MONTANA OUTDOOR RECREATION SURVEY

Prepared for Montana Department of Fish, Wildlife, and Parks Helena, Montana

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INTRODUCTION

This report presents the results of an extensive survey of Montana residents regarding outdoor recreation (in the broadest sense) -- their activity, their preferences, and their opinions regarding numerous issues involved in outdoor recreation in Montana. The project was funded by the Montana Department of Fish, Wildlife, and Parks to obtain the kinds of information that would assist it in its planning for the 1981-1983 biennium; it has generated considerable information of interest not only to the Department but also to others concerned about outdoor recreation in Montana.

The report has been divided into several chapters, covering such topics as the extent of the respondents' involvement in outdoor recreation activity, their preferences in terms of activities and services, and their opinions and preferences regarding several outdoor recreation issues (such as funding, control or regulation of land or water use, revisions of programs or services, and so on), as well as some of the demographic characteristics of the respondents and their households and of those who hold Departmental licenses. Discussions of the methodology and the survey sample are included in the appendixes, along with copies of the survey instruments.

Because of sample size limitations, which are discussed in Appendix A, geographic breakdowns of the survey results, for the most part, have

been restricted to multicounty groupings — the seven largest counties and the remaining forty—nine counties, each taken as a whole, and seven broad multicounty regions. The seven largest counties are those that had populations over 30,000 in 1980: Butte—Silver Bow (formerly Silver Bow), Cascade, Flathead, Gallatin, Lewis and Clark, Missoula, and Yellowstone counties. These are also the predominantly urban counties in the state and contain the cities of Butte, Great Falls, Kalispell, Bozeman, Helena, Missoula, and Billings within their borders. The remaining forty—nine counties all had populations under 25,000 in 1980. The counties have also been grouped into seven broad regions, detailed in figure B.1 in Appendix B, which are the districts established by the Department for the administration of its programs.

A couple of other points are worth noting for the reader's information. Some of the analyses focus on the "license status" of the respondents and refer to them as "license holders" or "nonholders." "License holders" are those who reported purchasing a license from the Department of Fish, Wildlife, and Parks (DFWP) in 1979; those who did not purchase a DFWP license of any kind are referred to as "nonholders." Also, because the Department is referred to frequently, and for the sake of brevity, references in the text or tables will cite the "Department" or "DFWP" unless otherwise warranted.

The Bureau of Business and Economic Research would like to extend special thanks to the Montana Fish and Game Commission and the Department of Fish, Wildlife, and Parks for its funding and sponsorship of this

project and would also like to thank members of the staff -- Steve Bayless,

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Information Services Bureau -- for their assistance during the conduct of the project.

CHAPTER 1

OUTDOOR RECREATION ACTIVITIES AND PROGRAMS

One of the purposes of the survey was to determine the extent to which Montanans participate in outdoor recreation activities, and the activities that are the most popular. The results show that most Montanans devote some of their leisure time to outdoor recreation activity. Survey respondents were asked to name the two or three things they do most often during their leisure time, including both indoor and outdoor hobby and recreation activities. Ninety-eight percent of the survey participants responded to this question, and 75 percent of those responding cited one or more outdoor recreation activities.

This was followed by a series of questions designed to measure not only the overall rates of participation for selected outdoor recreation activities, but also what factors may affect people's participation.

Since the fuel situation in particular might significantly affect the ability of recreation enthusiasts to pursue their activities, a couple of questions were directed specifically at this issue.

Respondents were also asked a series of general questions designed to ascertain whether they wish to see revisions in the outdoor recreation services and programs currently offered.

Respondents were read a list of selected outdoor recreation activities and asked how many days they participated in each activity during 1979. Table 1.1 (three pages) shows the percentage of total respondents who indicated that they had participated in the activity at least one day in 1979. Table 1.2 shows the median number of participation days for each activity. For example, almost 59 percent of the respondents reported fishing in Montana at least one day in 1979 (table 1.1). The median number of days recorded was fourteen (table 1.2), which means that about half the respondents who fished in 1979 reported fishing fewer than fourteen days, and about half said they fished on more than fourteen days.

In general, the most popular recreation activities in Montana in 1979 were the most sedentary: picnicking, driving for pleasure, and walking for pleasure (as opposed to hiking or mountain climbing). Over 70 percent of the survey respondents reported doing each of these activities at least once in 1979. Also, as might be expected, the younger respondents showed higher participation rates, especially in the more vigorous activities. Bird watching, driving or walking for pleasure, and picnicking were activities which showed relatively greater participation by those sixty-five years of age and over. The respondent's sex and residence significantly affected participation in only a few activities. However, the license status of respondents was a generally significant factor; license holders were more likely than nonholders to have participated in every activity listed.

Table 1.1

(As Percentages of Total Respondents)

Residence, by DFWP region Region 1 Region 3 Region 4 Region 5 Region 5 Region 6 Region 5 Region 7 Legion 6 Region 6 Region 6 Region 7 Residence, by county size 5 Seven largest counties License status DFWP license holder Nonholder	23.8 22.2 32.8 22.2 32.8 22.8 25.0 25.0 26.2 24.4 23.1	81cycling 32.8 34.4 35.4 30.2 31.7 29.3 35.7 29.3 36.0	Bird Watching 29.4 46.7 29.4 29.5 29.5 29.5 29.5 29.5 29.5 31.2 28.2 31.1 27.0	Boating 48.4 48.4 29.7 28.7 34.7 27.3 34.6 29.3 38.5 28.5 23.9	62.1 57.6 66.7 57.6 57.6 57.1 57.0 44.4 51.3	2k.ing 2k.ing 23.8 20.3 20.3 20.5 3.8 3.8 5.1 8.5 9.0 18.5	Pleasure 71.4 71.4 72.8 72.8 72.1 72.7 69.6 67.3	Number of Respondends 1, 287 1, 287 196 285 285 287 717 717 520 530
Sex of respondent Male Female	28.4 20.1	29.3 35.8	28.4 30.3	37.6 28.2	63.1		70.6	564 503
Age of respondent f 18-24 years 25-34 years 35-44 years 45-64 years 65 years and over	39.6 29.9 26.2 13.4 8.1	54.3 4.5.6 30.3 16.4	21.8 26.5 29.9 32.8	49.2 37.7 29.0 26.8	75.6 71.5 63.3 43.8 23.7	19.8 18.1 7.7 1.2	8 4 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	197 355 221 299 160

Note: Because many respondents cited more than one activity, the percentage detail does not add to 160.0

With four-wheel drive vehicle.

Nonmotorized.

Includes nature study, outdoor photography.

Motorized. Includes water skiing.

The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each, The number of respondents does not add to the total because those who did not answer the age question were omitted from the tabulation.

Table 1.1 (continued)

(As Percentages of Total Respondents)

	Fishing	Hiking	Horseback Riding	Hunting	Motorbike Riding ^C	Outdoor Swimming	Picnicking	Number of Recoondends
All respondents	58.8	38.4	8.8	35.2	හ හ ස	65.3	77.5	1, 837
Residence, by DFWP region Region 1 Region 3 Region 4 Region 5 Region 6 Region 6	59.4 62.1 57.9 57.9 56.8	47.5 48.6 43.6 36.8 37.3 17.2	21.3 19.3 22.1 16.1 13.6 19.2	41.0 40.1 33.7 38.5 4	21:3 18:9 15:4 17:7 15:2	8 6 6 6 6 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8	8.20 7.20 7.20 7.20 7.20 8.80	22.0 22.0 22.0 22.0 20.0 20.0 20.0
Residence, by county size Seven largest counties All other counties	61.3 54.8	43.7	16.7	32.5 39.0	8,82 8,83	68.2 61.3	77.5	717 520
License status DFWP license holder Nonholder	84.9	45.6	21.1	54.8	22.5	74.0	81.5	730
Sex of respondent Male Female	72.3	42.2	21.1	55.5	25.0	66.5	75.7 79.0	564 673
Age of respondent ^e 18-24 years 25-34 years 35-44 years 45-64 years 65 years and over	8666 8666 867 867 867 867	57.4 52.4 38.0 24.7	35.5 22.8 17.2 12.7	422.6 338.4 13.1 13.1	38.6 23.4 15.4 12.7	88.8 78.6 71.0 50.5	83.2 83.2 72.6 60.0	197 355 221 299

Note: Because many respondents cited rore than one activity, the percentage detail does not add to 100.0
alncludes ice fishing.
blucludes trapping, archery/bow and arrow hunting.
CBoth on- and off-road vehicles.
details the seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents

each. eThe number of respondents does not add to the total because those who did not answer the age question were omitted from the

Table 1.1 (continued)

(As Percentages of Total Respondents)

	Playing Outdoor Games ^a	Riverfloating or Canoeing ^b	Snownobiling	Walking for Pleasure	Downhill Skiing	Other Winter Sports ^c	Rock Hounding	Number of Regrondents
All respondents	58,5	25.0	14.8	71.9	5.7	1.2	14/1 * *****	1,237
Residence, by DFWP region		.: : e	7	Ç	<i>:</i>			
Region 2	55.7	30.7	0 m	70.8	- N-	χ.		14 8 80 5 80 6 80 6
Region 3	0.09	37.9	12.8	74.4	10.3) -	200	: 45 50 71 71
Region 4	4.10	24.6	₹. 8.	73.3	بر. ش	2.8	7.1	388
Region 6	ა. ა. ლა	\$ 10°	6, 4, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5,	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	သော တ တ	თ c	ه. د	220
, Region 7	5.15.	19.2	6.81	67.7	0,	, - , -	2,0	50 60
Residence, by county size Seven largest counties All other counties	63.6 51.5	2,5 2,0 3,0 4,0 4,0 5,0 5,0 5,0 5,0 5,0 5,0 5,0 5,0 5,0 5	12.0	73.6		(0	7. C.
License status						:	· •	5
. DFWP license holder Nonholder	62,9 52,3	33.0	16.3	73.7	4.5	- c v.e	~ <u>-</u> ~	730 507
Sex of respondent Male Female	61.7	30.3 20.5	16.7	67.6 75.5	6.0	0.7		56 673
Age of respondent 18-24 years	٤, 48 48	.04	29.4	6.77	7 01	,	i.	£ ?
25-34 years 35-44 years 45-64 years	80,6 60,2	25.	00.	7.67	, 0 m	140 14.	^ 	\$ 60 60 \$60 60 \$60 60 \$60 60
65 years and over	20.0	3.7	<u>, 0</u>	65.2	2,3	۳°0 0°0	0.7	299

Note: Because many respondents cited more than one activity, the percentage detail does not add to 100.0. boolf, tennis, frisbee, softball, etc.

Calcingues in the state of the

Extent of Participation in Selected Outdoor Recreation Activities

Table 1.2

	4
	:
1979	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Following is a discussion of the overall participation rates for each activity. The responses were analyzed by residence, sex, age, and license status of the respondents; and any significant differences in participation among the respondent groups are noted.

Back-Country Touring. Just under 24 percent of the respondents reported back-country touring with a four-wheel drive vehicle in 1979. Significantly greater participation was reported by license holders (31 percent) compared with nonholders (13 percent). Those in the younger age groups were more likely to have participated in this activity, with participation falling off significantly for those over forty-five years of age and older. Eight days was the median number of days reported by those who had done some back-country touring in 1979.

Bicycling. Over 32 percent of the respondents reported bicycling at least one day in 1979. Age was the only factor significantly affecting participation; over 54 percent of those between eighteen and twenty-four years of age reported bicycling. Respondents between twenty-five and thirty-four years of age also reported a relatively higher rate of participation (over 45 percent), but participation in the other older groups diminished sharply with age. Respondents reported a median of twenty days of bicycling in 1979.

<u>Bird Watching</u>. This activity broadly included nature study and outdoor photography. Almost 30 percent of the survey respondents indicated some participation in these activities in 1979, and, as noted

earlier, a substantial portion of respondents in the older age categories indicated participation. Age was found to be of no statistical significance in determining participation. An interesting difference was found when comparing participants' places of residence. Those residing in region 1 (northwestern Montana, including the regions west of Glacier Park and surrounding Flathead Lake) recorded the highest participation rate -- over 46 percent. Those from region 5 (south central) showed the lowest rate, 24 percent. Participants in this activity reported the highest median number of participation days, twenty-five, of all the activities listed.

Boating. Thirty-two percent of the respondents reported some motorized boating or water skiing in 1979, and several characteristics apparently were significant. License holders were more likely to have gone boating than nonholders (38 percent versus about 24 percent), and men reported higher participation than women. As might be expected, those in the two younger age groups (under thirty-five years of age) were also more likely to have participated in this activity. And, again, respondents in region 1 (northwest) reported higher participation than did those in the other regions, possibly because that region, which includes Flathead Lake, offers abundant boating opportunities. Respondents from region 5 (south central) reported the least participation. Boating enthusiasts showed a median of six days' participation in 1979.

Camping. Camping was enjoyed by a majority -- over 57 percent -- of the survey respondents in 1979, with a median of ten days' participation reported. Camping was considered to be all types of camping, not just

backpacking. License holders were significantly more active; over 70 percent of the license holders surveyed said they camped at least once in 1979, while only about 39 percent of the nonholders reported camping. There were also significant differences between the participation rates of men and women; 63 percent of the male respondents indicated participation, compared to about 53 percent of the female respondents. Those in the two younger age groups were far more likely to have camped than those over thirty-five years of age. Apparently residence was also significant. Those who lived in the seven largest counties reported a higher rate of participation (62 percent) than did those in the remaining counties (51 percent). Over two-thirds of those in region 3 (southwest) said they had camped, while the other regions showed less participation, with those in region 7 (southeast) showing a significantly lower participation rate (44 percent).

Cross-Country Skiing. Over 14 percent of those surveyed said they had cross-country skied in 1979. The only significant differences in participation were based on age; those in the age groups spanning eighteen to forty-four years showed similar participation rates, with decreasing participation reported by those over forty-five years of age. Cross-country skiing enthusiasts recorded a median of six days' participation in 1979.

<u>Driving for Pleasure</u>. Driving for pleasure or sightseeing was enjoyed by a large proportion -- 71 percent -- of the survey respondents, and twelve days was the median number recorded. High participation rates

were reported by those from all regions and areas of the state. The only significant rate differences were among the different age groups. Those between eighteen and twenty-four years of age reported the highest participation rate (nearly 86 percent), closely followed by those between twenty-five and thirty-four years of age (79 percent). While no age group reported a participation rate below 50 percent, the rates did decline with age.

Fishing. As noted earlier, nearly 59 percent of the respondents said they had fished in Montana at least one day in 1979; the median number of days reported was fourteen. The respondents residing in the different regions and multicounty areas showed relatively similar participation rates. However, significantly different participation rates were reported by men and women; 72 percent of the male respondents indicated they had fished, while the rate for female respondents was about 47 percent. In terms of age, those under forty-five years of age recorded higher rates of participation than did older respondents. And, interestingly, 21 percent of those who were not license holders said they had fished.

Hiking. Hiking or mountain climbing are also popular activities, enjoyed by over 38 percent of the survey respondents in 1979, who reported a median of six days. Significant differences appeared among respondents in terms of residence, license status, and age. Respondents from the seven most populous counties reported a higher participation rate than did those from the remaining counties (over 43 percent versus 31 percent). Respondents residing in region 2 had the highest rate (almost 49 percent)

of the seven regions, while region 7 (southeast) had the lowest rate (17 percent). License holders were more likely to have gone hiking or mountain climbing than nonholders (over 45 percent and 28 percent, respectively). And, not surprisingly, those in the two younger age groups had the highest participation rates.

Horseback Riding. Almost 19 percent of the survey respondents indicated they went horseback riding in 1979. Place of residence, license status, and sex were not significant factors influencing participation. The only statistically significant difference was based on age; those under thirty-five years of age reported significantly greater participation (27 percent) than did the older respondents (12 percent). Enthusiasts reported a median of ten days of horseback riding in 1979.

Hunting. Over 35 percent of the survey respondents said they had hunted in Montana in 1979; these hunters recorded a median of ten days. Place of residence was not significant; respondents who lived in the seven regions reported participation rates ranging from 31 percent to 41 percent, and those in the largest counties and the rest of the state reported about 32 and 39 percent, respectively. However, the difference in participation rates among men and women was significant; over 55 percent of the male respondents said they had hunted, while only 18 percent of the female respondents indicated they had done so. Those in the three younger age groups (under forty-five years of age) showed relatively, but not significantly, greater participation than did those in the older age groups. In contrast with fishing enthusiasts, far fewer nonholders of licenses

reported doing any hunting. As mentioned earlier, over 21 percent of nonholders said they had fished, but only 7 percent of nonholders reported

gone motorbike riding with on- or off-road vehicles in 1979. Significantly more male than female respondents (25 percent versus about 14 percent) reported participation. Age was the only other notable factor; almost 39 percent of those under twenty-five years of age said they had gone motorbike riding at least once in 1979, and the participation rates decreased sharply in the other age groups. The median number of participation days recorded was fourteen.

Outdoor Swimming. Respondents were asked if they had gone swimming outdoors during 1979. Nearly two-thirds of the respondents indicated they had, and they recorded a median of ten days. Place of residence, they had, and they recorded a median of ten days. Place of residence, they had, and age were significant among respondents. Those who lived in region 1 (which includes Flathead Lake as well as many other lakes and rivers) were far more likely to have gone swimming outdoors; 81 percent of those respondents indicated participation. Respondents from the western and central regions (2, 3, 4, and 5) recorded participation rates between 63 and 66 percent, while those in the more arid eastern part of the state (regions 6 and 7), reported the least participation (55 and 59 percent). Significantly more license holders than nonholders said they had gone swimming (74 percent versus almost 53 percent). And, age was again a statistically significant factor. Those ranging in age from eighteen to

thirty-four years showed high rates of participation (about 89 percent and 78 percent, respectively), followed by those between thirty-five and forty-four years of age (71 percent) and significantly less in the older groups.

Picnicking. Picnicking, like driving for pleasure, is a less vigorous activity and is enjoyed by a large percentage of Montanans. Over 77 percent of the survey respondents indicated they had picnicked at least once in 1979, with a median of six days. Age was a factor affecting participation, but the participation rates for the older age categories were still high. Respondents in the three younger categories (under forty-five years of age) reported very close participation rates, all over 80 percent. Compared to the younger groups, fewer respondents aged forty-five years and older reported picnicking, but their rates were still relatively high -- about 73 and 60 percent, respectively. License holders showed a slight edge over nonholders in participation rates (about 82 percent and 72 percent, respectively).

Playing Outdoor Games. Outdoor games and sports, such as golf, tennis, softball, volleyball, etc., are popular recreation activities.

Over 58 percent of the survey respondents said they participated in outdoor games and sports in 1979. Those respondents who reside in the seven-county area reported higher participation than did those in the other counties, and license holders were more likely than nonholders to have participated in such activities. As might be expected, participation rates were very high -- over 80 percent -- among the younger respondents

(under thirty-five years of age). Fifteen days' participation was the median.

River Floating or Canoeing. One-fourth of the respondents said they had gone river floating, canoeing, or rafting in 1979, for a median of four days. Those respondents who lived in region 3 (southwest) were most likely to have gone floating or canoeing (about 38 percent), while those in region 6 (northeast) reported the lowest participation (12 percent). Respondents in the seven most populous counties reported greater participation than did those in the other counties, and license holders were more likely to have gone canoeing or floating than were nonholders. Those in the younger age groups again showed significantly higher rates of participation.

Snowmobiling. Almost 15 percent of the survey respondents said they had gone snowmobiling in 1979. The only apparently significant factor was age. The youngest group (under twenty-five years of age) was highest with a 29 percent participation rate, and the participation declined significantly with age. Enthusiasts reported a median of five days¹ snowmobiling in 1979.

<u>Walking for Pleasure</u>. Like the other more sedentary activities, walking for pleasure or sightseeing was very popular; it was enjoyed by almost 72 percent of all respondents. Respondents in all geographic regions showed similarly high rates of participation. More women than men reported walking for pleasure or sightseeing, over 75 percent versus

about 67 percent. As might be expected, those under forty-five years of age had the highest participation rates (about 72 percent or more), but respondents in the older age categories also reported substantial participation (over 60 percent). A high median number of days -- twenty -- was recorded for this activity.

Downhill Skiing. A relatively small percentage of survey respondents -under 6 percent -- said they had gone downhill skiing at least once in 1979.

One reason for the smaller response is that downhill skiing, unlike the
other activities, was not included in the list of activities read to
respondents; survey participants had to mention downhill skiing specifically
for their participation to be noted. The very small sample size also
makes it difficult to assess the differences in participation rates among
the respondent groups. Skiing enthusiasts did show active participation
in this activity; ten days was the median number of days spent skiing.

Other Activities. A small percentage of respondents reported participation in other winter sports, rock hounding or metal detection, and miscellaneous activities. The low number of responses makes it impossible to determine statistically significant differences among the respondent groups, and the overall participation rates for these activities must be interpreted with caution.

Preferences for Additional Activity Participation

As a followup, respondents were asked if there were any outdoor recreation activities they wished they could do in Montana but don't

for any reason. Thirty-five percent said "yes" (table 1.3). Relatively similar response rates to this question were recorded by those in all the various respondent groups, although the respondents in region 3 (southwest) were slightly less likely to answer affirmatively.

Those respondents who answered "yes" to that initial question were then asked to cite the reasons or factors that kept them from enjoying the recreation activities in which they would like to participate.

Many respondents cited more than one reason, and the reason mentioned most often was that the activity was not available in the respondents' area, either due to geographic limitations, lack of access, or the lack of developed areas. Thirty-eight percent of those answering this question gave this response (table 1.3). Respondents in regions 5, 6, and 7 gave this response with more frequency than the respondents as a whole.

The next most frequently cited reason was that the respondents lacked the time necessary to pursue the recreation activities they wished they could do. The only significant difference in terms of this particular response was between those in region 3 (southwest), who mentioned this least often, and those in region 6 (northeast) who mentioned it the most (about 22 percent and 44 percent, respectively).

Other reasons cited for lack of participation were that an activity was just too expensive to pursue, or that the respondents' age and health were limiting factors. Miscellaneous responses, mentioned by only a few respondents, included lack of equipment necessary for the desired activity and references to the high cost or unavailability of gasoline.

Table 1.3

Responses Concerning Limits on Outdoor Recreation Activity of Respondents by Residence and License Status

(In Percentages)

	Number of Respondents	431		45	7.7	7 4	20,5	0 CC	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	00 to	, ,	\$ \$	24 to 00 to) ;		186
	Other	32.0		40.0	39.4	. 0	245	24.0	- 6	23.5	•	ŗ	25.4		4	32.8
ticipation	Health and Age	16.5		15.6	25.4	23.6	2.5		, ,	17.6	•		15.7		3 01	24.2
imits on Par	Lack of Too Not Health and Time Expensive Available Age	38.0		33.3	35.2	34.45	36.0	40.2	46. 2	47.0		22 7	, 47 (1, 47) (1, 47)		42.4	32,2
easons for L	Too Expensive	12.1		6.7	5.6	18.2	19.0	13.8	7.6	2.5		17. Q	7.0		14.7	8.6
# E E E E E E E E E E E E E E E E E E E	Lack of Time	28.8		26.7	25.4	21.8	25.0	34.5	43.6	29.4		25.2	33.5		26.1	32.3
Recreation Participation Limited ^a	Number of Respondents	1,230		113	211	195	283	219	104	66		213	517		726	504
eation P Limi	Yes	35.3		37.0	33.6	28.7	37.1	39.7	37.5	32.3		35.3	35.2		34.2	36.9
Recr	8	64.7		63.0	bb. 4	71.3	62.9	60.3	62.5	67.7		9,49	8*49		65.8	63.1
		All respondents	Residence, by DFWP region	Region	vegion z	Kegion 3	Kegion 4	Region 5	Region 6	Region 7	Residence, by county size	Seven largest counties	All other counties	License status	DFWP license holder	Nonholder

apercentage detail does not add to 100.0 due to rounding. Seven persons (or 0.6 percent of the total sample) did not respond. Asked only of those who reported that there were recreation activities they wished to participate in but couldn't (approximately 35 percent of the total sample). Percentage detail does not add to 100.0 because most respondents named more than one reason. The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

The Fuel Situation

To assess the potential effects of the fuel situation on Montanans' outdoor recreation participation, respondents were asked specifically whether or not rising fuel costs or the possibility of fuel not being readily available would affect their outdoor recreation activity. Not surprisingly, a clear majority of respondents -- nearly 63 percent -- said that the fuel situation would affect their outdoor recreation activity in some way (table 1.4).

Among the seven regions, those in region 4 (north central) were the most likely to report that the fuel situation would affect their outdoor recreation activity, while those in region 7 (southeast) were the least likely to say so (about 69 percent compared to 54 percent). These differences, however, were not statistically significant. Those in the two multicounty groups gave relatively similar responses, the majority in each saying the fuel situation would affect them.

License holders were significantly more likely than nonholders to expect that the fuel situation would affect their recreation activities (68 percent versus 55 percent). Since the earlier section in this chapter shows that license holders have higher activity participation rates, this result is not too surprising.

As a followup, those respondents who indicated that the fuel situation would affect their recreation activities were asked to explain specifically how their activities might be affected or changed. Over 64 percent of those answering said that the fuel situation would probably cause them to stay closer to home for their outdoor recreation. Many respondents cited more than one possible reaction, and nearly 39 percent indicated that they

Effect of Fuel Costs and Availability on Recreation Activity by Residence and License Status

(in Percentages)

		Effect of Fuel Situation on Recreation ^a	Situation ion ^a		ACE !	Actions Expected from Those Reporting Some Effect ^b	Mose Reporting So	me Effect b	******	2 3 6 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
	Would	Would Not Affect	llumber of Respondents	Stay Closer to Home	Participate in Fewer Activities	Participate in Activities Using Less Fuel	Cease	Participate Less Frequently	Other	Number of b Respondents
.11 respondents	62.9	36.9	1.234	64.1	38.9	21.3	4.5	** **	7.11	278
esidence, by DFWP region										
Region 1	57.4	42.6	220	58.6	48.6	28.6			0.6	20
Region 3	66.0	·	2 00	- c u	3/6	2,5	ဆွ	ر م	2	132
Region 4	50.5	20.00	286	£ 20 £ 20 £ 20 £ 20 £ 20 £ 20 £ 20 £ 20	\$ C	20.2	7.0	2.3	0.4	129
Region 5		, ag	9 20		7.45	2.5	0,	4.6		197
Region 6	. 65	3.5	901	- 0		g .	~.	0.	8.9	135
Region 7	. v.		# 66 93	63.0	27.0	10.4	0.0	ro r	٠ ٠	61
•					1,000	1	o.	0.0	13.0	\$
Residence, by county size Seven largest counties	64.8	34.9	714	67.7	27 83	ç	ŗ	ć	:	;
All other counties	60.2	39.6	520	58.8	40.6	22.7	, s,	n.⊲t.		465 313
License status		i								
Vrwr II cense no ider Nonholder	5.45 2.6.4	31.5	7.28 506	64°,5	39.9	21.6	4.4	0.0	٠ 4. ه	A4.00.00
							•	2 * *	9,0	2/2

^apercentage detail does not add to 100.0 because miscellaneous reponses have been omitted from the table. Three persons (or 0.2 percent of the total sample) did not respond.

Asked only of those who reported that the fuel situation would affect their participation in recreation activities (approximately 63 percent of the total sample). Percentage detail does not add to 100.0 because most respondents cited more than one action.

The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

would likely participate in fewer outdoor recreation activities in general.

About 21 percent said they would likely participate more in activities

that are less dependent on fuel. Other possible effects, mentioned by a

small proportion of the respondents, included ceasing recreation activity

participation altogether or participating less frequently.

General Program Funding and Revision

Respondents were asked how they think outdoor recreation services and programs in general should be paid for -- by charging fees to those who actually use the services or programs, by using general tax funds paid by all Montana taxpayers, or by some other method.

About 46 percent of the respondents felt that recreation services and programs should be funded by user fees, while 28 percent preferred that funding come from the state's general fund (table 1.5). Approximately 16 percent felt the funding should come from both sources, user fees and the state's general funds. The remaining respondents gave miscellaneous responses.

Among those who did not buy licenses in 1979 (nonholders), 51 percent felt those who utilize the outdoor recreation services and programs should pay for the services by way of user fees. License holders were less enthusiastic about user fees; about 42 percent suggested them as a way of funding. Respondents in region 5 (south central) were more likely than respondents in the other regions to feel that user fees should pay for outdoor recreation programs, but the differences among the regions were not significant.

Table 1.5

Preferences for Funding Outdoor Recreation Services and Programs by Residence and License Status

(In Percentages)

	User	State General Fund	Both	Other	Total	Number of Respondents
All respondents	1,94	28.3	16.4	9.5	100.0	1,217
Residence, by DFWP region Region 1	42.5	25.8	20.8	6,0	0.001	190
Region 2	45.9	30.1	15.3	8.7	0*001	602 802
Region 3	39.4	35.8	15.0	ص ھ	100.0	193
Region 4	46,2	25.8	9.9	11,2	100°0	279
Kegion 5	52.5	24.0	17.1	6.4	100.0	217
kegion 6	9.94	28.2	14.6	9.01	100.0	103
Region /	49.0	29.2	14.6	7.2	100.0	96
Residence, by county size Seven largest counties	45.8	27.4	17.9	<u>م</u> م	000	208
All other counties	9.94	29.5	_	و. ھ	100.0	509
License status DFWP license holder Nonholder	42.5	31.1	5. 6.9	ع م م م	100.0	724 493

Note: Percentage detail may not add to 100.0 due to rounding. ^aTwenty persons (or 1.6 percent of the total sample) did not respond. ^bThe seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

It should be noted that, in this section, we are talking about the general approach to funding outdoor recreation services and programs overall. Later chapters include discussions on funding approaches for specific types of outdoor recreation programs and services; in those specific cases, there was more variation in the responses.

