# **ANNUAL PROGRESS REPORT**

PROJECT TITLE:OregonCONTRACT NUMBER:F-128-PROJECT PERIOD:Octobe

Oregon Marine Recreational Fishery Studies F-128-R-15 October 1, 2000 through September 30, 2001

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Marine Resources Program Oregon Department of Fish & Wildlife

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## OREGON MARINE RECREATIONAL FISH STUDIES And NEARSHORE FISH STUDIES Contract No. F-128-R-15 Annual Progress Report October 1, 2000 through September 30, 2001

#### **PROJECT 1: OREGON MARINE RECREATIONAL FISH STUDIES**

This project originated in 1986 to address groundfish biological sampling needs in Oregon's marine recreational fishery. Angler effort directed towards groundfish species increased significantly since the mid-1980's as traditional opportunities for salmonid species diminished.

This situation led to the funding (jointly by Sport Fish Restoration and State General Funds) of a project designed to gather biological data for species other than salmonids sought by the marine finfish fishery. Rockfish, surfperch, and Pacific halibut were identified as species to receive first attention.

Starting in 1999, this project also began to address groundfish catch and effort sampling needs. This resulted from an evaluation of the accuracy of catch and effort estimates from the Marine Recreational Fishery Statistical Survey (MRFSS) of the National Marine Fishery Service (NMFS), the historical source of Oregon groundfish catch and effort statistics, which indicated overestimates of between two and three fold.

During FY2001 the Oregon Department of Fish and Wildlife (ODFW) continued to expand the groundfish catch and biological sampling program. We gathered biological samples from several additional marine species. In addition, black rockfish, surfperch and lingcod samples from the recreational fishery were aged.

This report describes activities and results during FY2001. Scientific names of the species discussed in this report are listed on Table 1. Funding budgeted for this project in FY2001 was completely spent.

#### Task 1: Establish biological database for selected groundfish species

Our objective is to establish a sound biological database for each of the most important groundfish species and for the aggregate recreational fishery. This database, as it grows more robust, will allow managers to assess the health of the resource and reliably evaluate the necessity of any future regulation changes. The information also will be used to form recommendations provided to the Oregon Fish and Wildlife Commission and the Pacific Fishery Management Council (PFMC) for their use when considering management issues.

Fish are randomly selected from anglers' catches and age structures (i.e., otoliths, fin rays) and biological data such as length, sex, and weight are obtained.

**Black rockfish.** Black rockfish are the most frequent groundfish species observed in the Oregon recreational fishery. We have been collecting biological data on black rockfish since 1979 from the port of Garibaldi on Oregon's north coast. Similar work started in 1992 in the ports of Newport and Brookings with sampling in Charleston starting in 1995. Starting in 1999, this work was expanded to the ports of Pacific City, Depoe Bay, Bandon, Port Orford, and Gold Beach.

During the current reporting period, we aged the black rockfish otoliths collected during 2000 (4,832) from the Oregon recreational fishery. The age distribution of the fish is detailed by port and sex in Table 2. The length-distribution of these same fish is detailed in Table 3. The number of fish in Table 3 exceeds those in Table 2, as one otolith was not readable.

Biological sampling of black rockfish continued into FY2001, when information was collected from 3,395 fish. The number of samples, by port and sex, are summarized in Table 4. This information will be analyzed in FY2002.

**Other Rockfish species**. During FY2001 we increased our biological sampling of blue rockfish, the second most frequent rockfish species observed in the Oregon recreational fishery. We collected 1,507 blue rockfish samples from coastal ports. The number of samples by sex and port are summarized in Table 4. The age structures will be available for future stock assessment of this species.

Biological and genetic samples were gathered from 864 marine species, mostly rockfish, during FY2001. This was part of a special study involving observation trips on recreational charter vessels (see Task 3). Funding became available when our surfperch biologist retired. Additional funding was procured from the Oregon Department of Fish and Wildlife (ODFW) Restoration and Enhancement Board. The number of samples, by port, species, and sex, are summarized in Table 5.

Length and weight samples were taken from all rockfish species encountered in FY2001 in most ports sampled. The average lengths and weights, and sample size by species of samples gathered in calendar year 2000, are summarized in Tables 6, 7 and 8, respectively. The average lengths and weights, and sample size by species of samples gathered in calendar year 2001, are summarized in Tables 9, 10 and 11, respectively.

