilled	.54	2.74	5.07
Professional	.41	1.54	3.76
Retired	.12	.34	2.83
		Family Size Groups	
Small	.46	1.92	4.17
Medium	.45	2.44	5.42
Large	.16	.80	5.00
		Total Sample	
	.42	2.16	5.14

Friends and Relatives

The role of friends and relatives in providing accommodation for vacationing families was found to be of utmost importance. As might be expected from the data presented earlier, concerning the proportion of families which stated that visiting was either a main aim, or part thereof, a great deal of time was spent with friends and relatives. The

3,462 nights spent in such accommodation amounted to 40.3 percent of the total, in contrast to the 18 percent reported by another study[4] concerned with vacationers interviewed at border crossings. Analysis on the basis of socio-economic group[5] revealed only that small families tend to stay with friends and relatives longer than medium-sized families. The group data (Table 24) indicates that there is a tendency for length of stay to increase as income level rises, and to decrease as family size increases. This tendency, however, is not statistically reliable.

TABLE 24. --NUMBER OF NIGHTS SPENT WITH FRIENDS OR RELATIVES

Group	Average	Standard Deviation	Coefficient of variability
		Occupation Groups	
Unskilled	3.16	6.67	2.11
Skilled	3.35	5.51	1.64
Professional	4.19	8.39	2.00
Retired	2.31	4.38	1.90
		Family Size Groups	
Small	4.44	8.13	1.83
Medium	3.10	5.60	1.81
Large	2.91	6.18	2.12
		Total Sample	
	3.49	6.57	1.88

Vacation Activities

It was originally hypothesized that the various socio-economic groups would exhibit characteristic patterns of vacation behaviour. In

order to test this hypothesis the data, grouped on the socio-economic variables, were tabulated in such a way that the number of families engaging in each of the vacation activities might be determined. Analysis of the resulting contingency tables failed to support the hypothesis. The data (Table 25) reveals approximately equal rates of participation by all groups in each of the activities listed. The most deviant group, that of the retired families, is not statistically significant in its deviation, owing to the small number of vacations observed.[5] Consequently, it cannot be said that characteristic patterns of vacation behaviour were

TABLE 25. --VACATION ACTIVITIES BY FAMILY GROUPS

Group	Swimming percent	Fishing percent	Boating percent	Hiking percent
		Occupation Groups		
Unskilled	48	20	25	20
Skilled	56	31	27	25
Professional	52	26	29	21
Retired*	27	0	6	13
		Family Size Groups		
Small	50	20	25	21
Medium	50	28	28	22
Large	51	26	28	29
		Total Sample		
	51	25	27	23

* Due to the fact that only 16 vacations were reported in detail by retired families, these figures were not considered reliable, and are presented here for interest only. They were deleted from the calcuation of percentages for the total group.

observed for any of the socio-economic groups examined. Subsequent regrouping on the basis of whether or not the families had participated in camping indicated statistically significant relationships on all activities, with campers reporting significantly higher participation rates in fishing, boating, hiking and sightseeing, but lower rates in swimming. Neither city of residence nor ownership of a summer cottage appeared to influence the choice of activities.

Résumé

The original hypothesis that the ownership of various articles of vacation equipment would be related to the socio-economic variables was not upheld, although a significantly non-random distribution was discovered when data concerning cottage ownership patterns were analysed on the basis of city groups. Comparison of the proportions of the sample owning tents, trailers, and boats indicated that they were significantly greater than the ratios reported in another study.[6] A negative relationship was found between family size and camping incidence, while a positive association was found between camping and occupation level. A positive relationship was also found between occupation and the number of nights spent in private campsites. Once again these results were in general agreement with those of another study.[7] The length of time spent in commercial accommodations was found to be positively related to occupational level and negatively associated with family size. The role of friends and relatives in providing accommodation for the

vacationers was found to account for almost one-half of the total, although analysis on the bases of the socio-economic groups yielded few significant differences. The patterns of vacation activities, which were originally hypothesised to be influenced by the socio-economic variables, were found to be relatively constant for all family size and occupation groups, but to vary significantly between those vacationers who camped and those who did not. Subsequent analyses on the bases of city residence and cottage ownership indicated no significant deviations.

References

1 "Participation in Outdoor Recreation . . . ", op. cit., p. 66.

2 The vacationers reported spending 752 nights out of a total of 8, 476 in private cottages.

3 1, 506 nights were spent in commercial accommodations.

4 Tourist '63, op. cit., p. 65.

5 The numbers of vacations observed were: Family Size Group; Small (373), Medium (569), Large (80); Occupation Group; Unskilled (114), Skilled (515), Professional (343), and Retired (16).

6 "Participation in Outdoor Recreation . . . ", loc. cit.

7 "National Recreation Survey", Study Report 19 (Washington: Outdoor Recreation Resources Review Commission, 1962), p. 374.