Respondents were also asked if there were any particular outdoor recreation services or programs which should be provided which are not provided now. Apparently most respondents are satisfied with current programs; a significant proportion, 80 percent, did not feel that any additional services or programs should be included (table 1.6). Place of residence and license status apparently were not significant; the distributions of responses in the various respondent groups were relatively similar to those recorded for all the respondents as a whole.

On the other side of the coin, the respondents were also asked whether they felt any outdoor recreation services or programs now provided should be eliminated. Again, an overwhelming majority -- this time over 85 percent -- expressed satisfaction with current programs by saying that no programs should be eliminated. Respondents in region 6 (northeast) were more likely to be satisfied; over 93 percent said "no." A relatively smaller percentage of satisfaction was recorded in region 1 (northwest) -- about 77 percent felt that no programs should be eliminated -- but this response should still be interpreted as confirmation that the respondents are relatively satisfied with current recreation services and programs in general.

Table 1,6

Attitudes toward Revision of Recreation Services and Programs by Residence and License Status

Eliminate Any Program or Service	Number of Total Respondents	100.0 1,231	100.0 122 100.0 211 100.0 283 100.0 283 100.0 103 100.0 103 100.0 515 100.0 518	
nate Any	Other	2.9	ತ್ತುವವವರ್ಷ ನಮ್ಮ ನೀ ಶಹನಾಗುಪ್ತದ ಜ್ಞ ಸ್ಥ	ر پ پ
E	N	85.3	88.0 93.2 93.2 90.8 84.1 90.8 85.6 85.6	000
	Yes	E .	87 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	2
ervices	Number of Respondents	1,231	122 212 192 238 238 217 718 728 728	200
New Programs or Services	Total	100.0		
New Prog	Other	2.4	- w w) * \
Add	No	80.7	7880.2 80.2 80.3 76.5 83.9 76.5 79.7 79.7 79.7 79.7 79.7 79.7 79.7 79	
	Yes	17.0	26 26 26 84 84 70 50 7 50 7 50 7 50 7 50 7 50 7 50 7	
		All respondents	Residence, by DFWP region Region 1 Region 3 Region 4 Region 5 Region 5 Region 6 Region 7 Residence, by county size 5 Seven largest counties All other counties License status DFWP license holder Nonholder	

Note: Percentage detail may not add to 100,0 due to rounding. aSix persons (or 0.5 percent of the total sample) did not respond. bThe seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

CHAPTER 2

PARK AND RECREATION SITES PROGRAM

A primary purpose of the survey was to learn as much as possible about Montanans' attitudes toward current state fisheries, hunting and wildlife, and park programs. This chapter and the two following chapters will deal with each of these. Respondents' attitudes toward current practices and programs were surveyed, as well as their attitudes toward possible revisions, including changes in funding.

State Park and Recreation Area Visitation and Awareness

Respondents were asked if they had visited any state or federal park or recreation sites in Montana in the last five years. As indicated in table 2.1, nearly 80 percent of the respondents said they had. Only one-fifth indicated they had not. There were differences among the seven administrative regions. Those in region 1 (northwest) were the most likely to have visited a state or federal recreation site within the past five years; over 84 percent reported doing so. In comparison, about 63 percent of the respondents who lived in region 7 (southeast) reported having visited such an area.

Urban residents (in the seven largest counties) were also more likely to have visited a federal or state recreation site since 1975. More than 83 percent reported doing so, while about 74 percent of the respondents in the rest of the state reported that they had. And, more license

holders than nonholders said they had visited a federal or state site (83 percent versus 74 percent).

Visits to Park and Recreation Sites in 1979. Those respondents who reported they had visited a state or federal park or site since 1975 were asked how many times they had done so in 1979. Nearly 80 percent of the respondents answering the question said they had visited a state or federal area at least once in 1979 (table 2.1). Over half reported between one and five visits, 13 percent recorded between six and ten visits, and about 12 percent said they had made over ten visits. Among the seven regions, those in region 3 (southwest) were most likely to have done so; about 84 percent reported one or more visits in 1979. In contrast, about 56 percent of those in region 7 (southeast) said they had visited a state or federal park or recreation site during 1979.

Respondents in the seven largest counties were more likely than those in the rest of the state to have visited a recreation area. About 82 percent reported at least one visit, while 72 percent of those in the other counties reported doing so. Not surprisingly, license holders reported a higher 1979 visitation rate than nonholders; over 82 percent reported visiting such a site in 1979, compared to 71 percent of the nonholders.

Following up on this, those who reported visits since 1975 were also asked about visits just to a <u>state</u> park or recreation area in 1979.

Slightly less than half (about 49 percent) had visited a state site, and about 16 percent said they didn't know if the place they had visited was operated by the state (table 2.2). Those in region 1 (northwest) were

Table 2.1

Visits to State or Federal Recreation Sites in Montana by Residence and License Status

	Visit Site W	ed State ithin La	Visited State or Federal Site within Last Five Years	Ä	sits to	State or Fe	ederal Site	1979 ^b
	بر ج	Ş	Number of Respondents	None	1 to 5 Visits	6 to 10 Visits	1 to 5 6 to 10 Over 10 Number Visits Visits Visits Visits Pespond	Number of Respondents
		and the same		Characteristics		November of the property of th		
All respondents	19.4	20.0	1,237	21.4	52.6	~ ~	12.2	982
Residence, by Urwy region	777	3	122	16.5	45.6	17.5	4.61	103
	200	20.3	27.2	21.6	58.7	9.6	9,6	167
Section 2	80.5	7.5	195	5.0	50,3	21.7	12.1	157
4 00.00	8	17.2	285	18,0	57.9	11.6	12.0	233
Section 7	8 8	18,2	220	21,1	53.3	14.4	-	180
Region 6	76.9	23.1	104	31,3	50.0	10.0	ထ	80
Region 7	62.6	36,4	66		35,5	ئ ئ	16.1	83
Residence by county size								
Seven largest counties	83.4	5.9	717	17,1	54.0	74.5	14.0	598
All other counties	73.8	25.6	520	28,1	50.5	11.7	4,0	384
U = 3.00								
DFWP license holder	83.2	16,2	730	17,3	52.2	15.7	14.8	209
Nonholder	74.0	25.4	202	28.0	53.3	6,6	o. 0	375

apercentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table.

basked only of those who reported they had visited a federal or state site within the past five years (approximately 79 percent of the total sample). Percentage detail does not add to 100.0 due to rounding and the omission of those who said they did not know the type of site they had visited (0.3 percent of those who were asked the question).

Che seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Table 2.2

disits to State Recreation Sites in Montana, 1979 by Residence and License Status

	None	Don't Know	i to 5 Visits	6 to 10 Visits	Over 10 Visits	Number of Respondents
All respondents	34.7	16,4	35.9	7.9	5.0	888
Residence, by DFWP region Region 1	28.2	12.6	40.8	7.6	8,7	103
Region 2	34.7	18,0	38,3	9.9	2.4	167
Region 3	32.5	14.0	39.5	დ ე.	۲۰,	157
Region 4	33.0	19,3	34.3	7.7	5.6	233
Region 5	34.4	21,1	34.4	7.2	2.8	180
Region 6	41,3	11,3	33.8	10.0	ω •	80
Region 7	50.0	6.5	25.8	6.5	~	62
Residence, by county size a Seven largest counties	<u>ر</u> س	₹	37.0	<i>寸</i> • ⊗	ru O	598
All other counties	40.1	3,3	34.4	7.3	6,4	384
License status DFWP license holder	30.8	3	38	10.2	۲,	202
	41.	20.5	31.2	4,3	, 0, 0,	375

ation site within the past five years (approximately 79 percent of the total sample). Percentage detail does not add to 100.0 due to rounding.

Are seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each. Notes: Asked only of those who reported they had visited a federal or state park or recre-

most likely to have visited a state site (about 59 percent said they had), while those in region 7 (southeast) were the least likely (about 43 percent said they had).

The responses among those in the seven largest counties and those in the other forty-nine counties were relatively similar. Over 50 percent of those in the largest counties visited a state site in 1979, and about 47 percent of those in the other counties had done so. And, license holders were more likely to have visited a state park or recreation site than were nonholders.

Awareness of State Site Ownership. Those respondents who indicated they had visited a state or federal recreation site since 1975 were asked if, generally speaking, they usually notice when visiting an area whether it is operated by the state. Of those asked, nearly 54 percent indicated they were aware (table 2.3). Forty-four percent said they were not usually aware, and the rest gave other responses. Among the various regions, those in region 2 (west central) claimed the highest awareness (60 percent), but the differences between the regions was not found to be statistically significant. These numbers should be interpreted with caution, as the following discussion suggests. Respondents' perceptions of their awareness and their actual awareness can often be quite different.

Proximity to State Recreation Areas. Respondents were asked whether they resided within fifty miles of a state park or recreation site. Over two-thirds of the total sample said they did. About 20 percent said they did not, while about 11 percent were not sure (table 2.4).

Table 2.3

Awareness of State Operation of Parks and Recreation Sites by Residence and License Status

	<u>Aware</u>	Not <u>Aware</u>	Number of <u>Respondents</u>
All respondents	53.7	44.2	984
Residence, by DFWP region Region 1 Region 2 Region 3 Region 4 Region 5 Region 6 Region 7	54.8 60.5 53.2 54.2 48.3 50.0 52.5	46.8 43.6 49.4	104 167 156 236 178 82 61
Residence, by county size a Seven largest counties All other counties License status DFWP license holder Nonholder	52.6 55.3 56.3 49.5	45.1 42.9 41.6 48.4	599 385 606 378

Notes: Asked only of those who said they had visited a state or federal park or recreation site within the past five years (approximately 79 percent of the total sample). Percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table.

aThe seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Proximity to State Park or Recreation Sites and Accuracy of Response by Residence and License Status

	4,4-	Reside v	Reside within Fifty Miles of State Site ^a	Miles	6. 李 8 8 8 8 8 8 8 8 8 8 8	- Accuracy of	Accuracy of Site Named ^b	金属 化二甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基
	Yes	O.	Other Response	Number of Respondents	Accurately Named	inaccurately Named	Unable to Identify	Number of Respondents
All respondents	68,0	20.5	11.6	1,236	35.9	8.64	14.3	811
Residence, by DFWP region								
Region	84,4	11.5	4,1	122	42.6	43.6	13.9	101
Region 2	72.2	13.2	9.4	2.12	25.7	52.7	21.6	148
Region 3	71.6	17.5	10.8	194	47.3	45.0	7.6	137
Region 4	- 89	20.4	9, 11	285	27.4	59.5	3.2	190
Region 5	8,19	22.7	15,5	220	22,3	56.9	20,8	130
Kegion 6	ر د د	36,5	12.5	104	54.9	37.3	7.8	57
Region /	62,6	31.3	6.1	88	65.0	28.3	6.7	09
Residence, by county size Saven largest county		0	-	ž e ž		S		
All other counties	63.6	27.0		519	30.5 44.2	51.8	7.7	492 272
License status								; ;
DFWP license holder	73.8	- 8 <u>-</u>	8, 1	730	39.2	46.7	0.41	765
Nonholder	59.5	23.9	16.6	206	29.9	55.3	6,41	291

apercentage detail does not add to 100.0 due to rounding. One person (or 0.) percent of the total sample) did not respond. Bevaluation made of the responses of those who said they lived within fifty miles of a state park or recreation site (approximately 68 percent of the total sample). Only the accuracy of the site's name was checked; accuracy of the actual site location was not evaluated. Percentage detail does not add to 100.0 due to rounding. Twenty-nine persons (or 3.5 percent of those eligible to answer the question) did not respond.

Cite seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Respondents in region 1 (northwest) were far more likely to answer "yes" to this question; over 84 percent said they resided within fifty miles of a state park or recreation site. Approximately 72 percent of the respondents in the other two western regions (2 and 3) indicated they lived in proximity to a state recreation area.

A primary purpose of this was really to evaluate the respondents' awareness of state-operated recreation sites. Thus, those who said they lived near a state site were then asked to name the area or areas they lived closest to. The accuracy of the name was then checked against a list of all state recreation parks and sites. Only the accuracy of the name was evaluated; whether the area was, indeed, within fifty miles of the respondents' place of residence was not evaluated.

Results indicate that the respondents' actual awareness of state recreation sites is slightly different than their preceived awareness (as reported in table 2.3). Sixty-eight percent of the respondents said they did reside within fifty miles of a park or recreation area; but when the site or sites named by those respondents were evaluated, only about 36 percent of those answering (or roughly 291 respondents) accurately named a state park or recreation area. Almost half inaccurately named a site, and 14 percent were unable to name any site (table 2.4).

Those in region 7 (southeast) were most likely to correctly name a state site; 65 percent were correct. Respondents from region 2 (west central) were the least likely to be accurate, as only about one-fourth correctly named a state park or recreation area. Those in the seven largest counties were less likely to be correct than were those in the other

counties (about 30 percent versus 44 percent). License holders were more accurate in naming a state site than were nonholders, but by a smaller margin than that reflected by respondents from the two multicounty areas:

39 percent of the license holders were accurate, while about 30 percent of the nonholders correctly named a state area.

Program Revision

Respondents were asked if, thinking ahead to the next five or ten years, the state should be purchasing land for new or expanded park or recreation sites. About 46 percent of the respondents favored the idea, while 44 percent were opposed (table 2.5). The remaining respondents answered with various miscellaneous comments. Respondents in region 5 (south central) were more likely to favor the idea, and those in region 6 (northeast) were weakest in their support (50 percent versus 35 percent, respectively). Those who lived in the seven largest counties also showed relatively more support, with about 52 percent favoring state purchase of land for new or expanded sites, while those in the remaining counties were less favorable (37 percent). As might be expected, license holders, who are more likely to be recreation enthusiasts, were more supportive of site development or expansion than were nonholders (50 percent compared with about 39 percent).

New Site Location. To follow up this question, respondents were asked where additional parks or recreation areas should be located if additional sites are developed. About 41 percent said new sites should be located closer to the state's larger population areas (table 2.5).

Opinions regarding New or Expanded State Recreation Sites within Next Five to Ten Years by Residence and License Status

Table 2.5

(In Percentages)

	State Pur	Purchase of Land fi or Expanded Sitesa	State Purchase of Land for New or Expanded Sitesa	Preferred Location		of New Sites, if Developed b	Developed ^b	
	Favor	Oppose	Number of Respondents	Near Large Population Areas	In Less Populated Areas	in Both Locations	Wherever Needed	Number of Respondents
All respondents	45.7	44.3	1,218	40.7	31.3	9.8	7.9	1,221
Residence, by DFWP region								
Region 1	49.6	43.8	121	20.00	35.2	F# 8	4.9	122
Region 2	i,	42.3	208	0.04	30.0	12,9	00 65	210
Region 3	50.0	41.7	192	6.44	29.8	10.1	ڻ ي ي	288
Region 4	40.0	45.0	280	40.7	30.0	7. 1	ر و و	280
Region 5	50.5	44.0	216	7.84	27.3	8,6	, S	220
Region 6	35.0	53.4	103	37.5	32.7	6.7	7.7	204
Region 7	, 8 1, 8	43.9	98	26.8	43.3	10.3	10,3	97
Residence, by county size c	ļ	•	i	•	•			
Seven largest counties	51.6	39.4	708	.99	28, 4	0,1) \ \ \ \	711
All other counties	37.6	51.2	510	34.9	35,3	4,6	ය හ	510
License status	л О	- -	799	41 2	C.A. Book	<u> </u>	-1 O	73.9A
Nonholder	38.	, co	496	40.0	2,	9.	7.0	497

^aPercentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table. Nineteen persons (or 1.5 percent of the total sample) did not respond.

Percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table. Sixteen persons (or 1.3 percent of the total sample) did not respond.

The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Thirty-one percent preferred that any new developments be located in Montana's less populated areas. Almost 10 percent felt any new sites should be located in both areas, and 8 percent said that the recreation areas should be wherever they are needed.

Respondents from region 5 showed greater support for locating new state recreation sites near large population areas. Respondents from region 7, on the other hand, were the most likely to say that new sites should be located in the state's less populated areas. Those who lived in the seven more populous counties tended to want any new recreation sites located near large population areas; the preferences among those who resided in the other less populous counties, however, were pretty evenly divided between large population areas and less populated areas. License status did not influence response to this question; license holders and nonholders showed similar response patterns, with the preference being for locating any new sites near the large population areas.

Types of Sites Preferred. Respondents were also asked what type of recreation sites and parks they would prefer, if additional state facilities are provided. Several different types of sites were suggested, and many respondents chose more than one type. There was a relatively high nonresponse rate (over 17 percent of the total sample); all respondents were asked this question, and those who had reflected in an earlier answer that they were opposed to development of additional sites were more likely not to respond.

About half of those who answered said that additional state recreation sites should include camping and picnic areas (table 2.6).

Table 2.6 (continued)

Type of Additional State Recreation Sites Preferred by Residence and License Status

(In Percentages)

	Hunting Access Areas	Snowmobiling Access Areas	Off-road Vehicle Access Areas	Cross-country Skiing Access Areas	Water Recreation Areasb	Primitive and Roadless Areas	Number of Respondents
All respondents	17.5	4.8	~~		9,6	9 0	7,017
Residence, by DFWP region							
Region	13,7	~ : 	0 0 2	18.6	9,0	ລັດ	102
Region 3	22.2	. c	. — . —	ກຸດ. ດູດ.	, w	, o	158
Region 4	20.2	17.2	12.0	18.0	7.7	7.3	233
Region 5	0.51	14.3	13,8	15.3	5,8		189
Region 6	9	14.5	14.5	12,0	~** ***	3.6	83
Region 7	24.7	15.6	16.9	13.0	C = = = = = = = = = = = = = = = = = = =	7.8	23
Residence, by county size	81	4 d s	<u>~</u>	C.		-# O	508
All other counties	 	14	, <u></u>) (r)	. Q.		क्ष इ.स. इ.स.
License status DFWP license holder Nonholder	21.7	16.0	13.6	17.9	2.5	7.6	632 385

Notes: Percentage detail does not add to 100.0 because most respondents named more than one type of site. Two hundred twenty persons (or 17.8 percent of the total sample) did not respond; many of these had reported in a preceding question that they felt the state already had enough sites and chose not to respond to this question. Some miscellaneous responses were omitted from the table. Sincludes areas for motorcycles and four-wheel drive vehicles. bincludes areas for motorcycles and four-wheel drive vehicles. Cludes river access, boating areas, swimming areas; excludes fishing access areas. Cludes areas generally used for backpacking and hiking. The seven largest counties had populations over 30,000 in 1980; all other counties had fewer than 25,000 residents each.

Table 2.6

Type of Additional State Recreation Sites Preferred by Residence and License Status

Number of Respondents	71041	103 1755 1755 1883 1883 1883 83 83 83 83 83 83 83 83 83 83 83 83
Fishing Access Areas	41.0	35.5 39.7.5 47.5.6 32.5.0 49.8 36.8 36.8 36.8 36.8 36.8 36.8 36.8 36
Water fow! Areas	ŭ v	7.41 1010 1010 1010 1010 1010 1010 1010 1
Game b	4.5	93.50 - 51. 31. 31. 35. 35. 35. 35. 35. 35. 35. 35. 35. 35
Historical Parks	5.6	28
Snow Park Areasa	۵. ص	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Camping and Picnic Sites	50.4	51.0 46.2 46.2 50.6 51.9 57.8 47.2 48.2 55.8
	All respondents	Residence, by DFWP region Region 1 Region 2 Region 4 Region 4 Region 5 Region 6 Region 7 Residence, by county size 5 Seven largest counties All other counties License status DFWP license holder Nonholder

Notes: Percentage detail does not add to 100.0 because most respondents named more than one type of site. Two hundred twenty persons (or 17.8 percent of the total sample) did not respond; many of these had reported in a preceding question that they felt the state already had enough sites and chose not to respond to this question. Some miscellaneous responses were omitted from the table.

alnoludes skiing and sledding areas. blnoludes animal reserves and wildlife preserves. The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents

The next most frequently mentioned type of site was fishing access areas, named by 41 percent of the respondents.

Other types of recreation areas were mentioned much less frequently. Hunting access sites and access areas for cross-country skiing were mentioned by 17 percent of the respondents. Over 15 percent mentioned historical and cultural park areas and game ranges, including animal reserves and wildlife preserves. Slightly under 15 percent indicated new sites should include access areas for snowmobiling. Thirteen percent chose waterfowl areas, and the same proportion wanted access areas for motorbiking, including off-road areas for four-wheel drive vehicles and motorcycles. Just under 10 percent indicated they wanted "snow park" areas developed for sledding, skiing, and other winter activities. And 8 percent said they wanted additional primitive and roadless areas that can be used generally for backpacking and hiking. About 6 percent said that additional water recreation areas (excluding fishing access areas) should be provided.

Respondents in the seven regions and in the two multicounty areas were generally in agreement with the respondents as a whole. The only significant difference was between license holders and nonholders. Not surprisingly, license holders were more likely to request additional fishing and hunting access areas. Almost 50 percent of the license holders responding indicated that new fishing access areas are needed; only 26 percent of the nonholders named this type of site. And nearly 22 percent of the license holders named hunting access sites, while only about 10 percent of nonholders did so.

Funding Awareness

To assess respondents' perceptions and awareness of the funding sources for the state's system of park and recreation sites, they were asked to name what they thought were the major funding sources. These results are shown in table 2.7. Some respondents named more than one source, and more sources than those listed in the table were named. However, those sources named by a significant number of respondents are listed.

Slightly over half of the respondents mentioned the state general fund(s) or a similar response. Over 23 percent mentioned the revenue collected from the sale of hunting, fishing, and other licenses. About 9 percent named federal funds. Almost one-fourth were not able to name any funding sources.

When analyzed according to administrative regions, no statistically significant differences were found. In all seven regions, the state general fund(s) was the funding source most frequently mentioned.

License revenue was the second most frequently mentioned source, with federal funds a distant third. Respondents who could not name a funding source ranged from 20 percent in region 5 (south central) to 34 percent in region 7 (southeast).

A significant difference was found between those in the seven largest counties and those in the rest of the state. Almost 56 percent of those in the seven largest counties mentioned the state general fund as a source which supports the parks program, while 44 percent of the respondents in the other counties named this funding source. About the same proportions in each multicounty group mentioned license revenues and federal funds.

Respondents' Opinions and Awareness regarding Sources of Funding for State Recreation Sites by Residence and License Status

Table 2.7

(In Percentages)

License status DFWP license holder Nonholder	Residence, by county size C Seven largest counties All other counties	Residence, by DFWP region Region 1 Region 2 Region 4 Region 5 Region 6 Region 7	'All respondents	
51,0 50,9	55°8	47.5 57.1 47.9 56.2 46.2 39.4	51.0	State General Fund
30.1	25.2 21.3	25.4 19.5 25.8 26.6 22.4 22.1	23.6	Sources of State Site Funding as Cited by Respondents ^a Hunting and Federal D Fishing Licenses Funds K
æ 19 12 15	10.7	- 0 - 0 0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8.9	Site Fund espondents Federal Funds
21.7 29.4	19.9 31.7	25. 4 22. 4 24. 7 24. 1 32. 1 34. 3	24.9	
727 503	713 517	122 210 204 202 210 210 99	1,230	on't Number of
27.7 36.1	26.4 37.7	34. 29.24. 26.83 39.44	3	Aci
57.4 7.9	51.7 47.5	57.58-3	50.0	tual Sou by
21.0 16.0	21.9	10.00 mg 22.00 mg 22.	8.9	Actual Sources Accurately Named by Respondents ^b lhomber to the language of t
507	520°	00000000000000000000000000000000000000	1,237	b lhomber of Respondents

aReflects what the respondents believe are the funding sources, whether accurate or not. Percentage detail does not add to 100.0 because some respondents named more than one funding source. Miscellaneous responses were omitted from the table. Seven persons (or 0.6 percent of the total sample) did not respond.

Sepercentage detail does not add to 100.0 due to rounding.

Che seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

About half of license holders and nonholders mentioned the state general fund. However, license holders were much more likely to mention license revenues as a source; 30 percent of the license holders mentioned this source, compared with 14 percent of the nonholders. About equal proportions of both license holders and nonholders mentioned federal funds.

According to a Department report entitled Design for Tomorrow,

1977-1990, published in 1978, the Montana parks program is funded by the
following: license revenues (which provide 17 percent of program revenue),
boat and snowmobile gas tax (25 percent), the coal tax and matching funds
(10 percent), the state general fund (23 percent), federal Land and Water
Conservation Funds (11 percent), parks earned revenue (9 percent), and
boat and snowmobile licenses (5 percent). As indicated in table 2.7,
the respondents apparently are aware of license revenue, state general
fund money, and federal funds as sources of revenue for the state parks
program. The other sources which are actually used were mentioned by
only a very few respondents.

The overall accuracy of the respondents' answers to this question, or their awareness, is also shown in table 2.7. Half the respondents were able to accurately name one funding source. About 19 percent correctly named two or more of the funding sources. A significant proportion — 31 percent — were unable to identify correctly any source of funds for the parks program.

Respondents in the various administrative regions named funding sources with about the same accuracy as did the respondents as a whole. While

more respondents in the seven largest counties than in the rest of the state were accurate about the funding sources, the differences were not statistically significant. The accuracy of responses among license holders was slightly higher than that of nonholders, but, again, the difference was not statistically significant.

Respondents' Overall Rating of the Park and Sites Program

Respondents were asked, in general, what their feelings were regarding the state's maintenance of its parks and recreation sites.

Over three-fourths of those responding said that the state does a "very good" or "good" job (table 2.8). About 16 percent said the state does a "fair" job, and only 2 percent said the state does a "poor" job.

No statistically significant differences were found among the various regions; those in the seven largest counties and in the other forty-nine counties were also generally in agreement. License holders and nonholders also tended to agree that the state does a very good or good job maintaining its system of parks and recreation sites.

Table 2.8

Evaluation of State Operation of Parks and Recreation Sites by Residence and License Status

	Very Good	Good	Fair	Poor	Number of Respondents
All respondents	20.2	56.8	16.7	2.1	1,219
Residence, by DFWP region Region 1 Region 2 Region 3 Region 4 Region 5 Region 6 Region 7	19.6 23.1 16.1	58.2 55.2 64.5	19.8 17.8 14.9 16.7 14.3 17.5	2.1 1.8 2.8 2.9	121 208 194 281 217 103 95
Residence, by county size a Seven largest counties All other counties	19.8 20.7	58.7 54.2		1.3 3.4	712 507
License status DFWP license holder Nonholder	19.8 20.7	56.9 56.7	18.6 13.9	2.2	722 497

Notes: Percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table. Eighteen persons (or 1.4 percent of the total sample) did not respond). ^aThe seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

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CHAPTER 3

FISHING AND THE FISHERIES PROGRAM

Fishing is among the most popular outdoor recreation activities in Montana. When asked if they ever fish in Montana, 855 of 1,235 respondents, or 69 percent, said that they do. Further, almost 59 percent said they had fished during 1979.

Preferences regarding Sites and Limits

The fishing enthusiasts were asked about where they preferred to fish -- at what kinds of sites. Overall, 59 percent stated that they preferred streams and rivers, and about 32 percent favored lakes and reservoirs; another 9 percent mentioned other sites, such as ponds (table 3.1). There is a systematic variation, however, among the respondents in their preferences, with a tendency toward streams and rivers in region 1 (northwest) and toward lakes and reservoirs in region 6 (northeast) and region 7 (southeast). This trend probably reflects the geography of Montana, with streams and rivers more convenient for fishermen in western Montana and reservoirs more accessible in the prairies in the eastern part of the state. The preferences of residents in the seven largest counties for stream and river fishing is probably due to the fact that most of Montana's urban areas are in the western portion of the state.

In terms of limits, Montana fishing enthusiasts overwhelmingly preferred to catch a few large fish rather than many small fish. Given

Preferences regarding Fishing Location and Fishing Limits by Residence and Fishing Participation

Table 3.1

(In Percentages)

2- 5 days 6- 10 days 11- 30 days 31- 50 days 51-100 days 0ver 100 days	Fishing participation in 1979 Did not fish in Montana Did fish in Montana I day	Residence, by county size d Seven largest counties All other counties		Residence, by DFWP region Region 1 Region 2 Region 3	All respondents	
59,2 65,1 55,1 63,7 64,3	7 + 00 × 4 +	7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	57, 4 63, 8 47, 1	54.2 60.8	59.4	Preferred Streams and Rivers
2223 25-9553	50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	200 0	£5333;	34.0 28.4	31,5	Preferred Fishing Location ^a reams and Lakes and <u>Rivers</u> <u>Reservoirs</u> Oth
77.05.445.0	သ တိက် သိ တိက်	o o o	, w - w ,	ж О - л & V	9. 1	Other
32.7 30.5 30.1 23.6 17.0	229 8 29,0 5	29.4	20.50	29,8 20,3	29.0	More Few
55.5 55.0 61.8 71.7	55 5 55 9 10 6 3	55.0 57.7	51.3	n 655 n 63	58.4	More Fish vs. Fewer but Larger Fish e Fewer but Do No
	7.8 9.9 7.6	& & & & & & & & & & & & & & & & & & &	7,5	25°6	co 	Fish Do Not Care
1147 127 272 55 54 14	344 695 993	115 08	195 149 67	1 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	865	Number of Respondents

apercentage detail may not add to 100.0 due to rounding.
Percentage detail does not add to 100.0 because miscellaneous responses (such as "other" responses) have been omitted from the table.
CAsked only of those who said that they fish in Montana (excludes those who never fish in Montana).

dThe seven largest counties had populations over 30,000 in 1980; all other Montana counties ind fewer than 25,000

this choice, 58 percent of the respondents said they preferred fewer but larger fish, compared to 29 percent who opted for more fish. Approximately 8 percent said they did not care. The pattern of responses, about two to one in favor of fewer but larger fish, is remarkably stable among the administrative regions and multicounty groups. There was, however, a strong preference among avid fishermen (fifty-one or more days in 1979) toward fewer but larger fish.

Fishing Access Sites

All the respondents, not just the enthusiasts, were queried concerning their views about state fishing access sites -- that is, those maintained by the Department of Fish, Wildlife, and Parks. Approximately 51 percent of the respondents thought that more should be obtained during the next five to ten years, while 37 percent believed there were enough already (table 3.2). The remaining 13 percent had no opinion or gave some other answer.