**Redtail surfperch.** Work on the surfperch complex is based out of our Charleston office and concentrates on the intensive recreational shore fishery along the southern Oregon coast. Otoliths from 1,909 redtail surfperch collected in FY2000 were aged during FY2001; the age distribution by sex is shown in Table 12. The length distribution of these fish is shown in Table 13. The number of fish in Table 13 exceeds those in Table 12, as some otoliths were not readable.

During FY2001, we collected biological data and otoliths from 341 redtail surfperch. MRFSS funded samplers participated in obtaining this information. Biological data gathered from these fish will be reported in FY2002.

**Other surfperch species**. Otoliths from white surfperch/seaperch, striped surfperch/seaperch, pile surfperch/seaperch, silver surfperch, and walleye surfperch collected in FY2000 from the Oregon recreational fishery were aged during FY2001. During the current reporting period staff aged white (181), pile (72), striped (71), walleye (58), calico (12), and silver (8) surfperch. The age distribution of all the fish sampled, by species and sex, are shown in Table 12. The corresponding length distribution by species and sex is presented in Table 13. The number of fish in Table 13 exceeds those in Table 12, as some otoliths were not readable.

During FY2001, we collected surfperch biological data and otoliths from 23 fish that were surfperch species other than redtail. MRFSS funded samplers participated in obtaining this information. Biological data gathered from these fish will be reported in FY2002.

**Pacific halibut.** Project staff were involved in collecting biological and fishery data from Oregon's recreational fishery for Pacific halibut. These data were provided to the International Pacific Halibut Commission and the National Marine Fishery Service for their use in managing this species. Length data from 5,048 halibut were taken during FY2001 from the Oregon recreational fishery and are summarized by port in Table 14.

**Lingcod**. During FY2001 we collected 1,952 lingcod fin rays for ageing from the Oregon recreational fishery (Table 4). The age distribution from a representative sample of fish collected in 2000 is detailed by port and sex in Table 15. The length-distribution of these same fish is detailed in Table 16. We have not aged 1999 samples. These will be aged in FY2002 along with 2001 samples.

**Other nearshore marine species**. During FY2001 we randomly sampled length and weights of most other marine species caught in the Oregon recreational fishery. The average lengths and weights, and sample size by species of samples gathered in calendar year 2000, are summarized in Tables 6, 7 and 8, respectively. The average lengths and weights, and sample size by species of samples gathered in Calendar year 2001, are summarized in Tables 9, 10 and 11, respectively.

### Task 2: Oregon recreational groundfish catch by species and angler effort statistics

Supplemental angler creels were incorporated within the larger ODFW ocean boat sampling program starting in FY1999 to improve groundfish catch and effort sampling and develop a more comprehensive program that integrates all Oregon ocean recreational boat fishery sampling. Funding from this project allowed sampling to be conducted in nearly all Oregon ports. In addition, we expanded the sampling temporally to cover the entire year out of Newport, Depoe Bay, Charleston (starting in FY2000) and Brookings; the most active Oregon ports during the winter. Also, we expanded the program in most other ports sampled to cover the May through September period. This expansion continued in FY2001. We have reviewed the results of this work, which indicates approximately 5 percent of the annual harvest in the ocean boat recreational fishery occurs during the November through February period. Based on this work we plan to sample the major ports starting in FY2002 during March through October with sampling in minor ports during May through September.

During FY2002 we will finish summarizing the catch and effort statistics for the Oregon recreational groundfish fishery for the calendar year 2001. The 2000 statewide monthly catch summary by species is summarized in Table 17. The results from the 1999-2000 year round survey was used to extrapolate catch and effort during months not sampled.

Staff participated on the Pacific Recreational Fisheries Information Network (RecFIN) committee to coordinate sampling between the MRFSS survey and the ODFW Ocean Recreational Boat Sampling Program (ORBS) in Oregon marine waters. The ORBS program is responsible for producing catch and effort statistics for the ocean boat fishery. The MRFSS complements the ORBS program with demographic, economic and special add-on surveys. In addition, the MRFSS program is the only source of catch and effort estimates in the Oregon shore and estuary recreational fisheries.

