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Pleasure Boating in Oregon 1975

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ROBERT W. STRAUB

OREGON STATE MARINE BOARD

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James A. Hodley, Director

PLEASURE BOATING IN OREGON - 1975

A Report to the OREGON STATE MARINE BOARD James A. Hadley, Director

APRIL 1976

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SUMMARY OF FINDINGS

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SUMMARY OF FINDINGS

Pleasure boating in Oregon has grown rapidly in the past 15 years. In 1975, there were 111,045 pleasure craft registered¹ with the State Marine Board. This survey was conducted in order to assess the type, amount, and location of boating use within Oregon as required by Oregon Revised Statute 488.833. A 10 percent sample of the boats registered in Oregon was taken in the fall of 1975 and this report presents the findings of those responding to the state-wide boating survey. The following is a summary of the information reported herein.

The five most populated counties contain 52 percent of all the registered pleasure boats in Oregon but they do not have the largest number of boats on a per capita basis.

Nearly 60 percent of the registered pleasure boats are less than 16 feet in length and 78 percent are powered with outboard motors. Slightly over 46 percent of the primary motors used with pleasure boats have a rating of less than 25 horsepower.

There is a great deal of difference between the counties in which boats are registered and those in which they are used. Not surprisingly, Multnomah county experiences the greatest amount of use in the state. Six counties generate 60 percent of the total use in Oregon while 30 water bodies accommodate nearly 60 percent of the total state-wide use. The total amount of annual boating use is estimated to be at least 1.9 million boating days.

Boating use varies considerably during the year with 68 percent of it occurring during the months of May, June, July, and August.

¹In this report a "registered" boat refers to a vessel which has been issued a certificate of number by the Oregon State Marine Board. All motorized pleasure vessels and sailboats 12 feet and over are required to obtain a certificate of number.

More than four-fifths of the pleasure boats are transported at some time during the season with over 75 percent being transported less than 10 times.

Fishing is reported as the most popular boating activity and accounts for over 60 percent of all boating days.

Only 10 percent of the boat owners obtained a Courtesy Motorboat Examination in 1975, however, it is estimated that 24 percent of all pleasure boats were stopped for an inspection--primarily by the Sheriff's Marine Patrol.

Two-thirds of the respondents in the survey indicated they encountered no problems in their visits to boating facilities in the 1975 season, but of those encountering some problem, most felt that overcrowding was a concern which needed attention.

CONTENTS

	Page
SUMMARY OF FINDINGS	iv
INTRODUCTION	1
Background Purpose and Objectives Sampling and Boat Owner Response	
CHARACTERISTICS OF PLEASURE BOATS	9
Trends County of Registration Boat Characteristics	
USE OF PLEASURE BOATS	19
Boat Use Boat Transportation Boating Activities Fuel Consumption	
BOAT INSPECTION AND SAFETY	39
USER EVALUATION OF BOAT FACILITIES	45
GLOSSARY	50
BIBLIOGRAPHY	51
APPENDIX A: Summary of Methodology	
APPENDIX B: Questionnaire	
APPENDIX C: Follow-up Postcard	
APPENDIX D: Age and income characteristics of pleasure boat owners	
APPENDIX E: Pleasure boat activities by body of water	
APPENDIX F: Problems encountered by body of water	

LIST OF FIGURES

Figure Number	Title	Page
1	Growth of pleasure boat registration in Oregon, 1960-1975.	11
2	County variation in pleasure boat registration in Oregon, 1975.	13
3	Boat and motor characteristics of pleasure boats in Oregon, 1975.	15
4	County variation in pleasure boat use in Oregon, 1975.	21
5	Out-of-county pleasure boat use for selected Oregon counties, 1975.	26
6	Out-of-county pleasure boat use for selected Oregon counties, 1975.	27
7	Out-of-county pleasure boat use for selected Oregon counties, 1975.	28
8	Monthly variation in pleasure boat use in Oregon, during the boating season, 1974 - 1975.	31
9	Preferred activities of pleasure boat users in Oregon, 1975.	34
10	Sponsor of boating safety courses completed by registered boat owners in Oregon (September 1972 through August 1975).	43
11	Identification of boating problems encountered by registered pleasure boat owners during the boating season, 1974 - 1975.	47

LIST OF TABLES

Table Number	Title	Page
1	Questionnaires returned by county of registra- tion, 1975 boating survey.	6
2	Oregon pleasure boat registration by county and by length of boat, 1975.	14
3	Oregon pleasure boat registration by county and by power system type, 1975.	16
4	Oregon pleasure boat registration by county and by horsepower class of primary motor or motors, 1975.	18
5	Oregon pleasure boat use by county of registra- tion and by county of use during the 1975 boating season.	24
6	The 30 "Most Used" bodies of water by activity type, in Oregon, 1975.	29
7	Oregon pleasure boat use by county of registra- tion and month of year during the 1975 boating season.	30
8	Oregon pleasure boat launches by county of launch and by launch facility type during the 1975 boating season.	32
9	Oregon pleasure boat use by county of registra- tion and by activity type during the 1975 boating season.	34
10	Oregon pleasure boat use by county of use and by activity type during the 1975 boating season.	37
11	Oregon pleasure boat inspections by type of boat and by inspecting agency during the 1975 boating season	41
12	Oregon pleasure boat owners contacting the Coast Guard Auxiliary for a Courtesy Motorboat Examination during the 1975 boating season.	42

Table Number	Title	Page
13	Oregon pleasure boat owners completing boating safety courses during the period September 1972 through August 1975 by county of registra- tion and by sponsoring agency	44
14	The 30 "Most Problem" bodies of water by type of problem, in Oregon, 1975.	49

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INTRODUCTION

INTRODUCTION

Background

Recreational boating has increased noticeably in Oregon within the past fifteen years. One indicator of this growth is the increase of registered boats¹ which totaled 33,638 in 1960 and 111,045 in 1975. This increase is an important indicator of the popularity of pleasure boating and raises questions as to where participation in boating activities occurs within Oregon and the adequacy of boating facilities to serve the public.

In 1971 and again in 1973, the Oregon State Legislature amended the statute under which the Oregon State Marine Board functions. One of the effects of the amendments is to require the Marine Board to distribute certain funds to counties according to the amount and different kinds of boating activity taking place within each county of use, rather than where the boats are registered. Concerning fund distribution, individual counties may make substantiated proposals to the Board for the development and improvement of boating facilities or boating programs within their jurisdiction.

To facilitate fund distribution in relation to boating activity and county proposals, the Oregon Legislature has mandated the Marine Board:

shall at least once every three years conduct a survey of owners and others to determine, by county, the kinds of boating activity on the various waters of the state during different periods of the year. Boating activity in a county shall be determined by taking into consideration the number and kinds of boats engaging in different boating activities in the county and the number of days during the last fiscal year that such activities were carried on in the county. (ORS 488.833)

¹In this report a "registered" boat refers to a vessel which has been issued a certificate of number by the Oregon State Marine Board. All motorized pleasure vessels and sailboats 12 feet and over are required to obtain a certificate of number.

Purpose and Objectives

It is the primary purpose of this report to fulfill the legislative requirement of a comprehensive, accurate, up-to-date survey of boating activities in Oregon. Where deemed important, data items were solicited in this survey which permit comparisons between it and the 1971-1972 survey. Those items reported in the 1971-1972 study of pleasure boating and in this study are:

- Characteristics of the boat for the population from which the sample was drawn.
- Characteristics of the respondent--presumably the boat owner or principal user of the boat.
- Total boating days of the respective populations identified in each study (preselected versus 'most used' boat).

Several differences should be noted between the present survey and that conducted in 1971-1972:

- In 1975, the data base represents a 10 percent systematic sample of boat owners with Oregon mailing addresses. In 1972, a special survey of ten counties was incorporated into the selected statewide sample.
- 2. The unit sampled in 1975 was a specified boat with its registration number printed on the address label of the pleasure boat owner. The sample unit in 1972 was the boat owner and information requested about the 'most used' boat of the respondent rather than an identified boat registered with the State Marine Board during that boating season.

 In 1975 the location of boating activity throughout the state was identified by county and body of water whereas location of the activity was not identified in 1972.

Sampling and Boat Owner Response

A 10 percent systematic sample of boats registered in Oregon as of August 1975 was selected by the State Marine Board using U.S. Postal Service Zip Code numbers. The procedure used was to choose the first boat registered in every zip code number and every tenth boat thereafter. Thus, if 23 boats were registered in a zip code number, the first would be chosen followed by the 10th and 20th respectively in that zip code, a total of three boats. An expanded discussion of the research methodology appears in Appendix A.

Altogether, 7,222 questionnaires were returned and qualified for analysis. This represents a response of 62 percent. The rate of return for the 1975 survey was 15 percent higher than that attained in the 1971-1972 survey of pleasure boat owners and can probably be attributed to the use of a follow-up postcard mailed to all respondents two weeks after the initial questionnaire. Received questionnaires were checked for completeness, coded, optically or electronically scanned, and key-punched in preparation for statistical analysis and tabulation. Data was processed onto magnetic tape, and statistically manipulated by a standard statistical computer program (see Appendix A for a more thorough discussion). The 47 percent of returned questionnaires in 1972 represented about 28 percent of the 85,596 pleasure boats registered in Oregon while the present survey,

with 7,222 returned questionnaires, represents about 6.5 percent of the 111,045 pleasure boats registered in Oregon as of September 1975.

The number of questionnaires returned in this survey by county of boat registration is presented in Table 1. This more uniform sampling of the entire Oregon boating population differs from that of 1971-1972 where a complete survey was conducted for boaters in Benton, Clackamas, Lincoln, Linn, Marion, Multnomah, Polk, Tillamook, Washington, and Yamhill Counties and a ten percent sample of boaters in the remaining 26 counties.

County by county level of sampling in Table 1 reflects the overall response rate of 62 percent to a 10 percent sample. Higher return in the smaller more rural counties can be accounted for, in part, by the sampling strategy which automatically included one boat in each zip code number. Some counties, notably Multnomah and Sherman exhibited poorer return rates, the reasons for which have not been evaluated.

The cover letter, printed as page one of the questionnaire (Appendix B), was labeled with the Oregon boat registration number, boat length, questionnaire identification number and address of the individual under whose name the boat was registered. Twenty-two questions were contained on the questionnaire, the first fourteen pertained to the registered boat, the remaining eight questions pertained either to other boats owned or general information concerning the respondents.

Table 1

Questionnaires Returned by County of Registration, 1975 Boating Survey

County	Number Returned	Percent of all Returns	Percent of Registered Boats in County
Baker	65	0.9	8.9
Benton	147	2.0	6.7
Clackamas	659	9.1	6.7
Clatsop	106	1.5	5.7
Columbia	124	1.7	6.3
Coos	286	4.0	5.6
Crook	38	0.5	6.1
Curry	94	1.3	7.2
Deschutes	229	3.2	6.6
Douglas	333	4.6	6.4
Gilliam	6	0.1	7.5
Grant	23	0.3	8.0
Harney	20	0.3	6.8
Hood River	30	0.4	5.2
Jackson	389	5.4	6.3
Jefferson	34	0.5	6.6
Josephine	152	2.1	6.3
Klamath	255	3.5	6.5
Lake	20	0.3	8.4
Lane	836	11.6	6.4
Lincoln	152	2.1	6.8
Linn	261	3.6	6.1
Malheur	84	1.2	6.8
Marion	445	6.2	6.5
Morrow	16	0.2	7.6
Multnomah	1,174	16.3	5.5
Polk	90	1.2	6.2
Sherman	4	0.1	4.8
Tillamook	95	1.3	6.5
Umatilla	102	1.4	6.7
Union	65	0.9	8.3
Wallowa	17	0.2	6.4
Wasco	47	0.7	5.6
Washington	471	6.5	6.7
Wheeler	4	0.1	11.1
Yamhill	109	1.5	6.0
Not Identified	240	3.3	
Total	7,222		

As to be expected, boat owner response to certain questions was not consistent even when the information requested was similar to a previous question. In the case of "boating days by month", (question number nine in Appendix B), it is understandable that there would be some inexactness in the respondent's ability to recall the details of a previous 12-month period. However, when a second question was presented to the respondent requesting information concerning the number of days of boating use by a given body of water, the question was apparently answered as if it were unrelated to the previous question on the questionnaire. This introduced difficulties in interpretation of the data when cross-tabulated. The reader should recognize that total boating days by county, body of water, or by activity is not a part of total boating days state-wide. Although it is a true statement conceptually, the practical reality is that the quantities shown were generated from two different questions. Because of recall problems by the respondents, their answers may vary five to six percent from one question to the next. Thus, the reader cannot take individual responses from question number ten and expect them to equal the response to question number nine.

CHARACTERISTICS OF PLEASURE BOATS

CHARACTERISTICS OF PLEASURE BOATS

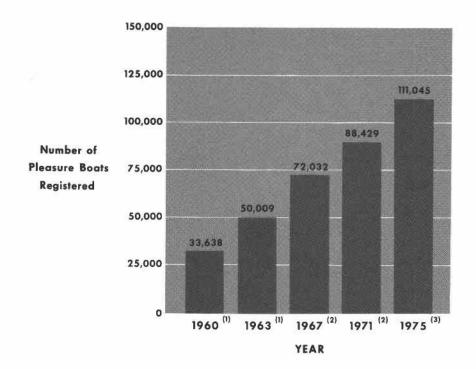
Trends

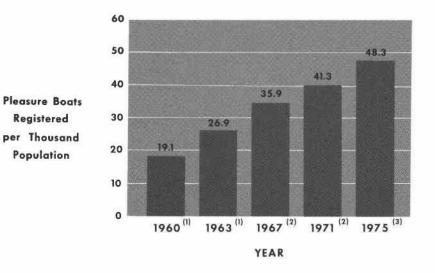
Within the past 15 years, pleasure boat registration has grown more than three-fold--from 33,638 pleasure boats in 1960 to 111,045 pleasure boats in 1975 (Figure 1). The annual rate of increase has remained approximately constant at about nine percent. Changes in criteria for boat registration can account for a portion of this growth. Changes in pleasure boat registration per 1,000 people is shown in Figure 1 as well, and suggests a somewhat slower per capita annual growth rate of approximately seven percent with a slight tendency toward decline. Such a marked increase in pleasure boat registration relative to population increase poses a challenge to the public agencies serving the boating population of the State.

County of Registration

As to be expected, the greatest concentration of registered pleasure boats in Oregon occurs in the highly urbanized counties such as Multnomah, Lane, Clackamas, Washington, and Marion. In 1975, those five counties contained 59 percent of the state's population and 52 percent of all pleasure boats registered with Oregon's State Marine Board. However, when the proportional relationship of registered boats per capita by county is considered, then five entirely different counties can be noted as containing the highest per capita registration.

¹The age and income characteristics of Oregon pleasure boat *owners* are found in Appendix D (p. 61-62).





(1) Registration data for boats with motors of 8 h.p. or more.
 (2) Registration of boats with motors of 3.5 h.p. or more, and sailboats 12 feet and over.
 (3) All motorized pleasure boats, and sailboats 12 feet and over.



The five counties having the highest number of registered pleasure boats per thousand are four coastal counties--Curry, Coos, Lincoln, Tillamook, and the inland county of Deschutes. A county by county comparison of pleasure boat registration is shown by total number and per capita in Figure 2.