There were sizable differences among the respondents concerning their views about state-maintained fishing access sites. The proportion of the respondents desiring more access sites was highest in region 3 (southwest) and region 5 (south central) and lowest in region 4 (north central) and region 6 (northeast). Urban dwellers were more favorable toward additional sites than were those living in rural areas: approximately 55 percent of the respondents living in the seven largest counties felt that more sites should be obtained, compared to 45 percent in the remaining counties. Not surprisingly, additional access sites were most popular among fishing enthusiasts: fifty-nine percent of the respondents who fished

Table 3.2

Opinions regarding the Need for More State Fishing Access Sites in the Next Five to Ten Years by Residence and Fishing Participation

	State Should Obtain More	Have Enough Already	Number of Respondents
All respondents	50.8	37.2	1,194
Residence, by DFWP region			
Region 1	48.7	34.5	119
Region 2	51.2	39.6	207
Region 3	56.6	33.3	189
Region 4	42.8	44.6	271
Region 5	63.4	26.3	213
Region 6	38.1	46.4	97
Region 7	49.0	36.7	98
Residence, by county size ^a			
Seven largest counties	54.9	34.1	692
All other counties	45.2	41.4	502
Fishing participation in 1979			
Did not fish in Montana	38.5	43.2	481
Did fish in Montana	59.2	33.1	713
1 day	56.0	32.0	25
2- 5 days	54.0	35.4	161
6-10 days	56.4	33.1	133
11-30 days	62.0	32.1	271
31-50 days	66.7	27.8	54
51-100 days	58.2	38.2	<i>55</i>
Over 100 days	71.4	28.6	14

Notes: The percentage detail does not add to 100.0 because miscellaneous responses, such as "other" responses, have been omitted from the table. Also, forty-three persons (or 3.5 percent of the total sample) did not respond.

^aThe seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

in Montana during 1979 said that more sites were needed and 33 percent thought there were enough already. In comparison, only about 38 percent of those not fishing in 1979 were in favor of more sites and 43 percent were satisfied with the existing sites.

Warm Water Fisheries Program

Respondents who indicated they had ever fished in Montana (not necessarily in 1979) were asked if they thought more emphasis should be placed on warm water fish, such as walleye, northerns, and bass. About 43 percent indicated that they favored the increased emphasis and about 46 percent were opposed (table 3.3). There were sharp geographic differences, however, in the pattern of the responses. Those living in eastern Montana (where there are more opportunities for warm water fishing) were more apt to favor expansion in the warm water program that were those in western Montana. Notice, for example, that about 67 percent of the respondents in region 7 (southeast) and about 63 percent in region 6 (northeast) approved of the expansion, while only about 34 percent in region 2 (west central) and 38 in region 4 (north central) approved.

Those who favored increased emphasis on warm water fishing were further questioned about methods for financing the expanded program.

Increased fishing license fees were favored by 75 percent and opposed by 18 percent. When asked if they would still favor the expansion of warm water fishing even if it meant a reduction in the cold water (trout) program, about 42 percent still favored expansion but almost 49 percent were now opposed. For the most part, detailed analysis of the warm water program questions was not possible because of the relatively small number

Preferences of Montana Fishermen regarding the Warm Water Fisheries Program by Residence and Fishing Participation

Table 3.3

(In Percentages)

		,	i	8 S S S S S S S S S S S S S S S S S S S	Fishermer	Fishermen Favoring Expansi	on of Warn	n Water Pr	nsion of Warm Water Program
	Increas Wa	Warm Water Program	Warm Water Program	increas	e Fishing	Increase Fishing License Fees	Reduc	e Cold Wa	Reduce Cold Water Program
	Favor	Oppose	Number of Respondents	Favor	Oppose	Number of Respondents	Favor	0ppose	Number of Respondents
All respondents	43,2	45.7	843	75.4	18.0	378	42.1	6.84	380
Residence, by DFWP region									
Region 1	80	49.5	91	82.1	7.9	39	34.2	52.6	38
Region 2	33.8	52.0	148	80.7	ලා දහ	57	36.7	48°3	00
Region 3	39.6	44.6	139	71.9	22,8	57	29.8	* 899	57
Region 4	37.9	50.8	195	74.0	ট •	77	44, 7	52.6	76
Region 5	6,24	45.2	146	65.7	26.9	67	41.2	42,6	80
Region 6	62.7	28.4	67	86,0	o w	43	- 20 21	37.2	\$3 53
Region 7	66.7	29.8	57	73.7	ភ	38	ر ا ا	34, 2	38
Residence, by county size b		• •							
Seven largest counties	2.3	6.8	506	75.6	ខ្មែ	227	40,2	53.0	219
All other counties	44.5	43.9	337	75.2	Ž,	157	44.7	¥3,5	161
Fishing participation in 1979									
Did not fish in Montana	42.1	i.	159	70.4	19.7	71	38.0	ۇ ىد	71
Did fish in Montana	43.4	46.6	684	76.5	17.6	307	43.0	9	309
1 day	42.9	47.6	137	77.8		\$9	22,2	77.8	ಳು
2- 5 days	¥3°5	6.94	147	යා	T5.2	88	ઝ રુ જ	50°.	67
6- 10 days	42,2	r V	128	69,6	4,12	56	46.4	\$- 5	56
11- 30 days	43.3	45.9	268	78,5	14.9	121	47.5	\$#\$ 3	122
31- 50 days	ىن ئى ئ	\$5°6	54	77.8	22,2	18	44。4	50,0	18
51-100 days	56,6	43.4	53	70.0	26.7	30	50.0	46.7	30
Over 100 days	46.2	46.2	13	71,4	 _ي ن	7	28.6	71,4	7

Notes: The questions represented in this table were asked only of Montana fishermen (i.e., those who fish in Montana ever, not just in 1979); excluded were those who said they never fish in Montana. In most cases, the percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table.

Asked only of those Montana fishermen who favored increased emphasis on the warm water program.

The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

of responses. Notice, however, the apparent strong support for expanded warm water fishing (even at the expense of the cold water program) in eastern Montana, especially regions 6 and 7.

Issues Related to Fish Habitat

A few questions were asked regarding certain aspects involved in management of Montana waters especially as this pertains to fish habitat and the environment where people fish. These questions were asked of all respondents, regardless of whether or not they were fishing enthusiasts, and table 3.4 summarizes their responses.

The respondents were first asked whether they favored or opposed efforts by the state to maintain fish habitat by maintaining minimum flows of water in the stream, keeping stream channels from being changed, and similar activities. Efforts by the Department to maintain fish habitat were overwhelmingly approved; overall, about 90 percent of the respondents were in favor and 4 percent opposed.

Reactions to the idea of controlling subdivision activities along rivers with high fishing or recreational value were also recorded. About 88 percent of the respondents felt that subdivision activities should be controlled in some way, while approximately 7 percent were opposed to any regulation. Notice, however, that there appears to be significantly greater opposition in the rural areas and in the administrative regions located in eastern Montana. For example, about 5 percent of the respondents living in the seven largest counties were opposed to such regulation compared to 10 percent among residents in the remaining forty-nine counties. While the results suggest overwhelming approval of this type

Opinions regarding Selected Activities by the State to Manage Montana Waters by Residence and Fishing Participation

Table 3.4

(In Percentages)

Fishing participation in 1979 Did not fish in Montana Did fish in Montana 1 day 2-5 days 6-10 days 11-30 days 31-50 days 51-100 days 0ver 100 days	Residence, by county size described Seven largest counties All other counties	Residence, by DFWP region Region 1 Region 2 Region 3 Region 4 Region 5 Region 6 Region 7	All respondents	
90.56 90.56 90.56 90.56	92.9 87.0	86.8 92.3 90.1 91.8 90.8 88.9	90.5	- Main Pro
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	~ <u>~</u>	**************************************	4.4	aintain Streamflow to Protect Fish Habitat Number of Oppose Respond
223 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	709 507	121 209 192 280 218 99	1,216	Protect Fish Habitat **Number of Favor Oppose Respondents**
85.4 89.4 91.6 84.3 91.2 91.2 91.2	90.7 83.7	86.8 91.9 98.6 87.7 89.9 79.8	87.8	Acti Favor
7.8 6.9 11.0 9.1 7.1	5.2 10.2	7.4 6.2 6.7 6.7 12.4	7.3	gulate Su vities al Oppose
499 722 25 166 134 273 55	712 509	121 209 193 285 217 99	1,221	Regulate Subdivision Activities along Rivers Number of bor Oppose Respondents
48.9 48.9 53.0 51.1 48.9 36.4 47.3	47.1 51.4	38.0 42.1 50.0 55.0 48.4 51.8	48.9	of W.
37, 4 43, 4 39, 2 38, 5 44, 9 30, 8	44.8 35.7	46.3 43.3 42.5 334.5 334.5	41.0	trol or S aters dur Oppose
503 725 135 855 136	712 516	121 209 194 282 219 99	1,228	Control or Schedule Use of Waters during High Use **Mumber of Common State of

Note: The percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table.

aTwenty-one persons (or 1.7 percent of the total sample) did not respond.

Sixteen persons (or 1.3 percent of the total sample) did not respond.

Chine persons (or 0.7 percent of the total sample) did not respond.

The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

of subdivision regulation, they must be interpreted with caution because the respondents may not be equally informed about the various aspects of the topic. For example, urban residents may not be familiar with these types of subdivisions, while rural residents might be more aware of the potential problems associated with regulation, and this may help to explain their greater opposition. Also, had several more specific questions been asked about various degrees of subdivision activity and regulation, a wider range of opinions would likely have been found; the intention, however, was only to get a public reaction to a general idea.

The respondents were also asked about the state controlling or scheduling the use of popular recreation waters during periods of high use -- that is, actively regulating those streams and rivers which are used heavily for fishing, canoeing, and other forms of recreation. Overall, about 49 percent of the respondents favored such regulation and approximately 41 percent were opposed. Of those approving regulation, roughly 66 percent favored the issuing of permits, and approximately 27 percent opposed permits; the remainder said they didn't know or suggested some other form of regulation. (These data are not presented in tabular format.)

Respondents supporting the regulation of subdivisions and the use of popular recreation waters strongly favored the State of Montana as the appropriate regulatory authority. About 75 percent of those who believed subdivisions should be controlled indicated that the State of Montana should be responsible, approximately 7 percent preferred local governments, and the remainder didn't care or mentioned the federal government

or some combination of federal-state-local authority. With respect to use of recreation waters during high use, about 86 percent thought the State of Montana should do the scheduling and be in control; the remainder did not care or preferred some other level of government. (These data are not presented in tabular format.)

Funding of the Fisheries Program

Table 3.5 summarizes the responses to questions concerning the funding of fisheries programs. These questions were also asked of all respondents, not just the fishing enthusiasts.

When asked about raising fishing license fees to cover the increasing costs of the current fisheries programs, about 72 percent of the respondents favored such an increase. Many of the remaining respondents mentioned alternative sources of revenue, such as taxes in general and federal funds. Residents of region 5 (south central) and region 6 (northeast) were, on the average, more favorable toward raising the license fees for this reason than were those living in region 1 (northwest) and region 7 (southeast). Interestingly, about the same percentage of fishermen and nonfishermen (72 percent) were favorable toward increased fishing license fees. Also, respondents with lower household incomes were slightly less likely to approve of raising the license fees, with this tendency most noticeable among respondents reporting household incomes of \$5,000 or less in 1979.

The respondents were also queried about the current practice of using hunting fees to fund a sizable portion of the fisheries program.

Specifically, they were asked whether or not they favored increasing fishing license fees to fully fund the fisheries program. Overall,

Table 3.5

Opinions regarding Selected Fishing License Fee Changes by Residence, Fishing Participation, and Income

(In Percentages)

rogram	,					
increased Fees to Fully Fund Fisheries Program (No Longer Use Hunting Fees)b	Number of Respondents	1,224	2010 2010 2010 2016 2010 2010	209	202 722 722 723 734 735 735 735 735 735 735 735 735 735 735	2011 2012 218 348 355
ully Fun Use Hunt	Don't Know	1.1	<u>ე გი</u> დ დ აგ დ დ <i>ყ</i> დ დ აგ დ	9.9.55 6.8.	20.02	## 4 0 0 4 - 0 - 0 6 6 6
ees to F	Oppose	32.2	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	7.8	33.5 33.5 34.5 35.5 35.7	29.28 25.7 35.4 35.4
increased F (No	Favor	4.64	444 444.6 5.05 5.05 6.05 6.05 6.05 6.05 6.05 6.	50.6	50.7 50.7 50.3 50.3 50.3 50.3	46.4 49.7 53.2 51.1 52.6
Favor increased Fees to Fund Rising Costs of Fisheries Program ^a	Number of Respondents	1,228	121 208 194 285 218 103	212 516	504 724 135 135 329 55	84 152 199 218 349 137
Favor Increas Rising Costs	Percentage of Total	71.9	62.0 71.2 72.2 78.4 78.6	72.5	77.0 72.0 56.0 75.8 72.0 69.1	57.1 70.2 69.3 74.3 75.9
		All respondents	Residence, by DFWP region Region 1 Region 3 Region 4 Region 5 Region 6 Region 7	Residence, by county size Seven largest counties All other counties	Fishing participation in 1979 Did not fish in Montana Did fish in Montana I day 2	Household income in 1979 ^d \$ 5,000 or less \$ 5,001 - \$10,000 \$10,001 - \$15,000 \$15,001 - \$20,000 \$20,001 - \$35,000 0ver \$35,000

any the affirmative responses are shown, expressed as a percentage of all persons responding. Nine persons (or 0.7 percent of the total sample) did not respond.

bin most cases, the percentage detail does not add to 100.0 because the miscellaneous responses have been omitted from the table. Thirteen persons (or 1.1 percent of the total sample) did not respond.

The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each,

The number of respondents does not add to the total shown for all respondents because those who did not repond to the income question were omitted from the tabulation.

about 49 percent said they favored such an increase, while 32 percent were opposed; another 11 percent said they didn't know, and the rest gave other responses. Even though roughly the same proportions of fishermen and nonfishermen favored the increase, a larger percentage of the fishermen were opposed to the proposal (36 percent compared to about 27 percent of the nonfishermen). Interestingly, in a tabulation not shown in table 3.5, hunters were found to resemble fishermen with respect to the use of hunting fees for the fisheries program; that is, about the same proportions favored or opposed this particular proposal.

CHAPTER 4

HUNTING AND WILDLIFE MANAGEMENT PROGRAMS

Several questions in the survey dealt with various aspects of hunting and wildlife management in the state and, of course, with funding for such programs. Over one-third of the respondents reported that they did some hunting in 1979, and the Department reports that the numbers are increasing.

As was done in most of the survey, however, these questions were directed to all respondents, not just those who are actually hunting enthusiasts (who participated in 1979), in order to be able to determine if hunters and nonhunters differ in their opinions in any way.

Limits on the Number of Hunters Allowed

The growing number of persons who hunt in Montana combined with the limits on the amount of game available have led to concerns about the future of quality hunting in the state. The respondents were asked a number of questions concerning limiting the number of hunters, so that each may have a better chance of success. These answers are summarized in table 4.1.

Resident Hunters. When asked whether the number of resident hunters should be limited, about 37 percent of the respondents said they were in favor of such a limit while 48 percent were opposed. The greatest support for restricting resident hunters was in eastern and central Montana.

Opinions regarding Limiting Resident and Nonresident Hunters by Residence and Hunting Participation Table 4,

Did not hunt in Montana Did hunt in Montana 1 day 2-5 days 6-10 days 11-30 days Over 30 days	Residence, by county size Seven largest counties All other counties Hunting participation in 1979	Residence, by DFWP region Region 1 Region 2 Region 3 Region 4 Region 5 Region 6 Region 7	All respondents	
3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	35.7 38.5	25.6 30.8 29.4 42.4 44.1 44.9	36.9	
55, 3 56, 3 57, 2	48.9	57.0 52.6 57.7 41.7 41.4 49.0	48.2	t Residen
436 21 21 112 112 33	712 519	121 211 194 283 220 104 98	1,831	Limit Resident Hunters Number of
99988994 3245 3448 	87,7	86.7 85.7 87.7 90.9 82.7 83.8	86.8	- Limit
67.563.69	= = = = = = = = = = = = = = = = = = =	10.2 10.2 10.2 10.2 10.2	10.4	Nonresid
436 436 21 113 1157 33	716 520	122 211 195 285 280 220	1,236	- Limit Nonresident Hunters - Number of b
57.8 64.8 80.6	5 57.5 0 0 57.5	61.0 52.0 53.8 62.6 53.8	56.0	Lower than
- 233 47 245 47 482 0 85 0	2 45 2 5 4	30 33, 3 35, 3 40, 2 5, 0	32.1	Preferred N No Change (17 nnn)
002-0-3		20002200	1. 4	Lower than No Change Higher than <i>Number of</i>
105 125 125 125 125	626 441 671	105 179 168 249 198 85	1,067	Number of C

Note: In most cases, the percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table.

asix persons (or 0.5 percent of the total sample) did not respond.
One person (or 0.1 percent of the total sample) did not respond,
CASked only of those favoring a limit on nonresident hunters.
dine seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

The percentages of respondents favoring limits were much higher in regions 4, 5, 6, and 7 (roughly the area east of the Continental Divide) than in regions 1, 2, and 3 in the west. Conversely, opposition to resident limits was much greater in the western portion of the state, where opponents outnumbered supporters almost two to one. There were significant differences between hunters and nonhunters. Persons who did not hunt in Montana in 1979 (nonhunters) were almost evenly split; about 41 percent were in favor of resident limits and about 44 percent opposed any limit. Hunters, on the other hand, were strongly against a limit on resident hunters; roughly 57 percent were opposed, while only about 29 percent were in favor of such limits.

Nonresident Hunters. A limit on the number of nonresident hunters, however, was overwhelmingly approved by the respondents. More than 86 percent said they favored such a limit, while only 10 percent were opposed. The only systematic variation among the respondents was between hunters and nonhunters; a slightly higher proportion of hunters (91 percent) favored such a limit than did nonhunters (84 percent).

Those respondents favoring a restriction on nonresident hunters were further queried about the current limit of 17,000 nonresident big game licenses that may be sold each year. Over half (56 percent) preferred a lower limit (thus fewer nonresident hunters), 32 percent favored no change in the limit, and only 1 percent wanted an increase in the limit. Once again, the only apparent variation among the respondents was between those who hunted in 1979 and those who did not; a lower limit on nonresident hunters was preferred by more hunters (63 percent) than nonhunters (about 52 percent).

Other Options to Increase Hunting Opportunities

Rather than limiting their number, an alternative which may improve the success rate for hunters is to increase the availability of hunting opportunities. Table 4.2 presents the responses to questions concerning other approaches to increasing the hunting (and fishing) opportunities in Montana.

Paid Hunting and Fishing on Private Land. One alternative dealt with the practice of paid hunting (and fishing) on private lands—members of the public would pay private landowners a fee to hunt (and fish) on their lands during the regular hunting (and fishing) seasons. When asked about such paid hunting (and fishing) on private land, which might open up some additional land for such recreation, the respondents were almost evenly divided; about 47 percent approved while about 44 percent disapproved. This alternative was less popular with hunters than nonhunters; about 34 percent of those who hunted in 1979 approved of paid hunting and fishing on private land, while 59 percent disapproved. Among nonhunters, the figures were almost reversed; about 54 percent approved while 35 percent disapproved.

The apparent ambivalence of Montanans toward the concept of paid hunting and fishing on private land disappears when the role of government is considered. Only 30 percent of the respondents believed that the state should encourage this practice, while 56 percent stated that the state should not encourage it. Encouragement by the state was viewed slightly more favorably by nonhunters than hunters; about 26 percent of the hunters thought the state should foster such paid arrangements as compared to only

Table 4.2

Opinions regarding Game Farms and Paid Hunting and Fishing on Private Land by Residence and Hunting Participation

(In Percentages)

35.3 59.1 54.0 58.9 62.4 63.6
Residence, by county size Seven largest counties All other counties Hunting participation in 1979 Did not hunt in Montana l day 2-5 days 6-10 days 11-30 days Over 30 days

Note: The percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table.

^aFour persons (or 0.3 percent of the total sample) did not respond.

^bSeven persons (or 0.6 percent of the total sample) did not respond.

^cThe seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

32 percent of the nonhunters. Correspondingly, about 65 percent of the hunters and 51 percent of the nonhunters were against state encouragement of such a practice.

Private Game Farms. Another alternative is the private game farm, where game animals are grown for meat or other products and/or where people pay to hunt privately owned wildlife. This alternative received mixed reviews: about 49 percent of the respondents opposed this type of operation, but almost 38 percent (certainly a sizable proportion) approved. Opposition to private game farms was slightly greater among hunters (about 54 percent) than among nonhunters (47 percent). Regardless of their general feelings toward game farms, though, most repondents (71 percent) thought they should be regulated by the state. (These data are not premoted in tabular format.)

Nongame Wildlife and Endangered Species

A few questions were also asked concerning nongame wildlife programs and programs for endangered species of wildlife. Tables 4.3 and 4.4 summarize the responses to these questions. Included in this section is a discussion of the responses to a question about small game animals, such as rabbits, squirrels, and raccoons. It is included in this section on nongame wildlife because, although such small animals may be hunted, they are not generally thought of by the public as being in the category of game animals.

Small Game Animals. At present, Montana does not require a license to hunt small game animals, such as rabbits, ground squirrels, and

Table 4.3

Opinions regarding Licensing and Funding of Nongame Wildlife Programs by Residence and Hunting Participation

(In Percentages)

	8 +	Require License to Hunt Small Game	ense to	More for Non	Emphasis game Wild	More Emphasis and Funding for Nongame Wildlife Programs	Use Hur for Nor	Hunting and Nongame Wild	and Fishing Fees Wildlife Programs
	Favor	Oppose	Number of Respondents	Favor	Oppose	Number of b Respondents	Favor	Oppose	Number of b Respondents
Ali respondents	25.9	4.89	1,234	17.4	72.5	1,225	46.4	40°8	1,225
Residence, by DFWP region									
Region	30.8	58.3	120	15.8	74.2	120	43.0	45.5	121
Region 2	24.5	70.3	212	16,6	68,2	27.1	47.6	38.5	208
Region 3	27.2	67.7	195	25.9	66.3	193	48.5	37.6	194
Region 4	25.3	68.8	285	17.8	73.3	281	44.0	43.3	282
Region 5	31.4	64.5	220	17.4	71.2	219	51.6	37.4	219
Region 6	16.5	9.6/	103	9.6	81.7	104	44.2	43,3	104
Region 7	19.2	73.7	66	1.3	82.5	66	41.2	44,3	26
Residence, by county size								•	
Seven largest counties	28.9	65.4	716	25 2.	70.9	712	47.3	40.1	777
All other counties	21.6	72.6	518	ب چ	74.7	513	45.1		514
Hunting participation in 1979					,			•	i i
Did not hunt in Montana		66.6	800	7.4	9.0/	793	46.0	ر م د ر	793
Did hunt in Montana	24.4	71.7	434	17.4	75.9	433	47.0	43,3	432
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	19,0	76,2	21	14.3	6.19	12	52.4	28.6	2.1
2- 5 days	17.0	77.7	277	16,2	74.8	111	43.8	45.5	112
5×60 01-9	24.1	23.2	112	16.2	78,4	14	44. Tu	47.3	110
11-30 days	32.8	64.	156	17.2	78,3	157	50.6	40.4	156
Over 30 days	18.2	78.8	53	28.1	68.8	32	45.5	45.5	53.53
· ·									

Note: The percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table. Three persons (or 0.2 percent of the total sample) did not respond. Twelve persons (or 1.0 percent of the total sample) did not respond. The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Table 4.4

Respondents Favoring Use of Hunting and Fishing License Fees to Protect Endangered Species, by Residence and Hunting Participation

	Percentage of Total	Number of Respondents
All respondents	31.0	1,231
Residence, by DFWP region Region 1 Region 2 Region 3 Region 4 Region 5 Region 6 Region 7	23.8 31.4 33.3 28.5 38.8 28.8 25.8	122 210 195 284 219 104 97
Residence, by county size ^a Seven largest counties All other counties	29.4 33.1	714 517
Hunting participation in 1979 Did not hunt in Montana Did hunt in Montana 1 day 2- 5 days 6-10 days 11-30 days Over 30 days	33.6 26.0 19.0 25.0 26.1 28.0 24.2	797 434 21 112 111 157 33

Notes: Only the affirmative responses are shown, as a percentage of all persons responding. Six persons (or 0.5 percent of the total sample) did not respond.

aThe seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

raccoons. When queried, the respondents overwhelmingly thought that this practice should continue. About 68 percent opposed a licensing requirement, while approximately 26 percent thought that such hunters should be licensed (table 4.3). The opposition was greatest in the rural areas; about 73 percent of the respondents living in the forty-nine smaller counties were against requiring licenses, as compared to 65 percent in the seven largest. The rural versus urban difference is also present in the figures for the administrative regions; notice that the percentage opposed was greatest in the sparsely populated areas of regions 6 and 7, in the far eastern portion of Montana. Hunters were only slightly more opposed than nonhunters; about 72 percent of the hunters, compared to 67 percent of the nonhunters, said they were against a license requirement for hunting small game animals.

Nongame Wildlife. The respondents opposed any increased emphasis and funding of nongame wildlife by about four to one (table 4.3). About 72 percent said they were against such an increase, while only 17 percent were in favor. As with the small game licensing requirement, the opposition was slightly more prevalent in the rural areas; approximately 75 percent of the respondents in the forty-nine smaller counties were against increased emphasis and funding, compared to about 71 percent among those in the seven largest counties. Correspondingly, opposition was greatest in regions 6 and 7, which are primarily rural. Finally, even though about 17 percent of both hunters and nonhunters favored the change in emphasis, approximately 76 percent of the hunters were opposed as compared to about 71 percent of the nonhunters. Interestingly, of those in the entire sample who did

favor increased funding for nongame wildlife, a very large majority (about 89 percent) liked a procedure where people could donate part of their state tax refund by checking a box on their tax form.

When asked about the use of hunting and fishing fees for nongame wildlife programs, the respondents were about evenly split; 46 percent were in favor while about 41 percent were opposed. There were no significant differences among the respondents in their opinions concerning this use of hunting and fishing fees; even hunters and nonhunters had similar patterns of response.

Endangered Species. Another issue related to nongame funding dealt with the use of hunting and fishing license fees for programs or efforts to protect endangered species in the state. Only about 31 percent of the respondents favored the use of license fees to finance the protection of endangered animals (table 4.4). The remainder mentioned other sources, such as state taxes or federal funds. There was more of a tendency for nonhunters to favor this proposal than hunters; about 34 percent of the nonhunters approved of this use of license fees as compared to 26 percent of those who hunted during 1979.

Land Acquisition for Wildlife Management

When the state purchases land for wildlife management purposes, hunting is often allowed but most other uses are excluded or seriously limited. When asked whether they felt the state should continue to acquire land for such purposes, about 53 percent of the respondents were in favor and approximately 34 percent were opposed (table 4.5). There

Table 4.5

Opinions regarding Continued State Purchases of Land for Wildlife Management Purchases Only by Residence and Hunting Participation

(In Percentages)

	Favor	0ppose	Number of <u>Respondents</u>
All respondents	52.8	34.1	1,219
Residence, by DFWP region Region 1 Region 2 Region 3 Region 4 Region 5 Region 6 Region 7	53.7	32.3	121
	53.4	31.7	208
	49.5	38.7	194
	55.7	32.1	280
	54.7	34.6	214
	51.5	34.0	103
	46.5	37.4	99
Residence, by county size ^a Seven largest counties All other counties Hunting participation in 1979	55.3	32.5	707
	49.4	36.3	512
Did not hunt in Montana Did hunt in Montana I day 2- 5 days 6-10 days 11-30 days Over 30 days	48.6	36.6	784
	60.5	29.7	435
	61.9	23.8	21
	51.3	36.3	113
	61.6	31.3	112
	64.7	25.0	156
	66.7	27.3	33

Notes: The percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table. Eighteen persons (or 1.5 percent of the total sample) did not respond. The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

were sizable differences between the responses of hunters and nonhunters.

About 49 percent of the nonhunters felt that these purchases should continue.

In contrast, approximately 60 percent of the hunters favored these purchases, and approval was highest among those who hunted most. Notice, for example, that the approval rate was more than 66 percent for persons who hunted over thirty days in 1979.