### Task 3: Stock assessment analysis

**Black rockfish and yelloweye rockfish**. Staff assisted in stock assessments on black rockfish and yelloweye rockfish during FY2001. Besides providing estimates of historical annual harvest, age trends, and catch per angler trends in the Oregon recreational ocean boat fishery, staff participated in evaluating the assessments. Yelloweye rockfish was determined to be overfished. Black rockfish off Oregon and California is at a concern status, since the assessment indicated the abundance is less than half of estimated historical levels. ODFW plans to conduct a tagging study starting in 2002 to assist in providing exploitation rate information for future assessments.

**Discard study**. A special study was conducted in FY2001 to evaluate discard of canary rockfish in the Oregon recreational fishery. The angler bag limit of canary rockfish was reduced from 15 in 1999 to 3 in 2000 and to 1 in 2001 due to reduced abundance. Three seasonal employees were hired to ride on recreational charter vessels during the July through September period. Funding became available when our surfperch biologist retired. Additional funding was procured from the ODFW Restoration and Enhancement Board. The three seasonal employees completed 105 at-sea observations. The observed discard rate for canary rockfish was 11 percent, which compares to 8 percent reported by anglers during dockside interviews. Many fish were released due to their small size and not due to bag limit attainment. For example, the discard rate for blue rockfish and yelloweye rockfish was approximately 6 percent and for yellowtail rockfish the rate was 14 percent. The bag limit for these species is ten rockfish in the aggregate, with no sub-limit for these individual species. Most were released due to their small size. The discard rates observed by species are detailed in Table 18.

**Surfperch study**. A tagging study on the Oregon south coast, initiated in FY1992, was completed in FY2001. The final report, including biological analysis, is attached. Recommendations for future management of redtail surfperch include a lowering of the recreational bag limit (presently at 25 fish per day) and/or closure during parturition. Action has already been taken to prohibit commercial retention during parturition. ODFW plans to take action to reduce the recreational daily bag limit.

#### **Task 4: Information dissemination**

The ODFW maintained a web site for Oregon marine recreational fishery regulations. Recreational regulations for finfish, including salmon and Pacific halibut, can be assessed through the menu located at www.hmsc.edu/odfw/. This same information can be assessed under the Marine Program Fishing Information menu on the ODFW home page located at www.dfw.state.or.us/. Also posted and continually updated inseason were catches for Pacific halibut and salmon quota fisheries.

Staff held 4 public meetings during FY2001 to discuss proposed changes to the Oregon recreational fishery for Pacific halibut and rockfish. In addition, a web-based survey was used to solicit angler opinions on various options under consideration.

Informational letters on final regulatory actions for the 2001 Oregon marine recreational fishery, and proposed changes to the 2002 fishery, were distributed to interested anglers and charter boat operators.

Periodically, as regulation changes occurred, we posted signs on the docks describing the changes. This information was also posted on our web site.

Staff responded to several requests for catch and effort statistics and other biological information. Staff also participated in the Oregon Coastal Sport Fishing Association's annual meeting.

#### Task 5: Assessment of management approaches

Staff assisted the Groundfish Management Team of the Pacific Fisheries Management Council by summarizing landing statistics from the Oregon recreational groundfish fishery. We also provided analysis of the effect of various management measures on groundfish fisheries under consideration for the year 2002 Oregon recreational fishery.

### **PROJECT 2: NEARSHORE FISH STUDIES**

Oregon intensified research studies on nearshore bottomfish species starting in 1998. The first project identified was to investigate differences in nearshore black rockfish populations between reef areas. In 1999, this work was expanded to include genetic stock identification for bottomfish species. We have been collecting black rockfish and other species at-sea to gather genetic samples and biological data, including age structures. The funding for this work comes from other sources. To complete this work we needed to hire a person to age the structures gathered. Starting in FY1999 funding was approved under the Sport Fish Restoration program to hire a biologist to assist in this research, and in particular, to age the black rockfish structures collected.

This report describes activities and results during FY2001. Funding budgeted for this project in FY2001 was completely spent.

The staff person funded by this project assisted in planning FY2001 at-sea research, conducting the research, ageing black rockfish samples from 2000, and maintained a biological database.