Boat Characteristics

The characteristics of pleasure boats in this study differ slightly from those in the 1971-1972 survey done by the Bureau of Governmental Research and Service (1972, page 21) and is most likely related to difference in sample selection (see page 2).

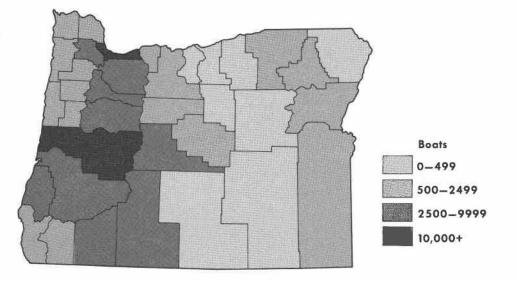
As shown in Figure 3, 59.4 percent of registered pleasure boats are under 16 feet in length in 1975, whereas 70 percent were in this category in 1972. Pleasure boats between 16 and 19 feet in length comprised 32.3 percent of the current boating population and only 23 percent of the 1972 population. For those boat lengths ranging from 20 to 23 feet the most recent figure is 5.2 percent, up from three percent in 1972, and boats longer than 24 feet comprise three percent of the 1975 population; equal to the 1972 figure for this category. Not shown in Figure 3 is a 2.7 percent 'no response' due to the removal of the mailing label which furnished the boat length data. Table 2 provides boat length data on a county by county basis.

Figure 3 further reveals that about 78 percent of the boating population classify their power system as an outboard motor; 4.7 percent as inboard motor; 13.2 percent as an inboard/outboard power system, and

NUMBER OF PLEASURE BOATS REGISTERED

The total number of boats registered in Oregon for 1975 was 111,045.

per thousand.



PLEASURE BOATS PER THOUSAND POPULATION

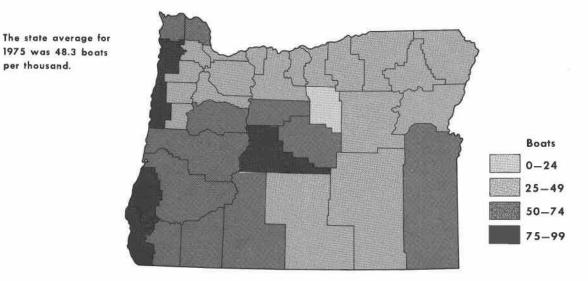


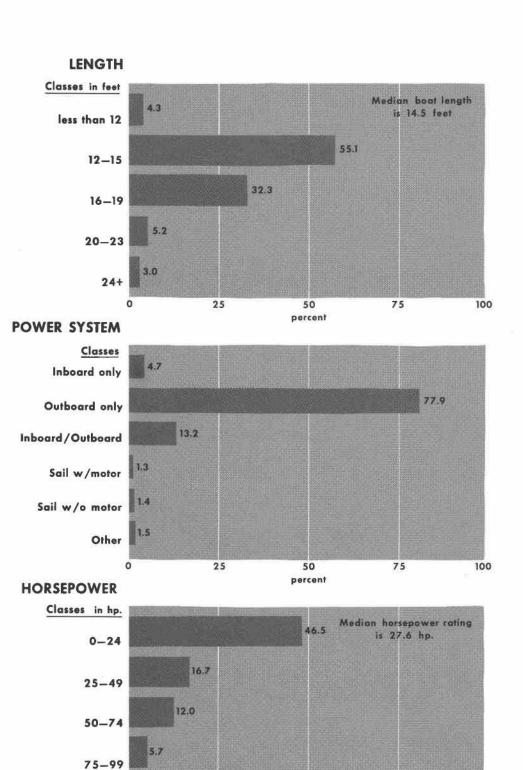
Figure 2. County variation in pleasure boat registration in Oregon, 1975.

Table 2

Oregon pleasure boat registration by county and by length of boat, 1975.

County of Reg.	Less than 12 feet	12-15 feet	16-19 feet	20-23 feet	24 feet and over	Total Numbe of Boats
Baker	31	769	169	0	0	969
Benton	62	1,122	907	46	77	2,214
lackamas	461	5,105	3,444	646	231	9,887
latsop	215	707	461	108	123	1,614
olumbia	62	861	676	154	92	1,845
coos	292	2,383	1,368	185	92	4,320
rook	15	354	185	15	15	584
Curry	46	615	538	169	46	1,414
leschutes	138	2,276	830	77	31	3,352
louglas	215	2,891	1,599	246	62	5,013
Silliam	0	46	46	0	0	92
irant	0	246	92	0	0	338
larney	15	246	31	15	0	307
lood River	15	261	138	0	46	460
lackson	123	3,613	1,768	246	108	5,858
lefferson	15	323	123	0	46	507
Josephine	123	1,338	707	108	31	2,307
Clamath	138	2,599	876	62	77	3,752
ake	15	231	62	0	0	308
_ane	431	7,350	3,936	553	154	12,424
incoln	108	1,384	600	169	46	2,307
.inn	138	2,552	1,138	108	15	3,951
Malheur	15	800	415	31	15	1,276
Marion	308	3,536	2,291	308	154	6,597
forrow	15	123	62	15	0	215
Multnomah	692	8,149	6,012	1,246	1,399	17,498
Polk	77	846	353	31	31	1,338
Sherman	0	0	46	o	0	46
Tillamook	92	800	430	92	31	1,445
Umatilla	77	815	569	92	15	1,568
Union	15	507	400	46	0	968
Wallowa	15	77	154	0	0	246
Wasco	46	400	215	15	15	691
Washington	369	3,106	2,783	523	231	7,012
Wheeler	0	62	0	0	0	62
Yamhill	46	938	492	169	15	1,660
TOTAL	4,425	57,431	33,916	5,474	3,198	104,444
Non-Response						6,581
TOTAL						111,025*

*Total does not equal 111,045 due to rounding.





percent

19.1

100+

Table 3

Oregon pleasure boat registration by county and by power system type, 1975.

		Powe	er System Type (N	umber of Boats)			
County of Reg.	Inboard Only	Outboard Only	Inboard/ Outboard	Sailboat w/ Motor	Sailboat w/o Motor	Other	Total Numbe of Boats
Baker	46	892	46	0	0	15	999
Benton	108	1,830	246	31	31	15	2,261
Clackamas	554	7,780	1,369	108	138	169	10,118
Clatsop	108	1,261	200	31	0	15	1,615
Columbia	123	1,476	277	15	0	15	1,906
Coos	169	3,429	707	0	15	62	4,382
Crook	0	538	46	0	0	0	584
Curry	185	1,015	231	0	0	15	1,446
Deschutes	62	3,044	261	15	46	92	3,520
Douglas	185	4,228	538	15	15	138	5,119
Gilliam	0	77	15	0	0	0	92
Grant	0	338	15	0	0	0	353
Harney	0	277	15	0	0	15	307
Hood River	15	369	77	0	0	0	461
Jackson	231	4,782	692	77	92	108	5,982
Jefferson	0	477	46	0	0	0	523
Josephine	46	2,091	123	0	0	77	2,337
Klamath	108	3,091	477	77	77	77	3,907
Lake	15	261	15	0	0	15	306
Lane	446	10,071	1,876	123	231	108	12,855
Lincoln	108	1,999	169	31	31	0	2,338
Linn	154	3,352	400	31	62	15	4,014
Malheur	46	1,030	169	0	0	46	1,291
Marion	261	5,397	1,015	62	46	46	6,827
Morrow	15	169	46	0	15	0	245
Multnomah	1,476	12,654	2,706	538	477	200	18,051
Polk	77	984	231	15	0	62	1,369
Sherman	0	46	15	0	0	0	61
Tillamook	15	1,322	92	0	15	15	1,459
Jmatilla	31	1,169	246	31	15	77	1,569
Jnion	15	800	154	0	0	31	1,000
√allowa	0	185	77	0	0	0	262
Vasco	46	584	77	15	0	0	722
Mashington	369	5,136	1,292	108	185	154	7,244
Wheeler	0	62	0	0	0	0	62
Yamhill	15	1,369	231	31	15	15	1,676
TOTAL	5,029	83,585	14,192	1,354	1,506	1,597	107,263
lon-Response							3,767

*Total does not equal 111,045 because of rounding errors.

2.7 percent identified their craft as sailboats (an almost equal number having auxilary motors as those not having a motor). These 1975 figures are comparable to those of 1972 except that outboard motors were five percent higher in the 1972 study and the inboard/ outboard category was four percent lower. Other than this difference, distinct changes are not evident between 1972 to 1975 in the type of power systems used. This characteristic of boats by county of registration is presented in Table 3.

The horsepower rating of the primary power system used with pleasure boats on a state-wide basis is classified in Figure 3 with Table 4 providing a county-by-county summary of this data item. On a state-wide basis, a noticeable increase occurred between the 1972 study and this study in the first horsepower category. In the present survey, 46.5 percent of the pleasure boats in the state had a primary power system with a rating of less than 25 horsepower whereas in 1972, 33.5 percent of the pleasure boats were in this class. However, the difference between 1972 and 1975 cannot be easily interpreted, because a portion of the 13 percent change may be related to the change in the sample unit surveyed--the 'most used' boat in 1972 versus a preselected boat in 1975. Thus, the 'shift' to smaller boat motors is not a logical conclusion since two different populations are encompassed in each study. For the remaining horsepower rating categories, 16.7 percent of the 1975 pleasure boats had power systems between 25 and 49 horsepower; 12 percent had power systems from 50 to 74 horsepower; 5.7 percent from 75 to 99 horsepower; and 19.1 percent had power systems 100 horsepower or greater.

Table 4

Oregon pleasure boat registration by county and by horsepower class of primary motor or motors, 1975.

	Less Than	25 to	50 to	75 to	100 hp.	Total Numbe
County of Reg.	25 np.	49 hp.	74 hp.	99 hp.	å Over	of Boats
Baker	477	231	123	31	123	985
Benton	953	323	323	215	354	2,168
Clackamas	3,829	1,645	1,353	738	2,106	9,671
Clatsop	676	354	92	123	323	1,568
Columbia	615	507	200	138	415	1,875
Coos	2,214	630	384	231	830	4,289
Crook	215	138	62	61	108	584
Curry	477	323	154	61	415	1,430
Deschutes	1,891	538	369	185	369	3,352
Douglas	2,292	707	815	215	831	4,860
Gilliam	15	31	15	15	15	91
Grant	184	62	46	31	31	354
Harney	154	77	31	15	15	292
Hood River	215	46	62	46	92	461
Jackson	2,830	769	554	354	1,107	5,614
Jefferson	200	169	92	15	46	522
Josephine	1,307	415	215	77	246	2,260
Klamath	2,046	508	292	138	661	3,645
Lake	231	0	15	0	31	277
Lane	5,445	2,092	1,661	584	2,553	12,335
Lincoln	1,276	461	246	62	231	2,276
Linn	1,691	784	600	231	584	3,890
Malheur	384	246	185	185	246	1,246
Marion	2,752	1,046	1,030	508	1,307	6,643
Morrow	46	15	62	31	77	231
Multnomah	5,829	2,506	2,707	1,415	4,353	16,810
Polk	615	231	169	0	277	1,292
Sherman	0	0	15	15	31	61
Tillamook	799	323	108	77	123	1,430
Umatilla	477	231	231	154	338	1,431
Union	384	169	77	61	277	968
Wallowa	108	15	46	0	92	261
Wasco	277	108	108	61	138	692
Washington	2,138	969	1,230	554	1,892	6,783
Wheeler	31	31	0	0	0	62
Yamhill	677	308	308	46	277	1,616
TOTAL	43,750	17,008	13,980	6,673	20,914	102,325
Non-Response					-1	1,601
and a second						7,119

BOAT USE

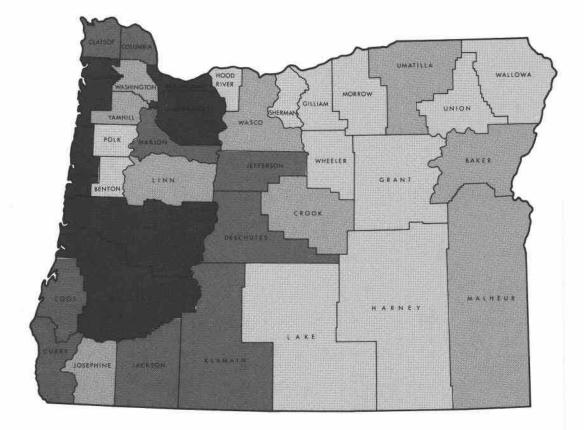
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USE OF PLEASURE BOATS

Boat Use

There is a great amount of spatial and temporal variation in the use of pleasure boats in Oregon. This is to be expected given the diversity of water environments within the state, and the seasonal nature of many water-related activities, e.g., water skiing. Figure 4 depicts the variation in boat use among the 36 Oregon counties. According to this map, Multnomah County experiences the greatest amount of use within Oregon, with over 272,900 days of boating use reported, or 14.8 percent of the total annual use of the entire state. This is not especially surprising given the large number of boats registered in that county and the location of the county with respect to the Willamette and Columbia Rivers. Other counties which receive a great deal of use include Clackamas, Douglas, Lane, Lincoln and Tillamook. The location of these counties with respect to major rivers and the Pacific Ocean and their sizeable number of registered boats, can explain a large amount of this use. The total amount of boating use within the state during the 1975 boating season by boats registered in Oregon is estimated to be at least 1,843,400 days, or 16.5 days per registered pleasure boat.

Of interest are the differences that occur between the counties in which boats are registered and those in which the boats are actually used. Some counties, because of their location relative to large and outstanding bodies of water, tend to attract boaters from outside the county, especially from those counties with an insufficient supply of



Boating Days



less than 10,000



50,001-100,000



10,000-50,000

more than 100,000

Figure 4. County variation in pleasure boat use in Oregon, 1975.

water bodies suitable for various types of boating recreation. The amount of boating use within a county by boats registered in that same county varies greatly, as seen in Table 5. This table shows the counties in which boats were actually used with respect to the county in which they were registered. The percentage of boating use taking place within the county of registration varies from nearly 92 percent for Curry County to only 10 percent for Washington County. Based upon this information, Oregon counties can generally be classified as either net importers or net exporters of boating use. Importing counties are those in which the total use within the county exceeds the use generated by that county, while exporting counties generate more use than takes place within that county. The list below shows those counties which are net importers and net exporters of use. The figures in parentheses indicate the percentage of total use taking place in the county, which is accounted for by boats registered in that same county.

Net Importers of Use

Baker (71)	Hood River (65)
Clatsop (87)	Jefferson (70)
Columbia (68)	Klamath (70)
Coos (78)	Lake (80)
Crook (66)	Lincoln (84)
Curry (92)	Malheur (80)
Deschutes (61)	Morrow (73)
Douglas (74)	Sherman (23)
Gilliam (36)	Tillamook (89)
Harney (39)	Wallowa (72)

Net Exporters of Use

Multonmah (55) Benton (15) Clackamas (54) Polk (14) Umatilla (64) Grant (14) Jackson (54) Union (12) Josephine (31) Wasco (48) Lane (62) Washington (10) Linn (38) Wheeler (*) Yamhill (27) Marion (31)

*insufficient data

Figures 5, 6, and 7 show the location and amount of use which took place for six selected Oregon counties. The total use generated by these six counties is over 1,113,000 days, or 60 percent of the total annual use in the entire state. Along similar lines, Table 6 shows the amount of use at the 30 "most used" bodies of water within Oregon. The Willamette and Columbia Rivers, together with the Pacific Ocean, represent the three most popular bodies of water used by Oregon boat owners. Taken together, these three water bodies account for 31 percent of the total use within the state. The 30 most used bodies represent over 59 percent of the total use.