Funding Hunting and Wildlife Management Programs

The costs of Montana's hunting and wildlife management programs are likely to rise significantly in the next few years. The respondents were asked their opinions about proposed hunting license fee increases to finance these increased costs. Their responses are presented in table 4.6. A large majority of the respondents (about 69 percent) favored increased hunting license fees to cover the rise in costs, and about 13 percent said they did not know or felt unable to give an opinion; another 18 percent suggested other funding sources, such as tax revenues in general or federal funds. Not surprisingly, increased license fees were less popular among hunters than nonhunters; about 64 percent of the hunters agreed with increased fees, compared to 71 percent of the nonhunters. Also, increased license fees were less popular among respondents with lower household incomes; about 83 percent of those with household incomes over \$35,000 in 1979 favored higher fees, and the proportion in favor declined steadily to about 61 percent among those with household incomes of \$5,000 or less. Interestingly, in terms of household income, many of the differences in the proportions of respondents favoring higher fees were accompanied by corresponding differences in the proportions who said they

Table 4.6

Opinions regarding Selected Hunting License Fee Increases by Residence, Hunting Participation, and Income

(In Percentages)

	How to F	Fund Rising Co ildlife Program	Fund Rising Costs of Idlife Program	Specific by T	Specific License Fee Increases Preferred by Those Favoring Increased Fees	Increase	s Preferred ed Fees	Incre Make Fewer	ase Resid Up Revent Nonresid	Increase Resident Fees to Make Up Revenue Lost from Fewer Nonresident Licenses
	Increase Hunting Fees	Don't Know	Number of Respondents	Resident Only	Nonresident Only	Both	Number of b Respondents	Favor	Oppose	Number of Respondents
All respondents	8.89	12.8	1,229	2.9	35.4	60.1	887	62.3	30.5	594
Residence, by DFWP region Region 1 Region 3 Region 4 Region 5 Region 6 Region 7	65.3 67.8 69.1 66.7 74.9 74.0	15.7 10.8 14.2 8.2 8.2 17.3	121 211 194 288 219 104 98	4 0 0 0 0 4 4 0 0 0 0 0 0 0 0 0 0 0 0 0	51.7 35.3 41.1 28.3 30.8	44.8 61.3 54.6 65.1 66.3	180 181 181 186 186 85	64.5 62.0 58.9 60.5 64.2 68.2	21.0 33.7 36.8 29.1 25.0 34.1	68 88 11834 1234 1483 144
Residence, by county size Seven largest counties All other counties	68.5	<u>.</u>	712 517	24 W.	36.3 34.2	60.0	513	63.6	29.4	357 237
Hunting participation in 1979 Did not hunt in Montana Did hunt in Montana 1 day 2 - 5 days 6-10 days 11-30 days	71.3 64.1 65.2 65.2 67.0 57.6	4.000 - 2.000 - 2.0000 - 2.00000 - 2.0000 - 2.00000 - 2.0000 - 2.00000 - 2.00000 - 2.00000 - 2.0000 - 2.0000 - 2.0000 - 2.0000 - 2.0000 - 2.0000 - 2.0000 -	794 435 211 1112 152 33	2 2 2 2 3 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4	33.2 39.7 43.6 40.0 47.6	562. 772.7 861.3 86.4	587 300 11 78 78 80 110	603.5 603.5 58.3 58.3 54.2	22 23 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25	28 246 25 26 26 26 26 26 26 26 26 26 26 26 26 26
Household income in 1979 ° \$ 5,000 or less \$ 5,000 - \$10,000 \$10,000 \$15,000 \$15,001 - \$15,000 \$20,000 \$20,001 - \$35,000 0ver \$35,000	60.7 66.2 65.8 68.0 70.6 83.2	22.6 17.2 13.6 10.0	84 151 199 219 350 137	3.6 2.75 2.75 7.75	50.9 37.5 31.7 28.8 39.2 28.3	43 64 64 68 68 68 68 68 68 68 68 68 68 68 68 68	55 104 1339 1556 120	61.7 59.7 62.2 59.6 63.8	33.33.33.33.33.33.33.33.33.33.33.33.33.	47 67 111 114 150 56

Mote: In most cases, the percentage detail does not add to 100.0 because the miscellaneous responses were omitted from the table.

**Eight persons (or 0.6 percent of the total sample) did not respond.

**Asked only of those who did not oppose increasing hunting license fees to cover rising wildlife program costs.

**Asked only of those who wanted to reduce the number of nonresident hunting licenses allowed.

**The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

The number of respondents does not add to the total shown for all respondents because those who did not respond to the income question were omitted from the crosstabulation.

either didn't know or could not give an opinion. For example, the rise in the favorable response rate among persons in the upper income categories was matched by decreases in the proportion who didn't know or had no opinion. This suggests that as persons become more familiar with the situation, they tend to favor increased license fees rather than other funding sources.

Most of the respondents who favored higher fees thought that both resident and nonresident licenses should be increased (60 percent), but a sizable minority (35 percent) felt that only nonresident licenses should be raised. Less than 3 percent responded that only resident hunters should pay higher license fees. A slightly greater percentage of hunters than nonhunters thought that only nonresident licenses should be increased; about 40 percent of the hunters said that only nonresident fees should be raised, compared to 33 percent of the nonhunters. Correspondingly, proportionately fewer hunters (56 percent) than nonhunters (62 percent) believed that both resident and nonresident license fees should be raised.

Earlier it was noted that many of the respondents felt that the current limit of 17,000 nonresident big game hunting licenses issued each year should be reduced. Such an action may decrease the revenue to the Department of Fish, Wildlife, and Parks. The respondents who said that this nonresident limit should be reduced were further questioned about an increase in resident hunting fees to make up for the lost revenue. Given this set of circumstances -- a decline in revenue due to fewer nonresident hunters -- these respondents believed in higher resident hunting fees by more than a two to one margin; 62 percent were in favor while about 30 percent were opposed.

CHAPTER 5

RELATED ISSUES PERTAINING IN GENERAL TO OUTDOOR RECREATION AND THE MONTANA DEPARTMENT OF FISH, WILDLIFE. AND PARKS

A number of other issues were also addressed in the survey and are discussed in this section. These issues relate to all aspects of outdoor recreation -- not just to the parks and recreation site program, fisheries program, or hunting and wildlife programs -- and to the Department overall.

Relations between Landowners and Recreationists

The potential for conflict between recreationists and landowners is one of the most important problems in resource management. The respondents were asked questions designed to gauge the extent of the problem and also to examine the issues from the perspective of both the landowner and the recreationist.

The respondents were first asked whether they believed there was any friction between private landowners and people who used their land for recreation activities (recreationists). No less than 90 percent of the respondents agreed that there were conflicts between these two groups. (These data are not presented in tabular form.)

Those who agreed that there was friction between landowners and recreationists were further queried about the severity of the problem.

As shown in table 5.1, about 26 percent said it was "very serious," approximately 52 percent said it was "serious," and about 17 percent said

Landowner-Recreationist Friction and Related Experience of Recreationists by Residence and Fishing and Hunting Participation

Table 5.1

(In Percentages)

Hunting participation in 1979 Did not hunt in Montana Did hunt in Montana 1-10 days Over 10 days	Fishing participation in 1979 Did not fish in Montana Did fish in Montana 1-10 days Over 10 days	Residence, by county size Seven largest counties All other counties	Residence, by DFWP region Region 1 Region 2 Region 4 Region 5 Region 6 Region 6	All respondents	
9 23.2 30.1 30.3 29.9	9 23.1 27.4 28.2 26.6	26.4 24.7	28.0 316.2 38.4 29.3 18.2	25.7	Very Serious
50, 8 53, 6 54, 2	49.7 53.3 48.4 57.5	52.7 50.7	45.8 59.2 48.6 51.0 51.0	51,8	end Recu
3.8.6	17.5 3.5 6.5 8	19.6	17.8 17.8 13.6 13.2 16.2 26.1	16.8	Friction between Landowners and Recreationists and Recreationists and Recreations Serious Reap
708 401 224 177	308 308 360	655 454	107 191 177 178 257 198 86	1,109	Aumber of Respondents
16.0 39.2 36.6 42.6	31.4 4.5 4.8	26.2 21.6	23.0 18.1 29.7 26.1 25.9 25.9 20.2	24.2	Respondents Who Have Experienced Problems with Landowners bercentage ilumber of Total Responden
13 14 7 19 45 6 19 6 19 6 19 6 19 6 19 6 19 6 19 6 19	33 7 8 33 8 99 8	215 519	122 210 195 195 284 220 104	1,234	s Who Have d Problems downers ilumber of Respondents
235 1 1 2 2 1 1 2 d	23.0 24.4 24.4	21.5 28.6		24.1	Very Often
26.0 27.3 27.3	27.5 d	28.8 23.2	200000	26.7	Frequenc with
1 1 0 0 0	50.0 46.7 d	47.6 47.3		47.5	Frequency of Problems with Landowners ^c Not Too etimes Frequently
131 172 90 82	74 229 89 140	191 112	50 00 00 00 00 00 00 00 00 00 00 00 00 0	303	Number of Respondents

cAsked only of those who reported having experienced friction with a landowner (approximately 24 percent of the total sample of 1,237). Percentage detail does not add to 100.0 because the miscellaneous responses were omitted from the table. Also, although some detail is provided for selected respondent groups for comparison purposes only, the numbers are too small to allow for reliable analysis.

The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each. Asked only of those who felt there was landowner-recreationist friction (90 percent of the total sample of 1,237). Percentage detail does not add to 100.0 because the miscellaneous responses have been omitted from the table.

bonly the affirmative responses have been shown, as a percentage of all persons responding. Three persons (or 0.2 percent of the total sample) did not respond.

"not too serious." The response patterns were roughly similar in all portions of the state, except that persons in regions 2 (west central) and region 6 (northeast) tended to downgrade the severity of the problem; a slightly smaller percentage of the respondents in these areas rated it as "very serious." Both hunting and fishing enthusiasts thought the problem was more serious than did persons who did not participate in these activities. Notice, for example, that there were relatively more fishermen than nonfishermen who ranked landowner-recreationist friction as "serious" or "very serious." A similar pattern is also present in the responses of hunters and nonhunters — that is, a relatively higher percentage of hunters thought the problem was "serious" or "very serious."

The Recreationist Perspective. The respondents were asked if they had ever experienced a problem or friction with a private landowner about access to hunting, fishing, or recreation sites. About 24 percent replied that they had experienced a problem with a landowner (table 5.1). Urban dwellers appeared to be more likely than persons living in rural areas to have experienced conflict with a landowner; about 26 percent of the persons living in the seven largest counties reported such conflict, compared to about 22 percent among those in the remaining forty-nine counties. Not unexpectedly, hunting and fishing enthusiasts were much more likely to have reported friction with landowners than were persons who did not engage in these forms of recreation. About 31 percent of the fishing enthusiasts and 39 percent of the hunters said they experienced problems with landowners, compared to only 14 percent among nonfishermen and 16 percent among nonhunters. Not surprising, avid outdoor recreationists

appeared to be most likely to experience landowner friction. Respondents who fished over ten days reported a higher incidence of landowner conflict (about 35 percent) than did those who fished ten days or less (26 percent). Similarly, a slightly higher percentage of persons who hunted over ten days said they had problems than did those hunting ten days or less. Finally, it is interesting to note that relatively more hunters (39 percent) than fishing enthusiasts (31 percent) reported that they had experienced a problem with a landowner.

The respondents who experienced friction with landowners were queried further about the frequency of this problem. Twenty-four percent said it occurred "very often," approximately 27 percent said "sometimes," and about 48 percent said "not too frequently." The details for the administrative regions are not shown because there were too few responses in these categories for reliable analysis.

The Landowner Perspective. In order to analyze both sides of the problem, the landowners in the sample were asked about their experiences with recreationists. As shown in table 5.2, 23 percent of the respondents said that they (or, in a couple of cases, another family member) had land that is or could be used for hunting, fishing, or other recreation. More than one-half (54 percent) of these landowners said that they had encountered friction or problems with recreationists regarding access to or through their land. Moreover, the landowners in the eastern part of the state appeared to have had proportionately more problems than have those in western Montana. Over 64 percent of the landowners in region 6 (northeast) and about 66 percent in region 7 (southeast) reported problems,

Table 5.2

Land Ownership and Landowner Friction with Recreationists, by Residence

All respondents	Recreati Recreati Percentage of Total 23.0	Respondents Who Own Recreational Landa entage Number of Total Respondents 3.0 1,237	Landowner Experienced Recree Percentage of Total	Landowners Who Have Experienced Problems with Recreationists Fercentage Fercentage Of Total Fercentage Fercentage St.4 285
Residence, by DFWP region Region 1	36.1	122	47.7	77
	20.8	212	45.5	44
	20.5	195	52.5	40
	20.0	285	4.19	57
	18,2	220	47.5	40
	29.8	104	64.5	27
	29.3	66	65.5	53
Residence, by county size Seven largest counties All other counties	18.1	717 520	49.2 58.7	130 155

Note: Only the affirmative responses are shown, as a percentage of all persons responding. Annother two persons who said another family member (usually the parent) in the household

actually owns the land. bAsked only of landowners. ^CThe seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each, compared to about 48 percent in region 1 (northwest) and 46 percent in region 2 (west central). (Even though the number of responses is relatively small, this difference between the eastern and western regions is statistically significant.)

When asked about the frequency of problems with recreationists,

32 percent of the landowners said they occurred "very often," about

35 percent said "sometimes," and about 29 percent said "not too frequently."

Unfortunately, there were too few responses to analyze accurately the

frequency of problems for the various categories of respondents, thus the

responses have not been presented in tabular format.

Efforts to Improve Landowner-Recreationist Relations. As a possible approach to reducing the friction between landowners and recreationists, whether perceived or actual, the state could negotiate specific easements across private land and/or other arrangements for allowing access for recreationists. Table 5.3 summarizes the respondents' opinions concerning some of these possible alternatives.

A state program to negotiate long-term easements across private lands in order to reach public lands received the overwhelming support of the respondents; more than 75 percent favored such a program. Negotiation of easements was more popular among hunting and fishing enthusiasts. About 81 percent of the persons who fished in 1979 favored the program, compared to 67 percent among those who did not fish. Similarly, approximately 84 percent of the hunters approved of easements, compared to 70 percent of the nonhunters. Notice that avid recreationists were more inclined to favor an easement program; the approval rate was higher

Table 5.3

Opinions regarding Selected State Actions to Facilitate Access to Public Lands and Wildlife by Residence, Fishing and Hunting Participation, and Landowner Status

(In Percentages)

	Negoti Pr	tiate Easements (a Private Lands) for Public Land Acress	Negotiate Easements (across Private Lands) for Public Land Armess	Easements	vs. Other l	Easements vs. Other Land Programs	Financial Mainta	Financial Incentive to Landowners Maintaining Wildlife Habitat and Allowing Public Access	andowners for Habitat Access
	Favor	Oppose	Number of Respondents	In Addition to Other	Instead of Other	Jumber of Respondents	Approve	0 is approve	Number of Respondents
All respondents	75.2	14.2	1,230	54.6	22.6	312.	61.2	32.6	62.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.
Residence, by DFWP region Region 1 Region 2	75.4	4.64	50 57 60 50 60 60 60 60 60 60 60 60 60 60 60 60 60	480	20.5	2022	66.1 58.5	27.3	121 210
Region > Region 4 Region 5	73.9	7.0.5 10.5 20.5	288 819	59.4	25.4	9 9 4 7 9 6 7 7 7 9 6 7 7 7	59.2 59.3 64.8	35.5 28.5 38.5 38.5 38.5 38.5 38.5 38.5 38.5 3	288 219
Region 7	75.0	3.5	104 98	53.8	28.1	204 36	52.5 55.6	35.4	99 99
Residence, by county size Seven largest counties All other counties	75.8	13.9	7.14 5.18	56.8 51.6	21.8	706 510	60.1 62.8	32.4 31.8	709 519
Fishing participation in 1979 Bid not fish in Montana Did fish in Montana 1-10 days Over 10 days	67.1 80.9 78.3 83.0	8 = = = = = = = = = = = = = = = = = = =	505 727 327 400	46.2 60.3 55.1 64.5	23.3 22.1 25.2 19.6	493 723 325 395	57.2 64.0 59.9	33.6 33.6 33.6 33.6 33.6	505 723 327 396
Hunting participation in 1979 Did not hunt in Kontana Old hunt in Montana 1-10 days Over 10 days	70.5 83.9 81.7 86.8	16.1 13.0 7.9	796 436 1966 190	50.5 62.0 60.7 63.7	22.5 22.8 23.4 22.1	8 4 4 0 8 4 4 0	59.7 63.9 62.0 66.5	32.2 32.1 33.9 29.8	7
Landowner status Landowner Nonowner	71.1	20.4	284 848	50.9	30.3	939	62.5 60.9	32.3 32.1	285 943

Note: The percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table.

Prive persons (or 0.4 percent of the total sample) did not respond.

Twenty-one persons (or 1.7 percent of the total sample) did not respond.

Nine persons (or 0.7 percent of the total sample) did not respond.

The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

for hunting and fishing enthusiasts who were in the field over ten days than for those with ten days or less.

Since, under this proposal, the state would be negotiating such easements with private landowners, it seemed appropriate to look at how the landowners felt about the proposal and apparently their opinions did not differ significantly. While landowners were more likely than any other group to voice some opposition, the easement proposal was still supported by the majority (71 percent).

Montana already has a number of programs to acquire land for fish, wildlife, and recreation. The respondents were asked if such an easement program should be in addition to or instead of some of the current programs. Once again, the easement program was popular with the respondents; more than one-half (55 percent) said that it should be in addition to other land programs, while less than one-fourth (about 23 percent) preferred that it replace an existing program. Support for the additional easement program was greatest among recreationists; 60 percent of the fishing enthusiasts and 62 percent of the hunters said it should be in addition to other land programs, compared to roughly 46 to 51 percent among persons who did not participate in these activities in 1979. Repeating the earlier patterns, an additional easement program was most popular with avid fishermen and, to a lesser degree, with avid hunters (over ten days of participation). Among landowners, an additional program was also much more popular (about 51 percent) than was a replacement program (30 percent). When compared with other respondent groups, though, landowners were relatively less enthusiastic about an additional program and were somewhat more likely to opt for a replacement program.

The respondents favoring a new easement program were subsequently asked how it should be financed. Over half (58 percent) said that such a program should be paid for through increased hunting and fishing fees paid by the actual users. The remaining respondents either said they didn't know or mentioned some other funding source. (These data are not presented in tabular form.)

Another alternative for improving relations with private landowners would be to provide them with a financial incentive for maintaining wildlife habitat and allowing public access. Such a proposal received support from the respondents; 61 percent approved the proposal, while about one-third disapproved. A program of financial incentives was particularly popular among recreationists; the approval rate was about 64 percent among fishing enthusiasts, compared to 57 percent among persons who did not fish in 1979. Among hunters and nonhunters, about 64 percent and 60 percent, respectively, approved the proposal. The support for this proposal was greatest among avid recreationists; the percentage approving was greater for persons with over ten days of hunting or fishing than it was for persons with ten days or less. The proposal was also popular among landowners (about 62 percent in favor); and, in this instance, landowners were <u>not</u> more likely than any others to register opposition.

When it came to funding such financial incentives for landowners, slightly more than one-half (about 53 percent) of those favoring such a program said that fishing and hunting fees should be raised to cover the costs. The other respondents either said they didn't know or mentioned

other possibilities, such as special taxes, federal funds, or some other source. (These data are not presented in tabular form.)

Water Use and Energy Decision Issues

Table 5.4 summarizes the opinions of the respondents concerning the priorities for using Montana waters and the role of the Department of Fish, Wildlife, and Parks in decisions made by the state concerning energyrelated activities. On the subject of priority of use for Montana waters, the respondents were offered three alternatives: (1) water should be maintained for fish and wildlife before anything else is considered; (2) it should be maintained for fish, wildlife, and agriculture before anything else; and (3) Montana water should be equally available for all uses, including industrial. Only 8 percent of the respondents felt that fish and wildlife should have the highest priority. Instead, approximately 42 percent said that agriculture should also receive first priority along with fish and wildlife, and about 37 percent replied that the water should be equally available for all users, including industrial. For most, though not all, respondent groups the "ranking" of these three alternatives was relatively similar: in most cases, the larger percentage of the respondents in the particular group gave first priority to fish and widlife and agriculture before anything else, followed (often closely) by the alternative of equal availability of water to all users. Two notable but not significant exceptions were in regions 1 (northwest) and 4 (north central) in which the largest percentages of respondents cited the "equal availability" alternative. Consistently few respondents gave first priority to the alternative of fish and wildlife before anything else.

Table 5.4

Preferences regarding Water Use and Departmental Involvement in State Energy Decisions by Residence and Fishing and Hunting Participation

(In Percentages)

	E. 50 15 15 15 15 15 15 15 15 15 15 15 15 15	Priority for Use of Montana Water	of Montana Water	मां कर तह सा का का मां का की की की की सा सा सा सा सा	DFWP Ener	DFWP involvement in State Energy=Related Decisions	in State Decisions
	Fish-Wildlife First	Fish-Wildlife and Agriculture First	Equally Available for All Uses Including Industrial	Number of a Respondents	Should Be Involved	Should Not Be Involved	Number of b Respondents
All respondents	8.2	41.6	36.6	1,2227	83.1	S	1,2334
Residence, by DFWP region Region 1 Region 3 Region 4 Region 5 Region 6 Region 7	7.5 10.8 11.3 6.8 6.8 4.9	33.3 46.9 41.7 41.7	4 2 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	20 20 102 200 103 99	83.6 7.8.7 87.1 84.9 84.1 77.9	12.3 7.2 7.2 11.8	122 112 123 123 104 99
Residence, by county size Seven largest counties All other counties	7.7 8.9	42.2	388.3 44.3	711	85.4 80.0	9.5 2.8 8.5	714 520
Fishing participation in 1979 Did not fish in Montana Did fish in Montana	5.2	39.9	38.9 35.0	501 726	78.5 86.3	5.0 9.0 8.0	508 726
Hunting participation in 1979 Did not hunt in Montana Did hunt in Montana	6.9 6.01	40.1	39.7 9.7 9.7	794 433	81.6 85.9	55	800

Note: The percentage detail does not add to 100.0 because the miscellaneous responses have been omitted from the table.

Ten persons (or 0.8 percent of the total sample) did not respond.

Three persons (or 0.2 percent of the total sample) did not respond.

Three persons (or 0.2 percent of the total sample) did not respond.

The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Not surprisingly, this alternative (fish and wildlife first) was more popular among the fishing and hunting enthusiasts than among persons who did not participate in these activities. Also, it is interesting to note that an equal availability policy for Montana water received considerable support (about 32 and 35 percent, respectively) even among hunters and fishing enthusiasts.

Energy-related developments, such as coal mining and oil and gas exploration, could affect fish and wildlife habitat in some areas of the state. The respondents were asked whether the Department of Fish, Wildlife, and Parks should be involved in the state's decisions concerning energy-related activities in order to assure consideration of fish and wildlife habitat. They overwhelmingly stated that the Department should participate in energy-related decisions; 83 percent of the respondents agreed with such involvement, while only 11 percent were opposed. Department involvement received relatively more support from hunters and fishing enthusiasts than from nonparticipants in these activities. The only significant opposition appeared to be in rural areas; about 14 percent of the persons living in the forty-nine smaller counties were opposed to such involvement by the Department, as compared to 9 percent for the seven largest counties.

Enforcement of Fish, Game, and Park Regulations

Among the Department's responsibilities is enforcement of the many fish, game, and park regulations, and several aspects of enforcement were covered in the survey.

Current Enforcement Program. When the respondents were asked about the current level of enforcement activity, overall, the majority of the respondents (61 percent) said that the Department provides adequate enforcement at present, while 25 percent felt that the enforcement efforts should be increased (table 5.5). Barely 3 percent thought the Department was doing more than was warranted, and the remainder either didn't know or offered some other response. Increased enforcement effort received the most support among hunting and fishing enthusiasts. About 28 percent of the fishing enthusiasts thought that overall enforcement should be increased, compared to about 21 percent of those who did not fish in 1979. Similarly, about 28 percent of the hunters supported increased enforcement effort, compared to roughly 24 percent of the nonhunters. It is interesting to note that the more avid recreationists were more likely to prefer increased enforcement; for example, about 36 percent of the hunters who were in the field over ten days said they thought the overall enforcement effort should be increased, compared to roughly 22 percent of those who hunted ten days or less.

The respondents were almost evenly divided in their opinions concerning the number of enforcement personnel in the field; approximately 38 percent of the respondents felt that more enforcement personnel are needed, while 43 percent replied that there were currently enough. As with the overall level of enforcement, support for additional enforcement personnel was relatively greater among hunters and fishing enthusiasts, especially the more avid participants. For example, 42 percent of the hunters favored more enforcement personnel, compared with 35 percent of

Opinions regarding Departmental Enforcement Efforts and Funding by Residence and Fishing and Hunting Participation Table 5.5

(In Percentages)

Hunting participation in 1979 Did not hunt in Montana Did hunt in Montana I=10 days Over 10 days	Fishing participation in 1979 Did not fish in Montana Did fish in Montana 1-10 days Over 10 days	Residence, by county size C Seven largest counties All other counties	Residence, by DFWP region Region 1 Region 2 Region 3 Region 4 Region 5 Region 6 Region 7	All respondents	
23.5 27.8 21.6 35.8	20.9 27.8 26.9 28.5	25.3 24.6	29.4 25.0 23.3 25.4 22.8 24.0 27.6	Should Be Increased 25.0	Overall DE
60.0 63.0 67.3 57.4	58.8 62.6 64.5	60.3 62.2	59.7 59.0 61.7 62.6 63.5 62.2	Adequate Now 61.1	Overall DFWP Enforcement Effort
793 435 245 190	502 726 326	712 516	119 212 193 283 219 104 98	Number of Respondents a	ent Effort
43.6 46.3 38.9	54.4.9	43.0 44.0	42.1 47.4 40.9 39.1 48.4 40.4	Enough Now 43.4	E N
35.1 42.4 37.7 48.4	31.2 42.1 39.8 44.0	38.1 37.1	36. 41.9 41.9	More Are Needed	umber of DFW nforcement P
793 434 190	503 724 324 400	709 518	121 209 193 284 217 217 104	Number of b Respondents	Number of DFWP Field Enforcement Personnel
50.6 50.6 50.6	61.3 54.1 52.0 55.9	57.9 55.9	50.8 57.1 57.0 63.3 59.2	<u>Favor</u> 57.1	Increase Additio
29.7 43.2 47.1 38.1	27.8 39.1 39.4	34.5	37.5 31.9 41.2 35.2 29.8 30.1	<u>Oppose</u> 34,4	License
795 433 244 189	504 724 325 99	711 517	120 210 194 284 218 218 103	Number of Respondents 1,228	ncrease License Fees to Cover Additional Enforcement Costs

Note: The percentage detail does not add to 100.0 because the major responses only are shown (miscellaneous responses and those with very few responses have been omitted from the table).

responses have been omitted from the table).

anine persons (or 0.7 percent of the total sample) did not respond.

because of the total sample of the total sa

the nonhunters. Among those who hunted over ten days, 48 percent said more personnel are needed, compared to about 38 percent among those who hunted less.

Funding for Increased Enforcement. Funding, of course, is always a concern, and respondents were asked how they would feel about an increase in license fees to cover any expansion in the enforcement program. Fifty-seven percent said they favored an increase in license fees for such additional costs, while 34 percent were opposed (table 5.5). Resistance to increased license fees for this purpose was greatest among hunting and fishing enthusiasts, but not necessarily among the more avid participants. Notice, for example, that about 51 percent of the hunters overall favored increased fees and 43 percent were opposed; among nonhunters, in contrast, about 61 percent favored the increase and only about 30 percent were opposed. However, there were significant differences among the hunters themselves. In fact, the more avid hunters generally favored higher fees for this purpose: about 57 percent of those hunting over ten days said they supported higher licenses, compared to only 46 percent among the less active hunters.

Alternatives to Increased Enforcement Personnel

Rather than hiring more enforcement personnel, the Department could expand its enforcement effort using other approaches. For example, it could provide more public information about the regulations in general; or it might put more emphasis on the penalties for violating the regulations; or, finally, it could encourage the public to report any

violations they see. When queried about these particular alternatives, the respondents clearly preferred that more emphasis be placed on the reporting of violations by the public. Forty-one percent preferred this approach, while about 23 percent favored more public information about the regulations, and 18 percent preferred more emphasis on the penalties for violations (table 5.6). Increased public involvement in the reporting of violations received the support of the enthusiasts; 50 percent of the hunters and 44 percent of the fishing enthusiasts preferred this alternative, compared to roughly 37 percent of both nonhunters and nonfishermen.

Ex-Officio Enforcement Activity. As another approach to enforcement, the Department's field personnel, other than game wardens, were recently trained and given authority to enforce fish, game, and park regulations. The respondents clearly approved of this approach. As shown in table 5.6, over 75 percent of the respondents favored this expansion of duties and authority for field personnel, while only 13 percent were opposed. This approach was slightly more popular among hunting and fishing enthusiasts than among those who did not participate in these activities. For example, 80 percent of the fishermen were in favor, compared to about 77 percent of those who did not fish.

The respondents were slightly less enthusiastic toward giving similar enforcement authority to other people (outside the Department), such as field personnel in other state or federal agencies. Those who approved of ex-officio enforcement authority for Department personnel were asked about expanding this authority to similar personnel in other agencies: about 65 percent were in favor, but 30 percent (clearly a sizable minority) were opposed.

Table 5.6

Preferences regarding Selected Enforcement Activities by Residence and Fishing and Hunting Participation

(In Percentages)

	Alter	Alternative Enforcement Programs ^a	cement Progr	ams	Use of for Ex	DFWP Fle	Use of DFWP Field Personnel for Ex-Officio Enforcement	Give Ex Authori	x-Officio Enfo ity to Similar Field Personne	Give Ex-Officio Enforcement Authority to Similar Other Field Personnel
	More	Emphasize Penalties	Public Reporting	Number of b Respondents	Favor	esodd0	Number of Respondents	Favor	Oppose	Number of Respondents
All respondents	22.7	18.5	₹° [†	1,228	78.7	13.4	1,221	64.7	30.1	973
Residence, by DFWP region Region 1 Region 3 Region 4 Region 5 Region 7	225.3 225.3 222.3 222.3 6 4 4 3 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	18.7 18.3 20.2 18.6 2.4.3	39.22.22.22.44.2.00.88.84.0.8	122 211 193 282 280 103	73.6 79.1 77.5 82.9 77.2 80.6	12.4 11.8 14.7 17.2 10.7	121 211 191 281 215 103	656 64 65 656 65 65 656 65 65 656 65	31.5 30.4 30.5 36.1 27.6	0 1 1 4 8 2 1 8 4 4 8 5 7 8 8 7 8 8 7 8 8 7
Residence, by county size Seven largest counties All other counties	24.7	17.2	41.0	715 513	78.8 78.6	14.0	706 515	65.7 63.5	28.8 31.9	562 411
Fishing participation in 1979 Did not fish in Montana Did fish in Montana	22.7	20.7	37.3	502 726	76.6 80.2	12.6	499 722	63.8 66.4	29.8 30.3	389 584
Hunting participation in 1979 Did not hunt in Montana Did hunt in Montana	25.3 18.0	20.2	36.8 50.0	794 434	77.5	12.7	787 434	63.6 66.9	30.3	623 350

Note: Percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table.