During the 2000 at-sea research staff collected over 1,700 rockfish otoliths including 901 black rockfish. The age reader funded by this project aged the black rockfish during FY2001 (Table 19). The lengths of these fish are summarized in Table 20, respectively. The number of fish in Table 20 exceeds those in Table 19, as one otolith was not readable.

During FY2001 the age reader was trained to age lingcod. A representative sample of lingcod collected in 2000 was aged and is reported under Task 1 of Project 1.

#### Acknowledgements

Oregon acknowledges the hard work of several staff on these projects during FY2001. Many seasonal employees were involved in sampling the ocean boat recreational groundfish fishery. Carol Perkins aged black rockfish otoliths, compiled fishery and biological data, and distributed information to anglers. Darrell Pruden performed the surfperch studies. Bill Miller worked on the nearshore bottomfish research and aged black rockfish otoliths and lingcod fin rays. MRFSS samplers assisted in biological sampling of perch species.

Table 1.	List of common and scientific names of
species	sampled in the Oregon marine recreational
fishery.	

Common Name	Scientific Name
albacore tuna	Thunnus alalunga
arrowtooth flounder	Atheresthes stomias
big skate	Raja binoculata
black rockfish	Sebastes melanops
blue rockfish	Sebastes mystinus
blue shark	Prionace glauca
bocaccio	Sebastes paucispinis
brown rockfish	Sebastes auriculatus
buffalo sculpin	Enophrys bison
butter sole	Pleuronectes isolepis
cabezon	Scorpaenichthys marmoratus
california halibut	Paralichthys cakifornicus
canary rockfish	Sebastes aleutianus
chilipepper	Sebastes goodei
china rockfish	Sebastes nebulosus
coho salmon	Oncorrhynchus kistch
copper rockfish	Sebastes caurinus
dover sole	Microstomus pacificus
grass rockfish	Sebastes rastrelliger
areenstriped rockfish	Sebastes elongatus
jack mackerel	Trachurus symmetricus
jacksmelt	Atherinopsis californiensis
kelp greenling	Hexagrammos decagrammus
linacod	Ophiodon elongatus
longnose skate	Raia rhina
pacific halibut	Hippoglaossus stenolepis
pacific mackerel	Scomber japonicus
pacific ocean perch	Sebastes alutus
pacific sanddab	Citharichthys sordidus
pacific whiting	Merlucius productus
petrale sole	Fopsetta jordani
pile surfperch	damalichthys vacca
guillback rockfish	Sebastes maliger
ratfish	Hvdrolagus colliei
red irish lord	Hemilepidotus hemilepidotus
redbanded rockfish	Sebastes babcocki
redstripe rockfish	Sebastes proriger
redtail surfperch	Amphistichus rhodeterus
rock greenling	Anoploma fimbria
rock sole	Pleuronectes bilineatus
rosethorn rockfish	Sebastes helvomaculatus
rosv rockfish	Sebastes rosaceus
sable fish	Hexagrammos lagocephalus
sand sole	Psettichthys melanostichtus
silver surfperch	Hyperprosonon ellipticum
silvergrav rockfish	Sebastes brevispinis
spiny dogfish shark	Squalus acanthias
starry flounder	Platichthys stellatus
striped perch	Embiota lateralis
tiger rockfish	Sebastes nigrocinctus
vermilion rockfish	Sebastes miniatus
walleve surfnerch	Hyperprosopon argentum
white surfnerch	Phanerodon furcatus
widow rockfish	Sebastes entomelas
wolfeel	Anarrhichthys ocellatus
velloweve rockfich	Sebastes ruberrimus
vellowmouth rockfish	Sebastes reedi
vellowtail rockfish	Sebastes flavidus
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Table 2. Age distribution of black rockfish sampled from the 2000 Oregon recreational fishery by port.

M = Male F = Female T = Total

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Table 3. Length distribution of black rockfish sampled from the 2000 Oregon recreational fishery by port.

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T = Total M = Male F = Female

Table 4. Number of fish by species, sex and port sampled for age structures from the Oregon ocean boat recreational fishery during FY2001.