CHAPTER V

SUMMARY AND CONCLUSION

The examination of the vacations of a group of families resident in the British Columbia cities of Kamloops, Vernon, Kelowna, and Penticton in an attempt to define and characterise the nature and extent of the vacation hinterlands of these cities, and the nature of the vacationer's interaction with the recreational resources of the hinterlands, has comprised the second, third, and fourth chapters of this thesis. This final section will summarise the study and set forth the conclusions that have been reached.

Summary

Analysis has shown that the intra-city differences in population and labour force structures, socio-economic factors, vacation duration, and vacation incidence, were for the most part of little practical significance. Two noteworthy exceptions were the deviations of Kamloops on the measures of age and mean length of vacations. A slight negative relationship was observed between family size and vacation incidence, and a slight positive one between occupational class and the incidence of vacations. Vacation objectives were found to differ slightly according to occupation, but no significant differences were observed between family size groups. The importance of visiting as a vacation objective was substantiated by reference to two other studies reporting similarly high rates. The duration of vacations was found to be positively associated

with occupation, and negatively related to family size, although the latter relationship is much weaker.

The determination of gross directional flows yielded directional indices for each of the cities, although the data necessary for the explanation of deviations were not available. The movements of the total group were predominantly east-west and an expected southward attraction to areas in the United States failed to materialize. The vacation destinations were analysed on the bases of the socio-economic groups, and on city of residence, but the distributions were found to be random, and it was concluded that none of these groups possessed characteristic hinterlands. Analysis of the amount of time spent in each of the destination areas failed to support the hypothesis that each of the socio-economic groups would be characterised by distinctive patterns, although these data, when mapped as a single sample, revealed that certain destination areas are more important as vacation spots than mere destination information would indicate.

The distances travelled by vacationers on circle routes were found to be significantly greater than those travelled on direct routes, while socio-economic groupings revealed a slight positive relationship between occupation and distance, and a weak negative association between distance and family size. The application of a gravity model to extrapolated visitation figures indicated the need to consider distance as a discontinuous factor. Three regression lines, accounting for 97.8, 63.4,

and 98.6, percent of the variation in the magnitude of the distance exponent, were calculated for the ranges 0-150, 151-950, and 951-1,517 miles, respectively. Application of the model to data from another study produced similar results.

A strong degree of relationship was observed between cottage ownership and occupation, however, the family size factor appeared to exert no influence. Vacation equipment ownership patterns, when analysed on the bases of the socio-economic variables, were found to be random, while a slight positive association was noted between occupation and participation in camping. The number of nights spent in commercial accommodation was positively associated with income and negatively related to family size, as might be expected, while the role of friends and relatives in accommodating vacationers was found to be relatively constant from group to group, as were the families' vacation activities.

Conclusions

The major aims of this study, the definition and characterisation of the nature and areal extent of the vacation travels of a sample of urban families, and the search for meaningful relationships between various facets of vacation behaviour, and social and economic attributes, have been partially fulfilled. The remainder of this final chapter will consist of conclusions drawn from the study and comments on some of their implications.

Delimitation of the vacation hinterlands of the sample cities

indicated that the areas were coincident. This finding, it is concluded, is due to the proximity of the cities. The additional distance that a family from Penticton, for example, would have to travel to be on an equal footing with a Kamloops family in order to holiday in the Edmonton area does not appear to loom very large in the minds of the Penticton vacationers. In fact, the only measure on which separate hinterlands could be defined for the sample cities was based on cottage ownership. Few of the cottages, which tended to be clustered near the cities they served, were more than one hour's driving time from the permanent homes of their owners. In comparison, the range of the average vacationer was found to be approximately six to eight hour's driving time.

The relationships observed between vacation incidence and the socio-economic variables indicate that as family size decreases, or income increases, the number of vacations taken rises. The decline in birth rates in the four cities (noted in the second chapter), combined with the general trend towards increased disposable income and leisure time, forecasts an increase in vacation incidence, and correpondingly greater demands on the vacation hinterlands.

The importance of visiting people as a vacation objective indicates that migration patterns may have to be taken into consideration before vacation movements can be accurately predicted. The increasing mobility of the Canadian public, partially a result of the factors of increased income and improved transportation routes and modes, may be interpreted to mean that visiting friends and relatives will become a more

important element in vacationing. Whether or not this change will increase the percentage of 'visiting vacations' is a moot point. In view of the evidence presented to indicate that the ratio of vacationers going visiting is relatively constant, it appears likely that the proportion will remain approximately the same.

It is evident that not only is the incidence of vacations going to increase, but also the duration of these vacations (as a result of the same factors), once again increasing the pressure on the hinterlands to supply vacation resources. A portion of this demand will undoubtedly be met by increasing numbers of friends and relatives, but there will be a need for additional recreation opportunities in the form of outdoor recreation facilities and means of access to unfamiliar areas. There is evidence, notably the construction of larger and faster airplanes, that technological innovations will extend the range of vacationers, thus enlarging the area from which the vacation resources may be utilized, while the construction of new roads, for example the Prince George-Jasper highway now under construction, will make new areas available for vacation exploration. Although the supply of commercial recreation facilities can probably be safely left to the private sector, the provision of natural areas and wilderness campsites, traditionally equally accessible to people of all socio-economic groups, will require the attention of governments at local, provincial, and federal levels.