Alternative enforcement programs: more public information about the regulations in general; emphasizing the penalties for breaking the regulations; and encouraging the public to report any violations they see.

Nine persons (or 0.7 percent of the total sample) did not respond.

Sixteen persons (or 1.3 percent of the total sample) did not respond.

Asked only of those who did not oppose use of DFWP field personnel for enforcement activity.

The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Toll-Free "Report Line." For several years, the Department has maintained a toll-free telephone number for the public's use in reporting violations of fish, game, and park regulations and landowner problems.

Table 5.7 presents a summary of the responses to several questions concerning this toll-free number. First of all, the respondents overwhelmingly approved of a toll-free number for reporting problems; over 90 percent were in favor, while only about 8 percent were opposed. Among the various respondent groups (including landowners), no less than 88 percent supported the idea of a toll-free number. This response pattern reinforces the earlier finding that many persons think that more of the burden for enforcement and reporting of violations should be borne by participants and the public,

Despite the popularity of a toll-free number, only about 21 percent of the respondents were aware that one already exists (the "Report Line"). Hunting and fishing enthusiasts, however, appeared to be more knowledgeable; about 35 percent of the hunters and 26 percent of the fishermen were aware of the number, while only about 13 percent of the nonhunters and 12 percent of those who did not fish knew of the number.

The "Report Line" is intended not only for the recreationists' or the public's use in reporting violations, but also for the landowners' use in reporting problems such as trespass and property damage. Although landowners, like the hunting and fishing enthusiasts, appeared more knowledgeable than their opposites (nonowners), only about 24 percent were actually aware of the "Report Line." This was only slightly greater than the awareness indicated among all respondents as a whole and was much less than that reported among hunters.

Responses regarding a Toli-Free Telephone Number for Reporting Violations by Residence, Fishing and Hunting Participation, and Landowner Status

	Respondent Toll-Fr	Respondents Favoring a Toll-Free Number	Responde of Toll-F	Respondents Aware of Toll-Free Number	Respondents the Toll~	Respondents Who Have Used the Toll-Free Number
	Percentage of Total	Number of Respondents	Percentage of Total	Number of Respondents	Percentage of Total	Number of Respondents
All respondents	4.16	1,2234	20.6	1,834	<u>.</u>	7,034
Residence, by DFWP region	ç	7 7	6 7	C 20	1	,
Region 2	90.0	13 F. 67	23.0 18.9		 	122
Region 3	88.1	407	23.8	1 FG	2.1	193
Region 4	93.7	284	21.5	284	-	+ e3 + 60 5 A
Region 5	93.2	220	5.5	220	0.0	220
Region 7	94.9	104 99	15.4	104 39	00	104
Residence, by size of county						
Seven largest counties	91.9	715	21.0	715	ບຸເ !	715
All other counties	90.8	519	20.0	519) ! !	519
Fishing participation in 1979 Did not fish in Montana	80 3	500	ت ? م	Š	v	
Did fish in Montana	92.8	727	26.2	727	U 1 1 1 1	727
Hunting participation in 1979	ć	Ç		:	c.	
Did hunt in Montana	94.0	436	34.6	798 436) U	798 436
Landowner status						
Landowner	4.00	483	23.6	60 40 40 40 40 40 40 40 40 40 40 40 40 40	o o	284
	34.0	000		950	! ! !	950

Note: Only the affirmative responses are shown, as a percentage of all persons responding. aThree persons (or 0.2 percent of the total sample) did not respond. by seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents

each. CAlthough some percentage detail is shown for this question for comparison purposes only, both the actual number and the percentage of affirmative responses in every case is too small to allow for reliable analysis.

Further, only thirteen of the respondents, or barely I percent of the sample, said they had actually used the toll-free "Report Line" to report a violation or related problem. This is too few responses for a reliable analysis; but, it is interesting to note that, as shown in table 5.7, most of the "Report Line" users lived in the western part of the state.

Awareness of Local Game Warden. The respondents were also asked if they knew who their local game warden is and how to contact him if necessary. Statewide, about 27 percent of the respondents stated that they knew who their local game warden is (table 5.8). This knowledge varied significantly, however, among the administrative regions: from about 51 percent in region 1 (northwest) to only 19 percent in region 5 (south central). It appears that persons living in rural areas were better acquainted with their local game warden than were the residents of the urban areas; only about 16 percent of the people living in the seven largest counties said they knew who their local game warden is, compared to 42 percent in the remaining forty-nine counties. As expected, hunting and fishing enthusiasts were considerably more knowledgeable; about 43 percent of the hunters and 32 percent of the fishermen knew who their local game warden is, compared to 18 or 19 percent for persons not participating in these activities.

Even though most of the respondents did not know who their local game warden is, almost three-fourths (74 percent) said they did know how to contact him if necessary.

Table 5.8

Awareness of Local Game Warden, by Residence and Fishing and Hunting Participation

Respondent Able To Contact Respondent Knows Local Game Warden Local Game Warden Number of b Percentage Percentage Number of Respondents of Total of Total Respondents 1,234 74.1 1,236 26.9 respondents idence, by DFWP region 81.0 121 122 50.8 legion l 68.4 212 212 20.8 legion 2 193 72.0 25.3 194 Region 3 21.8 285 75.1 285 Region 4 74.5 220 220 19.1 Region 5 104 77.9 104 42.3 Region 6 99 73.7 99 29.3 Region 7 idence, by county size 716 717 72.3 15.9 Seven largest counties 76.4 518 519 42.0 \ll other counties ning participation in 1979 507 508 65.5 19.3)id not fish in Montana 80.1 727 728 32.1)id fish in Montana ting participation in 1979 798 67.3 18.3 800)id not hunt in Montana 436 86.5 436 42.7)id hunt in Montana

e: Only the affirmative responses are shown, as a percentage of all persons responding.

person (or 0.1 percent of the total sample) did not respond.

ree persons (or 0.2 percent of the total sample) did not respond.

seven largest counties had populations over 30,000 in 1980; all other Montana counties fewer than 25,000 residents each.

Required Conservation Education Course

Conservation education for young people is believed by many to lead to or at least help foster more responsible attitudes among adults toward fish and wildlife and their environments. Even more specifically, some people feel that students in Montana's public elementary schools should be required to have a course in conservation education that would cover fish, wildlife, and plant life and their relationships to their environments. This idea was included in the survey, and the respondents were asked if they would generally favor or oppose such a requirement. No less than 74 percent of the respondents, statewide or in any respondent group, favored such a requirement, and only 24 percent at the most (in region 1) were opposed (table 5.9). As was stated earlier about the question dealing with the idea of controlling or regulating subdivision activities along rivers, this apprently overwhelming approval should be viewed with some caution. For one reason, the question addressed the idea of such a requirement in a general sense for a general reaction. Also, had several alternatives been offered with varying content and varying degrees of "requirements," there may well have been a wider range of responses. Nevertheless, especially for those involved in conservation education, it should be helpful to know that the idea of conservation education for Montana youth was relatively well received,

Sources of Information on Outdoor Recreation and Recreation Issues

It is helpful to those involved in public information and education efforts to know where people get their information and where (or in

Table 5.9

Opinions regarding a Required Conservation Education Course by Residence and License Status

(In Percentages)

	Favor	Oppose	Other Response	Total	Number of Respondents
All respondents	77.9	19.6	2.4	100.0	1,232
Residence, by DFWP region Region 1	74.47	24.0	<u> </u>	100.0	121
Region 2	81,1	15.6	3,3	100.0	212
Region 3	75.6	21.8	2.6	100.0	193
Region 4	78.2	19.7	2.1	100.0	284
Region 5	7.97	21.9	1,4	100.0	219
Region 6	78.8	17.3	3.8	100.0	104
Region 7	80.8	16.2	3.0	100.0	66
Residence, by county size Seven largest counties	78.4	9.61	1.7	100.0	712
All other counties	77.3	19.2	3.5	100.0	520
License status DFWP license holder	79.3	<u>ي</u> م	1.6	100.0	728
Nonholder	76.0	20.4	9.0	100.0	502

Notes: Percentage detail does not add to total due to rounding. Five persons (or 0.4 percent of the total sample) did not respond.

The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

what sources) they place their confidence. The respondents were asked specifically about where they usually pick up information about fish and wildlife, the outdoors, or outdoor recreation.

The survey results show that Montanans tend to rely more on 'word of mouth" for such information than other sources. "Word of mouth" refers to getting information from friends, family, work associates, and other community members; and about 58 percent of the respondents cited this source (table 5.10). Respondents were allowed to cite more than one source, and others frequently mentioned were newspapers (42 percent) and magazines and television (about 33 percent for each).

There were few differences in responses among the respondents from the various regions. The only statistically significant difference was that the respondents in region 5 (south central) cited newspapers as a source more frequently than did those in the other regions; respondents residing in region 4 (north central) cited newspapers the least often. The license holders surveyed mentioned word of mouth relatively more often (63 percent) than did the nonholders (about 52 percent); on the other hand, nonholders cited television as an information source significantly more often (about 40 percent) than did license holders (28 percent).

When asked which information source they placed the most confidence in for information regarding recreation issues, respondents again, by a large margin, cited word of mouth. Overall, about 36 percent mentioned this source (table 5.11). Of the other sources mentioned, only newspapers (mentioned by 15 percent of the respondents) and magazines (10 percent) were cited by at least 10 percent of those responding. Television was

Table 5.10

Sources of Information about Outdoor Recreation Subjects and issues by Residence and License Status

(In Percentages)

	Television	Radio	Newspapers	Magazines	Other Printed Material	Word of Mouthb	Government Agencies	Own Experience	Other	Total	Number of Respondents
All respondents	32.7	13.2	42.1	32.8	12.0	58.5	13.5	0.6	19.2	100.0	1,235
Residence, by DFWP region Region 1	23.0	10,7	42.6	28.7	4,5	63.9	4.91	5.0	17.2	100.0	122
Region 3	34.4	2.55 .00	42.0		- cs	ν. Σ. τ.	٠ د س	. w	22.0	0.00	195
Region 4 Region 5 Region 6	27.5. 27.5.0	4 0 0 2 0 0	₩ ₩ - 4.6 - 4.8	တို့ လူ တို့ လူ တို့ လူ	7.00 6.00 7.00 7.00 7.00	57.2.2	<u>ა</u> 5 ∠ ბ. ი. დ.	7.7 6.8	6. 6. 6. 6. 6. 4.	0.000	284 220 103
Region 7	37.4	3.1	37.4	34.3	, pro-	63.6	<u>-</u>	- ·	3.	0.001	66
Residence, by county size Seven largest counties All other counties	34.3	13.8	42.3 41.8	33.0 32.6	12.6	58.9 57.8	4.5. 4.6.	10.3	4.00 4.00	100.0	716 519
License status DFWP license holder Nonholder	7 K 9 V 0 00	7.1 V.V.	4 4 - 4 - 4	36.3	చ్ <i>ట</i> య ట	00 tv 60 tv 60 tv		- W	22,0	100.0	730 505

Note: The percentage detail does not add to 100.0 because most respondents cited more than one source of information.

Bincludes newsletters, pamphlets, maps, and other similar printed materials,
blucludes information obtained from friends, community members, family members, work associates, hunting and fishing companions, etc.
Two persons (or 0.2 percent of the total sample) did not respond.
The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Sources of Recreation Information in which Respondents Place Most Confidence by Residence and License Status

Table 5.11

(In Percentages)

	Television	Radio	Newspapers	Magazines	Other Printed Materiala	Word of	Government Agencies	0wn Experience	Other	Total	Number of Respondents
All respondents	8 2	2.3	15.0	10.2	w N	35.6	8,2	ۍ ن	11.5	100.0	1,128
Residence, by DFWP region Region	ω * V 1	0.9	H3.2	٠ سُ		45,6	7.9	7.9	£-	100.0	114
Region 2	7,2	on	13.0	12.4	- 3, 7 8	35 5 5	6.3	* * \$	16.9	100.0	104
Region 4	10.0	1.6	12.8	11.6	3.2	34.4	9.6	6.4	10,4	100.0	250
Region 5	7.8		- 00	8	3.4	38.3	8.7	3.4	9.7	100.0	206
Region 6 Region 7		2 2	16.5	<u>=</u> و ئ ٽ	<i>\$</i> 2.	34.4	5 6 2	و ب ع -	10,3	100.0	96 97
Residence, by county size d Seven largest counties All other counties	7.4 9.2	2.6	14.9	9.6	2.6	36.5 5	8,8 7,3	5.6	7 0 2 2	100.0 0	650 478
License status DFWP license holder Nonholder	<u> </u>	 	16.4	9.1	23.5	37.4 33.0	ν, ¹ 0	3, 4	4.00	100.0	\$38 440

Note: The percentage detail may not add to 100.0 due to rounding.

a includes newsletters, pamphlets, maps, and other similar printed materials.

b includes information obtained from friends, community members, family members, work associates, hunting and fishing companions, etc.

cone hundred nine persons (or 9.7 percent of the total sample) did not respond.

d The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

mentioned by 8 percent of the respondents as were government agencies (such as the Department). There were no significant differences among the respondents from the seven regions, or between those in the seven largest counties and the rest of the state. License holders and nonholders also seemed to agree, for the most part, on the information sources in which they place the most confidence.

Montana Outdoors Magazine

As was noted in table 5.10, almost a third of the respondents indicated that they turned to magazines (in general) for information on outdoor recreation and related issues. One of the magazines in Montana that deals with outdoor recreation and related issues is Montana Outdoors, published by the Department, and it is apparently relatively well known among Montanans. Almost 89 percent of the respondents acknowledged seeing Montana Outdoors (table 5.12). Among the various respondent groups, no less than about 85 percent were aware of the magazine (had seen it). License holders, however, were significantly more aware of the magazine (91 percent had seen it) than were nonholders (about 85 percent), although the latter is still a sizable majority.

Unfortunately, while the magazine is relatively well known, apparently very few actually subscribe to it. Less than 20 percent of the respondents reported being subscribers (table 5.12). Among the various respondent groups, subscribers represented anywhere from about 13 to 25 percent of the respondents. License holders again were more likely to be subscribers than were nonholders (about 23 percent and 13 percent, respectively), although this was not a significant difference.

Table 5.12

Awareness of Montana Outdoors Magazine and Subscription Status by Residence and License Status

(In Percentages)

	Ever Se	en Montar	Ever Seen Montana Outdoors?	Subscribe	to Monta	Subscribe to Montana Outdoors?
	Yes	No	Number of Respondents	Yes	No	Number of Respondents
All respondents	9°8 88	۵, ۵	1,237	<u>ග</u>	80.9	1,096
Residence, by DFWP region	i C	3	Š	Ē	2	4
Region	ແຮ້ນ ໃ	`	122	S V V	-	708
Region 2	87.3	<i>ي</i> ئ	212	7.9	83.2	185
Region 3	89.2	ر د د	195	20.6	79.4	175
Region 4	و د ه	 భ	285	00 ,	တ - တ	258
Region 5	87.3	0,0	220	17.7	82,3	192
Region 6	88	× 2	104	21.7	78.3	20
Region 7	6°98	6 6 6	66	Ĭ,	ر پ پ	86
Residence, by county size						
Seven largest countles	89.5	on on	717	گ ئ	æ -₹.	644
All other counties	87.3	٠ 0 0	520	0,0	80.3	452
License status						
DFWP license holder	ر د و	ا ا	730	22.6	77.2	667
Nonnolder	0 *+ 0	- - - -	700	0 * 7	/ • 00	# 20

Note: Percentage detail does not add to 100.0 because miscellaneous responses were omitted from the table,

aAsked only of those who reported they had seen Montana Outdoors. The seven largest counties had populations over 30,000 in 1980; all other Montana counties

had fewer than 25,000 residents each.

Nonsubscribers were also asked their reasons for not subscribing to

Montana Outdoors. Almost a third of the nonsubscribers said they really had
no particular reason for not subscribing:

Reasons for Not Subscribing to Montana Outdoors

	Percentage of Total
No particular reason	30.5
Able to read someone else's copy	14.3
Just not interested in it or subject	14.2
Lack of money; cannot afford to subscribe	12.0
Not enough time to read magazines, etc.	7.6
Have other priorities for my time and money	7.2
Buy single issues occasionally or frequently	3.0
Dislike the magazine	2.5
Other response	8.6
Total	100.0
Number of respondents	872

About 14 percent indicated they were able to read someone else's copy, and another 3 percent acknowledged that they did buy single issues now and then. Only about 2 percent actually said they dislike the magazine. The rest said they couldn't afford to subscribe, lacked the time for such outside reading, had other priorities for what time and money they did have available, or just were not interested in the magazine or the subject.

Overall Performance of the Montana Department of Fish, Wildlife, and Parks

Throughout the survey, the respondents were asked their opinions regarding different Department programs and activities, and their opinions often differed depending on the subject. One question, however, asked specifically about the Department's performance overall, all things considered. Statewide, about 71 percent felt its performance was "good" and another 11 percent said "excellent," while only 13 percent said "fair" or "poor" (barely 2 percent actually said "poor"). Among the various respondent groups, no less than about 79 percent said "good" or "excellent" (table 5.13). Slightly more license holders and fishing enthusiasts rated the Department's performance as "good" or "excellent" than did their opposites. However, nonhunters were slightly more complimentary than were hunters. (None of these differences were significant.)

Table 5.13 Opinions regarding the Overall Performance of the Montana Department of Fish, Wildlife, and Parks by Residence, License Status, and Fishing and Hunting Participation

(In Percentages)

	Excellent	Good	<u>Fair</u>	Poor	Number of Respondents
All respondents	10.6	71.4	11.3	1.6	1,218
Residence, by DFWP region Region 1 Region 2 Region 3 Region 4 Region 5 Region 6	11.6 10.0 12.6 11.7 9.6 7.9	70.2 68.9 68.9 71.5 74.3	12.4 12.0 9.5 11.0 9.6 11.9	3.3 0.0 2.1 1.8 2.3	121 209 190 281 218 101
Region 7	8.2	73.5	16.3	1.0	98
Residence, by county size ^a Seven largest counties All other counties	10.6 10.6	72.5 70.0	10.2 12.9	1.6 1.8	708 510
License status DFWP license holder Nonholder	12.0 8.5	71.5 71.3	11.6 11.0	1.9 7.9	726 492
Fishing participation in 1979 Did not fish in Montana Did fish in Montana	8.7 11.9	72.1 71.0	9.9 12.3	1.6	494 724
Hunting participation in 1979 Did not hunt in Montana Did hunt in Montana	10.2 11.4	72.8 68.9	10.3	0.9 3.0	787 431

Notes: Percentage detail does not add to 100.0 because the miscellaneous responses have been omitted from the table. Nineteen persons (or 1.5 percent of the total sample) did not respond.

The seven largest counties had populations over 30,000 in 1980; all other Montana

counties had fewer than 25,000 residents each.

CHAPTER 6

CHARACTERISTICS OF MONTANANS AND THEIR HOUSEHOLDS AS REVEALED BY THE SURVEY

This section briefly discusses the characteristics of Montana households, as described by the survey respondents who live in those households. (Appendix B on the survey sample briefly describes the respondents themselves and compares them with the Montana population.)

Also discussed in this section are the characteristics of persons who reported purchasing a license from the Department in 1979. As noted earlier, these persons are referred to as license holders, and those who did not purchase a DFWP license of any kind are referred to as nonholders.

Household Size

Much has been said about increased numbers of households in the United States since 1970 and companion decreases in household size. Data from this survey, as well as data from a statewide housing survey for 1978, suggest that Montana has not escaped this trend. According to preliminary data from the U.S. Bureau of the Census, the number of households in Montana increased about 30 percent during the 1970s. At the same time, average household size has declined: it was reported at 3.10 in 1970, compared to survey estimates of 2.94 for 1978 and 2.88 for 1980 (table 6.1).

Household Size, by Residence

Table 6.1

(In Percentages)

Region 7		ģ		Region 3		Region 1	Residence, by DFWP region	All other counties	Yellowstone	Missoula	Lewis and Clark	Gallatin	Flathead	Cascade	Butte-Silver Bow	Seven largest counties	Residence, by county size	All respondents		
3.04	3, 14	2.94	2.71	2.88	2.69	3.20		3,02	2.95	2.50	2.38	2.90	3.11	2.73	3.05	2.79		2.88	Household Size	Average
22.2	16.3	12.3	21.1	16.4	180.4	15.6		17.3	11.4	19.8	25.4	16.7	15.4	22.2	14.3	17.6		17.5	1-	Z
23.2	26.0	38.2	31.6	35.4	35.4	29.5	-	29.4	37.7	40.5	38.0	34.5	32.3	26.7	33.9	35.0		32.7	12	Number of Persons
	16.3	15.9	21.1	16.4	20.8	15.6	ı	16.0	17.1	20.6	21.1	20.2	15.4	22.2	10.7	-8 -8		17.6	ļw	ersons
24.2	17.3	20.0	16.1	18.5	17.0	19.7		20.4	20.0	13.0	ŝ	14.3	- 8 5	19.3	25.0	17.0		18.4	+	in Household
19.2	24.0	13.6	10.2	13 ເມ	α. •	19.7		16.9	13.7	6.1	7.0	14.3	18.5	9.6	16.1	1.6		13.9	More	sehold
100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		0.001	Total	
99	104	220	285	195	212	122		520	175	131	71	84	65	135	56	717		1,237	Number of Respondents	

Note: Percentage detail does not add to total due to rounding. Average number of persons in the household. The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

The seven largest counties, as a group, and the rest of the state followed this statewide pattern somewhat closely. The seven-county area, however, was more likely to have smaller households: more than 70 percent of the households had three or fewer persons, but over half (53 percent) had only one or two; the average overall was 2.79 persons per household. In the rest of the state, while almost 63 percent had three or fewer persons, less than half (47 percent) had one or two persons and the average overall was 3.02 persons.

Among the seven largest counties, there was about a 30 percent variation in overall household size. Lewis and Clark (Helena) and Missoula counties, for example, tended to be at the smaller end of the scale with averages of 2.38 and 2.50 persons, respectively; no less than 80 percent of their households had three or fewer persons. At the larger end were Butte-Silver Bow and Flathead (Kalispell) counties with average sizes of slightly over three persons. In these latter two counties, as well as Yellowstone (Billings), about two-thirds or more of the households had between two and four persons. Cascade (Great Falls) and Gallatin (Bozeman) fell in between, with about 70 percent of their households having three or fewer persons. In all cases, however, the most prevalent household size was two persons.

There was less variation in average household size among the seven administrative regions, but some differences are worth noting. Largest in average size was region 1 (northwest) with 3.20 persons, followed by the two eastern regions (region 6 and 7) with averages slightly over three persons each. These three regions were more likely than the others to have households of three persons or more (although in all cases at least a majority had between two and four persons). At the smaller end

were regions 2 (west central) and region 4 (north central), with averages of 2.69 and 2.71 persons, respectively. Roughly three-fourths of the households in these regions had three or fewer persons.

In most cases, the most prevalent household size was two persons, except in the strongly rural eastern part of the state. Region 6 (northeast), for example, had almost as many larger households with five or more persons as it had households with only two persons; and region 7 (southeast) had almost equal numbers of households with one, two, and four persons.

Type of Household

The surveyed households were classified into household types based, first, on "family" status -- "family households" with one person living alone or unrelated individuals living together. The family households (which are, by definition, multiperson households) were further classified by the type of householder (or household head) -- husband-wife households, in which either the husband or wife is considered the householder and both are present in the household, and those in which either the householder is unmarried or the spouse is not living in the household. The nonfamily households were further classified by size -- households with one person and those with more than one person.

Not unexpectedly, most households in the state are family households and the more conventional husband-wife households predominate: well over

This is a revision from the way households have been classified in the past but is the classification now used by the U.S. Bureau of the Census and has been adopted in order to facilitate comparison with census data where available.

two-thirds of the surveyed households were husband-wife households (table 6.2). Another 16 percent were households with only one person.

Husband-wife households were also the vast majority in all the geographic areas presented, although there were some differences that are worth noting. For example, among the seven largest counties, Butte-Silver Bow, Flathead, and Yellowstone counties had the highest proportions of husband-wife households and among the lowest proportions of one person households. In contrast, the other four counties, for the most part, had the lowest proportions of husband-wife households and higher proportions of one person households. Cascade and Lewis and Clark (Helena) counties had the highest proportions of one person households (over 20 percent in each).

Characteristics of Householders

Each surveyed household was asked to indicate the individual considered by its members to be the head of the household, or what is referred to as the "householder." In most instances, the householder designations followed traditional patterns — that is, among husband-wife households, the husband was usually (but not always) considered the householder.

Since the conventional husband-wife households predominate in the state and since the husbands in those households were more likely to be the householders, it is no surprise that the surveyed households were more likely to be headed by males than by females. Statewide, the vast majority (almost 79 percent) of the householders were male, while about 21 percent

 $^{^2\}mbox{This}$ new designation "householder" is used in order to be compatible with new U.S. Census Bureau practices.

Type of Household, by Residence (In Percentages)

Table 6.2

	Family Households	seholds ^a	Nonfamily	Nonfamily Households ^b		
	Husband- Wife	Other	One Person	More Than One Person	Total	Tumber of Fespondents
All respondents (households)	70.9	8.7	16.5	u •9	00.00	2,976
Residence, by county size						
Seven largest counties	69.7	ν, Φ	16.7	5.0	100.0	274
Butte-Silver Bow	75.0	6.9	14.3	00°	100.0	රු ව
Cascade	68.9	о —	21.5	2.5	0,001	ČNI
Flathead	75,4	9.2	15.4	0.0	0.001	57
Gallatin	68.7	6.0	14.5	8.01	0.001	en Cu
Lewis and Clark	64.3	5.7	24.3	5.7	100,0	20
MISSOULA	64.6	8,0	19.2	5.4	100,0	230
Yellowstone	73.1	9.1	10.3	7.4	100.0	1775
All other counties	72.5	8,8	16.3	2.3	100.0	520
Residence, by DFWP region						
Region	73.8	9,8	15.6	0.8	100.0	122
Region 2	66.8	10.4	18.0	4.7	100.0	577
Region 3	70.6	7.7	15.5	6.2	100.0	196
Region 4	69.4	°	20.1	2.5	100.0	200
Region 5	73.2	9.5	7.4	ທ່	0.00	
Region 6	75.0	7.7	T3.5	ω œ	100.0	204
Region 7	71.7	6.1	21.2	1,0	0,001	99

Note: Percentage detail may not add to total due to rounding.

**Consist of relatives living together: married couple, with or without children; or a man or woman with children, or any other combination of relatives living together.

**DAN individual living alone or unrelated individuals living together.

**CThree persons (or 0.2 percent of the total sample) did not respond.

**The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

were female (table 6.3). Significant differences were found between Missoula and Yellowstone counties and between the regions in which they are located. Missoula was low with 75 percent male householders and, thus, high with 25 percent female householders. In contrast, 86 percent of the Yellowstone householders were male and only 14 percent were female. Regions 2 (Missoula) and 5 (Yellowstone) showed roughly the same proportions.

In terms of age, most of the surveyed households were headed by persons thirty-five years of age and older. Statewide, 37 percent of the householders were under thirty-five, while over 60 percent were thirty-five and older; the estimated median (middle) age overall was forty-two years (table 6.4).

The patterns were much the same among the seven largest counties (individually and as a group) as well as the rest of the state and did not differ significantly from the statewide distribution. Butte-Silver Bow and Flathead, among the largest counties, were the highest with at least two-thirds of their householders in this older age group. Missoula and Yellowstone tended to be lower with only 53 and 56 percent, respectively, in the older age group, which accounted for the lower median ages in those counties. The other three counties, as well as the rest of the state, fell in between.

While these differences were not statistically significant, there is one notable difference between Butte-Silver Bow and Flathead. In both of these counties, almost the same proportions of householders were in the older age group. Yet, the estimated median age of householders in

Table 6.3

Sex of Householder (Household Head), by Residence

(In Percentages)

Number of Respondents	1,223		208	56	134	65	88	7.0	128	172	515		122	208	193	282	217	102	66
Total	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0
Female Householder	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		20.5	14,3	22.4	23.1	22.9	24.3	25.0	14.0	22.7		23.8	25.0	19,7	23,4	١6, ا	9.61	22.2
Male Householder	78.6		79.5	% .'.	77.6	76,9	77.1	75.7	75.0	0.98	77.3		76.2	75.0	80,3	9.9/	833°0	80.4	77.8
	All respondents (households)	Residence, by county size	Seven largest counties	Butte-Silver Bow	Cascade	Flathead	Gallatin	Lewis and Clark	Missoula	Yellowstone	All other counties	Residence, by DFWP region	,	Region 2	Kegion 3	Region 4	Region 5	Region 6	Region /

Note: Householders include those who said they share householder (head of household) status with a spouse or other household member.

aFourteen persons (or 1.1 percent of the total sample) did not respond. The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Table 6.4

(Sa
Percentage
=

	Estimated Median Age (Years)	18 to 24 Years	25 to 34 Years	35 to 44 Years	45 to 64 Years	65 Years and Over	Total	Number of Respondents
All respondents (households)	42	8.	28.9	18.2	30.0	14.7	100.0	1,215
Residence, by county size								
Seven largest counties	41	8	31,2	17.8	28.6	13.7	100.0	703
Butte-Silver Bow	52	~ &•	30.4	œ •	30°4	28.6	100.0	56
Cascade	41	L. 6	29,1	18.7	28.4	14.2	100.0	134
Flathead	43	9-	28.1	25.0	29.7	15.6	100.0	64
Gallatin	40	12.2	28.0	20.7	28.0	0. [100.0	82
Lewis and Clark	45	14.3	21.4	14.3	31.4	18.6	100.0	20
Missoula	37	0.1	36.2	15.0	26.8	0.	100.0	127
Yellowstone	23	7.6	35.9	19.4	28.2	8.8	100.0	170
All other counties	Ž.	7.2	25.8	18.8	32.0	16.2	100.0	512
Residence, by DFWP region								
Region 1	43	4.2	27.5	24.2	29,2	15.0	100,0	120
Region 2	\$4 \$3	200	29,5	16.9	30°	0.4	100,00	207
Region 3	53	-# @	30.5	ž,	28,9	8,9	100.0	190
Region 4	43	10.6	25.5	16.7	32.6		0.001	282
Region 5	40	6,0	33,5	20.5	28.4	9"	100.0	215
Region 6	42	ಹ	28,4	38.6	32.4	8	100.0	202
Region 7	44	7.1	26.3	18.2	26.3	22,2	100.0	66

Notes: Householders include those who said they share householder (head of household) status with a spouse or other household member. Percentage detail may not add to total due to rounding. The seven so (or 1.8 percent of the total sample) did not respond. The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Butte-Silver Bow was fifty-two years, compared to only forty-three years in Flathead County. A closer look at the data indicates that well over half the householders in Butte-Silver Bow were forty-five years of age or older, and almost 30 percent were sixty-five and older. This can probably be explained largely by the significant reductions over the last few years in mining jobs and related employment in the area; many younger householders of working age have probably moved their families to other areas to seek employment.