Just as there is a great deal of variation in the location of boating use, so too is there a large amount of variability in the seasons of use. As Figure 8 indicates, there is a considerable degree of change in the amount of use occurring during the year. As one might expect, the majority of use takes place during the late spring and summer months of May, June, July and August when 68 percent of the total annual use occurs. Boating use declines during the fall and reaches a minimum during the month of January. A description of the number of boating days estimated for each month in the 36 counties is given in Table 7. The total amount of boating use estimated from this table is 1,967,137 days, or an average of 17 days for each registered boat in the entire state. This, of course, is comparable to the figure derived from the data concerning boating days in different activities.

Table 5

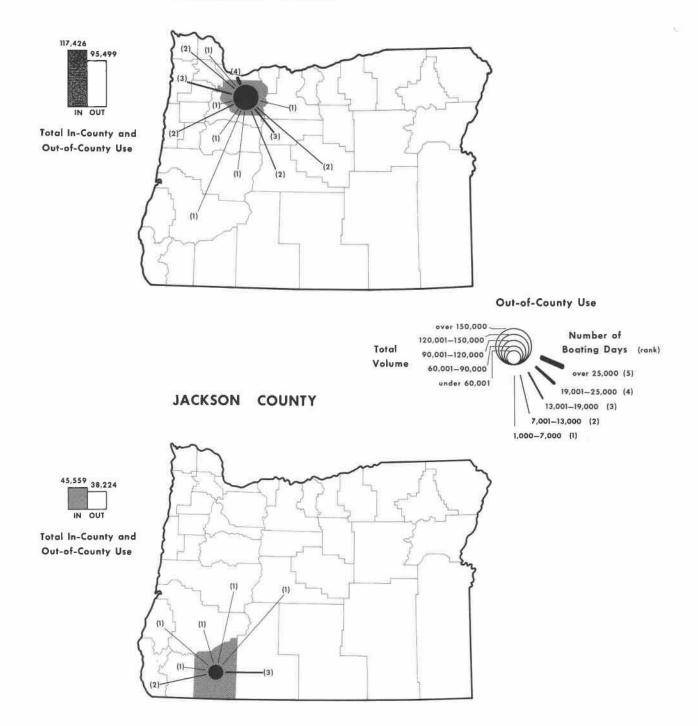
Oregon pleasure boat use by county of registration and by county of use during the 1975 boating season.

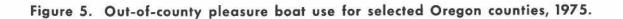
			(County of	Use (Boa	ting Days)									_			
County of Registration	Baker	Benton	Clackamas	Clatsop	Columbia	Coos	Crook	Curry	Deschutes	Douglas	Gilliam	Grant	Harney	Hood River	Jackson	Jefferson	Josephine	Klamath	Lake
Baker	6,135	0	0	0	0	0	Ó	0	0	1.08	0	0	15	0	61	0	o	0	0
Benton	0	4,982	o	185	0	369	92	46	1,261	815	0	0	0	0	46	1,030	0	907	0
Clackamas	184	31	117,426	7,181	1,784	554	4,090	0	8,810	1,491	46	31	384	461	138	13,485	۵	846	231
Clatsop	0	o	415	32,843	46	0	369	554	155	0	0	0	0	0	0	323	0	0	0
CoTumbia	0	0	0	3,490	26,554	592	815	92	584	62	0	0	0	0	0	1,107	0	15	0
Coos	0	0	0	0	0	67.808	292	4,044	677	9,548	0	0	123	0	31	77	0	461	215
Crook	0	0	0	0	0	51	3,936	0	338	108	0	Ö	0	0	0	800	0	154	0
Curry	0	0	0	0	0	1,307	92	32,658	323	108	0	Q	0	0	138	154	0	369	0
Deschutes	31	0	231	15	0	77	4,813	384	27,861	2,107	0	0	169	0	0	7,673	0	630	138
Douglas	0	0	231	0	77	6,827	200	738	1.415	56,906	0	0	0	0	1,338	123	61	2,552	0
Gilliam	0	0	31	0	0	0	154	0	0	Ó	277	0	0	0	0	0	0	0	0
Grant	2,430	0	0	0	0	0	61	0	0	0	46	492	154	0	0	0	0	0	0
Harney	323	0	0	323	0	15	31	0	369	o	D	0	892	0	0	0	0	0	0
Hood River	0	0	62	215	92	a	784	0	46	0	0	0	0	3,721	0	200	0	0	0
Jackson	0	Ø	0	0	0	1,691	277	11,809	1,861	4,428	46	0	0	0	45,559	0	2,076	14,822	15
Jefferson	0	0	0	0	0	77	523	0	538	62	0	31	46	0	0	4,428	o	0	D
Josephine	0	0	0	0	0	553	0	4,828	384	2,768	0	0	0	0	8,841	0	8,949	1,599	0
Klamath	0	0	0	0	0	738	169	4,290	3,429	2,199	0	0	15	61	3,659	0	0	40,885	1,169
Lake	0	0	0	0	0	0	15	0	92	369	0	0	0	0	277	0	0	0	3,368
Lane	0	154	108	369	0	6,289	400	246	12,993	30.014	0	0	D	o	553	1,476	77	12,639	184
Lincoln	61	0	92	0	0	815	1,661	0	323	430	923	31	0	0	0	154	0	154	0
Linn	0	1,015	Q	46	31	251	1,476	0	5,628	1,399	231	0	61	0	0	1,507	0	2,030	0
Malheur	1,984	0	0	61	0	61	0	0	0	0	0	0	0	0	0	0	0	0	0
Marion	169	0	2,276	999	815	507	2,583	292	8,088	4,797	0	0	31	0	62	1,676	0	1,353	77
Morrow	92	0	0	0	0	0	0	0	0	0	46	31	0	0	0	0	0	0	0
Multnomah	784	138	22,495	20,896	17,605	3,121	6,812	108	13,116	2,722	33	0	431	446	200	12,393	o	1,107	784
Polk	77	0	0	123	0	0	646	123	1,030	661	0	62	0	0	46	292	62	600	0
Sherman	0	a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tillamook	o	0	0	31	0	215	138	0	369	200	0	0	0	0	0	138	0	٥	154
Umatilla	1,614	0	0	384	0	108	62	ō	154	169	0	46	0	0	0	77	0	0	0
Union	5,551	0	0	461	0	46	0	15	0	108	0	138	0	0	0	0	0	0	0
Wallowa	707	0	0	0	0	0	0	62	D	0	0	0	0	0	0	0	0	0	0
Wasco	0	0	77	61	0	a	369	0	261	0	77	77	0	1,845	0	1,661	0	0	0
Washington	507	46	8,857	7,027	5,320	154	2,722	61	4,797	1,799	0	0	0	123	77	2,891	0	784	15
Wheeler	a	0	D	0	0	0	0	0	31	0	0	31	0	0	15	46	0	31	0
Yamhi11	0	0	338	461	307	138	200	0	892	200	0	0	0	0	0	707	0	246	108
N/RNot Specified	0	77	1,737	77	507	677	138	92	492	108	0	15	0	154	446	46	0	0	0
Total Number of Boating Days	20,649	6,443	154,376	75,248	53,138	93,161	33,920	60,442	96,347	123,686	1,723	985	2,321	6,811	61,487	52,464	11,225	82,184	6,458

Table 5 (cont.)

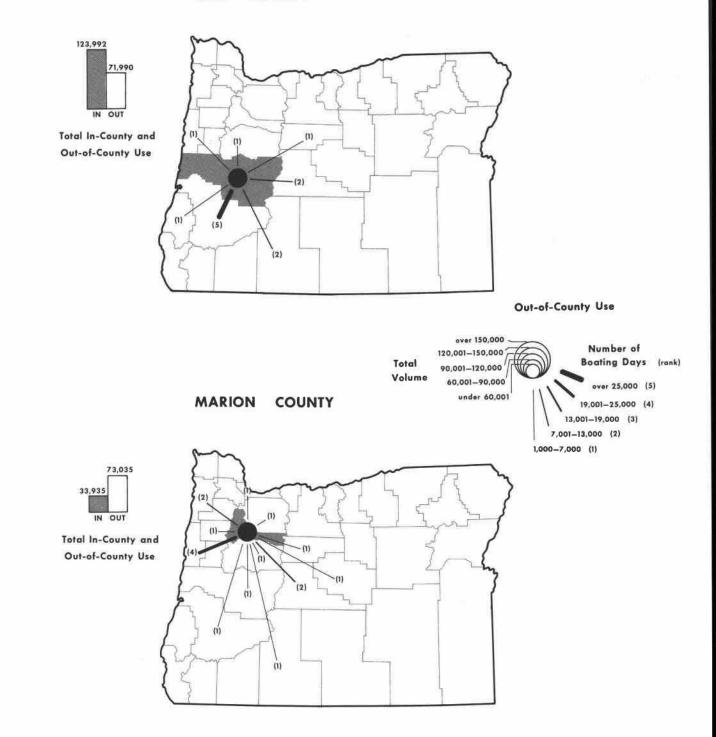
						County of Use (Boating Days)													
Lane	Lincoln	Linn	Malheur	Marton	Morrow	Multnomah	Polk	Sherman	Tillamook	Umatilla	Union	Wal Iowa	Wasco	Washington	Wheeler	Yamhil1	Non- Response ,	County Not Specified	Total No. of Boating Days
154	0	1,230	692	46	0	0	0	0	154	0	0	0	0	0	0	0	0	92	8,687
3,736	10,302	7,949	D	46	0	0	31	0	308	0	0	0	0	123	0	0	46	323	32,597
1,661	9,333	1,722	1,030	3,721	0	19,389	123	0	16,283	0	0	31	1,537	461	0	461	431	2,168	215,524
123	0	٥	0	46	0	92	0	0	2,060	0	0	108	0	0	0	0	138	384	37,656
692	738	62	246	523	0	1,707	0	0	800	0	0	92	0	138	0	0	200	400	39,009
1,353	62	0	0	77	0	77	0	0	77	D	0	0	0	0	0	0	938	876	86,736
261	0	0	31	0	0	61	0	0	0	0	0	0	0	0	0	0	169	62	5,981
77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	354	35,580
246	554	0	77	15	0	0	0	0	169	0	0	0	0	0	0	0	62	461	45,713
3,675	477	0	430	15	0	62	0	77	46	0	0	0	0	0	0	0	707	769	76,726
0	0	0	15	0	231	0	0	46	0	0	0	15	0	0	0	0	0	0	769
D	0	0	231	0	0	G	0	0	15	0	0	0	0	0	0	0	0	31	3,460
0	0	0	230	0	0	77	0	0	0	0	0	0	0	0	0	0	0	31	2,291
0	138	15	92	0	0	108	0	31	92	0	0	0	62	0	0	0	0	62	5,720
1,184	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	277	861	84,921
Û	77	154	0	231	D	0	0	92	0	0	0	0	15	0	0	0	0	61	6,335
323	0	31	0	0	۵	0	0	0	0	0	0	0	0	0	D	0	0	292	28,568
246	723	61	92	0	0	0	0	0	0	0	0	0	0	0	0	0	554	600	58,890
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	46	4,198
123,992	3,398	1,276	77	200	0	846	0	15	338	0	0	0	307	31	0	0	2,091	2,014	200,087
1,261	47,865	661	0	384	0	0	0	0	1,537	0	0	0	0	0	0	0	77	569	56,998
3,306	9,349	17,667	231	1,138	0		0	0	430	0	0	0	0	0	0	15	92	461	46,543
, 0	0	0	9,472	0	0		0	0	0	0	77	46	31	0	0	0	0	123	11,855
4,597	22,449	4,044	154	33,935	0	1,968	6,704	0	8,487	0	323	138	0	446	0	0	1,476	1,107	109,553
0	0	0	0	D	3,844	0	0	0	62	1,030	92	0	0	0	46	0	0	46	5,289
4,290	10,363	1,184	646	3,583		212,418	0	261	28,153	154	0	461	3,490	2,768	0	1,153	11,547	3,905	387,596
354	6,089	584	0	1,614	0	0.000	2,137	0	646	0	0	0	0	0	0	184	0	154	15,576
0	0	0	0	0	D	0	0	123	0	0	0	0	15	0	0	0	400	0	538
0	1,076	123	0	0	0	138	0	0	26,693	277	0	0	0	0	0	123	0	308	29,983
0	723	231	308	0	1,322	0	0	15	46	12,255	154	1,076	31	0	0	0	215	200	19,220
0	31	77	277	0	0	0	0	0	246	292	1,184	2,045	0	0	0	0	0	108	10,579
61	200	0	0	0	0	0	0	0	0	0	0	2,614	0	0	0	0	0	31	3,675
138	800	0	0	O	0		0	185	46	0	0	185	5,704	0	0	0	123	123	11,778
3,014	4,797	984	31	3,598	77		0	0	15,622	0	0	92	369	11,455	0	4,075	3,521	1,169	116,150
0	0	0	0	0	0	-	0	0	0	0	0	0	D	0	0	0	0	0	154
953	5,628	154	0	800	0		31	0	2,737	0	0	0	46	738	0	5,182	92	215	21,849
615	2,168	92	31	277	46	2,414	400	554	4,520	0	92	0	0	31	0	308	415	169	16,698
156,312	137,337	38,301	14,393	50,249	5,551	272,876	9,426	1,399	109,568	14,023	1,922	6,903	11,607	16,191	46	12,131	23,602	18,575	1,843,482

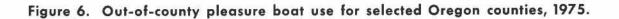
CLACKAMAS COUNTY



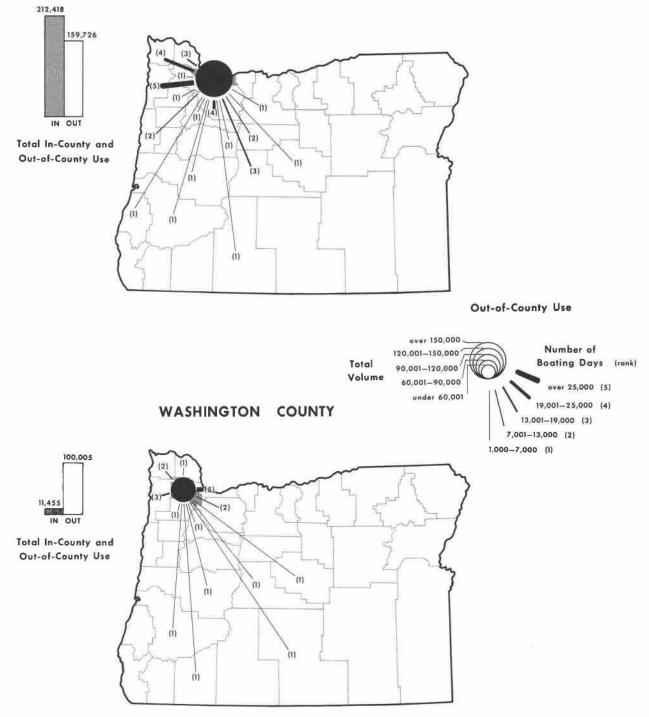


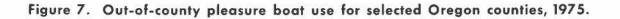
LANE COUNTY





MULTNOMAH COUNTY





The 30 "Most Used" Bodies of Water by Activity Type, in Oregon, 1975.