1			-	Numb	<u>er of Fish</u>				
	Blac	k Rockfish		B	ue Rockfish			Lingcod	
Port	Male	Female	Total	Male	Female	Total	Male	Female	Total
Garibaldi	236	283	519	61	130	191	143	156	299
<b>Pacific City</b>	29	42	71	-	15	16	26	20	46
Depoe Bay	89	96	185	41	49	06	103	96	199
Newport	340	355	695	131	342	473	244	269	513
Winches. Bay							~	7	ω
Charleston	232	185	417	113	177	290	176	62	238
Bandon	65	72	137	14	56	70	28	27	55
Port Orford	82	79	161	6	44	53	36	44	80
<b>Gold Beach</b>	140	341	481	5	54	59	51	42	93
Brookings	356	373	729	62	203	265	200	221	421
Total	1569	1826	3395	437	1070	1507	1008	944	1952

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Table 5.

						Numbe	r of Specime	ns					
	Garibald	=	Depoe B	ay	Newpor	t	Charlest	on	Bando	-	Brooking	Sc	Total
FishName	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	
Blue RF	38	12											50
Yelloweye RF	29	19	-	4	2	2	6	-	с		-		71
Canary RF	34	26	33	16	10	11	9	7	7	2	12	17	171
China RF	20	6	14	7	13	1	8	-	6	9		7	100
Yellowtail RF			5	2	18	7	7		5	2		7	43
Copper RF	9	e	-	e	8	6	2	-	-	-	-	-	37
Quillback RF	25	18	17	17	13	1			2	-	-		105
Boccacio	14	9											20
Brown RF							4						4
Tiger RF	1	œ		5		2		7		2			30
Vermilion RF	2	-	2	-	-	-	2	e	12	5	-	-	32
Lingcod	35	4					7	12	9	7	2	2	75
Kelp greenling	22	18	9	4	7	13	3	-	-		-		76
Cabezon	9	19	4	5	5	11							50
Grand Total	242	143	83	64	77	78	43	23	41	26	19	25	864

Table 6. Average fork length (mm) by species and month sampled from the Oregon ocean boat recreational fishery during 2000.

						Mon	th						
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Grand Total
Black RF	390	381	359	373	374	379	388	388	381	379	381	390	381
Blue RF	297	300	293	318	316	313	326	321	323	317	308	299	315
Yelloweye RF		476	409	418	437	431	457	410	453	358	394	389	429
Canary RF	370	318	334	345	361	346	345	343	342	416	323	320	349
China RF		309	350	345	334	342	342	344	344	327	332	351	342
Yellowtail RF		292	343	366	372	356	371	346	377	359	323	315	361
Copper RF				406	401	396	404	413	375	371	391	441	401
Quillback RF		338	377	338	345	348	361	343	346	329	330	351	347
Blackgill RF							367						367
Bocaccio				557	601		556	566	362	714			565
Brown RF					384								384
Greenspotted RF								291					291
Greenstriped RF				307	314	293	304	286	312				299
Grass RF						410			445				428
Pacific Ocean perch						310							310
Pygmy RF						357							357
Redbanded RF						449	425						433
Redstripe RF					321	255	351	270	344				318
Rosethorn RF				280	245	273	241	269	364	231			274
Rosy RF				295		339	324	258					284
Silvergray RF					457								457
Speckled RF				300									300
Tiger RF		374		390	413	468	389	375	373				386
Vermilion RF		517	389	425	429	426	441	430	423	585	437	405	430
Widow RF		355	308	326	334	368	370	376	395	432			368
Rockfish spp						351		293					308
Pacific halibut					1011	1124	1058	1044	1024				1013
Sand sole				378	360		336						352
California halibut						797	758						778
Pacific sanddab							256		258				257
Rock sole							230						230
Arrowtooth flounder								360					360
Lingcod	683	676	673	681	688	682	694	696	700	687	672	681	688
Kelp greenling		342	363	350	353	353	346	353	357	354	361	343	352
Rock greenling					326	327	350		394	365			341
Cabezon	496	452	488	489	478	467	492	482	491	455	501	481	480
Red Irish lord				352		309							323
Buffalo sculpin									339				339
Striped seaperch								308	311				310
Pacific mackerel								322					322
Sablefish									615				615
Giant kelpfish						346							346
Jacksmelt						_	298						298
Rock prickleback						335							335
Spotted ratfish					600								600

Table 7. Average weight (kg) by species and month sampled from the Oregon ocean boat recreational fishery during 2000.