The age distributions among the seven regions were relatively similar and showed much less variation than was the case with the seven largest countries.

Incomes of Montana Households in 1979

The survey participants were also asked about the incomes of their households in 1979 -- total income from all sources and before taxes and other deductions. Only about 7 percent of the sample refused to answer or gave incomplete information.

Of those responding, just about half reported household incomes between \$15,000 and \$35,000 in 1979, while slightly over 10 percent reported incomes over \$35,000. The rest, 38 percent, had incomes of \$15,000 and under in 1979 (table 6.5).

For the most part, the distributions of 1979 household incomes were relatively similar in the seven largest counties and the rest of the state, as a whole: the largest segments (from about 44 to 54 percent) reported 1979 incomes between \$15,000 and \$35,000, the next largest segments had

Table 6.5

Incomes of Montana Households in 1979, by Residence

(In Percentages)

	\$5,000 or Less	\$5,001 to \$10,000	\$10,001 to \$15,000	\$15,001 to \$20,000	\$20,001 to \$35,000	0ver \$35,000	Total	Number of Respondents ^a
All respondents	7.3	13.4	17.5	19.2	30.6	12.0	100.0	1,146
Residence, by county size								
Seven largest counties	0,0	7.50	17.	9.6	W. W.	0.0	0.001	868
Cascade	o. ∞	5, 2, 2 - 2, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3,	19.2	25.6	5 7 C	12.0	0.00	125
Flathead	6.57	14.5	19.4	16.1	33.0	07	100.0	89
Gallatin	8.0	12.0	12.0	17.3	36.0	14.7	100.0	75
Lewis and Clark	10.1	17.4	17.4	17.4	30.4	7.2	100.0	69
Missoula	7.6	14.4	15,3	19.5	33.9	9.3	100.0	118
Yellowstone	3.0	12.0	18.0	21.0	32.9	13.2	100.0	167
All other counties	9.2	11.7	18,2	18.6	28.9	13.4	100.0	478
Residence, by DFWP region								
Region 1	9.7	12.4	17.7	15.9	37.2	7.1	100.0	113
Region 2	7.3	14.0	16.1	20.2	32,1	10.4	100.0	193
Region 3	7.9	15.2	9.4!	17.4	34.3	10.7	100.0	178
Region 4	ထီ	ካ ፣ ካ [18,5	22.6	25.6	10.7	100.0	270
Region 5	ψ, m	0. =	ا د وا	20.1	31.6	12.9	100.0	209
Region 6	, 5	7.7	22.0	16.5	24.2	24.2	100.0	16
Region 7	7.6	17.4	15.2	15.2	31.5	13.0	100,0	98

Note: Percentage detail may not add to total due to rounding. aNinety-one persons (or 7.4 percent of the total sample) did not respond. bThe seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each. incomes of \$15,000 and under, and the smallest segment (from about 6 to 15 percent) reported incomes over \$35,000. The one notable exception to this was Butte-Silver Bow: the largest segment in that county (about 50 percent of the households) reported household incomes of \$15,000 and under in 1979. Earlier it was noted that the county had experienced significant reductions in jobs, and that almost 30 percent of the households surveyed were headed by persons sixty-five years of age and older, which may account for some of the lower household incomes in the county.

Gallatin and Yellowstone counties, compared to the other large counties, had greater proportions of their households in the upper income categories: about 51 and 46 percent, respectively, had incomes over \$20,000 and about 15 and 13 percent reported incomes over \$35,000. Lewis and Clark County had the largest proportion of households with incomes of \$5,000 or less. This may be explained somewhat by the relatively larger proportion of one person households in the county, and many of these may be students (students tend to occupy the lower income categories).

The distribution of incomes for the forty-nine smaller counties as a whole was almost identical to the statewide distribution and to that for the seven-county group. Any differences were not significant.

The income distributions in the various regions were relatively similar and also not unlike the statewide distribution. As was the case in most of the other areas, the largest segments in the regions (41 to 53 percent) reported incomes between \$15,000 and \$35,000 in 1979. The northeast part of the state (region 6) had the largest proportion of households in the upper income categories: about 48 percent with incomes over \$20,000, and almost 25 percent reporting incomes over \$35,000.

Table 6.6 presents estimates of median household incomes by residence. (The median is, as noted before, the halfway point in a distribution -thus, half the respondents were above that midpoint and half were below.) The median figures presented here should be used carefully because they are derived from grouped data and are less accurate than medians derived using actual (ungrouped) amounts. It should also be noted that not all the respondents were the heads of their households (almost 40 percent were not) and, thus, the nonhouseholder respondents may not have had as accurate knowledge about total household income as did the householder respondents. Nevertheless, the estimated medians provide another relative measure of income and serve to reinforce the earlier observations. For example, Butte-Silver Bow and Lewis and Clark counties had the lowest medians (\$15,000 and \$16,500, respectively); Gallatin and Yellowstone, on the other hand, had the highest (\$20,000 and \$19,100, respectively). The forty-nine smaller counties, as a whole, had a median income of \$17,900 which put them slightly below the state as a whole. Most of the regions had medians above the statewide figure, especially region 6, which was highest at \$19,500.

Length of Residence in Current Place

Based on the experiences of the survey respondents, the majority of Montana residents have not changed communities in over ten years.

Statewide, around 54 percent of the respondents had lived in their current communities over ten years. At the same time, however, almost a third were "relative newcomers" who had lived in their current communities five years

Table 6.6

Estimated Median Incomes of Montana Households in 1979
by Residence

	Median Income (Estimated)
All respondents (households)	18,100
Residence, by county size ^a	
Seven largest counties	18,200
Butte-Silver Bow	15,000
Cascade	17,600
Flathead	18,000
Gallatin	20,200
Lewis and Clark	16,500
Missoula	18,300
Yellowstone	19,100
All other counties	17,900
Residence, by DFWP region	
Region 1	18,200
Region 2	18,100
Region 3	18,500
Region 4	17,000
Region 5	18,600
Region 6	19,500
Region 7	18,200

Note: These medians have been estimated using grouped or summarized data (income groupings) rather than actual ungrouped dollar amounts and, therefore, are less accurate than medians derived from ungrouped dollar amounts. aThe seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

or less; about 10 percent were "recent movers" who had lived in their current communities for only a year or less (table 6.7).

The forty-nine smaller counties, as a whole, did not differ significantly from the state overall, although slightly more had resided in their same communities over ten years, and slightly fewer were recent movers.

There were, however, some significant differences among the seven largest counties. The most striking differences were among residents of Butte-Silver Bow and Gallatin counties. In Butte-Silver Bow, for example, barely 10 percent of the respondents were relative newcomers (had lived in the county five years or less), while over 80 percent had lived there more than ten years. The county that came closest to Butte-Silver Bow in terms of such a preponderance of long-term residents was Lewis and Clark County with barely 54 percent. Gallatin County, on the other hand, had a significantly smaller percentage of long-term residents -- only 32 percent -- and a greater proportion of relative newcomers (five years or less) -- 46 percent. Missoula County also had a relatively smaller proportion of long-term residents (48 percent) and a larger proportion of relative newcomers (about 37 percent), but not as extreme as in Gallatin County. This can probably be explained largely by the fact that Gallatin and Missoula counties are the locations of the two state universities and that college student and faculty populations tend to be more transient. Butte-Silver Bow, on the other hand, in which over 80 percent had not changed communities in over ten years, has been losing population over the last decade and apparently has attracted few new residents.

Length of Residence in Current Place, by Residence

Table 6.7

(In Percentages)

Region 6 Region 7	Region 4			Region 1	Residence, by DFWP region	All other counties	Yellowstone	Missoula	Lewis and Clark	Gallatin	Flathead	Cascade	Butte-Silver Bow	Seven largest counties	Residence, by county size b	All respondents	
9.5	12.6	6.7	9.0	ယ ယ		о С	13,3	9.2	12.7	7.1	 V1	15.6	0.0	10,1		9.6	l Year or Less
~ ~ ~ .	 - 5	28,2	26.4	30°3		19.8	17.9	27.5	16.9	39.3	33.8 8	16.3	10.7	22.7		21.5	2 to 5 Years
9,6	7 5 - 5	17.9	13.2	16.4		15.0	16.2	15.3	16.9	21.4	12,3	16.3	7.1	15.7		15.4	6 to 10 Years
62.5	54.7	47.2	51.4	50.0		56.3	52.6	48.1	53.5	32,1	ហ្	51.9	82.1	51.6		53.6	Over 10 Years
100.0	100,0	0.001	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100,0	100.0	100.0	100.0		100.0	Total
104 99	285	195	212	122		520	173	131	71	84	65	135	58	715		1, 235	Number of Respondents

Note: Percentage detail may not add to total due to rounding.

aTwo persons (or 0.2 percent of the total sample) did not respond.

The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Among the regions, the patterns were relatively similar and did not differ significantly from the state as a whole. In each region, the largest segment of the population (in most cases, a majority of between 50 and 62 percent) had not changed communities in over ten years.

Discussions of the proportions of relative newcomers in the state -31 percent statewide, almost 37 percent in Missoula, over 46 percent in
Gallatin, etc. -- may conjure up in the reader's mind a vision of streams
of people moving into Montana. However, additional survey data (on
residences five years ago) suggest that much, if not most, of the activity
or movement has involved Montanans changing residences within the state
rather than moving in from outside Montana.

Statewide, as noted earlier, about 31 percent of the residents had lived in their current communities five years or less -- or, stated another way, 31 percent had lived outside their current communities about five years ago. However, the additional residence data for the state as a whole indicate that only 13 percent of the respondents lived outside Montana five years earlier:

Residence of Montanans Five Years Ago (In 1975)

	Percentage of Total
Montana	86.9
Out of state	13.1
Total	100.0
Number of respondents	1 _e 071

Thus, the rest of the relative newcomers (five years or less in current communities), the other 18 percent, apparently moved from elsewhere in the state.

In the case of Gallatin County, which had the highest proportion of relative newcomers (46 percent), only about 22 percent of the respondents lived outside Montana five years earlier (table 6.8). The rest of the relative newcomers to Gallatin County (about 24 percent) came from elsewhere in the state. Gallatin still had the highest percentage of respondents moving in from out of state, followed closely by Flathead (20 percent). Butte-Silver Bow and Lewis and Clark, on the other hand, had the smallest percentages -- about 2 and 6 percent, respectively. These latter two counties also reported the highest percentages of respondents living in the same county five years ago, especially Butte-Silver Bow with a significantly high 92 percent.

Among the seven regions, anywhere from about 6 to 19 percent of the respondents lived outside Montana five years ago; however, no less than 76 percent lived in the same region (table 6.9). Unfortunately, the sample sizes are too small to determine whether these differences are significant.

License Holders and Nonholders

One of the characteristics more specific to outdoor recreation in Montana was the respondent's status as a holder of a Departmental license for 1979 or as a "nonholder." License holders include those who purchased only the Montana conservation license (many people purchase just the conservation license as a kind of donation) as well as those who also purchased licenses specifically for hunting, fishing, etc.

Table 6.8

Residence of Montanans Five Years Ago (in 1975), by Size of County

(In Percentages)

)W ** ** * * * * * * * * * * * * * * * *	Montana merene			
	Same County or Area	Different County or Area	Out of State	Total	Number of Respondents
Seven largest counties	80.2	6.4	14.9	100.0	712
Butte-Silver Bow	92.9	5.4	Φ,	100.0	26
Cascade	74.1	~**	17.8	100,0	135
Flathead	72.3	7.7	20.0	100.0	65
Gallatin	6,69	7.8	21.7	100.0	00 00 00 00 00 00 00 00 00 00 00 00 00
Lewis and Clark	80.3	7,4	5,6	100.0	27
Missoula	71.3	17.1	9.	100.0	129
Yellowstone	74.0	ထိ	17.9	100.0	173
All other counties	83.5	0°9	10.6	100.0	520

Notes: The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each. Percentage detail may not add to total due to rounding. ^aFive persons (or 0.4 percent of the sample) did not respond.

Table 6.9

Residence of Montanans Five Years Ago (in 1975) by DFWP Administrative Region

(In Percentages)

---- Montana ----

Number of Respondents	122	210	194	285	218	104	66
Total	100.0	100.0	100.0	100.0	0.001	100.0	100.0
Out of State	18.9	©	12.9	5	17.0	5.8	Success (P) Success
Different Region	6.4	11,4	8.2	7.4	0.9	7.7	7.1
Same Region	76.2	76.7	78.9	80.7	77.1	86.5	81.8
	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7

Note: Percentage detail may not add to total due to rounding. agive persons (or 0.4 percent of the sample) did not respond.

DFWP license holders in 1979 (table 6.10). Recent data from the U.S. Census Bureau estimate the adult population (also the survey population) at almost 71 percent of the state total. Given this and the preliminary 1980 census count for the state (783,674), the adult population is approximated at 554,000 persons. This, in turn, given the survey results, translates into approximately 327,000 DFWP license holders in the state.

In each of the seven largest counties and the rest of the state, the majority of the respondents indicated that they were license holders.

Among the seven counties, Butte-Silver Bow and Cascade had the lowest percentages of license holders (57 percent) while Gallatin had the highest (71 percent). In each of the regions, as in the seven counties, a majority of respondents reported being license holders; region 6 in the northeast had the smallest percentage (53 percent), while region 1 in the northwest had the highest (68 percent).

Characteristics of License Holders and Nonholders. Now a closer look at some of the characteristics of license holders compared with the nonholders. In terms of current residence, a slightly larger percentage of the license holders (60 percent), compared to the nonholders (54 percent), were living in the seven largest counties; conversely, there was a larger percentage of nonholders living in the forty-nine smaller counties -- about 46 percent compared to about 40 percent for license holders (table 6.11). However, while these differences are noticeable, they are not

³U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-25, no. 879 (Washington, D.C., March 1980), table 2.

Table 6,10

DFWP License Holder Status in 1979 by Residence

(In Percentages)

	License Holders	Nonholders	Total	Number of Respondents
All respondents	59.0	0°[†	0.00	1,237
Residence, by county size ^a				
Seven largest counties	61.5	38.5	100.0	717
Butte-Silver Bow	57.1	42,9	100.0	56
Cascade	57.0	43.0	100.0	135
Flathead	69.2	30°8	100.0	65
Gallatin	71.4	28,6	100.0	84
Lewis and Clark	62.0	38.0	100.0	TZ
Missoula	58.0	42.0	100.0	131
Yellowstone	- 19	38,9	100.0	175
All other counties	55.6	41, 44	100.0	520
Residence, by DFWP region				
Region 1	68,0	32,0	100.0	122
Region 2	58,5	41,5	100.0	212
Region 3	66.7	33,3	100.0	195
Region 4	54.0	0,94	100.0	285
Region 5	57.7	42,3	100.0	220
Region 6	52.9	47.1	100.0	104
Region 7	57.6	42,4	100.0	66

^aThe seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Table 6.11

Residence of License Holders and Nonholders

(In Percentages)

	License Holders	<u>Nonholders</u>
Current residence, by county size ^a	100.0	100.0
Seven largest counties Butte-Silver Bow Cascade Flathead Gallatin Lewis and Clark Missoula Yellowstone All other counties	60.4 4.4 10.5 6.2 8.2 6.0 10.4 14.7 39.6	54.4 4.7 11.4 3.9 4.7 5.3 10.8 13.4
Current residence, by DFWP region Region 1 Region 2 Region 3 Region 4 Region 5 Region 6 Region 7	100.0 11.4 17.0 17.8 21.1 17.4 7.5 7.8	100.0 7.7 17.4 12.8 25.8 18.3 9.7 8.3
Residence five years ago (1975) ^b Montana Same DFWP region Different DFWP region Out of state	100.0 87.6 79.2 8.4 12.4	100.0 85.9 79.2 6.7 14.1

Note: Percentage detail may not add to total due to rounding.

The seven largest counties had populations over 30,000 in
1980; all other Montana counties had fewer than 25,000 residents
each.

bFive persons (or 0.4 percent of the total sample) did not respond.

significant, and these distributions do not differ significantly from the distribution of the overall sample (presented in Appendix B). The same is true for the distributions of these two groups among the regions — neither differs significantly from each other nor from the distribution of the overall sample.

In terms of length of residence, most license holders and nonholders had lived in their current communities over ten years, but a slightly larger proportion of nonholders were such long-term residents (table 6.12). At the same time, a slightly larger percentage of nonholders were also recent movers, having lived in their current communities only one year or less.

While these differences in terms of residence and the length of residence were notable, they were not significant. There were, however, some significant differences in terms of age, sex, householder status, and employment status.

License holders tended to be younger than nonholders; roughly 50 percent were under thirty-five years of age, compared to about 38 percent for nonholders (table 6.12). Further, a substantial majority of license holders (68 percent) were under forty-five years of age, compared to only about 55 percent of the nonholders. The estimated median ages show this difference more clearly; license holders had a median (middle) age of thirty-five years, compared to forty-two years for nonholders. Almost 41 percent of the license holders were female; compared to nonholders, though, license holders were more likely to be male: 59 percent were male, compared to barely one-fourth of the nonholders (almost 75 percent of the nonholders were female). License holders were also more likely

Table 6.12
Characteristics of License Holders and Nonholders

	License Holder	s <u>Nonholders</u>	
Number of respondents	730	507	
Age of respondent ^a 18-24 years	100.0 15.9	100.0 16.1	
25-34 years	33.8	21.6	
35-44 years 45-64 years	18.7 22.4	16.9 27.0	
65 years and over	9.2	18.5	
Estimated median age (in years)	35	;	42
Sex of respondent	100.0	100.0	
Male	59.3 40.7	25.8 74.2	
Female	40.7	14.2	
Length of residence in current place ^b	100.0	100.0	
l year or less	7.3 25.5	12.8 15.6	
2- 5 years 6-10 years	16.2	14.2	
Over 10 years	51.0	57.3	
Householder (head of household) status ^C	100.0	100.0	
Householder (head of household)d	66.0	54.3	
Not householder	34.0	45.7	
Highest level of formal education a	100.0	100.0	
Some high school or less	11.3	15.6 38.0	
High school graduate ^e	43.2 23.1	24.0	
Some college College graduate	22.4	22.4	
Estimated median school years completed	18	2.9	12.9
Employment status	100.0	100.0	
Employed	73.0	59.8	
Unemployed and looking for work	2.3 24.7	4.2 36.0	
Not in the labor force	24.7	30.0	
Employed persons, by type of worker	100.0	100.0	
Private sector workers	57.7	58.4 20.5	
Government workers	22.0 20.3	20.5	
Self-employed persons	~~		

Note: Percentage detail may not add to total due to rounding.

Five persons (or 0.4 percent of the total sample) did not respond.

Two persons (or 0.2 percent of the total sample) did not respond.

Twelve persons (or 1.0 percent of the total sample) did not respond.

Includes those who said they share householder (head of household) status with a spouse or other household member.

Fincludes those with formal technical training beyond high school but not at a junior college or four-year college.

Thirteen employed persons (or 1.1 percent of the total sample) did not respond.

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to be householders (household heads): 66 percent were householders compared to 54 percent among nonholders.

In terms of employment status, license holders were more likely to be employed. While the majority in each group was employed, a significantly larger proportion of license holders was employed at the time of the survey (73 percent compared to barely 60 percent of the nonholders). On the other hand, a significantly larger proportion of nonholders was not in the labor force; this is likely a reflection of the predominance of females among the nonholders, since females tend to have lower labor force participation rates than do males. Of those license holders and nonholders who were employed, most (about 58 percent in each group) were private sector wage and salary workers.

There were no notable or significant differences in levels of education among license holders and nonholders: the largest segments in each group had completed some college or more, and the estimated median years of school completed were identical for the two groups.

Household Characteristics of License Holders and Nonholders. Many more of the household differences proved to be significant. The households of license holders tended to be a bit larger, averaging 3.00 persons to 2.72 persons for nonholders (table 6.13). A significantly larger proportion of nonholder households had only one person (25 percent compared to 12 percent for license holders), and slightly over half had only one or two persons; among license holders, only about 46 percent had one or two persons. Earlier it was noted that most households in the state were family households and that the conventional husband-wife households

Table 6.13
Household Characteristics of License Holders and Nonholders

	License Holders	<u>Nonho l</u>	ders
Number of respondents	730	507	
Household size			
Total number of persons in household 1 2 3 4 5 6 or more Average household size	100.0 12.2 34.2 18.9 20.7 8.1 5.9	100.0 25.0 30.4 15.8 15.2 8.3 5.3	2.72
Type of household ^a Family households Husband-wife households Other family households Nonfamily households One person households Multiperson nonfamily households	100.0 84.6 77.8 6.9 15.4 11.5 3.8	100.0 72.3 61.0 11.3 27.7 23.8 4.0	
Age of householder (household head) ^d 18-24 years 25-34 years 35-44 years 45-64 years 65 years or over	100.0 8.8 33.5 19.3 27.8	100.0 7.3 22.2 16.5 33.3 20.8	
Sex of householder (household head) ^e Male Female	100.0 86.3 13.7	100.0 67.4 32.6	
Household income in 1979 ^f \$ 5,000 or less \$ 5,001 to \$10,000 \$10,001 to \$15,000 \$15,001 to \$20,000 \$20,001 to \$35,000 Over \$35,000 Estimated median household income	100.0 4.9 9.8 18.5 21.0 32.6 13.2 \$19,000	100.0 10.9 18.7 16.1 16.6 27.7 10.0	\$16,300
estimated meatan nousenota theome	+ - 3		₹

Three persons (or 0.2 percent of the total sample) did not respond. Consist of relatives living together: married couple, with or without children; or a man or woman with children, or any other combination of relatives living together.

CAn individual living alone or unrelated individuals living together.

d Twenty-two persons (or 1.8 percent of the total sample) did not respond.

e Fourteen persons (or 1.1 percent of the total sample) did not respond.

f Ninety-one persons (or 7.4 percent of the total sample) did not respond.

predominated. Such was also the case for both license holders and nonholders; however, a significantly larger proportion of households among license holders were the husband-wife type.

The differences in terms of age and sex of the householder were more pronounced and significant. Households of license holders were much more likely to be headed by younger persons — about 42 percent had householders under thirty—five years of age and over 60 percent were under forty—five years of age, compared to only 30 percent and 46 percent, respectively, for nonholders. Households of nonholders, thus, were more likely to be headed by persons forty—five years of age and older. Age differences such as these, and those discussed in the previous section, should be of particular interest to DFWP personnel as they plan for the future. Changes in the age structure of the population may have implications for changes in the number of license holders.

Both groups of households were most likely to have male householders, but this was especially so among license holders -- 86 percent of their households had male householders, compared to 67 percent among nonholders; about a third of the households of nonholders were headed by females.

The household incomes reported for both groups also showed some significant differences, with those of license holders tending to be higher. The majority of households in each group had household incomes over \$15,000 in 1979, but license holders had a significantly higher proportion in these upper income categories (about 67 percent compared to 54 percent for nonholders). Almost 30 percent of the nonholders had household incomes of \$10,000 or less in 1979, compared to only 15 percent

among license holders. The estimated median (middle) household incomes show the differences somewhat more clearly: the estimated median for license holders was \$19,000, compared to only \$16,300 among nonholders. The larger proportions of one person households and households with older household heads may well have a lot to do with the relatively lower household incomes among nonholders.

Relating Characteristics of Montanans and Their Households to Outdoor Recreation

A knowledge of some of the characteristics of Montanans and their households and of DFWP license holders and nonholders provides a useful background in analyzing outdoor recreation in the state. The foregoing tables and discussion, for instance, have pointed to a population where households have been declining in size in most areas of the state; where most households are conventional husband-wife (family) types, but where another one-fourth are either one person households or are other family households headed primarily by unmarried persons. They indicate that Montanans change residence frequently -- almost one-third of the respondents lived in their current communities five years or less -- but that much of this movement is within the state.

Over half the respondents reported being DFWP license holders in 1979. These license holders tend to be younger than nonholders, with a median (middle) age of thirty-five years. While they are more likely than nonholders to be male, about 41 percent are female, and they are more likely to be employed. They tend to live in slightly larger households, with a younger householder (under forty-five years of age) and with higher household incomes.

Background information such as this may help to explain the outdoor recreation activity and preferences of Montanans and their opinions regarding various oudoor recreation issues as discussed in the previous chapters.

HIGHLIGHTS OF THE SURVEY

Outdoor Recreation Activities

-Most Montanans devote some of their leisure time to outdoor recreation activity. Only 25 percent of the survey respondents indicated they do not usually participate in any such activity.
-The most popular outdoor recreation activities in Montana in 1979
 were among the most sedentary: picnicking, driving for pleasure,
 and walking for pleasure (as opposed to hiking or mountain climbing).

 Over 70 percent of the survey respondents reported doing each of
 these activities at least once in 1979.
-Montanans who purchased some type of Department of Fish, Wildlife, and Parks (DFWP) license in 1979 (license holders) participated in outdoor recreation activities more frequently than did nonholders. In every activity category, license holders indicated greater participation.
-Over 58 percent of the respondents reported fishing at least one day in 1979, and over 35 percent indicated they had hunted at least once that year. When asked how often they fished or hunted last year, the median (middle) number of days reported by those who fished was fourteen; the median reported by hunters was ten days.

-Camping and hiking are also popular leisure time activities. About 58 percent of the respondents reported camping at least one day in 1979, and ten days was the median number recorded. Thirty-eight percent indicated they had hiked or mountain climbed, with six days the median number reported.
-In most cases there were few statistical differences between the activity participation rates of those living in Montana's seven most populous counties (Butte-Silver Bow, Cascade, Flathead, Gallatin, Lewis and Clark, Missoula, and Yellowstone) and those residing in the remaining forty-nine counties.
-In general, as might be expected, participation rates were greater among the younger age groups, especially for the more vigorous activities. Bicycling, for instance, is definitely an activity enjoyed by younger Montanans; over half of those between eighteen and twenty-four years of age reported some bicycling in 1979.

 Bird watching and nature study, driving or walking for pleasure, and picnicking were activities which showed high participation by those sixty-five years of age and older.
-Respondents were asked how they think outdoor recreation services and programs in general should be paid for. Among those who did not buy licenses in 1979 (nonholders), 51 percent felt those who utilize the services should pay for the services by way of user fees.

License holders were less enthusiastic about fees: about 42 percent suggested them as a way of funding. Overall, 46 percent of all respondents recommended user fees, 28 percent said the services should be supported by state general tax funds, and 16 percent indicated that a combination of both funding sources should be used.

.... A significant proportion of respondents -- over 80 percent -- was satisfied with the programs now provided and did not feel that additional services or programs should be added or that any should be eliminated.

Park and Recreation Site Program

-Of the 1,237 respondents surveyed, almost 80 percent reported visiting a state or federal park or recreation site in Montana within the past five years.
-Forty-eight percent reported visiting a state-maintained park or recreation site at least once in 1979.
-About 43 percent of the survey respondents indicated they usually notice if a recreation area is maintained by the state or by another government agency. Among just those who said they had visited a state or federal site in the last five years, about

54 percent indicated they usually notice if the area is maintained by the state.

-Sixty-eight percent said there is a state park or recreation site within an hour's drive of their residence. However, of those, only 23 percent were able to accurately <u>name</u> the site (accuracy of the location was not checked). An additional 32 percent of those who mentioned a particular site did not use an accurate name.
-Respondents were fairly evenly divided over whether the state should purchase land for new or expanded park and recreation areas, or whether there are enough sites available now. About 46 percent said the state should purchase new sites, and 44 percent indicated there are enough areas already available.
-Fifty-one percent of the respondents identified state general tax funds as a major source of funding for park and recreation sites, and about 24 percent identified license fees and fines. In general, however, actual understanding of how these services are financed was limited; almost one-third of the respondents were unable to name any funding source.

....Respondents were asked how well, in general, they felt the state does in maintaining its parks and recreation sites. About 20 percent said the state does a "very good job," and almost 57 percent indicated they thought the state does a "good job." Only about 2 percent felt that the state does a "poor job."

Fishing and the Fisheries Program

-Montana fishermen overwhelmingly stated that they preferred to catch a few large fish rather than many small fish.
-Survey respondents who resided in eastern Montana were more apt to favor development and expansion of a warm water fishing program than were those in western Montana.
-Respondents strongly favored efforts by the state to maintain fish habitat and to control subdivision activities along rivers with high fishing, scenic, or recreational value. The overwhelming approval of this type of subdivision regulation must be interpreted with caution because the respondents may not have been equally informed about the topic and the intention was only to get a public reaction to the general idea.
-When asked about who should control regulatory activities with respect to fishing habitat and the use of recreation waters, respondents always overwhelmingly said the State of Monana.

....The majority of respondents indicated support for raising fishing license fees to cover the increasing cost of the current fisheries program.

Hunting and Wildlife Management Programs

-Forty-eight percent of all survey respondents opposed limiting the number of resident hunters in Montana; about 37 percent said they were in favor of such a limit. Opposition to resident limits was strongest among hunters and in the western part of the state.
- approved. More than 86 percent said they favored such a limit while only 10 percent were opposed.
-Among those favoring the restriction of nonresident hunters, most preferred a lower limit than the current number of 17,000 nonresident big game licenses sold annually. Fifty-six percent preferred a lower figure, 32 percent preferred no change, and only 1 percent wanted an increase.
-Of those favoring a lower limit on the number of nonresident licenses sold, 62 percent favored raising the resident license fee to make up for the revenue lost.