			Activity Type	e (Number of	Boating Days)		Total Number
Rank	Body of Water	Fishing	Sailing	Skiing	Cruising	Other	of Boating Days
1	Willamette River	139,198*	9,656	54,415	47,635	8,380	259,284
2	Columbia River	69,253	26,370	32,059	60,735	12,608	201,025
3	Pacific Ocean	101,481*	2,599	1,107	1,876	3,307	101,370
4	South Tenmile Lake	12,516	584	7,196	8,657	9,764	38,717
5	Detroit Reservoir	17,774*	215	9,810	5,351	523	33,673
6	Rogue River	24,279*	0	2,706	1,107	3,091	31,183
7	Lake Oswego	308	1,476	12,793	11,255	1,553	27,385
8	Diamond Lake	24,909*	338	61	231	108	25,647
9	Tillamook Bay	19,097*	0	400	661	3,798	23,956
10	Klamath Lake	8,134	2,691	3,952	5,074	3,659	23,510
11	Umpqua River	19,743*	0	308	584	2,783	23,418
12	Lake Billy Chinook	10,609	354	8,810	3,152	0	22,925
13	Fern Ridge Reservoir	1,414	8,887	8,626	3,583	200	22,710
14	Prineville Reservoir	13,316*	15	6,243	1,707	169	21,450
15	Siltcoos Lake	15,545*	77	2,045	3,306	61	21,034
16	Siletz River	17,267*	0	15	646	1,691	19,619
17	Howard Prairie Reservoir	12,639*	3,275	769	953	569	18,205
18	Crane Prairie Reservoir	15,545*	215	1,584	707	0	18,051
19	Siuslaw River	13,946*	0	138	200	600	14,884
20	Foster Reservoir	4,767	15	6,581	2,506	138	14,007
21	Alsea River	12,424*	0	92	477	830	13,823
22	Lake O-Woods	2,276	492	5,489	5,289	215	13,761
23	Odell Lake	10,594*	738	1,199	800	0	13,331
24	Wickiup Reservoir	11,670*	0	1,061	538	46	13,315
25	Yaquina Bay	11,301*	323	338	261	969	13,192
26	Round Butte Reservoir	4,351	0	5,535	1,830	1,368	13,084
27	Hyatt Reservoir	9,659*	0	0	1,046	31	10,736
28	Snake River	6,627*	108	2,537	938	415	10,625
29	Nehalem River	8,272*	0	0	1,123	631	10,026
30	Devils Lake (Lincoln)	3,506	46	3,121	2,722	215	9,610

* Indicates an "Activity Specialized" Body of Water

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Oregon pleasure boat use by county of registration and month of year during the 1975 boating season.

County of				Piotiti		tor (num		ating Day	» /			Ţ	otal Numbe of
Registration	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug B	oating Day
Baker	584	323	46	31	31	0	138	185	815	1,491	2,106	1,461	7,211
Benton	3,121	1,860	646	477	369	292	615	1,199	3,352	5,643	7,642	7,427	32,643
Clackamas	19,097	9,518	2,829	1,630	1,737	3,659	9,871	26,431	27,446	34,996	43,437	43,406	224,057
Clatsop	4,551	4,028	3,060	1,876	1,276	769	1,030	2,060	2,829	4,090	5,289	6,304	37,162
Columbia	3,998	1,799	1,199	600	554	1,015	2,875	8,118	5,443	5,043	7,334	7,304	45,282
Coos	8,149	5,658	4,690	2,091	2,030	1,876	2,937	6,350	9,794	12,701	13,792	12,885	82,953
Crook	538	384	46	0	31	31	15	77	692	1,215	1,568	1,384	5,981
Curry	5,566	3,552	1,338	507	446	384	584	1,737	4,997	6,489	9,610	7,796	43,006
Deschutes	4,428	1,876	169	46	46	0	231	2,368	5,397	10,594	12,285	9,179	46,619
Douglas	7,749	4,905	2,998	1,645	1,322	1,368	2,460	7,457	10,210	15,361	18,605	14,284	88,364
Gilliam	77	15	0	0	0	31	0	0	154	77	200	246	800
Grant	384	215	15	0	0	0	0	277	461	738	938	677	3,705
Harney	169	62	0	0	0	0	0	31	138	215	600	876	2,091
Hood River	523	292	108	62	61	92	231	215	507	846	984	1,307	5,228
Jackson	9,902	4,920	2,182	1,092	846	707	892	4,367	10,717	19,035	22,003	19,758	96,421
Jefferson	415	108	0	0	0	31	46	323	584	830	2,076	1,261	5,674
Josephine	2,752	1,922	1,245	861	861	600	538	1,630	3,429	5,458	6,381	5,458	31,13
Klamath	4,505	3,137	1,830	600	246	77	800	2,568	8,549	12,178	15,437	11,517	61,444
Lake	108	46	200	31	0	15	61	46	446	923	1,215	892	3,983
Lane	21,388	10,548	3,521	1,107	1,122	830	2,230	8,334	20,373	40,193	51,110	47,266	208,022
Lincoln	6,811	5,105	1,614	815	492	615	892	2,060	4,152	8,103	11,609	12,993	55,261
Linn	3,952	1,537	569	492	292	277	477	1,999	4,567	8,718	12,654	9,579	45,113
Malheur	799	461	154	123	123	46	154	677	1,753	2,768	3,091	2,522	12,671
Marion	10,948	6,688	2,337	1,230	1,015	1,122	2,199	6,150	10,794	19,035	28,046	26,862	116,426
Morrow	523	169	0	0	0	0	15	200	584	1,138	1,399	1,368	5,396
Multnomah	44,206	22,695	8,749	4,244	4,613	6,719	18,759	47,635	47,204	57,583	75,711	83,891	422,009
Polk	1,538	676	200	246	215	62	277	1,076	1,907	2,829	4,751	4,213	17,990
Sherman	277	0	0	0	0	0	15	15	46	92	138	277	860
Tillamook	4,274	3,767	969	185	292	277	431	1,230	2,998	4,551	5,874	7,242	32,090
Umatilla	1,953	584	15	15	77	77	169	800	2,983	4,136	6,181	5,013	22,00
Union	907	661	92	31	0	0	46	384	1,245	2,691	3,214	2,583	11,854
Wallowa	200	15	0	0	0	0	67	61	554	861	815	907	3,47
Wasco	1,261	446	154	61	61	31	277	477	1,430	1,953	2,660	5,244	12,05
Washington	12,547	6,919		1,153	999	1,107	3,506	10,056	12,993	22,541	31,013	31,813	136,66
Wheeler	0	0	0	0	0	0	0	15	62	0	0	46	12
Yamhill	2,260	1,061	185	108	138	215	384	1,584	2,214	3,337	5,766	5,920	23,17
TOTAL		105,952	- 12.27.214					100000	20				1,948,94
Non-Response	200,100	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			,						25%		18,19
	3%		-										62,74

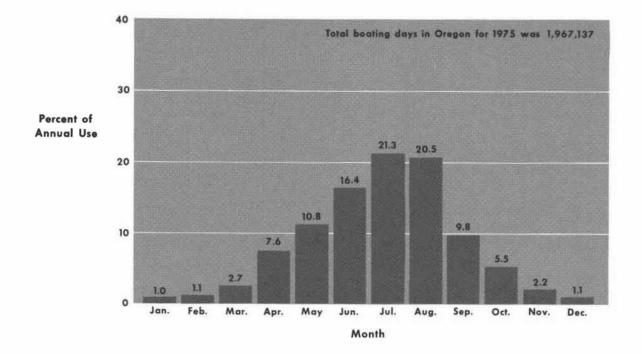


Figure 8. Monthly variation in pleasure boat use in Oregon, during the boating season, 1974—1975.

Oregon pleasure boat launches by county of launch and by launch facility type during the 1975 boating season.

	Launch Facility Type	(Number of Launches)		
County of Registration	Government	Commerical	Private	Total Number of Launches
Baker	10,994	108	999	12,101
Benton	4,751	861	492	6,104
Clackamas	39,485	3,029	5,751	48,265
Clatsop	17,682	2,353	4,843	24,878
Columbia	11,916	3,183	1,599	16,698
Coos	30,014	2,906	3,598	36,518
Crook	9,056	431	876	10,363
Curry	10,548	1,414	2,983	14,945
)eschutes	33,335	1,168	4,490	38,993
louglas	37,594	3,444	4,459	45,497
Gilliam	92	0	0	92
Grant	77	0	92	169
larney	292	0	246	538
lood River	923	0	15	938
Jackson	20,604	1,614	2,276	24,494
lefferson	10,025	154	1,830	12,009
osephine	5,997	138	723	6,858
lamath	18,236	2,445	7,319	28,000
ake	1,737	15	308	2,060
ane	52,416	4,782	8,057	65,255
incoln	19,466	12,039	5,228	36,733
inn	21,557	953	2,691	25,201
la l heur	6,212	123	784	7,119
larion	18,328	1,999	1,876	22,203
lorrow	1,676	1,153	323	3,152
lultnomah	64,671	8,072	15,545	88,289
rolk	4,336	431	138	4,905
herman	892	0	0	892
illamook	33,397	5,105	4,228	42,730
matilla	4,951	753	400	6,104
nion	907	0	138	1,045
lallowa	2,429	15	1,169	3,613
lasco	3,844	154	815	4,813
lashington	9,487	692	1,153	11,332
lheeler	46	0	31	77
/amhill	7,934	0	215	8,149
County Not Specified	26,093	2,891	4,736	33,720
TOTAL IN STATE	542,000	62,427	90,425	694,852
Dut of State TOTAL	9,594	3,690	5,997	19,281

Boat Transportation

Over 80 percent of the respondents indicated that they transported their boat at some time during the 1975 boating season. Of those transporting their boats, 81.4 percent used a trailer as their means of transportation, with the remainder using either the tops of automobiles or the beds of pickup trucks in order to transport their boats. The length and weight characteristics of the boat are undoubtedly among the prime determinants of the mode of transportation chosen. Information on the number of times a boat was transported indicates that over 75 percent of the boats sampled were transported ten times or less during the year, while over 90 percent were transported 20 times or less in the 1975 boating season.

Table 8 shows the number of launchings that were made by Oregon boat owners at various types of facilities around the state. The majority of these launchings (77.4 percent) were made at some type of publicly owned launch facility (federal, state, or county). The remainder of launchings were made at either private (13.5 percent) or commercial (9.2 percent) launch facilities. The estimated total number of launchings within the state during the 1975 season is 694,852, which represents an average of eight launchings for each registered boat transported during the year.

Boating Activities

Participation in various water related activities by Oregon boaters is shown in Figure 9. Fishing is reported as the most popular

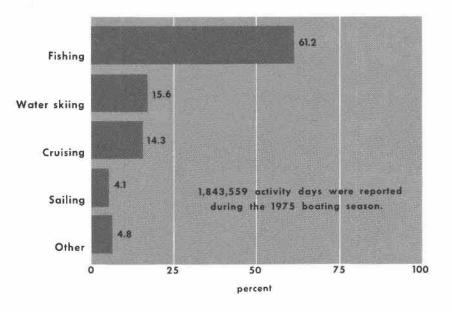


Figure 9. Preferred activities of pleasure boat users in Oregon, 1975.



activity, accounting for over 60 percent of the total activities engaged in. Water skiing and cruising are the next most popular activities, each being responsible for about 15 percent of all boating use. While sailing only accounts for about four percent of the use in this survey, this may represent an underestimate of the total amount of sailing due to the fact that sailboats under 12 feet in length are not required to register, and thus are not represented in this report.

In discussing various boating activities, it must be noted that these activities do not necessarily occur in exclusion of each other. Boating, as a form of outdoor recreation, does not usually consist of just one activity or phase, but rather a series of activities and phases which combine to form the total recreation experience. For example, a boater may indicate that his "principal" activity is fishing, but even fishing will quite often require some amount of cruising, and the recreation experiences which result from this activity. Similarly, boating may be combined with other activities such as swimming, picnicing, camping, hunting, and so forth. While the identification of recreationists by their activity preference is both useful and necessary, there is also the need to view water-based recreation such as "boating" as an activity in itself.

Tables 9 and 10 show the amount of boating use for various activities in the county of boat registration and the county of boat use. Once again, as in Table 5, there is a great deal of difference between the amount of use generated by the county of registration and the county in which the activities actually take place. The types of

Oregon pleasure boat use by county of registration and by activity type during the 1975 boating season.

		Activity Type	(Number of Boatin	ng Days)		
County of Reg.	Fishing	Sailing	Water Skiing	Cruising	Other	Total Number of Boating Day
Baker	5,151	0	1,799	1,107	538	8,595
Senton	21,941	784	6,289	1,876	2,122	33,012
lackamas	125,960	5,935	41,638	36,672	5,951	216,155
Clatsop	23,648	0	969	4,305	8,365	37,287
Columbia	26,385	200	4,275	6,765	1,122	38,747
loos	49,864	846	7,811	10,471	16,898	85,890
Crook	3,998	0	1,568	400	0	5,966
Curry	30,290	0	523	2,122	2,291	35,226
)eschutes	33,335	922	5,028	4,459	1,784	45,528
)oug]as	56,783	0	9,564	3,337	6,827	76,511
Gilliam	261	0	523	0	0	784
Grant	2,445	0	1,015	46	0	3,506
larney	1,768	0	369	123	0	2,260
lood River	2,168	0	569	2,875	62	5,674
Jackson	59,843	4,444	10,779	6,335	3,167	84,568
lefferson	3,475	0	1,292	1,276	231	6,273
losephine	22,926	0	3,152	1,153	1,153	28,384
lamath	33,335	3,890	6,504	10,425	4,321	58,475
ake	3,152	31	431	446	92	4,152
.ane	132,571	8,749	32,612	19,420	6,027	194,767
incoln	44,483	677	2,829	2,983	5,535	56,507
.inn	30,552	784	10,071	4,413	892	46,712
Malheur	8,180	92	2,091	784	615	11,763
larion	66,808	969	24,648	14,238	4,275	110,937
Aorrow	2,414	77	2,199	538	46	5,274
Multnomah	203,424	30,106	55,599	87,351	10,978	387,458
Polk	10,978	769	1,799	1,522	723	15,791
Sherman	77	0	446	15	0	538
Tillamook	20,880	277	984	1,384	6,212	29,737
Jmatilla	8,687	277	5,612	4,244	569	19,389
Jnion	7,503	0	2,706	415	62	10,686
Wallowa	2,183	0	1,292	169	0	3,644
lasco	3,905	1,507	4,474	1,799	0	11,686
Washington	58,921	7,242	26,954	21,296	3,782	118,195
Wheeler	123	0	31	0	0	154
Yamhill	14,115	630	5,028	1,599	707	22,080
TOTAL	1,122,534	69,209	283,473	256,363	95,347	1,826,926
Non-Response	5,720	3,321	2,337	3,690	1,568	16,637
TOTAL	1,128,252	72,529	285,810	260,053	96,915	1,843,559

Oregon pleasure boat use by county of use and by activity type during the 1975 boating season.