The apparent aversion of the vacationers to areas in the United States is probably mainly attributable to the fact that migration to the

sample cities has been predominantly westward. Other speculative but plausible reasons the subjects might have for avoiding the United States are the current exchange rates, which in effect penalise Canadian money, the inconvenience of going through Customs procedures, and unfamiliarity with (and consequent fear of) the legal and social situations which they imagine may be encountered.

The nullification of the hypothesis that the various socio-economic groups would be characterised by distinctive patterns of vacation activities illustrates the homogeneity of the sample group, and has implications for resource planners attempting to provide adequate recreational experiences for the populace at large. All groups appear to utilise the same resources although for difference lengths of time. Whether or not they all need equal opportunity is a different question. Intuitively it would make sense if the less expensive forms of recreation were reserved for the families least able to pay, however, political considerations would probably prevent this. Indeed, if the patterns of vacation equipment ownership can be taken to represent a measure of participation in vacation activities, it would seem that entrepreneurs have compensated by marketing the necessary equipment in sufficiently wide price ranges, in effect allowing almost everyone to participate to some degree. Only in the ownership of cottages is this initiative not evident, and it would appear that there are openings for merchants dealing in less expensive cottages and lower priced sites.

The evidence presented to support the hypothesis that distance

should not be treated as a continuous factor when used in gravity models for the prediction of vacation visitation rates appears to be strong. It should be emphasised that further verification is necessary before the exponent regression equations are suitable for confident use in predictive situations.

The use of an urban-based family approach in data collection has in many cases yielded results which are not incompatible with those of studies employing other methods. Although the questionnaires must necessarily demand only simple responses, a great deal of information may be collected through the use of this technique. The gathering of data pertaining to more complex information would be extremely difficult due to the lack of contact between the researcher and the subject, and in all probability would require a different approach.

Further Research

Further research into the complex nature of the vacation act is necessary if future demands are to be met satisfactorily. Five suggestions are:

(1) vacation visitation data should be gathered and submitted to the gravity model in an attempt to verify the conclusions reached above;

(2) data concerning the frequency of the participation of various socio-economic groups in a wider range of vacation activities should be collected and analysed;

(3) a more detailed study of vacation incidence, cross-tabulated with more definitive family characteristics, should be conducted to determine whether or not the families who do not go on vacation are really different from those who do;

(4) past migration patterns should be studied to determine their influence on vacation travel; and

(5) hinterlands for specific types of vacation should be defined. For example, do the camping and skiing hinterlands of an urban center occupy the same area, or are they of different dimensions and location?

The answers, if there are definite anwers, to these questions and to many more similar ones, must be found in order that we may fully comprehend the role of vacations in the "recreational insatisability of modern men living compressed in cities which are not planned to human scale and which time and again compel attempts to escape".[1]

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1 Glikson, op. cit., p. 898.

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VACATION SURVEY

City - _____

Note: a vacation, for the purposes of this study, is a period of more than four consecutive days which are spent away from home.

A. How many people are there in your immediate family? _____

B. What is the occupation of the head of your family? _____

C. How many vacations have you taken with one or both of your parents this year (1968)?
Circle the correct answer. 0 1 2 3 or more

Note: the following questions may apply to more than one vacation.
Please place your answers in the appropriate column.

D. How many days did each vacation take?

E. Did you have a definite destination in mind before you left home? Answer yes or no.

If yes: please name your destination.
state how many nights you stayed there.

F. Did you go and return by the same route? Answer yes or no.

If yes, please name 1) some of the major places you passed through on your trip, and 2) the number of nights you stayed at each.

a)

b)

c)

d)

First Vacation	Second Vacation	Subsequent Vacations

G. Did your party take a "circle route"? Answer yes or no.

If yes, please 1) name some of the major places you passed through on your trip, and 2) the number of nights you stayed in each.

a)
b)
c)
d)

H. What were your main methods of travel while on vacation?
Place an "X" in the appropriate places.

car .....
bus .....
train .....
boat .....
plane .....
other (specify) .....

I. What was the main reason for each trip?

holiday .....
visit friends or relatives .....
both holiday and visit .....
other (specify) .....

J. Which of the following did members of your party participate in while on vacation? Place an "X" in the appropriate places.

swimming			
fishing			
boating			
sightseeing			
hiking			
camping			
other (specify)			

K. How many nights did your party stay at:

government campsites			
private campsites			
private cottages			
friends or relatives			
other (specify)			

L. How many nights did you stay in a:

tent			
tent trailer			
trailer			
truck camper			
motel			
hotel			

M. Does your family own a summer cottage or cabin? Answer yes or no. _____

If so, where is it located? Give your answer in miles from a recognizable spot. For example, "Ten miles south of Kamloops," or "At the north end of Stump Lake."

N. Does your family own a: Circle the appropriate answer.

tent	yes	no
tent trailer.....	yes	no
trailer.....	yes	no
truck camper....	yes	no
boat	yes	no

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