-The respondents overwhelmingly opposed the idea of requiring a license to hunt small game animals. The opposition was greatest in the rural areas.
-Respondents also opposed, by a ratio of about four to one, increased emphasis on and funding of a nongame wildlife program.

Related Issues Pertaining in General to Outdoor Recreation and DFWP

-Ninety percent of the respondents said there were conflicts between private landowners and people who used their land for recreation purposes. About 78 percent thought the problems were "very serious" or "serious."
-Almost 23 percent of the survey respondents said they owned land that is or could be used for hunting, fishing, or other forms of recreation. More than half of these landowners said they had encountered friction or problems with recreationists regarding access to or through their land.
- lands in order to reach public lands received the overwhelming support of the respondents; 75 percent favored such a program. And, more than half the respondents said such an easement program should be in addition to other land programs, rather than a replacement for other programs.

-In general, respondents tended to favor multiple use of Motnana's water. Only 8 percent of the respondents said that fish and wildlife should have the highest priority in water use. Almost 42 percent felt that agriculture should also receive first priority along with fish and wildlife. About 36 percent felt water should be equally available for all uses, including industrial uses.
-Respondents overwhelmingly stated that the Department should be involved in the state's decisions concerning energy-related activities in order to assure consideration of fish and wildlife habitat. Eighty-three percent favored that involvement.
-The majority of respondents indicated that the Department's enforcement activities are adequate now. Increased enforcement activity received the most support from hunters and fishermen, and the most avid participants in these activities tended to most strongly favor increased enforcement efforts.
-Respondents were given several approaches as to how the Department could expand its enforcement effort without hiring more enforcement personnel. They clearly preferred that more emphasis be placed on reporting of violations by the public. More than 40 percent of the respondents, and about half of the hunters surveyed, favored increased public involvement in the reporting of violations.

-The respondents overwhelmingly approved of a toll-free telephone number for the public's use in reporting violations or problems; however, only about 21 percent were aware that one already exists (the "Report Line").
-Montanans tend to rely on 'word of mouth," newspapers, magazines, and television for information regarding outdoor recreation and related issues. Further, about 36 percent cited word of mouth as the source in which they placed the most confidence, followed by newspapers (cited by 15 percent).
-A significant majority of respondents felt that the overall performance of the Department of Fish, Wildlife, and Parks is "good" or "excellent." Seventy-one percent rated it as "good," and Il percent described it as "excellent." Only 13 percent responded by saying "fair" or "poor" (barely 2 percent said "poor").

Characteristics of Montanans and Their Households As Revealed by the Survey

....About 31 percent of the respondents had lived in their current communities five years or less; a little over half of those relative newcomers had moved from other places in Montana.

-Fifty-nine percent of the respondents indicated they were holders of a Department of Fish, Wildlife, and Parks license.
-License holders tended to be younger than nonholders; their estimated median (middle) ages were thirty-five years and forty-two years, respectively.
-License holders were more likely to be male, to be household heads, and to be employed than were nonholders.
-Compared to the households of nonholders, the households of license holders were more likely to be multiperson households with a male householder (head of household), and they had a median (middle) household income of \$19,000 in 1979. Conversely, households of nonholders were more likely to be smaller (one or two persons), and they had a median household income of \$16,300 in 1979.
-Overall, the survey sample appears to be representative of the resident population of Montana (as documented in Appendix B).

APPENDIX A

METHODOLOGY

This survey was conducted among Montana residents (adults eighteen years of age and older) during a six-week period commencing in May 1980. The eligible (adult) population was estimated at 546,000 residents, from which a minimum 1,200 interviews were to be obtained.

The survey was designed for telephone administration, rather than the personal or mail approach. Personal interviews are very expensive, given the time and travel involved, especially for a statewide survey. Also, there are no reliable and adequate lists of all Montana households or residents from which to select a representative sample for personal or mail contact. For primarily these reasons, the Bureau of Business and Economic Research, in 1978, designed a program to generate random telephone numbers for Montana and substate areas. This program utilizes a random digit dialing (RDD) technique for sample selection. The RDD technique is superior to the use of the telephone directory because it does not exclude households with unlisted telephones, and the actual sample selection can be facilitated considerably by computer techniques.

The sample frame resulting from use of the RDD technique approximates the current mix of households covered by the various telephone companies in the state as well as the geographic distribution of those households.

(The geographic distribution of the sample for this study is discussed in

Appendix B.) Of course, while even this approach does not assure 100 percent coverage, it is felt that any biases due to coverage problems do not significantly distort the results for the purposes of this type of study for at least two reasons. First of all, as recently as 1977, the U.S. Federal Communications Commission reported that no less than 96 percent of the households in the United States had telephones in their own homes; more locally, the FCC has reported that about 95 percent of Montana's households have telephone coverage. In addition, while there are some without telephones, such households or persons usually cannot be reached by personal or mail survey methods either—they tend to be more transient and/or socially isolated and are difficult to reach regardless of the method used. 2

Therefore, for the reasons stated and because this particular telephone approach, utilizing RDD sample selection techniques, has worked well in past studies, this project was designed for telephone administration.

However, because the initial sample units generated by the RDD procedure were households rather than individual residents, a second random selection procedure was used to select the individual respondents from among the eligible adults living in the various households: in their initial contacts with the households, the interviewers determined the

U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States, 1979 (Washington, D.C., 1979), table 975; citing U.S. Federal Communication Commission, Statistics of Communications Common Carriers.

William R. Klecka and Alfred J. Tuchfarber, "Random Digit Dialing: A Comparison to Personal Surveys," *Public Opinion Quarterly*, vol. 42, no. 1 (Spring 1978), p. 106.

composition of each; then a respondent was selected from among the eligible adults in each household using a specific random selection procedure. These various random sampling procedures were followed so as to ensure that every person had a chance to be selected and to ensure that the sample was representative of the Montana population from which it was drawn. (The sample is discussed in more detail in Appendix B.)

During the data collection period, about 3,600 randomly selected telephone numbers were attempted. About 1,900 of these were ineligible numbers; they included primarily nonworking or unassigned numbers, as well as nonresidential numbers and "no contacts" (no contact was made after at least five varied attempts). Of the approximately 1,700 persons subsequently selected at random from the eligible households, about 73 percent responded, resulting in 1,237 usable interviews. This response rate compares quite favorably with surveys of this type.

The size of the survey sample assures that the overall survey results are within plus or minus 4.3 percentage points of the "true" value (i.e., the result that would be obtained by interviewing all households in the state) at a confidence level of 99 percent. To illustrate what this means, had it been determined that 40 percent of the sample had lived in their current communities less than five years, it could then be assumed with 99 percent certainty that the true value lay between 35.7 and 44.3 percent (40 percent \pm 4.3 percent).

³The interviewers rotated systematically among eight varying random selection tables which, used together, are designed to generate a sample that is representative of the population from which it is drawn.

⁴If we assume a slightly lower confidence (or certainty) level of 95 percent, the reliability (or confidence interval) is increased to 2.8 percentage points: that is, we can assume with 95 percent certainty that the overall survey results are within plus or minus 2.8 percentage points.

The relatively smaller number of respondents in the various geographic categories (counties, population size groups, and regions), however, do not assure the same very high level of confidence as is the case for the entire statewide sample. Nevertheless, in most instances, the confidence levels are quite reasonable, and any statistically significant differences among the areas are noted in the text.

Increased sample size, of course, would have reduced the limits of sampling error. However, the reduction would have been small in relation to any practicable increase in sample size, and the effect would have been to increase costs and time without great benefits in meeting the objectives of the survey.

⁵For example, for the seven largest counties, as a whole, and the remaining forty-nine counties, as a whole: with a 95 percent level of confidence, the confidence intervals are \pm 3.7 and \pm 4.4 percentage points, respectively. Among the seven regions: with a 90 percent confidence level, the confidence intervals range from \pm 3.0 percentage points (region 4) to \pm 5.0 percentage points (region 7).

APPENDIX B

THE SAMPLE

The final sample included 1,237 persons, aged eighteen years and older, residing in Montana at the time of the survey. The geographic distributions of the survey sample are presented in table B.l. The first distribution presents data for the seven largest counties (the predominantly urban counties of the state) and for the remaining forty-nine smaller (and predominantly rural) counties, as a whole. The second distribution presents the data for the seven administrative regions of the Department of Fish, Wildlife, and Parks (see figure B.1).

Table B.2 summarizes the various demographic characteristics of the survey sample (respondents). The majority of the respondents were between eighteen and forty-four years of age, with an estimated median age of thirty-eight years, and a little over half were female. The majority (54 percent) had lived in Montana over ten years. The respondents tended to be well educated: 41 percent had completed high school and another 45 percent had completed some college or more. Most of the respondents indicated that they were householders (household heads) or shared that status with a spouse or other household member, and most were employed, predominantly as private sector workers. Almost half the respondents reported total household incomes between \$15,000 and \$35,000 in 1979, while 38 percent reported household incomes below \$15,000 and 12 percent reported incomes above \$35,000. Respondents were also asked whether they

Table B.1 Distribution of Survey Sample, by Residence

	Percentage of Total	Number of Respondents
All respondents	100	1,237
Residence, by county size		
Seven largest counties	58	717
Butte-Silver Bow	5	56
Cascade	11	135
Flathead	11 5 7 6	65
Gallatin	7	84
Lewis and Clark		71
Missoula	11	131
Yellowstone	14	175
All other counties	42	520
Residence, by DFWP region		
Region 1	10	122
Region 2	17	212
Region 3	16	195
Region 4	23	285
Region 5	18	220
Region 6	8	104
Region 7	8	99

Note: Percentage detail may not add to total due to

rounding.

a The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Figure B.1

Montana Department of Fish, Wildlife, and Parks Administrative Regions

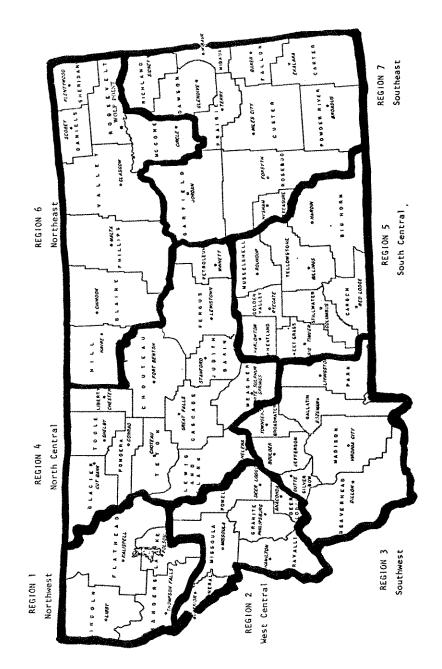


Table B.2 Characteristics of the Survey Sample

	Percentage of Total	Number of Respondents
All respondents	NA	1,237
Age of respondent: ^a 18-24 years 25-34 years 35-44 years 45-64 years 65 years and over **Stimated median age (in years)	100 16 29 18 24	1,232 197 355 221 299 160
Sex or respondent: Male Female	100 46 54	1,237 564 673
Length of residence in current place: 1 year or less 2- 5 years 6-10 years Over 10 years	100 10 21 15 54	1,235 118 265 190 662
Highest level of formal education: ^a Some high school or less High school graduate ^c Some college College graduate	100 13 41 23 22	1,232 161 506 289 276
Nstimated median school years completed		12.9
Householder (head of household) status: ^d Householder (head of household) ^e Not householder	100 61 39	1,225 750 475
Employment status: b Employed Unemployed and looking for work Not in the labor force	100 67 3 30	1,235 833 38 364
Employed persons, by type of worker: f Private sector workers Government workers Self-employed persons	100 58 21 21	820 475 176 169
Household income in 1979: ⁹ \$ 5,000 or less \$ 5,001 to \$10,000 \$10,001 to \$15,000 \$15,001 to \$20,000 \$20,001 to \$35,000 Over \$35,000	100 7 13 18 19 31	1,146 84 153 201 220 351 137
Estimated median household income		\$18,100
License holder status: Montana DFWP license holder Nonholders	100 59 41	1,237 730 507

Note: Percentage detail may not add to total due to rounding.

NA denotes not applicable.

affive persons (or 0.4 percent of the total sample) did not respond.

Two persons (or 0.2 percent of the total sample) did not respond.

cincludes those with formal technical training beyond high school but not at a junior

college or four-year college.

dTwelve persons (or 1.0 percent of the total sample) did not respond.

encludes those who said they sahre householder (or head of household) status with a spouse or other household member.

Thirteen employed persons (or 1.1 percent of the total sample) did not respond.

Ninety-one persons (or 7.4 percent of the total sample) did not respond.

had purchased a license from the Department for 1979; about 59 percent reported being license holders.

Unfortunately, there are limited demographic data available for comparisons of the survey sample (respondents) with the actual population. However, where such data are available, as presented in table B.3, the survey sample compares guite favorably.

As the data indicate, the geographic distribution of the survey sample compares favorably with current distribution of the population in the state. The smaller (rural) counties, as a whole, are only slightly underrepresented. This is primarily due to the extent of telephone coverage in the state--urban areas generally have slightly higher telephone coverage. However, the differences between the two are not significant.

Distribution of the sample based on sex, employment status, and type of employed worker also compare very favorably, with no significant differences indicated. Only in one instance—in terms of age, specifically in the 18-44 age group—does the difference between the sample and the population appear to be somewhat significant. Nevertheless, this one difference is not considered significant enough to distort the results, especially since, overall, the sample compares very favorably and thus is representative of the population.

Table B.3

Comparison of Survey Sample and the Montana Population

(In Percentages)

	Survey Sample	Montana <u>Population</u> a
Residence, by county size ^b	100	100
Seven largest counties Butte-Silver Bow	58 5	56 5
Cascade Flathead	11 5	10 7
Gallatin	7	, 5 5
Lewis and Clark	6	
Missoula	11 14	10 14
Yellowstone		, ,
All other counties	42	<i>l</i> 4 <i>l</i> 4
Residence, by DFWP region:	100	100
Region 1	10	12
Region 2	17	16
Region 3	16	15 23
Region 4	23 18	23 18
Region 5 Region 6	.8	8
Region 7	8	8
By age:	100	100
18-44 years	63	56
45-64 years	24	29
65 years and over	13	15
By sex:	100	100
Male	46	49
Female	54	51
By employment status:	100	100
Employed	67	64
Unemployed and looking for work	3	3
Not in the labor force	30	33
Employed persons, by type of worker:	109	100
Private sector workers	58	62
Government workers	21	23
Self-employed persons	21	15

Note: Percentage detail may not add to total due to rounding. aSources of the various comparison data are as follows: (1) residence, sex--U.S. Bureau of the Census, unpublished data; (2) age--U.S. Bureau of the Census, Current Population Reports, Series P-25, no. 875; (3) employment status--Montana Department of Labor and Industry, Employment Security Division, Montana Employment and Labor Force (February 1980); and (4) employed persons by type of worker--U.S. Bureau of Economic Analysis, Regional Economics Information System, unpublished data (April 1980).

bThe seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

APPENDIX C COVER SHEET AND QUESTIONNAIRE

2,4

Bureau of Business and Economic Research University of Montana Missoula, Montana 59812 (406) 243-5113

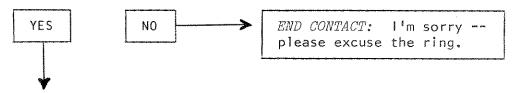
COVER SHEET

AMPLE: 1 2	TELEPHONE NUMBER:					VIEWER NUMBER:	
ONTACT RECORD (ATTEMPTS TO CONTA	CT RESPONI	DENT):			real grant plant in the plant of the Company and the Company a	
Contact no.	1 2	3	4	5	6	7	8
Date							
Day of week					······································		
Time of day							
Result							A CONTRACTOR OF THE CONTRACTOR
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				(in minute			
NTERVIEW NOT CO	OMPLETED (NONRESPO	nse):					
Nonresponse co	ode (see page 4):		$R\epsilon$	eason for	nonrespo	nse (expl	lain
briefly but co	ompletely):				<u></u>		
			A CONTRACT OF THE PARTY OF THE			er (andrews)	

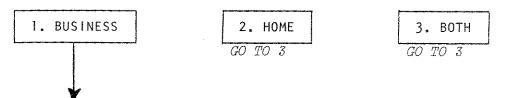
1. Hello, my name is ______. I'm calling from the University of Montana (here) in Missoula. We are currently working on a statewide survey on outdoor recreation issues for the Bureau of Business and Economic Research.

First of all, I need to be sure I've dialed the right number.

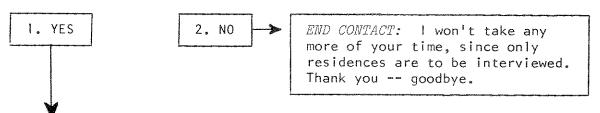
Is this (insert telephone number)?



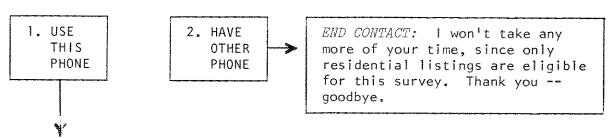
2. Since this telephone number has been generated by a computer, I don't know whether it's for a business or a home. (Which is it?)



2a. Does anyone live there on the premises?



2b. Is this number used for personal business too, or is there another phone number for the residence?



3. In order to do the interview, I have to (follow a specific sampling procedure we've been given to) determine which member of the household is to be interviewed I'll need a listing of all the people living in your household -- not their names, just their sex and age and relationship to you.

Let's start with you -- how old are you? (Are you male or female?) (Record age and sex for INFORMANT in appropriate grid, based on informant's age, on page(3.)

3a. Now I'd like the age and sex and relationship to you of each of the other members of your household who are 18 years of age or older. (Record in first grid on page 3.)

List all household members 18 years and older by their relationship to INFORMANT:

			
(B)	(c)	(D)	(E) RESP AND
SEX	AGE	NUMBER	HSHLD HEAD
<u> </u>			
SALIKATI MILITARIA			
222		CONTO ALABAMATA PARA PARA PARA PARA PARA PARA PARA P	
	***************************************		PERSON

R = RESPONDEN

H = HEAD OF HOUSEHOLD

3b. Now I'd like the sex and age and relationship to you of each of the members of your household who are 17 or younger.

SEX	AGE

3c. You've said there are <u>(repeat listing of persons in both grids)</u> -- does that include everyone living there at the present time? (If NO, correct grid.)

3d. And which person is the head of the household? (X Who is the chief wage earner (Record as "H" in column E of grid.)

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ber	the	elig	ible	people	in you	ur h	ouseh	old t	0	determi	n∈	ڎؚ
we	need	to	inter	-view.	(It wi	111	just	take	а	second	٠	.)

total number of eligible persons is ______,

I am to interview person number _____ who is

elation to Informant)

(SEE PAGE 4 FOR RESPONDENT SELECTION INSTRUCTIONS.)

IN INTERVIEW WITH R, IF POSSIBLE. OTHERWISE, MAKE APPOINTMENT TO CALL BACK LATER.

SELECTION	TABLE B ₁
If the number of eligible persons is:	Interview the person numbered:
1	1
2	1
3	l
lş.	1
5	2
6 or more	2

INSTRUCTIONS FOR SELECTING RESPONDENT:

- (A), (B), (C): Record the information provided by the Informant about the household men bers. List Informant in appropriate grid based on his/her age (if 18 or older, list in first grid; if 17 or younger, list in second grid).
- (D): Assign the number "I" to the oldest male, number "2" to the next oldest male, and so on until all the <u>eligible</u> males (18 or older) are numbered. Then continue the number sequence with the eligible females, numbering them from the oldest to the youngest (the oldest female gets the next number after the youngest eligible male, etc.).

NOTE: Only persons 18 or older are eligible and, thus, are to be numbered. This includes the Informant. If Informant is 17 or younger and is listed in the first grid by mistake, the listing can be corrected during editing but do not include him/her in assigning numbers.

(E): Use the selection table on page 3 (lower right corner) to determine the <u>number</u> of person to be interviewed.

the first column of the selection table, circle the number of eligible persons (aga \mathcal{L} or older) in the household -- that should be the highest number assigned in column (D) of the first grid.

The corresponding number in the second column of the selection table denotes the person to be interviewed. In column (E) of the grid, record the letter "R" to identify the Respondent.

NONRESPONSE CODES for eligible (residential) telephone numbers contacted:*

- 01. Broken or partial interview, not enough to count as completed interview.
- 02. Refusal by designated (randomly selected) respondent (R).
- 03. Refusal by someone other than R, where R was determined.
- 04. Refusal by someone other than R, where R was not determined.
- 05. Unable to interview R (noninterview), where R was determined -- R out of area (out of reach by telephone) until after survey period; R is seriously ill or confined to hospital, etc. for duration of survey period; severe language or hearing problem making interview impossible, and no interpreter available in household; etc.
- 06. Call back appointment made with designated R, but never able to recontact R.
- 07. Call back appointment (through someone other than R) to interview R, but no contact ever made with R.
- 08. No eligible R -- everyone in household is 17 or younger (no one is aged 18 or older
- 09. No qualified informant reached -- reached only child, babysitter, answering service tape recording, etc.
- 10. Other -- explain (on Cover Sheet) briefly but adequately.

*Cover Sheets are required for eligible telephone numbers only.

QUESTIONNAIRE NO.			Offic	e Use Only
Bureau of Business and Economic Research University of Montana Missoula, Montana 59812 (406) 243-5113				DFWP 1980
SAMPLE CODE: 1 2 TELEPHONE NUMBER:				
DATE OF INTERVIEW: TIME OF INTERVIEW (approximate): LENGTH OF INTERVIEW (minutes): Al. HOUSEHOLD MEMBERS (Record the same infogrids on page 3 of the Cover Sheet.)		- Magnetic processor and a second processor a	INTERVIEWEI NUMBER:	
(A)	(B)	(c)	(E)	on the state of th
HOUSEHOLD MEMBERS BY RELATIONSHIP TO INFORMANT	SEX	AGE	RESP AND HSHLD HEAD	R = RESPONDEN H = HEAD OF HOUSEHOLD

INTRODUCT	TION (Use only if necessary e.g., if Respondent was not Informant.)
	Hello, my name is I'm calling from the University of Montana (here) in Missoula. We are doing a statewide survey on outdoor recreation issues for the Bureau of Business and Economic Research.

A2. INTERVIEWER: THE FOLLOWING MUST BE READ TO RESPONDENT

GO TO STATEMENT A2 WITHOUT HESITATING

Before we start, I would like to assure you that this interview is completely confidential and voluntary. If we should come to any question that you don't want to answer, just let me know and we'll go on to the next question.

EXACT TIME NOW:

- A3. What is the name of the city, town, or community you live in? (Record below.)

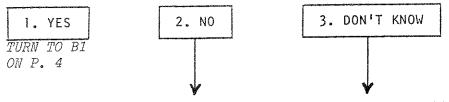
 IF R SAYS NOT LIVING IN CITY OR TOWN:
 - What city or town do you live closest to?

NAME OF CITY, TOWN, ETC.

A4. Do you (and your family) live there all year long or do you have another residence for some part of the year?

	1. HERE ALL YEAR 2. HAVE ANOTHER RESIDENCE
- при	A4a. On the average, how many months a year do you live there? MONTHS:
	ASK ONLY IF SIX (6) MONTHS OR LESS:
etype Appropriate	A4b. Where is your <u>usual</u> place of residence?
	CITY AND STATE:
Y	
A5. Abo	out how long have you lived in the <u>(place recorded in A3, page 2)</u> area?
	OR OR
	YEARS MONTHS DAYS
	ONLY IF TEN (10) YEARS OR LESS: Where were you living before this?
	LOCATION: CITY AND STATE

A6. Is this telephone number listed in the current telephone book?



A6a. Is the listing too new to be in the book, was an unlisted number requested, or is there some other reason that the number may not be listed?

١,	LIST TOO	
		444444 H

2.	REQUESTED	THE
	UNLISTED	NUMBER

3.	OTHER	(Specify):	
			and program as a successive and the state of
	-		

out mag	Where do you usually pick up information about fish and wildlife, the outdoors, or outdoor recreation from television, radio, newspapers, magazines, newsletters or other printed materials, from friends or other community members, or what?		
-тогооруна нациа			
-monatura consigned			
B i a	. Are there any other sources of information you usually use?		
ВЪ	Of the sources you mentioned, which one do you place the most confidence in?		
you	I have a question about what you do when you're not working or when 're on vacation that's the leisure time you have for hobbies and reation, both indoors and outdoors.		
Wha	t two or three things do you usually do in your leisure time?		
(1)			
(2)			

B3.	tell me about how many days you with activity marked and continu	outdoor recreation activities. Please did each one in 1979 in Montana. (Begin through the list, ending with the one marked. Read only the activities,	
	NUMBI OF DAY		
Α.		territoria de la companya della companya della companya de la companya della comp	<u> 1 Y</u>
В.	Bicycling	K. Hunting	
С.	Bird watching or nature	L. Motor bike riding	
D.	Boating with a motor	M. Outdoor swimming or going to a lake or river	
Ε.	Camping	N. Picnicking	
F.	Cross-country skiing	O. Playing outdoor games	
G.	Driving for pleasure or sightseeing	P. River floating or canoeing	
Н.	Fishing	Q. Snowmobiling	
۱.	Hiking or mountain climbing	R. Walking for pleasure or sightseeing	
· ·	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	· · · · · · · · · · · · · · · · · · ·	. ,
U.	44 o Personal Control of the Control of Cont	-	
٧.		·	
		-	
	B3a. Are there any other outdoo in 1979 that I didn't ment necessary, and record on I	recreation activities you did in Montana on? IF YES: Ask the following, if nes T, U, V above.	
	B3b. Which ones?		
	B3c. About how many days (Ask for each addition	id you <u>(activity mentioned)</u> in 1979? nal activity mentioned.)	
B3d.	Did you use any logging roads for gain access to any areas?	r any outdoor recreation activity or to	
	1 VES 2 NO	3 DON'T KNOW	
	TILETES S. L. J. MILLER S. L.	4 14: 18: 4 * 1 * 1 * 1 * 1 * 1 * 1 * 1 * 1 * 1 *	

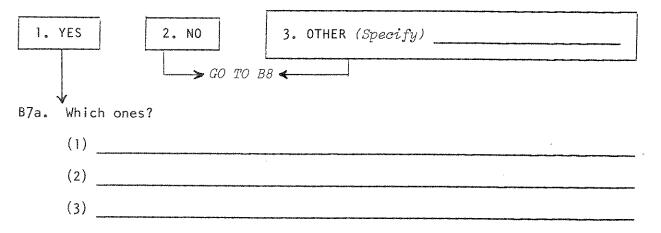
в4.	Are t	here any outdoor recreation activities you <u>wish</u> you could do in Montana you don't do for one reason or another?
	tnat	1. YES 2. NO GO TO B5
	B4a.	What are the main things that keep you from doing these things? IF FEWER THAN FOUR: (X) Are there any other reasons? (1)
		(2)
		(3)
		(4)
B5.	you w	if fuel costs continue to rise or if fuel is not readily available when want it would this affect your outdoor recreation activity or would expect it to have no effect on you? 1. WOULD AFFECT ME 2. NO EFFECT GO TO B6 ON PAGE 7
	B5a.	How would your activity be affected or changed? For example, some people might try to stay closer to home for their outdoor recreation; or they might engage in fewer outdoor recreation activities in general, or in activities that don't require the use of fuel. In what ways would your outdoor recreation most likely be affected
		or changed?
		[] STAY CLOSER TO HOME
		[] FEWER ACTIVITIES IN GENERAL
		[] ACTIVITIES NOT USING FUEL

(X) Any other changes? (Record above)

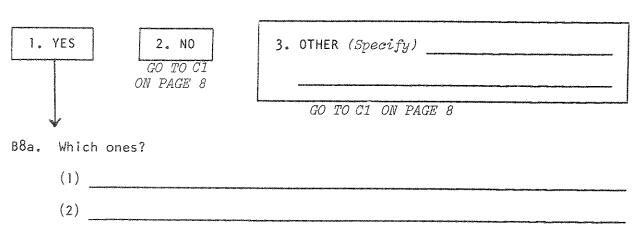
B6. Generally speaking, how do you think outdoor recreation services and programs should be paid for -- by charging fees to those who use the services or programs, or by using general tax funds paid by all Montana taxpayers, or something else?

1. USER FEES	2. GENERAL TAX FUN	IDS
3. OTHER (Speci	·y)	

B7. Are there any particular outdoor recreation services or programs you feel should be provided that are not provided now?

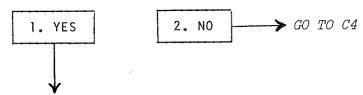


B8. And are there any outdoor recreation services or programs now provided that you feel should be <u>eliminated</u>?

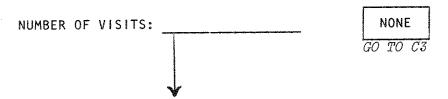


C1. The State of Montana maintains a statewide system of park and recreation sites. There are also many sites in the state that are managed by the federal government.

Have you visited any state or federal park or recreation sites in Montana in the last five years or so?



C2. What about just during 1979 -- how many times did you visit a state or federal site last year?



C2a. About how many of these visits were just to areas maintained by the state?

VISITS TO	Γ	DON'T	KNOW
"STATE" SITES:		DON-1	KNOW

C3. Generally speaking, would you say that you usually notice when you're visiting a state site rather than some other public site, or would you say you usually do not notice?