	AC	tivity Type (Num!	2010 - 1 11 - 11 - 11 - 11 - 11 - 11 - 11	ys)		
County of Use	Fishing	Sailing	Water Skiing	Cruising	Other	Total Number of Boating Day:
Baker	14,945	31	4,290	892	0	20,650
Benton	3,598	O	953	600	1,291	6,442
Clackamas	84,983	2,168	33,289	31,659	2,276	154,374
Clatsop	57,368	600	1,768	6,412	9,103	75,250
Columbia	38,348	1,092	3,229	8,933	1,538	53,139
Coos	53,477	753	8,887	12,009	18,036	93,163
Crook	24,279	15	7,304	1,999	323	33,919
Curry	54,216	0	261	2,737	3,229	60,443
Deschutes	82,953	1,261	6,781	4,905	446	96,346
Douglas	100,974	431	8,518	5,382	8,380	123,684
Gilliam	523	184	569	261	185	1,722
Grant	907	0	77	0	0	984
Harney	1,922	0	215	184	0	2,322
Hood River	1,768	1,507	507	2,998	31	6,812
Jackson	45,067	4,182	8,088	2,906	1,245	61,488
Jefferson	22,126	1,768	17,744	7,626	3,198	52,463
Josephine	8,657	0	1,307	969	292	11,224
Klamath	43,760	4,059	13,531	14,592	6,243	82,184
ake	4,966	46	953	400	92	6,458
ane	86,197	10,594	38,870	17,283	3,367	156,312
Lincoln	115,166	2,875	4,874	6,442	7,980	137,338
.inn	17,744	584	13,715	4,736	1,522	38,301
1a1 heur	10,025	77	2,568	876	846	14,392
farion	20,911	523	16,683	9,733	2,399	50,249
1orrow	2,506	108	1,876	692	369	5,551
4ultnomah	91,641	35,918	48,696	90,195	6,427	272,877
Polk	2,014	0	4,428	1,722	1,261	9,425
Sherman	969	0	338	77	15	1,399
[i]]amook	87,735	1,138	2,875	4,736	13,085	109,569
Jmatilla	4,059	461	5,689	3,552	262	14,023
Jnion	1,507	15	261	77	62	1,922
Vallowa	3,629	0	2,629	646	0	6,904
lasco	4,751	0	5,474	1,369	15	11,609
lashington	7,903	846	5,397	1,707	338	16,191
heeler	46	0	0	0	0	46
Yamhill	1,907	0	6,827	2,875	523	12,132
Non-Response						23,602
County Not Specified						18,574
TOTAL	1,116,985	72,267	282,702	256,855	96,100	1,843,483

*Oregon registered boats only. This table does not account for boats used in Oregon which are registered in other states or for Oregon boats which are not registered.

activity taking place for the 30 "most used" bodies of water in the state is shown in Table 6 (p. 29). An examination of this table reveals that certain water bodies tend to be "activity-specialized" (Lentnek, et al., 1969) in that, over 50 percent of the use at that water body is devoted to a single use. The Pacific Ocean can be used as an example of such an activity-specialized water body since 92 percent of the total use results from fishing. A complete tabulation of water bodies for which such a specialization exists is shown in Appendix E by an asterisk (*) in the column of activity type.

Fuel Consumption

Data regarding the amount of fuel consumed by pleasure boats registered in Oregon indicates that over 85 percent of the respondents used ten gallons or less of fuel for boat operation on a typical boating day, with an overall average daily consumption of 6.5 gallons. Fuel consumption amounts to over 716,000 gallons on a typical boating day for the entire state. The total amount of fuel used by pleasure boats registered in Oregon is therefore estimated to be at least 12,695,000 gallons in 1975, which is equivalent to an average of 118 gallons per motorized boat annually. It should be noted that fuel is also consumed in the transportation of boats to and from their place of use.

At seven cents per gallon state tax and discounting refunds made only upon request of the boat owner, the total annual gross state marine fuel income is at least \$888,692, of which \$87,261 was refunded in 1975 at the request of boat owners. The net income to the State of Oregon thus probably exceeded \$801,431.

BOAT INSPECTION AND SAFETY

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BOAT INSPECTION AND SAFETY

In 1975, there were 130 reported boating accidents within Oregon involving 34 fatalities and over \$242,000 in property damage (U.S. Coast Guard, 1975). While the number of reported accidents in 1975 declined from the 146 recorded in 1974, when Oregon ranked tenth in boating accidents nationwide, the number of fatalities nevertheless remained high and property damage increased by nearly \$40,000 over the 1974 figure.¹ A continued program of boating equipment inspection, law enforcement, and boating safety education would appear necessary in order to encourage safer boating in the waters of Oregon.

During the 1975 boating season there were over 20,000 boats which were stopped for an inspection, or approximately 24 percent of the boats registered in the state. Table 11 shows a breakdown of these inspections by the type of boat and the agency conducting the inspection. According to this, of the vessels inspected, the Sheriff's Marine Patrol was responsible for nearly 45 percent of all inspections, followed by the U.S. Coast Guard (19.6 percent) and the Oregon State Police (18 percent). Most of the boats inspected in 1975 were either outboards (73.6 percent) or inboard/outboards (19.2 percent). Very few sailboats (1.1 percent) were reported as being inspected during the 1975 season.

One aspect of the boating safety education is to encourage boat

¹ Source: Accident statistics compiled by the Oregon State Marine Board for 1975.

Oregon pleasure boat inspections by type of boat and by inspecting agency during the 1975 boating season.

		Insp	pecting Agency (Nu	mber of Boa	ats)			
Type of Boat	U.S. Coast Guard	Oregon State Police	Sheriff's Marine Patrol	Other	Multiple Response	Total No. of Inspected Boats	Total No. <u>NOT</u> Inspected or Not Used	Percent of Total Boats Inspected
Inboard	354	46	477	169	108	1,154	3,905	5.7%
Outboard	1,983	3,306	7,288	1,015	1,430	15,022	67,885	73.6%
Inboard w/ Out- board Drive	1,614	261	1,261	431	354	3,920	10,134	19.2%
Sailboat w/ Motor	46	0	46	46	15	154	1,214	0.8%
Sailboat w/o Motor	15	0	46	0	0	61	1,446	0.3%
Other	0	62	31	15	0	108	1,522	0.5%
Percent of Inspections	19.6	18.0	44.8	8.2	9.3			
TOTAL	4,012	3,675	9,149	1,676	1,907	20,419	86,106	

Missing Observations <u>4,520</u> TOTAL 111,045

owners to have their craft checked by authorized examiners. There were an estimated 9,700 Oregon boat owners who contacted the U.S. Coast Guard Auxiliary for a Courtesy Motorboat Examination (CME) in the 1975 boating season, or roughly ten percent of the total registered boats. Table 12 describes the estimated number of pleasure boat owners contacting the Coast Guard Auxiliary for a CME for each county in Oregon.

The percentage of boat owners completing a course in boating safety from various agencies between 1972 and 1975 is shown in Figure 10. Overall, only 12.8 percent of the respondents reported taking such a course during this period. The largest number of those completing a course in boating safety took it from either the U.S. Coast Guard Auxiliary (40 percent) or the U.S. Power Squadron (36 percent). Table 13 provides a county-by-county breakdown of pleasure boat owners completing a boating safety course from the various agencies.

Oregon pleasure boat owners contacting the Coast Guard Auxiliary for a Courtesy Motorboat Examination during the 1975 boating season.

County of Registration	Total Number of Registered Boat Owners	Number of Boat Owners Contacting CGA for Courtesy Motorboat Exam	Percent of Total
Baker	938	15	1.6
Benton	2,153	200	9.3
lackamas	9,579	677	7.1
Clatsop	1,614	92	5.7
Columbia	1,830	92	5.0
oos	4,190	231	5.5
rook	554	15	2.8
urry	1,430	338	23.7
Deschutes	3,275	92	2.8
ouglas	4,890	538	11
hilliam	93	31	33.3
Grant	338	15	4.5
larney	261	15	5.9
lood River	431	31	7.1
ackson	5,658	630	11.1
efferson	477	31	6.5
osephine	2,230	215	9.7
lamath	3,721	308	8.3
ake	262	0	0
ane	12,239	938	7.7
incoln	2,245	231	10.3
inn	3,829	308	8.0
lalheur	1,230	154	12.5
larion	6,581	538	8.2
lorrow	231	31	13.3
lultnomah	17,236	2,291	13.3
Polk	1,307	77	5.9
herman	63	0	0
fillamook	1,415	108	7.6
Jmatilla	1,461	138	9.5
Inion	984	0	0
Vallowa	246	0	0
lasco	646	92	14.3
Washington	6,935	892	12.9
Vheeler	63	0	0
Yamhill	1,584	338	21.4
Not Specified (O. of S.)	16	0	0
TOTAL	102,235	9,702	9.5
Missing Observations	8,810		
TOTAL	111,045		

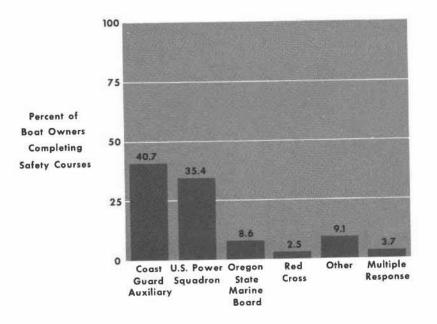
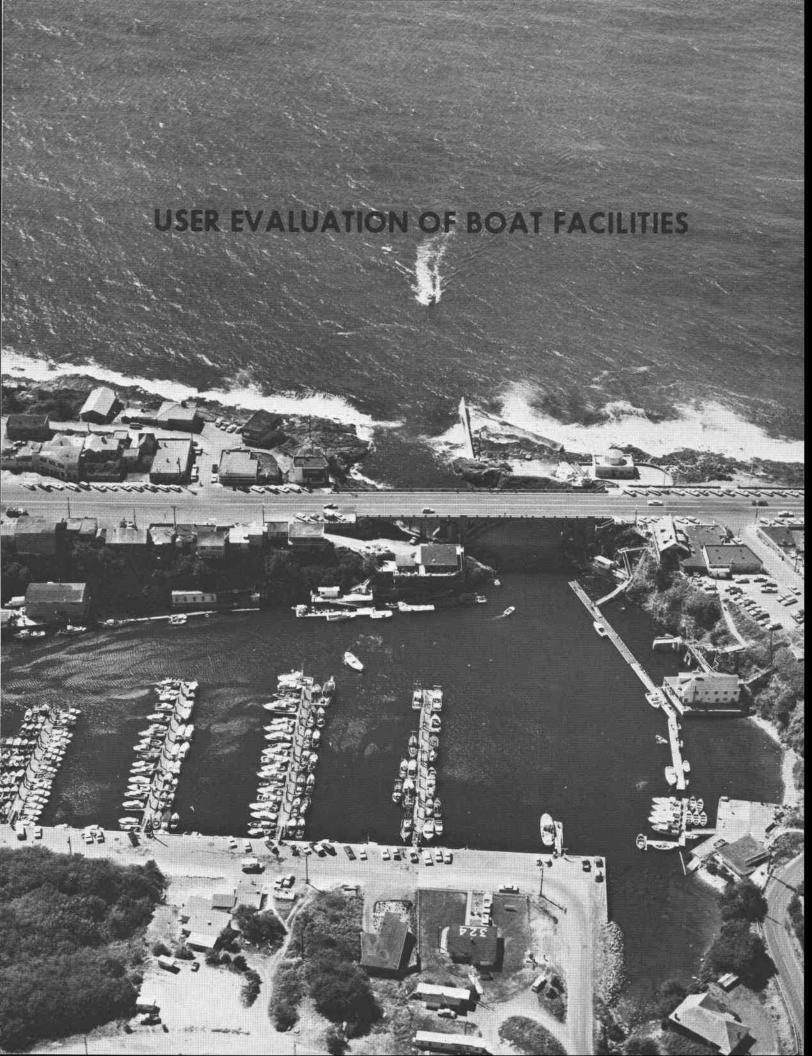


Figure 10. Sponsor of boating safety courses completed by registered boat owners in Oregon (September 1972 through August 1975).



Oregon pleasure boat owners completing boating safety courses during the period September 1975 through August 1975 by county of registration and by sponsoring agency.

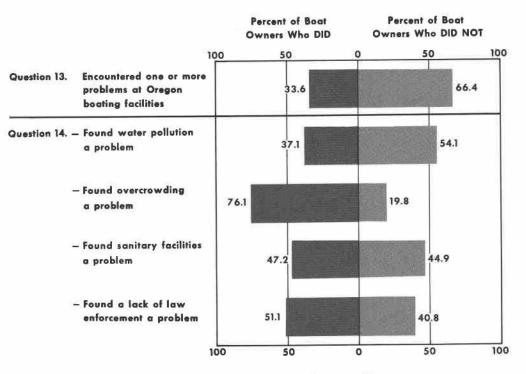
County of Reg.	USCG Auxiliary	U.S. Power Squadron	Red Cross	Oregon State Marine Board	Other	Multiple Response	Total Number Taking Course	No Course	Percent Com- pleting Course
Baker	12	0	12	0	12	0	36	646	5.3
Benton	256	28	14	28	43	0	369	1,660	18.2
Clackamas	174	832	27	55	165	101	1,354	7,791	14.8
Clatsop	51	66	2	0	66	33	218	1,508	12.6
Columbia	110	16	16	31	16	0	189	1,639	10.3
Coos	105	300	19	105	19	0	548	4,219	11.5
Crook	15	15	0	15	15	0	60	524	10.3
Curry	224	39	0	0	27	13	303	922	24.7
Deschutes	123	61	0	16	45	0	245	2,985	7.6
Douglas	456	63	0	92	0	0	611	4,242	12.6
Gilliam	13	0	0	0	0	0	13	62	17.3
Grant	0	0	12	0	0	0	12	258	4.4
Harney	0	0	0	0	0	0	0	273	0
Hood River	0	37	18	18	0	0	73	460	13.7
Jackson	327	0	46	92	46	0	511	5,225	8.9
Jefferson	28	0	0	14	0	0	42	434	8.8
Josephine	76	31	16	0	0	16	139	2,099	6.2
Klamath	227	15	15	30	45	15	342	3,304	9.4
Lake	0	0	0	12	0	0	12	209	5.4
Lane	545	266	24	61	170	48	1,114	10,998	9.2
Lincoln	203	29	0	29	29	0	290	1,807	13.8
Linn	330	48	16	32	32	16	474	3,491	12.0
Malheur	43	0	14	14	0	0	71	1,082	6.2
Marion	360	225	13	103	32	58	791	5,625	12.3
Morrow	39	0	0	0	0	0	39	157	19.9
Multnomah	850	1,858	20	198	277	178	3,381	16,405	17.1
Polk	64	32	0	32	0	0	128	1,223	9.5
Sherman	0	0	0	0	0	0	0	77	0
Tillamook	124	15	0	30	15	0	184	1,188	13.4
Umatilla	45	0	0	16	31	0	92	1,319	6.5
Union	0	0	0	0	23	0	23	710	3.1
Wallowa	0	0	0	18	0	0	18	249	6.7
Wasco	39	77	0	0	19	0	135	696	16.2
Washington	304	713	13	86	73	13	1,202	5,392	18.2
Wheeler	0	0	0	0	0	0	0	34	0
Yamhill	177	16	0	32	0	0	225	1,457	13.4
TOTAL	5,315	4,782	297	1,159	1,200	491	13,244	90,370	
Percent of Total Taking Course	40.1%	36.1%	2.2%	8.8%	9.1%	3.7%			



USER EVALUATION OF BOAT FACILITIES

With increased demand for water-based recreation and a limited supply of water bodies and facilities to satisfy this demand, there is a growing concern for the problems and conflicts associated with this demand. Identification of problems and conflicts among various users, and between recreationists and the resource, is necessary in order to guide management programs which seek to reduce these conflicting uses and protect the physical environment.