						Мо	nth						
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Grand Total
Black RF	1.1	1.0	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.0
Blue RF	0.5	0.6	0.5	0.7	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6
Yelloweye RF		4.9	1.5	1.6	1.7	1.6	2.1	1.5	2.0	1.0	1.4	1.3	1.7
Canary RF	1.0	1.0	0.7	0.8	0.9	0.8	0.8	0.8	0.8	1.4	0.7	0.7	0.8
China RF		0.7	1.0	0.9	0.8	0.9	0.9	0.9	0.8	0.8	0.7	1.0	0.9
Yellowtail RF		0.5	0.7	0.8	0.8	0.8	0.9	0.7	1.0	0.9	0.6	0.5	0.8
Copper RF				1.5	1.3	1.3	1.4	1.5	1.1	1.1	1.2	1.8	1.4
Quillback RF		0.8	1.3	0.8	0.9	0.9	1.0	0.9	0.9	0.8	0.7	1.0	0.9
Blackgill RF							1.0						1.0
Bocaccio				2.1	2.6		2.1	2.2	0.6	4.6			2.3
Brown RF					0.8								0.8
Greenspotted RF								0.4					0.4
Greenstriped RF				0.5	0.6	0.3	0.4	0.3	0.4				0.4
Grass RF						1.2			2.0				1.6
Pacific Ocean perch						0.6							0.6
Pygmy RF						1.1							1.1
Redbanded RF						2.0	1.4						1.6
Redstripe RF					0.5	0.3	0.6	0.3	0.6				0.5
Rosethorn RF				0.4	0.3	0.3	0.2	0.3	1.1	0.3			0.4
Rosy RF				0.5		0.8	0.7	0.2					0.4
Silvergray RF					1.4								1.4
Speckled RF				0.6									0.6
Tiger RF		1.0		1.1	1.6	2.1	1.3	1.1	1.0				1.2
Vermilion RF		2.5	1.2	1.7	1.6	1.7	1.8	1.6	1.6	3.8	1.8	1.4	1.7
Widow RF		1.0	0.5	0.6	0.6	0.8	0.9	1.0	1.1	1.4			0.9
Rockfish spp						0.7		0.5					0.6
Sand sole				0.6	0.7		0.5						0.6
California halibut						6.6	5.6						6.1
Pacific sanddab							0.1		0.2				0.2
Rock sole							0.6						0.6
Arrowtooth flounder								0.9					0.9
Lingcod	2.9	3.0	3.0	3.1	3.3	3.1	3.4	3.4	3.5	3.5	3.2	3.4	3.3
Kelp greenling		0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.6	0.7	0.6
Rock greenling					0.7	0.6	0.7		1.0	0.7			0.7
Cabezon	1.9	1.6	2.1	2.2	2.1	2.0	2.2	2.2	2.4	1.8	2.5	2.2	2.1
Red Irish lord				0.8		0.6							0.6
Buffalo sculpin									1.0				1.0
Striped seaperch								0.6	0.6				0.6
Pacific mackerel								0.4					0.4
Sablefish									2.3				2.3
Giant kelpfish						0.8							0.8
Jacksmelt							0.2						0.2
Rock prickleback						0.9							0.9
Spotted ratfish					1.4								1.4

Table 8. Number of fish sampled for average weight and length in the Oregon ocean boat recreational fishery during 2000.