Carry	1. USUALLY NOTIC	2. USUALLY DO NOT NOTICE
- management of the same	3. OTHER (Specify	1)

C4. Based on what you've seen or heard, what is your general feeling about how well the state maintains its parks and recreation sites -- overall, would you say the state does a very good job, a good job, a fair job, or a poor job

1. VERY GOOD | 2. GOOD | 3. FAIR | 4. POOR

		; l	
1. SHOULD PURCHASE	2. HAVE ENOUGH ALREADY	3. ОТН	ER (Specify)
GO TO C6			
C5a. Why do you say	that?		Y
If additional recreat			
mostly be closer to t areas, or what?	he larger populati	on areas, or	mostly in less-populat
areas, or what:			
1. CLOSER TO LARGER	POPULATION AREAS	No.	
		-	
2. IN LESS-POPULATE	D AREAS		
3. OTHER (Specify)			
3. OTHER (Specify)			
3. OTHER (Specify)			
There are several kin	ds of recreation s	ites availabl	e for public use. Som
There are several kin of these are: campin	ds of recreation s g and picnic sites	ites availabl ; "snow park"	e for public use. Som areas; historical and
There are several kin of these are: campin	ds of recreation s g and picnic sites ranges; waterfowl	ites availabl ; "snow park" areas; and ac	e for public use. Som areas; historical and cess areas for fishing
There are several kin of these are: campin cultural parks; game hunting, snowmobiling	ds of recreation s g and picnic sites ranges; waterfowl , motorbiking, cro	ites availabl ; "snow park" areas; and ac ss-country sk	e for public use. Som areas; historical and cess areas for fishing iing, and so on.
There are several kin of these are: campin cultural parks; game	ds of recreation s g and picnic sites ranges; waterfowl , motorbiking, cro re provided, what	ites availabl ; "snow park" areas; and ac ss-country sk	e for public use. Som areas; historical and cess areas for fishing iing, and so on.
There are several kin of these are: campin cultural parks; game hunting, snowmobiling	ds of recreation s g and picnic sites ranges; waterfowl , motorbiking, cro re provided, what mentioned.)	ites availabl; "snow park" areas; and ac ss-country sk kind or kinds	e for public use. Som areas; historical and cess areas for fishing iing, and so on.
There are several kin of these are: campin cultural parks; game hunting, snowmobiling If additional sites a prefer? (Record all in	ds of recreation s g and picnic sites ranges; waterfowl , motorbiking, cro re provided, what mentioned.)	ites availabl; "snow park" areas; and ac ss-country sk kind or kinds	e for public use. Som areas; historical and cess areas for fishing iing, and so on. of sites would you
There are several kin of these are: camping cultural parks; game hunting, snowmobiling If additional sites a prefer? (Record all) [] A. CAMPING AND P [] B. "SNOW PARK" AND	ds of recreation s g and picnic sites ranges; waterfowl , motorbiking, cro re provided, what mentioned.)	ites availabl; "snow park" areas; and acs-country sk	e for public use. Som areas; historical and cess areas for fishing iing, and so on. of sites would you REAS FOR:
There are several kin of these are: camping cultural parks; game hunting, snowmobiling If additional sites a prefer? (Record all) [] A. CAMPING AND P [] B. "SNOW PARK" AND	ds of recreation s g and picnic sites ranges; waterfowl , motorbiking, cro re provided, what mentioned.) ICNIC SITES	ites availabl; "snow park" areas; and ac ss-country sk kind or kinds ACCESS A	e for public use. Som areas; historical and cess areas for fishing iing, and so on. of sites would you REAS FOR: FISHING HUNTING
There are several kin of these are: camping cultural parks; game hunting, snowmobiling If additional sites a prefer? (Record all) [] A. CAMPING AND P [] B. "SNOW PARK" AND P [] C. HISTORICAL AND	ds of recreation s g and picnic sites ranges; waterfowl , motorbiking, cro re provided, what mentioned.) ICNIC SITES REAS	ites availabl; "snow park" areas; and acs-country sk kind or kinds ACCESS A [] F. [] G.	e for public use. Som areas; historical and cess areas for fishing iing, and so on. of sites would you REAS FOR: FISHING HUNTING

C8. Are there any state park or recreation sites near where you live -- say, within fifty (50) miles or within about an hour's drive? 3. DON'T KNOW 2. NO 1. YES → GO TO C9 < C8a. What is the name of the site or sites? C9. As far as you know, where does the state get most of its money to operate its system of park and recreation sites -- what are the major funding sources? (All are Montana sources except D.) [] A. BOAT AND SNOWMOBILE GAS TAXES [] B. STATE GENERAL FUND (STATE INCOME TAX) [] C. HUNTING AND FISHING LICENSES, FINES, ETC. [] D. FEDERAL FUNDS (LAND AND WATER CONSERVATION FUNDS, ETC.) [] E. COAL TAX AND MATCHING FUNDS [] F. REVENUE EARNED FROM THE STATE PARKS [] G. BOAT AND SNOWMOBILE LICENSES H. [] DON'T KNOW

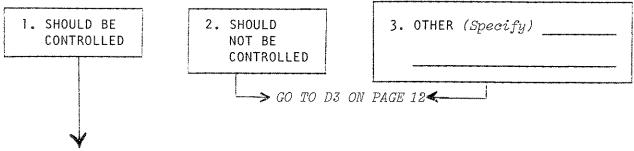
Now I have a few questions about fish and wildlife resources in Montana. Some of these questions use the terms "habitat," "game," and "nongame." We are using the term "habitat" to refer to the natural area or environment in which fish or wildlife are commonly found and where people can hunt and fish. The term "game" refers to fish or wildlife that are hunted, while "nongame" refers to fish or wildlife that usually are not hunted.

D1. Adequate habitat is necessary to maintain fish population and quality fishing in Montana. To obtain this, the state has been involved in efforts to maintain minimum amounts of water in the streams, to keep the stream channels from being changed, and to keep the streams unpolluted.

In general, would you say you favor or oppose such efforts by the state?

1. FAVOR	2. OPPOSE	
3. OTHER (Spec	eify)	

D2. How do you feel about subdivision activities along rivers that have high fishing, scenic, or recreational value -- do you think these subdivision activities should or should not be controlled in some way?



D2a. Who should be responsible for controlling these activities -- the State of Montana, the federal government, or what?

1. STATE OF MONTANA	2. FEDERAL GOVERNMENT
3. OTHER (Specify)	

	obtaining more sites or are there enough already?
	1. OBTAIN MORE 2. ENOUGH ALREADY
	3. OTHER (Specify)
04.	Fishing license fees, of course, are used for the fisheries program. As the costs of this program rise, should there be an increase in the fishing license fees charged to those who use the program, or should the funding come from some other source?
	1. INCREASE FISHING LICENSE FEES
	2. OTHER SOURCE (X) What would you suggest instead?)
D5.	As it is now, the fisheries program is also heavily financed by

Some Montana rivers and streams are used heavily for fishing and for D6. related recreation such as canoeing and floating. How would you feel about controlling or scheduling the use of these waters during periods of high use -- would you favor this, oppose it, or what? 3. OTHER (Specify) 2. OPPOSE 1. FAVOR → GO TO D7 < D6a. What about issuing permits to fish or float in such waters -- would you favor this approach, oppose it, or what? 1. FAVOR PERMIT **APPROACH** 3. OTHER (Specify) 2. OPPOSE **PERMITS** Now, suppose such river regulations did become necessary -- would you prefer that the regulations be administered by the State of Montana, by the federal government, or what? 2. FEDERAL GOVERNMENT 1. STATE OF MONTANA 3. OTHER (Specify) D8. Do you ever do any fishing in Montana? 2. NO ----> GO TO E1 ON PAGE 16 1. YES D9. Where do you prefer to fish most of all -- in streams, rivers, lakes, reservoirs, or elsewhere? 4. RESERVOIRS 3. LAKES 2. RIVERS 1. STREAMS 5. OTHER (Specify)

1	MORE FISH 3. OTHER (Specify)
	J. OHEN Topectyy)
	→ GO TO D11 ←
2.	FEWER BUT LARGER FISH
Annagem species groups	
DlOa.	Would you favor or oppose fishing regulations that would result in fewer but larger fish being available?
	1. FAVOR 2. OPPOSE
	3. OTHER (Specify)
or tr north	out fishing, with little emphasis on warm water fish, such as walley erns, perch, bass, and crappies. Do you think the state should or
or tr north shoul	d not put more emphasis on warm water fishing than it has in the pas
or tr north shoul	out fishing, with little emphasis on warm water fish, such as walley erns, perch, bass, and crappies. Do you think the state should or d not put more emphasis on warm water fishing than it has in the pas SHOULD EMPHASIZE MORE 2. SHOULD NOT GO TO E1
or tr north shoul	out fishing, with little emphasis on warm water fish, such as walley erns, perch, bass, and crappies. Do you think the state should or d not put more emphasis on warm water fishing than it has in the pas . SHOULD EMPHASIZE MORE 2. SHOULD NOT
or tr north shoul	out fishing, with little emphasis on warm water fish, such as walley erns, perch, bass, and crappies. Do you think the state should or d not put more emphasis on warm water fishing than it has in the pase. SHOULD EMPHASIZE MORE 2. SHOULD NOT GO TO E1 ON PAGE 16
or tr north shoul	out fishing, with little emphasis on warm water fish, such as walley erns, perch, bass, and crappies. Do you think the state should or d not put more emphasis on warm water fishing than it has in the pase. SHOULD EMPHASIZE MORE 2. SHOULD NOT GO TO E1 ON PAGE 16 Would you favor or oppose an increase in fishing license fees in order to expand the warm water program?
or tr north shoul	out fishing, with little emphasis on warm water fish, such as walley erns, perch, bass, and crappies. Do you think the state should or d not put more emphasis on warm water fishing than it has in the pase. SHOULD EMPHASIZE MORE 2. SHOULD NOT GO TO E1 ON PAGE 16 Would you favor or oppose an increase in fishing license fees in order to expand the warm water program?

I. FAVOR EXPANSION	2. OPPOSE EXPANSION
--------------------	---------------------

reduced in order to expand the warm water program -- would you

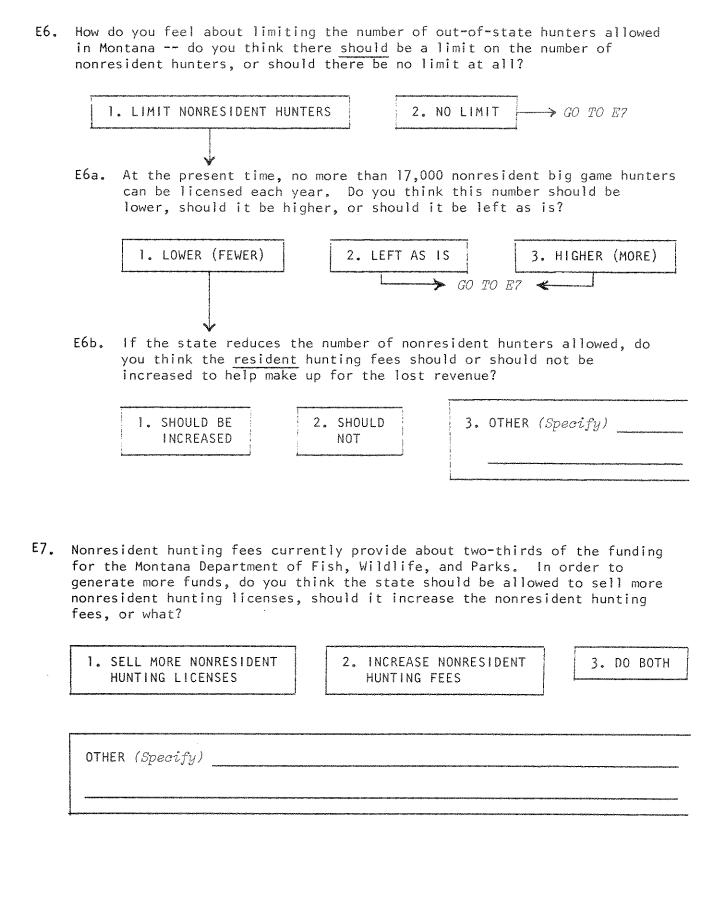
Dllb. How would you feel if the cold water trout program had to be

EI.	What are your feelings about the practice of <u>paid</u> hunting or fishing on private lands that's where the public pays the private landowners to hunt or fish on their lands during the regular hunting and fishing season? Generall speaking, do you approve of this practice, do you disapprove, or what?
	1. APPROVE 2. DISAPPROVE
	3. OTHER (Specify)
E2.	Do you think the state should or should not encourage this practice in order t increase the hunting and fishing opportunities in the state?
	1. SHOULD ENCOURAGE PRACTICE 2. SHOULD NOT
	3. OTHER (Specify)
E3.	When the state purchases land for wildlife management purposes, hunting is often allowed but most other uses are excluded or seriously limited. How do you feel about the state continuing to obtain land for such purposesgenerally speaking, do you favor this, are you opposed, or what?
	1. FAVOR 2. OPPOSE
	3. OTHER (Specify)

ı	INCREASE HUNTING FEES OTHER (X) What should be done?)
	GO TO E5
E4a.	Which hunting fees should be increased resident fees, nonresident fees, or both?
	1. RESIDENT FEES ONLY 2. NONRESIDENT FEES ONLY 3. BOTH
limit will leave any g	number of Montana residents who hunt is increasing, but there are son the amount of game available. This might mean that fewer hunters be able to take any game. If you had to choose, would you rather things as they are knowing each hunter will be less likely to take lame? Or, would you prefer that the state limit the number of resident ers allowed so each has a better chance?
limit will leave any g hunte	s on the amount of game available. This might mean that fewer hunters be able to take any game. If you had to choose, would you rather things as they are knowing each hunter will be less likely to take ame? Or, would you prefer that the state limit the number of resident

E4. In order to cover the increasing costs of Montana's wildlife management

and hunting program, do you think the state should increase the fees paid



	or should not require a license for hunting such small animals?
1. S	HOULD LICENSE 2. SHOULD NOT LICENSE
3.0	THER (Specify)
emphas other	e present time, nongame wildlife receive little direct funding or is in state programs, but some benefits come indirectly through wildlife programs. How do you feel about this do you think me wildlife should receive more direct funding and emphasis, are enerally satisfied with the way things are now, or what?
	ORE DIRECT FUNDING AND EMPHASIS 2. SATISFIED WITH WAY THINGS ARE NOW
***************************************	GO TO E10 ON PAGE 20
	3. OTHER (Specify)
	GO TO E10 ON PAGE 20
	GO TO ETO ON THEE 20
E9a.	How would you feel about a procedure where people could donate part of their state income tax <u>refund</u> to this by checking a box on their tax form would you favor this kind of refund checkoff procedure, would you oppose it, or what?
	1. FAVOR PROCEDURE 2. OPPOSE PROCEDURE
	3. OTHER (Specify)

1, SH	ULD USE FOR NO	ONGAME	2. SHOU	LD NOT USE FOR NON	GAME
3. OT	ER (Specify)				
and the animals	whooping crane	e. Do you t anced by hun	hink the co	als, such as the bost of protecting the shing license fees	hese
l. US	HUNTING AND F	FISHING LICE	NSE FEES		
OTHER		d you sugges	t?)		
1	The state of the s	and the reality of the section of th			
and a state of state and a state of sta					
meat or wildlife	other products	s, or where p speaking, wou	people pay uld you say	rms where game is g to hunt the private you <u>favor</u> this kir	ely owne

I. SHOULD REGULATE

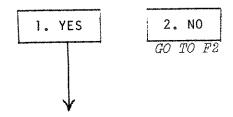
GO TO F1 ON PAGE 22

E13a. Why do you feel that way?

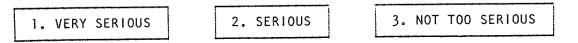
El3. Do you think the state should or should not regulate private game farms

El3a. Why do you feel that way?

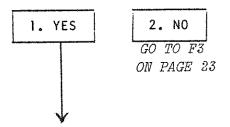
Fl. In Montana, fish and wildlife and various recreation opportunities are found on both public and private lands. As a result, access to and through private lands can be important for fishing, hunting, and other recreation. Do you think there is any friction or problem between private landowners and people who use their lands for these kinds of activities?



Fla. Is this problem very serious, serious, or not too serious at all?



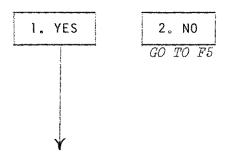
F2. Have you ever experienced a problem or friction with a private landowner about access to hunting, fishing, or recreation sites?



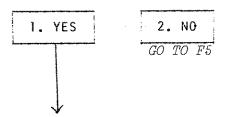
F2a. Does this happen very often, sometimes, or not too frequently?

1. VERY OFTEN 2. SOMETIMES 3. NOT TOO FREQUENTLY

F3. Do you have any land that either <u>is</u> used or <u>could be</u> used for hunting, fishing, or other recreation?



F4. Have you ever encountered any friction or problem with other people regarding access to or through your land for any of these activities?



F4a. Does this happen very often, sometimes, or not too frequently?

1. VERY OFTEN	2. SOMETIMES	NOT TOO FREQUENTLY
	5	

F5. Rather than actually purchasing additional land, the state could negotiate long-term easements across private lands in order to reach public lands for hunting, fishing, and so on. How do you feel about this -- do you favor the state negotiating such easements, are you opposed, or what?

1. FAVOR EASEMENTS	2. OPPOSE EASEMENTS	3. OTHER (Specify)
	And the second s	

1.	IN ADDITION	2. INSTEAD	3. OTHER (Specify)
	A A A A A A A A A A A A A A A A A A A		GO TO F7
F6a.			e funded through increased hunting e actual users, or some other way?
	1. INCREASED AND FISHII	1	OTHER (What would you suggest?
			·
incer		ining wildlife	habitat and allowing access would
incer you a	ntive for mainta	ining wildlife	habitat and allowing access would
incer you a	ntive for mainta approve or disapp	ining wildlife prove of this?	habitat and allowing access would
incer you a	ntive for mainta approve or disapp	ining wildlife prove of this? 2. DISAPPR GO TO F8 ON s be funded	through increased hunting and fishing
incer you a	How should this license fees, o	ining wildlife prove of this? 2. DISAPPR GO TO F8 ON s be funded or something e	OVE PAGE 25 through increased hunting and fishing

be maintained before any oth who feel the water should be agriculture before anything	cultural and industrial purposes. Some people ter needed to support fish and wildlife should her uses are considered. There are also some e maintained for fish and wildlife and for else. And there are also others who feel the ilable for all uses including industrial about this?
1. MAINTAIN FOR FISH AND V	WILDLIFE BEFORE ANYTHING ELSE IS CONSIDERED
2. MAINTAIN FOR FISH-WILDL	LIFE AND AGRICULTURE BEFORE ANYTHING ELSE
3. EQUALLY AVAILABLE FOR A	ALL USES, INCLUDING INDUSTRIAL
4. OTHER (Specify)	
are occurring more often in Mand wildlife habitat. In ord	der to assure consideration of fish and wildli
are occurring more often in Nand wildlife habitat. In ord habitat, do you think the Morshould have a say in the state or would you prefer that the	Montana. In some areas, they could affect fis der to assure consideration of fish and wildlintana Department of Fish, Wildlife, and Parks te's decisions relating to these activities,
are occurring more often in N and wildlife habitat. In ord habitat, do you think the Mor should have a say in the state	Montana. In some areas, they could affect fis der to assure consideration of fish and wildlintana Department of Fish, Wildlife, and Parks te's decisions relating to these activities,
are occurring more often in N and wildlife habitat. In ord habitat, do you think the Mor should have a say in the state or would you prefer that the	Montana. In some areas, they could affect fis der to assure consideration of fish and wildli ntana Department of Fish, Wildlife, and Parks te's decisions relating to these activities, Department not be involved?
are occurring more often in Mand wildlife habitat. In ord habitat, do you think the More should have a say in the state or would you prefer that the 1. SHOULD HAVE A SAY GO TO F10 ON PAGE 26 2. SHOULD NOT BE INVOLVED	Montana. In some areas, they could affect fister to assure consideration of fish and wildlintana Department of Fish, Wildlife, and Parks te's decisions relating to these activities, Department not be involved? 3. OTHER (Specify)
are occurring more often in Mand wildlife habitat. In ord habitat, do you think the More should have a say in the state or would you prefer that the 1. SHOULD HAVE A SAY GO TO F10 ON PAGE 26 2. SHOULD NOT BE INVOLVED	Montana. In some areas, they could affect fis der to assure consideration of fish and wildlintana Department of Fish, Wildlife, and Parks te's decisions relating to these activities, Department not be involved? 3. OTHER (Specify) GO TO F10 ON PAGE 26

would you	favor an increase	do more than is really on enforcement efforts by	the Department? 3. DOES MORE T IS CALLED F
·			
regulation these peop	ns in the field ple in the field, o	number of people who actu To you think the Departmen would you say more enfor	nt has enough of
are neede	u;		
1. ENOU	}	3. OTHER (Specify)	
1. ENOU	}	3. OTHER (Specify)	
1. ENOU	GH NOW	3. OTHER (Specify)	
1. ENOUG	GH NOW ARE NEEDED	3. OTHER (Specify)	way, would you any additional co

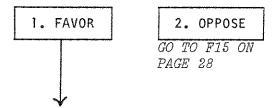
F13.	Suppose the Department was planning to change or expand its enforcement effort. And, rather than hiring more enforcement personnel, suppose it was considering the following approaches:
	1. more public information about the regulations in general: or

- 2. emphasizing the penalties for breaking the regulations; or
- 3. encouraging the public to report any violations they see.

If you had to choose, which one of these approaches would <u>you</u> prefer? (Circle the number of the response above or record in OTHER, as appropriate.)

OTHER (S	pecify)			
		dam-albam-60		
Adversality Marie Communication and Communicatio	······································			

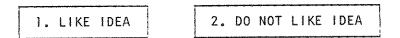
F14. Recently, the Department's field personnel, other than game wardens, were trained and given authority to enforce the state's fish, game, and park regulations. These people are referred to as ex-officio enforcement officers. Generally speaking, would you say you favor or oppose this practice?



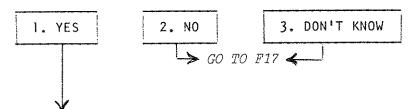
F14a. What about expanding this to give enforcement authority to other people, such as field personnel in other state or federal agencies -- in general, would you be in favor of that or would you be opposed?

1. FAVOR 2. OPPOSE

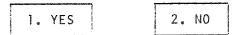
F15. What are your feelings about a toll-free telephone number for reporting fish and game violations and landowner problems such as trespass and property damage -- generally speaking, do you like that idea or not?



F16. As far as you know, does the state have such a toll-free telephone number now?



Fl6a. Have you ever used the toll-free number to report a violation or related problem?



F17. Do you know who the game warden is in your area?

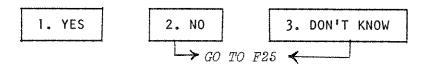
1		-					- }
1.	YES	i i	2.	NO;	DON'T	KNOW	
;							

F18. Do you know how to get in touch with the game warden in your area if it's necessary?

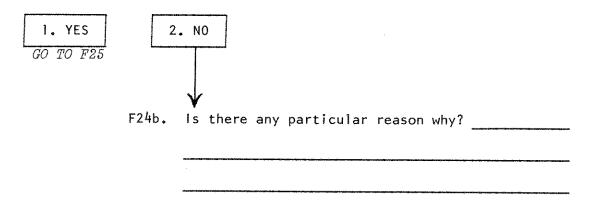
1. YES 2. NO; DON'T KNOW

F19.	Some people feel that students in Montana's public elementary schools should be required to have a course in conservation education that would cover fish, wildlife, and plants and their relationships to their environments. Generally speaking, would you favor or oppose such a requirement?
	1. FAVOR 2. OPPOSE
F20.	Did you purchase a Montana conservation license for 1979?
	1. YES 2. NO 3. DON'T KNOW
F21.	Did you purchase any hunting licenses or tags for 1979?
	1. YES 2. NO
F22.	What about a fishing license did you purchase one for 1979?
	1. YES 2. NO
F23.	Overall, how would you rate the performance of the Montana Department of Fish, Wildlife, and Parks would you say it's excellent, good, only fair, or poor?
	1. EXCELLENT 2. GOOD 3. ONLY FAIR 4. POOR

F24. Have you ever seen the magazine Montana Outdoors?



F24a. Do you currently subscribe to it?



F25. Now I'm going to read a list of descriptions -- as I read each one, please tell me if you feel it applies to you.

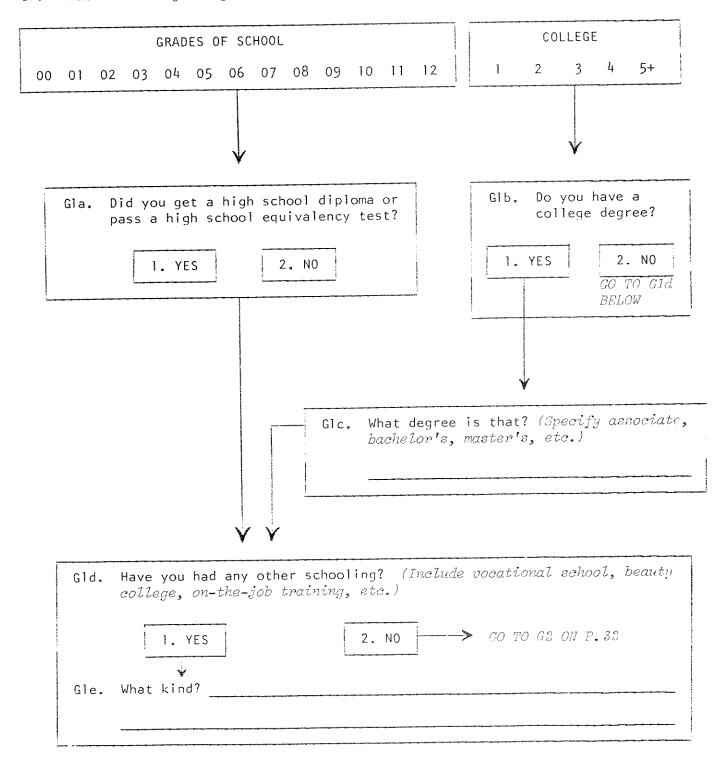
ľ	7	Α.	Hunter
i.	٤	37.0	Hunter

- [] B. Antihunter
- [] C. Fisherman
- [] D. Rancher or farmer
- [] E. Environmentalist
- [] F. City dweller
- [] G. Photographer
- [] H. Backpacker
- [] I. Gun collector
- [] J. Montana history "buff"

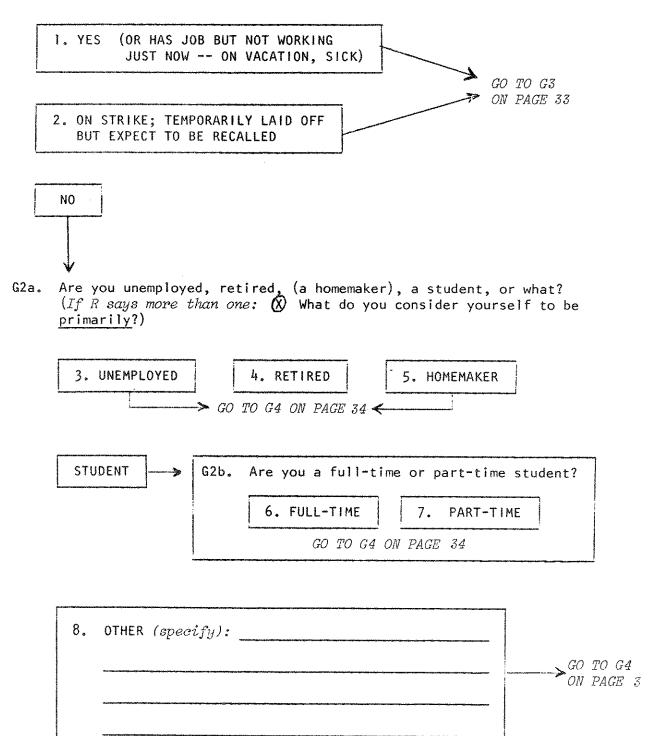
(Begin with item marked and continue through the list, ending with the item, if any, just above the one marked. Read only the items, not the preceding letters.)

To finish up, we need some information about you and your household for classification purposes.

G1. What is the highest grade of school, or year of college, you completed?



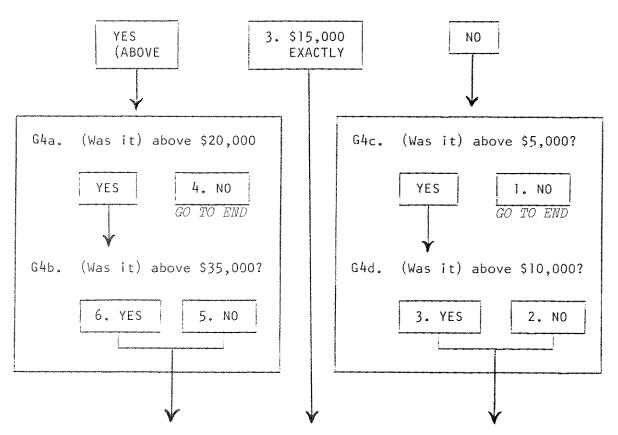
G2. Now we'd like to ask about your work status. Are you working for pay, either full time or part time?



	MORE THAN ONE JOB: Ask about main job first, then about total for
	jobs.
	(A) How many hours a week do you usually work on your main job
	(B) About how many hours a week altogether do you usually work on all your jobs?
	(A) ONE JOB/MAIN JOB (B) ALL JOBS TOTAL
HOURS	PER WEEK:
G3a.	What is your main occupation? (What sort of work do you do in
d)a.	your job?) (If more than one job, ask only about main job
	one R spends most time on, one R gets the most income from.)
	G3b. Tell me a little more about what you do in that job.
G3c.	
G3c.	What kind of business or industry is it in? ((\hat{X}) What's the name the firm?)
G3c.	
G3c.	
G3c.	
G3c.	the firm?)

G4. Last of all, to get an accurate picture of people's financial situations, we need to know the income of all the households we interview -- this would be all the income you (and your family or household) received in 1979, from all sources, and before taxes and other deductions.

Was your total (family or household) income in 1979 above \$15,000?



Those are all the questions I have. Thank you very much for taking the time to participate in the survey -- we appreciate your willingness to help.

EXACT T	IME	NOW:		

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