Boat owners were asked whether or not they encountered any problems at the facilities they visited, and if they did, to specify the type of problem, county and body of water. Slightly over onethird of the respondents indicated that they encountered some type of problem during the 1975 boating season as shown in Figure 11. Three-fourths of those responding that they encountered problems at boating facilities felt that overcrowding needed attention at the place where they participated in boating activities. Figure 11 shows the opinions of boaters who found one or more conditions to be a problem at the facilities they visited during the boating season. Along with overcrowding, a lack of law enforcement and sanitary facilities were also found to need attention. It should be noted that the percentage of boat owners who did or did not find one of the four conditions to be a problem only represents those responding to Question 14 (see Appendix B) and that the number of opinions on each condition is not uniform.



Note: Percentages may not total 100% due to `no opinion' responses.

Figure 11. Identification of boating problems encountered by registered pleasure boat owners during the boating season, 1974–1975.

The estimated number of boaters experiencing problems at various bodies of water is shown in Table 14. An examination of this table indicates that the greatest number of problems are encountered at the most used bodies of water, especially the problem of overcrowding, as seen for the Willamette and Columbia Rivers. A complete tabulation of problems by body of water appears in Appendix F.

The 30 "Most Problem" Bodies of Water by Type of Problem, in Oregon, 1975.

		Туре	of Problem ((Number of Boat	t Owners)		Total Number
Rank	Body of Water	Water Pollution	Over- Crowding	Sanitary Facilities	Lack of Law Enforcement	Total Number of Reported Problems	of Boating Days at Body of Water
1	Willamette River	1,030	2,783	1,184	1,522	6,519	259,284
2	Columbia River	846	2,168	738	799	4,551	201,025
3	Yaquina Bay	169	1,030	523	200	1,922	13,193
4	Tillamook Bay	92	1,246	261	185	1,784	23,956
5	Diamond Lake	277	630	46	231	1,184	25,647
6	Chetco Bay	154	553	185	215	1,107	6,627
7	Pacific Ocean	46	447	261	92	876	110,368
8	Detroit Reservoir	108	384	62	261	815	33,673
9	Fern Ridge Reservoir	138	261	62	308	769	22,710
10	Klamath Lake	477	15	108	154	754	23,510
11	Haag Lake	15	369	215	77	676	8,610
12	Lake Billy Chinook	123	307	46	154	630	22,926
13	Rogue River	77	292	92	108	569	31,182
14	Winchester Bay	92	231	154	77	554	7,703
15	Depoe Bay	31	323	154	31	539	3,659
16	Prineville Reservoir	31	184	138	185	538	21,449
17	Coos Bay	200	184	46	62	492	9,226
18	South Tenmile Lake	108	261	31	92	492	38,717
19	Foster Reservoir	15	308	31	123	477	14,007
20	Fall Creek Reservoir	46	200	31	169	446	4,121
21	Crane Prairie Reservoir	15	154	154	92	415	18,051
22	Umpqua River	92	92	138	77	399	23,417
23	Snake River	92	108	92	92	384	10,625
24	Hyatt Reservoir	15	92	123	108	338	10,732
25	Cooper Creek Reservoir	0	154	0	169	323	4,843
26	Lake 0-Woods	0	138	15	169	322	13,762
27	East Lake	31	123	46	108	308	9,425
28	Emigrant Lake	108	62	15	123	308	3,644
29	Round Butte Reservoir	15	215	15	46	291	13,085
30	Howard Prairie Reservoir	0	169	31	77	277	18,205

GLOSSARY

Boating Day - any portion of a 24-hour period in which a participant is engaged in boating activities.

<u>Boat Owners</u> - those individuals who own a pleasure boat registered with the Oregon State Marine Board.

<u>Boating Population</u> - the aggregate of pleasure boat owners in Oregon from which the sample for the 1975 study was drawn.

Boating Season - a 12-month period beginning September 1, 1974 and ending August 31, 1975 which conforms to the guidelines for conducting the 1975 boating survey.

<u>Inboard</u> - a type of boat for which the primary power system is located within and permanently attached to the hull.

<u>Inboard/Outboard</u> - a type of boat for which the engine of the primary power system is located within and permanently attached to the hull but with an external "outboard" propulsion unit which steers and drives the water craft.

Launching Ramp - an inclined surface leading to the water from which trailered boats may be launched and retrieved.

Other Boats - watercraft other than outboard, inboard/outboard, inboard and sailboats.

<u>Outboard</u> - a type of boat for which the power system is not permanently attached to the structure of the watercraft.

<u>Registered Boat</u> - a vessel which has been issued a certificate of number by the Oregon State Marine Board. All motorized pleasure vessels and sailboats 12 feet and over are required to obtain a certificate of number.

<u>Sailboat</u> - a type of boat intended to be propelled primarily by wind using a sail, regardless of size or design.

<u>Sample</u> - a collection of those sample units which have been selected from a sample population.

Sample Population - a complete list of all sample units.

<u>Sample Unit</u> - a subdivision of a target population, which is considered unique.

BIBLIOGRAPHY

Bomberg, K.

1973 Determination of the number of commercial and noncommercial recreational boats in the U.S., their use, and selected characteristics. Arlington: Information Concepts, Inc.

Bureau of Governmental Research and Service

1972 Pleasure Boating in Oregon. Salem: State Printing Office.

Lentnek, Barry, Carlton S. Van Doren, and James R. Trail 1969 Spatial Behavior in Recreational Boating. Journal of Leisure Research, Vol. 1, No. 2, pp. 103-124.

Linsert, H. Jr.

1971 A system for estimation recreational boats and their sanitation facilities in the United States. Arlington: Information Concepts, Inc.

Michigan State University, Department of Resource Development 1968 Michigan recreational boating needs study-1968. Lansing: Unpublished report to the Waterways Division, Department of Natural Resources.

Smith, Gormon C., and Henry Linsert

- 1971 A recreational boating population statistical information system. Washington, D.C.: Coast Guard Office of Research and Development.
- U.S. Army Corps of Engineers and U.S. Bureau of Outdoor Recreation 1968 Pleasure Boating Study. Puget Sound and adjacent waters in the state of Washington. Olympia: Washington State Parks and Recreation Commission.

Wulfsberg, Rolf M., and Darryl A. Lang

1974 Recreational boating in the continental United States in 1973: the nationwide boating survey. Washington, D.C.: U.S. Coast Guard and Department of Transportation.

APPENDIX A

SUMMARY OF METHODOLOGY

Description of Sample Population

The sample was drawn from a population of watercraft registered with the Oregon State Marine Board and classified by use as pleasure boats. Furthermore, the population was restricted to include only those boat owners with Oregon mailing addresses. New registrations were included in the population in August, 1975, and the sample drawn September, 1975.

Sampling Procedures

In order to adequately assess boating use in all portions of the state, the State Marine Board had the population stratified by U.S. Postal Service Zip Code numbers and provided Oregon State University with a ten percent systematic sample beginning with the first boat registered in that strata, and selecting each tenth boat in that strata until no more boats were registered in that strata. This procedure yielded 11,637 units. Subsequent statistical analysis of the sample was based on the assumption the selection procedures had produced a simple random sample.

Questionnaire Design

The survey questionnaire was constructed following a design previously employed in the Michigan Recreational Boating Needs Study - 1968 (Michigan State University, 1968). Modifications were made to the Michigan questionnaire to reflect the needs of

the Oregon State Marine Board and to better assess boating activity in Oregon. Some improvement over the original survey instrument resulted from a limited pre-test, although time constraints precluded thorough assessment of the questionnaire design, therefore the impact of wording and positional bias of questions on response is unknown. A copy of the questionnaire is included in Appendix C.

Mailing and Follow-Ups

The questionnaire was bulk-mailed to each sampling unit in a window envelope and a postcard follow-up was sent to all sampling units approximately two weeks later. A final response rate of 62 percent was achieved. While the percentage of questionnaires returned compares favorably with other surveys of this type, several incidents involving the mailing procedure might have precluded the opportunities for a higher return rate. First, approximately 370 of the addresses were without proper Zip Code and therefore were added manually to the questionnaires for the initial mailing. The additions were not made on the postal card follow-up possibly reducing the return rate on these 370 questionnaires. Second, bulk mail is not normally forwarded or returned to sender, therefore the percentage of the sampling units which did not receive the questionnaire is unknown. Third, a problem occurred when a certain number of address labels were defaced while being affixed to the questionnaire prior to mailing. Subsequently, some of these defaced labels failed to contain information necessary to be properly handled by the U.S. Postal

Service or lacked other identifying data needed by the respondent to properly complete the questionnaire. While the effect of the above conditions is speculation, there is high probability the response rate could have been improved.

Information from the returned survey instrument was manually coded and converted to a digitized form for processing by computer, initially, by production keypunching (3,120 questionnaires), subsequently, by optical scanning (4,102 questionnaires). Three computer cards were used to register information from one questionnaire. Several editing programs were employed to scan the data for coding errors and guard against logical contradictions in responses. A commercially produced statistical analysis program (Statistical Package for the Social Sciences) was called upon for the majority of reporting and analysis. APPENDIX B



STATE MARINE BOARD

OFFICE OF THE DIRECTOR

3000 MARKET ST. N.E., #505 . SALEM, OREGON . 97310 . 378-8587, 378-8588

September 1975

Dear Oregon Boat Owner:

Oregon law directs that the State Marine Board conduct a boating survey every three years.

The last survey, conducted in 1971-1972, has resulted in the construction of new or improved marine facilities, more effective safety and law enforcement patrol, increased emphasis on boating safety education for the young and novice boaters, and establishment of reasonable boating regulations where needed.

We now request your assistance in this 1975 survey. Your name was selected at random from our list of boat registrants and your reply will not be personally identified. It will be used with all other replies to show us the pattern of boating in Oregon and indicate where we should focus attention in order to improve boating opportunities in the state. Please place your completed questionnaire in the enclosed prepaid, preaddressed envelope and return it to us before October 20th.

Thank you for your assistance!

Sincerely, Tames Hadl Director

Enclosures

OREGON RECREATIONAL BOATING QUESTIONNAIRE

	lease answer questions 1 through 14 for the boat identified by the registration number and boat length which ppear above your address on page 1.
1.	WHAT TYPE OF POWER SYSTEM DOES THIS BOAT HAVE? (Check one)
	□ Inboard motor □ Outboard motor □ Inboard motor with outboard drive □ Sailboat with motor □
2.	PLEASE ESTIMATE THE AMOUNT OF FUEL YOU PURCHASE FOR THIS BOAT FOR A TYPICAL DAY OF BOATING ACTIVITYgallons (write in)
3.	WHAT IS THE HORSEPOWER RATING OF THE PRIMARY MOTOR (OR MOTORS) USED ON THIS BOAT? Hp
4.	WHAT COUNTY IS THIS BOAT REGISTERED IN?
5.	WAS THIS BOAT TRANSPORTED FROM YOUR HOME OR OTHER LOCATION TO PARTICULAR LAUNCHING SITES DURING THE PAST BOATING SEASON (year ending Sept. 1, 1975)?
6.	WAS THIS BOAT TRANSPORTED BY: Trailer Car-top carrier
7.	PLEASE INDICATE THE TOTAL NUMBER OF TIMES YOU TRANSPORTED THIS BOAT FROM THE PLACE OF STORAGE OR MOORING TO THE PLACE OF USE.

 IN THE TABLE BELOW, NAME THE COUNTIES WHERE YOU MOST OFTEN LAUNCHED THIS BOAT AND INDICATE THE NUMBER OF TIMES THE BOAT WAS LAUNCHED AT EACH BOATING ACCESS POINT.

		Number of Times This Boat Launched at-								
	County (Write in)	Commercial marina	Private property or other	Public Marina or Ramp						
	(write iii)			Federal	State	City, County				
Most Launches:	>									
2nd most Launches:	>									
All other Launches:	>									

9. PLEASE INDICATE BELOW THE TOTAL NUMBER OF DAYS* BY MONTH THAT THIS BOAT WAS ACTUALLY UNDER POWER OR SAIL BETWEEN SEPTEMBER 1, 1974 AND AUGUST 31 OF THIS YEAR. IF THIS BOAT WAS NOT IN USE, PLEASE CHECK HERE
AND PROCEED TO QUESTION 15.

		· · · · · ·			NUMBER	OF DAYS'					
Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.
1974				1975							

* a day is any portion of a 24-hour period in which you used this boat.

10. IN THE TABLE BELOW, NAME THE BODIES OF WATER AND COUNTIES WHERE THIS BOAT WAS USED DURING THE PAST BOATING SEASON. Give the number of days that this boat was actually in the water under power or sail in each of these counties; and give the number of boating days spent on various activities.

			USE OF	THIS BO	AT				
Note: Count each part The number of days s ities may not necessa days shown in the let	day spent boating spent on specific b rilly equal the tota t-hand column.	es a full day. Loating scliv- Il number of				Gount a a parti as a fu	each part day t dular boating II day for that	spent on activity.	
						B No. days	oating Activitie you used this l	es boat for	
Total Days			Body		Fishing	Sailing	Water skiing	Cruising	Other
of Boating		County (write-in)	Water (write-i	in)	(No. Days)	(No. Days)	(No. Days)	(No. Days)	(No. Days)
18 Exan	IPLE	LANE	Willows	tts.R.	O	0	5	14	0
	ity of use: →								
Coun 2nd mo	nty of ->			. 1					
Coun	ty of ->								
	in "All Counties: ->								
	ake, river, bay,	etc.						l	
11. WAS THIS BO	O NO	If "NO," plea	se skip to qu	ECTED 1	3 " HIS BOAT		ne)	IS?	E.
Oregon St									
13. IN YOUR BO FACILITIES T		ITED?	GON THIS P If "YES," plea If "NO," pleas	ase conti	nue with q	uestion 14.	INTER AN	Y PROBLEN	IS AT THE
14. DO YOU FEE BOATING AC		HE FOLLOWIN	NG CONDITIO	NS NEE	DS ATTEN	ITION AT T	HE PLACE	YOU PARTI	ICIPATE IN
Problem or condition	C Not a problem	heck how you fee No opinion	l: Yes, a problem			County, B	ody of Wate	ər	
Water pollution				>					
Overcrowding				>					
Sanitary facilities				>					
Lack of enforcing rules and regulations				>					
(other)				>					

THE FOLLOWING QUESTION CONCERNS OTHER RECREATIONAL BOATS OWNED IN ADDITION TO THE ONE IDENTIFIED BY THE REGISTRATION NUMBER ON PAGE 1.

(Note: If you own no other boats, please check here
and skip over to question 16.)

15. IN THE TABLE BELOW, GIVE THE NUMBER OF OTHER REGISTERED AND UNREGISTERED BOATS OWNED BY YOU, AND BY THE MEMBERS OF YOUR IMMEDIATE FAMILY RESIDING WITH YOU. Also, give the boat length and horsepower rating of the motor used on it.