Species         Jan         Feb         Mar         Apr         May         Jun         Jul         Aug         Species         Total         Total           Black RF         2         17         3         274         381         474         409         374         222         90         238         173         2267           Blue RF         5         21         51         125         163         285         197         139         220         127         239         127         1379           Canary RF         5         16         8         130         133         338         226         224         203         11         177         451           Copper RF         1         4         73         113         200         114         168         18         8366           Blackgill RF         3         2         20         35         102         60         91         43         48         8         386           Blackgill RF         3         2         20         35         102         6         1         1         1         8         8         366           Bocaccio         2							Mon	th						
Black RF         2         17         3         274         381         474         409         374         322         90         238         173         265           Blue RF         5         21         51         125         163         285         197         19         220         190         238         173         187           Yelloweye RF         0         4         2         50         44         56         48         108         75         8         4         388           Canary RF         1         4         73         113         200         114         168         92         20         11         17         481           Copper RF         1         2         20         35         102         60         91         43         14         8         8         366           Blackgill RF         3         2         20         35         102         61         21         2         1         1         1         1         8         8         366           Greenspited RF         2         2         28         29         1         25         1         2         2	Species	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Blue RF         5         21         51         125         163         285         197         319         220         127         239         127         1879           Velloweye RF         5         16         8         130         193         338         226         284         203         76         27         29         1535           China RF         4         1         22         31         100         67         86         92         20         11         17         451           Velloweig RF         3         2         20         35         102         60         91         43         11         48         8         366           Blackgill RF         3         2         20         35         102         60         91         43         8         8         366           Blocaccio         2         8         2         1         2         1         2         1         2         1         2         1         16         37         33         33         1         9         37         34         38         36         36         36         36         36         36         3	Black RF	2	17	3	274	381	474	409	374	222	90	238	173	2657
Yellowsye RF         0         4         2         50         44         56         48         108         59         5         8         4         388         226         284         203         76         27         29         1535           China RF         4         1         22         31         100         67         86         92         20         11         17         451           Yellowtail RF         1         4         73         113         200         114         168         19         52         13         11         828           Copper RF         3         2         20         35         102         60         91         43         14         8         8         366           Blackgill RF         3         2         20         35         102         60         91         43         14         8         8         366           Brown RF         2         8         15         29         1         25         6         104         2           Greenspotted RF         1         1         1         1         1         1         3         3         7 <td< td=""><td>Blue RF</td><td>5</td><td>21</td><td>51</td><td>125</td><td>163</td><td>285</td><td>197</td><td>319</td><td>220</td><td>127</td><td>239</td><td>127</td><td>1879</td></td<>	Blue RF	5	21	51	125	163	285	197	319	220	127	239	127	1879
Canary FF       5       16       8       130       193       338       226       224       203       76       27       29       1535         China RF       4       1       22       31       100       67       86       92       20       11       17       451         Vellowtail RF       1       4       73       113       200       14       148       13       11       481         Copper NF       3       2       20       35       102       60       91       43       14       8       8       386         Blackgill RF       3       2       20       35       102       60       91       43       1       1       8       8       366         Blocaccio       2       8       2       1       2       1       2       1       2       1       2       1       2       2       2       2       2       1<	Yelloweye RF	0	4	2	50	44	56	48	108	59	5	8	4	388
China FF         4         1         2         31         100         67         86         92         20         11         17         451           Yellowtail RF         1         4         73         113         200         114         168         139         52         13         11         888           Copper RF         3         2         20         35         102         60         91         43         14         8         8         386           Blackgill RF         3         2         20         35         102         60         91         43         14         8         8         386           Blackgill RF         2         2         8         2         1         2         1         1         1         8         386           Greenspotted RF         2         2         1         2         1         2         1         2         1         2         1         2           Greenspotted RF         1         1         1         1         1         3         3         3         3         3         3         3         3         3         3         3         <	Canary RF	5	16	8	130	193	338	226	284	203	76	27	29	1535
	China RF		4	1	22	31	100	67	86	92	20	11	17	451