	Type of boat*	Length	Horsepower rating of the motor
	* Include other inboards, outboard	s, sailboats, canoes, inboard	-outboards, rowboats, etc.
16.	HAVE YOU CONTACTED THE CO DURING THE PAST 12 MONTHS?	AST GUARD AUXILIARY F	OR A VOLUNTARY "Courtesy Motorboat Examination"
17.			TED A BOATING SAFETY COURSE WITHIN THE PAS skip to question 19
18.	PLEASE INDICATE THE SPONSOF	OF THE COURSE. (check	one.)
	 Coast Guard Auxiliary U.S. Power Squadron Other (specify) 		Red Cross State Marine Board
19.	WHAT IS THE AGE AND SEX OF	NG THE QUESTIONS IN TH THE "HEAD OF YOUR FA Male Female	
20.	WHAT IS THE OCCUPATION OF the organization for which you work		IILY"? (Please indicate the type of job that you hold, NO
		(write in	
21.	PLEASE ESTIMATE YOUR TOTAL only one box).	FAMILY INCOME FOR 19	75 BY CHECKING THE PROPER BOX BELOW. (Check
			10,000 to \$14,999
22.	WHICH OF THE ANSWERS BELOW "HEAD OF YOUR FAMILY"? (Che		OTAL YEARS OF EDUCATION COMPLETED BY TH
		10 11 12 13 14	15 16 17 or more
		THANKS FOR YO	

APPENDIX C

Follow-up postcard mailed to all boat owners in the sample:

	OREGON STATE MARINE BOARD 3000 Market Street N.E., No. 505 Salem, Oregon 97310	NON-PROFIT ORG. BULK RATE U.S. POSTAGE PAID PERMIT NO 200 CORVALLIS OR 97331
	STATE MARINE BOARD OFFICE OF THE DIRECTOR 3000 MARKET ST. N.E., #505 • SALEM, OREGON • 97310 • 378-8587, 378-8588	
Dear O	October 1, 1975 regon Boat Owner:	
A coup Oregon naire, ness. aside There	le of days ago we sent you a questionnaire as part of the Boating Survey. If you have already returned the question- please consider this a special "thank you" for your prompt- If, as we often do ourselves, you have put the questionnaire to finish later please fill it out and return it right away. Will probably never be a better time than now. You for your help. Sincerely, James fladley Director	

Appendix D

Characteristics of Oregon pleasure boat owners by age group and by county of registration, 1975.

	Less Than	24-34	Group (Numb 35-44	45-54	55-64	65-74	More Than	Total Number
County of Reg.	24 yrs.	yrs.	yrs.	yrs.	yrs.	yrs.	74 yrs.	of Boat Owner
Baker	15	62	138	323	215	200	15	968
Benton	31	323	461	554	630	185	15	2,199
Clackamas	231	1,368	2,183	2,568	2,122	1,076	277	9,825
Clatsop	31	200	200	523	400	200	62	1,616
Columbia	31	261	384	431	507	215	31	1,860
Coos	31	615	769	1,092	953	569	185	4,214
rook	0	31	108	154	169	108	15	585
Curry	15	92	108	246	492	431	62	1,446
eschutes	46	308	584	677	876	753	123	3,367
ouglas	62	569	784	1,322	1,445	661	62	4,905
illiam	0	15	0	0	31	15	15	76
irant	15	0	15	77	108	108	15	338
larney	0	46	31	77	108	15	15	292
lood River	0	46	123	31	123	108	0	431
lackson	123	661	892	1,584	1,491	784	154	5,689
lefferson	15	77	77	123	154	62	15	523
losephine	62	261	461	384	569	400	108	2,245
lamath	31	461	600	1,092	969	523	92	3,768
.ake	0	46	77	62	46	31	0	262
ane	185	1,614	2,014	3,321	3,290	1,876	246	12,546
incoln	0	138	292	492	769	461	108	2,260
inn	77	431	615	1,138	876	523	185	3,845
1alheur	15	108	123	261	415	292	15	1,229
larion	92	800	1,292	1,737	1,614	830	200	6,565
lorrow	0	46	31	123	31	0	0	231
Multnomah	369	2,245	3,060	4,859	4,398	2,076	384	17,391
Polk	0	108	277	400	338	185	46	1,354
Sherman	0	46	0	15	0	0	0	61
[illamook	31	77	77	338	507	185	138	1,353
Jmatilla	46	185	246	369	308	261	92	1,507
Inion	0	92	123	323	308	77	31	954
Vallowa	0	15	46	31	123	31	0	246
lasco	0	138	108	215	92	154	15	722
lashington	92	1,338	1,722	2,107	1,338	384	92	7,073
wheeler	0	0	0	46	0	15	0	61
Yamhill	62	77	323	461	384	261	77	1,645
TOTAL	1,708	12,900	18,344	27,556	26,199	14,055	2,890	103,652
lon-Response								7,393

Appendix D

Characteristics of Oregon pleasure boat owners by income group and by county of registration, 1975.

			Income Group	(Number of	Boat Owners)			
County of Reg.	Less Than \$3,000	\$3,000- \$5,999	\$6,000- \$7,999	\$8,000- \$9,999	\$10,000- \$14,999	\$15,000- \$24,999	\$25,000 & Over	Total Number of Boat Owner
Baker	77	108	92	108	246	200	77	908
Benton	15	46	123	185	661	584	446	2,060
lackamas	108	538	492	461	2,537	3,290	1,691	9,117
Clatsop	46	108	62	154	477	492	108	1,447
Columbia	92	62	62	200	507	646	138	1,707
Coos	185	446	308	431	1,153	1,061	308	3,892
Crook	31	77	31	46	185	138	62	570
Curry	108	261	62	185	369	200	62	1,247
)eschutes	77	308	200	338	953	969	338	3,183
)oug1as	215	569	461	384	1,584	1,138	338	4,689
Gilliam	0	15	0	0	15	15	31	76
Grant	15	92	15	31	62	77	15	307
larney	0	46	15	46	108	62	15	292
lood River	15	62	15	15	138	108	77	430
Jackson	200	538	400	584	1,399	1,676	538	5,335
lefferson	15	0	62	46	169	138	62	492
losephine	108	354	154	338	477	415	108	1,954
lamath	92	231	185	292	1,199	1,061	354	3,414
.ake	15	31	31	31	92	77	0	277
ane	338	1,122	769	1,153	3,567	3,613	1,015	11,577
incoln	138	477	231	123	492	446	215	2,122
.inn	46	507	354	338	1,138	1,015	231	3,629
lalheur	31	169	92	185	338	215	138	1,168
larion	200	461	415	646	1,584	2,014	830	6,150
lorrow	15	15	0	15	62	77	46	230
4ultnomah	338	1,153	784	1,138	4,275	5,797	2,829	16,314
Polk	92	62	108	123	338	369	185	1,277
Sherman	0	15	0	0	15	0	15	45
fillamook	123	261	154	123	323	138	123	1,245
Jmatilla	31	108	138	185	308	446	200	1,416
Jnion	46	92	92	15	369	292	62	968
lallowa	0	15	15	31	46	77	46	230
lasco	0	62	31	92	231	138	108	662
lashington	108	215	200	323	1,522	2,629	1,599	6,596
heeler	0	31	0	0	15	15	0	61
Yamhill	77	169	46	215	369	400	169	1,445
TOTAL	2,997	8,826	6,199	8,580	27,323	30,028	12,579	96,532
on-Response								14,513

Appendix E

Oregon Pleasure Boat Use by Body of Water and by Activity Type During the 1975 Boating Season.

		Activity Type (Number of Boating Days)						
Body of Water	Fishing	Sailing	Water Skiing	Cruising	Other	Total Number o Boating Days		
Agate Reservoir	123					123		
Agency Lake	384*				323	707		
Alsea Bay	4,720*			15	1,230	5,965		
Alsea River	12,424*		92	477	830	13,823		
Ana Reservoir	169		461*	154		784		
Antelope Flat Reservoir	123					123		
Badger Lake	77		46			123		
Balm Creek	31					31		
Beaver Creek	77					77		
Beulah Reservoir	1,030*					1,030		
Big Cliff Reservoir	31					31		
Big Lake	292*	31	231			554		
Big Lava Lake	1,261*					1,261		
Blue Lake	538	1,353	2,183	2,952	1,538	8,564		
Blue River Reservoir	477*	-,		-,		477		
Bradley Lake	123					123		
Bull Prairie Impound	138					138		
Bully Creek Reservoir	138		46			184		
Campbell Lake	707*		40			707		
Camp S. Lake	46					46		
Canyon Cr. Meadows Res	15					15		
Cape Meares Lake	246*					246		
Carmen Reservoir	354*		46			400		
		25/4	40	61				
Carter Lake	215	354*		61	77	630		
Chetco Bay	5,827*		60	723	77	6,627		
Chickahominy Reservoir	492*		62			554		
Clackamas River	4,966*		876	1,507	231	7,580		
Clatskanie River	108		011700	10110101		108		
Clear Lake	200		615*	307		1,122		
Clear Lake (Linn)	400*		61	31		492		
Cleawox Lake	15					15		
Coffenbury Lake	215*		62			277		
Cold Springs Reservoir	507*					507		
Collard Lake	661*					661		
Columbia River	69,253	26,370	32,059	60,735	12,608	201,025		
Cooper Creek Reservoir	1,507		2,767*	415	154	4,843		
Coos Bay	6,227*		108	569	2,322	9,226		
Coos River	2,168*		61	184	169	2,582		
Coquille River	2,967*			692	1,322	4,981		
Coquille River Middle	277		461*			738		
Coquille River N Fork	31					31		
Cottage Grove Reservoir	692		3,136*	400		4,228		
Cottonwood Mows Lake	61			31		92		
Cougar Reservoir	1,030*		553	77		1,660		
Crane Prairie Reservoir	15,545*	215	1,584	707		18,051		

Appendix E

		Total Number of				
Body of Water	Fishing	Sailing	Water Skiing	Cruising	Other	Boating Days
Crescent Lake	5,689*	61	1,784	492		8,026
Croft Lake	154*		-,		92	246
Crump Lake	46					46
Cullaby Lake	108	61	1,122*	261	92	1,644
	676	61	1,707*	246		2,690
Cultus Lake	323*	01	1,707	2.10		323
Davis Lake						861
Davis Lake (Deschutes)	861*	10/	10/	185	185	969
Deadhorse Lake	231	184	184	165	105	261
Delintment Lake	261*			15	602	3,659
Depoe Bay	2,952*			15	692	
Deschutes River	7,734*		646	400	261	9,041
Detroit Reservoir	17,774*	215	9,810	5,351	523	33,673
Devils Lake (Deschutes)	185*					185
Devils Lake (Lincoln)	3,506	46	3,121	2,722	215	9,610
Dexter Reservoir	31	77	1,475*	477	31	2,097
Diamond Lake	24,909*	338	61	231	108	25,647
Dog Lake	2,491*	15				2,506
Dorena Reservoir	4,028	846	2,768	615	61	8,318
Drews Reservoir	15		216	215		446
East Lake	9,241*	77		61	46	9,425
Eel Lake	631*			15		646
Elk Lake (Deschutes)	323	646		492		1,461
Elk River	154*					154
Emigrant Lake	246	123	2,891*	338	46	3,644
Empire Lake	108		15	77	215*	415
Fall Creek Reservoir	1,630		2,260*	231		4,121
Fern Ridge Reservoir	1,414	8,887	8,626	3,583	200	22,710
Fish Hawk Lake		61	7426			61
Fish Lake (Baker)	62	1500° i				62
Fish Lake (Harney)	31					31
Fish Lake (Jackson)	1,599*			107	231	1,937
	630*		77	31	31	769
Floras Lake Foster Reservoir	4,767	15	6,581	2,506	138	14,007
	231*	15	0,001	2,000		231
Fourmile Lake						231
Frog Lake	231*					46
Garrison Lake	46				61	2,214
Gerber Reservoir	2,153*				01	123
Gold Lake	123		105	10/		369
Goose Lake	223		185	184		
Grande Ronde River	62	15		<i>c</i> 1 -	154	5 798
Green Peter Reservoir	2,276	154	2,599	615	154	5,798
Haag Lake	4,121	523	2,722	1,045	200	8,611
Harriet Reservoir	169*					169
Hart Lake	92					92
Haystack Reservoir	707*	15	154			876
Higgins Reservoir	215*					215
Hills Creek Reservoir	1,092		999	415	108	2,614
Hemlock Lake	31					31
Hosmer (Mud) Lake	31					31

		Acti	vity Type (Number o	f Boating Days)		Total Number o
Body of Water	Fishing	Sailing	Water Skiing	Cruising	Other	Boating Days
Howard Prairie Reservoir	12,639*	3,275	769	953	569	18,205
Hyatt Reservoir	9,659*			1,046	31	10,736
Illinois River	292*					292
Indian Lake	31					31
Indian Prairie Lake	369*					369
John Day River	477*		1,015	231		1,723
Jubilee Impound	77					77
Kingsley Reservoir	584*					584
Klamath Lake	8,134	2,691	3,952	5,074	3,659	23,510
Klamath River	46			62	169*	277
Klaskanine River	123					123
Krumbo Reservoir	46					46
Lake Billy Chinook	10,609	354	8,810	3,152		22,925
Lake Creek	77					77
Lake Lytle	231	46	615*			892
Lake Marie	354*					354
Lake Oswego	308	1,476	12,793	11,255	1,553	27,385
Lake O-Woods	2,276	492	5,489	5,289	215	13,761
Lake Simtustus	969*			46		1,015
Lemolo Reservoir	969*		354	108		1,431
Little Cultus Lake	92			138*		230
Little Lava	46					46
Little Nestucca	92					92
Lofton Reservoir	46	31				77
Long Tom River	15					15
Lookout Point Reservoir	61				31	92
Loon Lake	876		1,476	369	938	3,659
Lost Lake (Douglas)	31				1000 C	31
Lost Lake (Hood River)	246*				15	261
Lost Lake (Linn)	554*					554
Lost River	31				108	139
Magone Lake	92					92
Malheur Reservoir	1,584*		61		31	1,676
Mann Lake	215*		U.L.			215
McKay Reservoir	461	185	1,015*	277		1,938
McKenzie River	1,399*	105	2,025	15	231	1,645
Mercer Lake	1,768	154	3,582	2,076		7,580
Metolias River	108	194	77	61		246
Miller Lake	15					15
Miller Lake	1,584*			231		1,815
Millicoma River	77			77		154
Monon Lake	15					15
Morgan Lake	354*					354
Munsel Lake	477*					477
Mecanicum River	431*					431
Neacoxie Lake	62					62
Nehalem Bay	3,183*		31	123	2,353	5,690
Nehalem River	8,272*		51	1,123	631	10,026
MONATCH MIVEL	0,272*			29263	195	1 / 61

Appendix E

65

1,276*

Nestucca Bay

185

1,461

		Activ	ity Type (Number of	Boating Days)	ating Days)		
Body of Water	Fishing	Sailing	Water Skiing	Cruising	Other	Boating Days	
Nestucca River	6,504*		62	784	415	7,765	
Netarts Bay	2,722*			138	2,276	5,136	
North Fork John Day			46	46		92	
North Fork Reservoir	2,722*		753	646	138	4,259	
North Santiam River	215*		31	46		292	
North Tenmile Lake	292*		46	15		353	
North Twin Lake	338*					338	
)choco Reservoir	7,442*		77	184		7,703	
dell Lake	10,594*	738	1,199	800		13,331	
)lallie Lake	261*					261	
live Lake (Grant)	108					108	
wyhee Reservoir	3,982*		1,215	492	92	5,781	
acific Ocean	101,481*	2,599	1,107	1,876	3,307	110,370	
aulina Lake	4,659*	77	46	200		4,982	
enland Prairie Impound	123					123	
Phillips Reservoir	3,121*	31	815	185		4,152	
ine Hollow Reservoir	554		1,537*			2,091	
Powder River	92		100.000			92	
Prineville Reservoir	13,316*	15	6,243	1,707	169	21,450	
lock Creek Reservoir	892*		6 8	31	15	938	
logue River	24,279*		2,706	1,107	3,091	31,183	
loslyn Lake	169*	31	1.000	0.011		200	
Round Butte Reservoir	4,351		5,535	1,830	1,368	13,084	
Salmon Ríver Bay	907*	31	-,		31	969	
Sand Lake	154*					154	
Sandy River	354*					354	
Santiam River	123*			61		184	
Scoggins Lake	1,030	261	1,676*	261		3,228	
Selmac Lake	800*	201	2,070			800	
Siletz Bay	646*					646	
Siletz River	17,267*		15	646	1,691	19,619	
Siltcoos Lake	15,545*	77	2,045	3,306	61	21,034	
Siuslaw Bay	661*	.,,	2,045	31	31	723	
	13,946*		138	200	600	14,884	
Siuslaw River Skipanon River	999*		150	200	12/2/2/	999	
Smith River	907*			31	31	969	
Smith River Reservoir	369*					369	
Smake River	6,627*	108	2,537	938	415	10,625	
South Coquille River	123	100	2,007	550	15	138	
	477			846*	123	1,446	
South Santiam River	477	584	7,196	8,657	9,764	38,717	
South Tenmile Lake	846*	304	7,190	5,057	- 3	846	
South Twin Lake					1,507*	1,984	
South Umpqua River	477 92				1,507	92	
Sparks Lake	92				154	154	
Sprague Lake	14					46	
Squaw Lake	46 215*			15		245	
Summit Lake			15				

Appendix E

App	endix	E
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			ity Type (Number of			Total Number o
Body of Water	Fishing	Sailing	Water Skiing	Cruising	Other	Boating Days
Suttle Lake	2,645	46	400	323	108	3,522
Sutton Lake	46					46
Tahkentich Lake	4,551*		31	31		4,613
Taylor Lake	77					77
Thief Valley Reservoir	354*		138	77	61	630
Thompson Lake	907*				62	969
Three Creeks Lake	261*					261
fillamook Bay	19,097*		400	661	3,798	23,956
fimothy Lake	1,230*	77	15	92		1,414
Tokatee Reservoir	384*	92				476
Frail Bridge Reservoir	123					123
Frask River	1,983*			154		2,137
Friangle Lake	1,614		3,290*	415	31	5,350
frillium Lake	431*					431
fualatin River	354			354	307	1,015
Jmpqua River	19,743*		308	584	2,783	23,418
Jmpqua River N Fork	676		1,384*			2,060
Jnity Reservoir	1,076*		600	92	92	1,860
/alsetz Lake	123					123
Waldo Lake	169*	46		31		246
Vallowa Lake	3,398*		2,522	584		6,504
alton Lake	523*					523
Marm Springs Reservoir	723*		154			877
Nickiup Reservoir	11,670*		1,061	538	46	13,315
Villamette River	139,198*	9,656	54,415	47,635	8,380	259,284
Villiamson River	553*					553
Willow Creek Reservoir	1,307*	154	861	15		2,337
Wilson River	2,076*					2,076
Winchester Bay	7,503*			108	92	7,703
Withers Reservoir	46					46
Woahink Lake	461		738	692	154	2,045
Wood River	200*					200
achats River	77					77
Yamhill River	861*			31	31	923
Yaquina Bay	11,301*	323	338	261	969	13,192
Yaquina River	1,092*	2.270	46			1,138
Yellow Jacket Impound	123		0.222.01			123
Multiple Response	274,630	6,366	38,501	51,863	16,237	387,597
Non-Response	28,645	1,507	6,904	4,582	2,445	44,083
fotal	1,116,986	72,266	282,698	256,855	96,103	1,824,908

Oregon Pleasure Boat Owners Experiencing Problems on Oregon Waterways During the 1975 Boating Season by Type of Problem and Body of Water.

	Туре	of Problem (Total Number		
Body of Water	Water Pollution	Over- Crowding	Sanitary Facilities	Lack of Law Enforcement	Total Number of Reported Problems	of Boating Days at Body of Water
Agate Reservoir		15	15	31	61	123
Agency Lake	31	15			46	707
Alsea Bay	15	77	46	31	169	5,966
Alsea River	15	62	92	31	200	13,823
Ana Reservoir			15	15	30	784
Antelope Flat Reservoir						123
Badger Lake						123
Balm Creek						31
Beaver Creek						77
Beulah Reservoir		15	46		61	1,030
Big Cliff Reservoir			1875			31
Big Lake			15	15	30	554
Big Lava Lake			15	31	46	1,261
Blue Lake			15	51		8,564
Blue River Reservoir						477
Bradley Lake						123
Bull Prairie Impound						138
		15		15	30	185
Bully Creek Reservoir		15		15	50	707
Campbell Lake						46
Camp S. Lake						40
Canyon Cr Meadows Res					30	246
Cape Meares Lake		15	15	15		400
Carmen Reservoir	15	15	15	15	60	630
Carter Lake	0.24		222		1 107	
Chetco Bay	154	553	185	215	1,107	6,627
Chickahominy Reservoir	31	15	15	15	76	554
Clackamas River	15	123	31		169	7,580
Clatskanie River						108
Clear Lake		1972 1929				1,122
Clear Lake (Linn)		15			15	492
Cleawox Lake			15		15	15
Coffenbury Lake		15			15	277
Cold Springs Reservoir						507
Collard Lake						661
Columbia River	846	2,168	738	799	4,551	201,025
Cooper Creek Reservoir		154		169	323	4,843
Coos Bay	200	184	46	62	492	9,226
Coos River	92	31	31	15	169	2,583
Coquille River	31	15	31		77	4,982
Coquille River Middle	15		15		30	738
Coquille River N Fork						31
Cottage Grove Reservoir	15	31	46	31	123	4,228
Cottonwood Mows Lake		15			15	92
Cougar Reservoir		31	15	31	77	1,661
Crane Prairie Reservoir	15	154	154	92	415	18,051

Body of Water	Water Pollution	Over- Crowding	Number of Boat Sanitary Facilities	Lack of Law Enforcement	Total Number of Reported Problems	Total Number of Boating Days at Body of Water
Crescent Lake	15	46	15	31	107	8,026
Croft Lake			20	88. 1	207	246
Crump Lake						46
Cullaby Lake	15			15	30	1,645
Cultus Lake	15	31	15	15	61	2,691
Davis Lake		31	15	15	01	323
Davis Lake (Deschutes)						861
Deadhorse Lake	15	15	15	15	60	969
Delintment Lake	1.5	15	15	15	00	261
Depoe Bay	31	323	154	31	539	3,659
Deschutes River	71	46	31	15	92	9,041
Detroit Reservoir	108	384				Determination of the second second
	108	364	62	261	815	33,673
Devils Lake (Deschutes)	23	16	1.5	21	0.2	185
Devils Lake (Lincoln)	31	15	15	31	92	9,610
Dexter Reservoir		31		77	108	2,091
Diamond Lake	277	630	46	231	1,184	25,647
Dog Lake		122		1.000		2,506
Dorena Reservoir		92	31	46	169	8,318
Drews Reservoir						446
Duncan Reservoir			15		15	0
East Lake	31	123	46	108	308	9,425
Eel Lake						646
Elk Lake (Deschutes)						1,461
Elk River						154
Emigrant Lake	108	62	15	123	308	3,644
Empire Lake				15	15	415
Fall Creek Reservoir	46	200	31	169	446	4,121
Fern Ridge Reservoir	138	261	62	308	769	22,710
Fish Hawk Lake				15	15	62
Fish Lake (Baker)						62
Fish Lake (Harney)						31
Fish Lake (Jackson)		15			15	1,937
Floras Lake						769
Foster Reservoir	15	308	31	123	477	14,007
Fourmile Lake						231
Frog Lake			15		15	231
Garrison Lake	15	15		15	45	46
Gerber Reservoir	15		15		30	2,214
Gold Lake						123
Goose Lake						369
Grande Ronde River						77
Green Peter Reservoir	46	31	77	108	262	5,797
Haag Lake	15	369	215	77	676	8,610
Harriet Reservoir			15		15	169
Hart Lake						92
Haystack Reservoir		15	31	15	61	876
Hemlock Lake						31
Higgins Reservoir						215
Hills Creek Reservoir	15	15	15	15	60	2,614
Hormor (Mud) Lake						31

Type of Problem (Number of Boat Owners)

70

31

Hosmer (Mud) Lake

	Type	Totol Number				
Body of Water	Water Pollution	Over- Crowding	Sanitary Facilities	Lack of Law Enforcement	Total Number of Reported Problems	Total Number of Boating Days at Body of Water
Howard Prairie Reservoir		169	31	77	277	18,205
Hyatt Reservoir	15	92	123	108	338	10,732
Illinois River						292
Indian Lake						31
Indian Prairie Lake			15		15	369
John Day River		46	10.000		46	1,722
Jubilee Impound						77
Kingsley Reservoir						584
Klamath Lake	477	15	188	154	754	23,510
Klamath River	15	15	15	15	45	277
Klaskanine River	15		19			123
Krumbo Reservoir						46
	122	307	46	154	630	22,926
Lake Billy Chinook	123	307	40	104	15	77
Lake Creek	15		15	15	45	892
Lake Lytle	15		15	15	45	354
Lake Marie		100	15		160	
Lake Oswego	46	108	15		169	27,384
Lake O-Woods		138	15	169	322	13,762
Lake Simtustus				15	15	1,015
Lemolo Reservoir		15	15		30	1,430
Little Cultus Lake						231
Little Lava						46
Little Nestucca						92
Lofton Reservoir						77
Long Tom River						15
Lookout Point Reservoir	15		15	15	45	92
Loon Lake	15	92	15	46	168	3,659
Lost Lake (Douglas)						31
Lost Lake (Hood River)						261
Lost Lake (Linn)		15	15		30	554
Lost River						138
Magone Lake			15		15	92
Malheur Reservoir			92		92	1,676
Mann Lake			15		15	215
McKay Reservoir	31		62	15	108	1,937
McKenzie River	15	15	15	15	60	1,645
Mercer Lake		15	15	31	61	7,580
Metolias River						246
Miller Lake						15
Miller Lake		15			15	1,814
Millicoma River	15				15	154
Monon Lake						15
Morgan Lake						354
Munsel Lake						477
Mecanicum River	15				15	431
Neacoxie Lake			15		15	62
Nehalem Bay		61	31	31	123	5,689
Nehalem River	31	77	61	77	246	10,025
		•	15	15	30	1,461

Type of Problem (Number of Boat Owners)

71

Nestucca Bay

15

15

30

1,461

Body of Water	Water Pollution	Over- Crowding	Sanitary Facilities	Lack of Law Enforcement	Total Number of Reported Problems	Total Number of Boating Days at Body of Water
Nestucca River	31	31	46	46	154	7,765
Netarts Bay			15	46	61	5,136
North Fork John Day						92
North Fork Reservoir	15	77		77	169	4,259
North Santiam River	15			15	30	292
North Tenmile Lake			15	15	30	354
North Twin Lake	15		31		46	338
Ochoco Reservoir	31	108		61	200	7,703
Odell Lake	15	31	31		77	13,331
Olallie Lake						261
Olive Lake (Grant)		15	31	15	61	108
Olive Lake (Union)			15		15	0
Owyhee Reservoir	15	15	15	31	76	5,781
Pacific Ocean	46	477	261	92	876	110,368
Paulina Lake	15	15	15	46	91	4,982
Penland Prairie Impound	13	13	15			123
Phillips Reservoir		92		46	138	4,152
Pine Hollow Reservoir		52	15	40	15	2,091
Powder River	15	62	15	31	123	92
Prineville Reservoir	31	184	138	185	538	21,449
Rock Creek Reservoir	15	31	15	105	61	938
Rogue River	77	292	92	108	569	31,182
Roslyn Lake		232	32	100	505	200
Round Butte Reservoir	15	215	15	46	291	13,085
Salmon River Bay	15	215	15	40	15	969
Sand Lake	15		15		15	154
Sandy River			15		20	354
Santiam River						185
	15	108	77	15	215	3,229
Scoggins Lake	15	100	11	15	22.5	800
Selmac Lake			15		15	646
Siletz Bay	1.6	21	15	77	185	19,620
Siletz River	46	31	31 92	46	246	21,034
Siltcoos Lake	46	62	92	31	93	723
Siuslaw Bay	31	31	77	77	431	14,884
Siuslaw River	215	62	77	11	451	999
Skipanon River	21	15	31		61	969
Smith River	31	15	15	15	45	369
Smith River Reservoir	0.2	15	15	15	384	10,625
Snake River	92	108	92	92	584	10,025
South Coquille River						1,445
South Santiam River	109	961	21	92	492	38,717
South Tenmile Lake	108	261	31			846
South Twin Lake		31		15	46	
South Umpqua River	15		15	15	45	1,983
Sparks Lake						92
Sprague Lake						154
Squaw Lake					15	46
Summit Lake			15		15	246

Type of Problem (Number of Boat Owners)

72

Sunset Lake

App	endix	F

	Type of Problem (Number of Boat Owners) Total Number					Total Number
Body of Water	Water Pollution	Over- Crowding	Sanitary Facilities	Lack of Law Enforcement	of Reported Problems	of Boating Days at Body of Water
Suttle Lake	15	61	77	62	215	3,521
Sutton Lake						46
Tahkentich Lake		61	77	31	169	4,613
Taylor Lake						77
Thief Valley Reservoir	15		46		61	630
Thompson Lake	15	15	15	15	60	969
Three Creeks Lake			15		15	261
Tillamook Bay	92	1,246	261	185	1,784	23,956
Timothy Lake				15	15	1,415
Tokatee Reservoir		15	15		30	477
Trail Bridge Reservoir						123
Trask River	15	15		15	45	2,137
Triangle Lake		77	15	92	184	5,351
Trillium Lake						431
Tualatin River	62				62	1,015
Umpqua River	92	92	138	77	399	23,417
Umpqua River N Fork						2,060
Unity Reservoir	15	62	46	31	154	1,860
Valsetz Lake						123
Waldo Lake						246
Wallowa Lake		62	46	15	123	6,504
Walton Lake						523
Warm Springs Reservoir			46		46	876
Wickiup Reservoir		92	46	138	276	13,316
Willamette River	1,030	2,783	1,184	1,522	6,519	259,284
Williamson River						554
Willow Creek Reservoir		46	15	15	76	2,337
Wilson River	46				46	2,076
Winchester Bay	92	231	154	77	554	7,703
Withers Reservoir						46
Woahink Lake						2,045
Wood River						200
Yachats River		15			15	77
Yamhill River	15				15	923
Yaquina Bay	169	1,030	523	200	1,922	13,193
Yaquina River	62	77	15		154	1,138
Yellow Jacket Impound			15		15	123
Youngs River			15	15	30	0
Multiple Response	200	661	185	400	1,446	387,597
Non-Response						44,083
Missing Observation	20,573	15,545	20,527	19,773	76,418	
Total	26,741	32,502	28,103	28,437	115,783	1,824,908