Copper RF       12       49       67       32       67       25       9       7       5       273         Guillback RF       3       2       20       35       102       60       91       43       14       8       8       386         Backgill RF       1	Yellowtail RF		1	4	73	113	200	114	168	139	52	13	11	888
Cullinger RF       3       2       20       35       102       60       91       43       14       8       8       386         Blackgill RF       1	Copper RF				12	49	67	32	67	25	9	7	5	273
Blackglil RF       I <thi< th=""> <t< td=""><td>Quillback RF</td><td></td><td>3</td><td>2</td><td>20</td><td>35</td><td>102</td><td>60</td><td>91</td><td>43</td><td>14</td><td>8</td><td>8</td><td>386</td></t<></thi<>	Quillback RF		3	2	20	35	102	60	91	43	14	8	8	386
Bocacio       2       8       2       1       2       1       2       1 <th1< th="">       1       <th1< th=""> <th1< th=""></th1<></th1<></th1<>	Blackgill RF							1						1
Brown RF Greenspotted RF22Greenspotted RF281529125622Greenstriped RF11112Pacific Ocean perch22112Pygmy RF111137Redstripe RF1063374336Rosethorn RF1063374336Rosethorn RF107538261111Tiger RF17538261161317Vermilion RF22213573607345144320Widow RF11322159334033152352352352352352352373331623733371663273327333311122439371663273337331112324529329793726121714333331113933111393716633733111393716633393716633733111393716633733331113	Bocaccio				2	8		2	1	2	1			16
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Brown RF					2								2
Greenstriped RF       28       15       29       1       25       6       104         Grass RF       1       1       1       1       2       2         Pygmy RF       1       1       1       1       2       3         Redstripe RF       1       1       1       1       3       3         Redstripe RF       10       6       3       3       7       4       3       36         Rosy RF       3       3       1       9       16       3       3       7       4       3       36         Rosy RF       1       7       5       3       8       26       11       61       9       93       15       1       4       4       300       4       320       4       320       4       320       4       320       4       320       4       320       4       320       4       320       4       320       4       320       4       320       4       320       4       320       4       320       4       320       4       320       4       320       4       320       3       3       1       1	Greenspotted RF								2					2
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Greenstriped RF				28	15	29	1	25	6				104
Pacific Ocean perch       2       2       1       1       1       1       1       1       1       1       1       3	Grass RF						1			1				2
Pygmy RF       1       1       2       3       3       3       7       4       3       3       3       6       3       3       7       4       3       3       3       6       3       3       7       4       3       3       3       6       3       3       7       4       3       3       3       6       3       3       7       4       3       3       3       6       3       3       7       4       3       3       3       6       3       3       7       4       3<	Pacific Ocean perch						2							2
Redbanded RF       1       1       2       3       3       3       3       3       7       4       3       3       6       7       3       7       4       3       3       6       7       7       7       3       7       4       3       3       6       7       7       7       3       3       7       4       3       3       7 <t< td=""><td>Pvamv RF</td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td></t<>	Pvamv RF						1							1
Redstripe RF       1       1       1       1       1       3       7         Rosethorn RF       10       6       3       3       7       4       3       36         Rosy RF       3       1       9       16       36       36       36         Silvergray RF       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       3       1       9       1	Redbanded RF						1	2						3
Rosethorn RF       10       6       3       3       7       4       3       36         Rosy RF       3       3       1       9       16       16         Silvergray RF       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       1       61       61       2       3       3       4       3       3       3       1       4       3       3       3       1       3       235       33       40       33       15       235       33       3       1       1       4       3       3       3       3       1       4       3       3       3       4       3       3       3       3       1       1       1       3       3       3       3       3	Redstripe RF					1	1	1	1	3				7
Rosy RF       3       3       1       9       16         Silvergray RF       2       2       1       7       5       3       8       26       11       16         Tiger RF       1       7       5       3       8       26       11       61         Vermilion RF       2       2       21       35       73       60       73       45       1       4       4       320         Widow RF       1       1       32       21       59       33       40       33       15       235         Rockfish spp       1       1       32       21       59       33       40       33       15       235         Rockfish spp       1       1       32       2       4       320       3273         Sand sole       2       2       4       2       2       4       323         Rock sole       10       13       23       33       23       33       23         Rock greenling       11       7       77       63       215       71       102       90       22       15       20       693         Roc	Rosethorn RF				10	6	3	3	7	4	3			36
Silvergray RF       2       2       2       2       2       2       3       3       2       1       <	Rosy RF				3		3	1	9					16
Speckled RF       1       1       7       5       3       8       26       11       61         Vermilion RF       2       2       21       35       73       60       73       45       1       4       4       320         Widow RF       1       1       32       21       59       33       40       33       15       235         Rockfish spp       1       1       32       21       59       33       40       33       15       43         Pacific halibut       3012       19       39       37       166       3273       3273         Sand sole       2       2       4       4       320       3273	Silvergrav RF					2								2
Tiger RF       1       7       5       3       8       26       11       61         Vermilion RF       2       2       21       35       73       60       73       45       1       4       4       320         Widow RF       1       1       32       21       59       33       40       33       15       235         Rockfish spp       1       32       21       59       33       40       33       15       235         Rockfish spp       1       322       2       4       3273       3273       33       315       235         Sand sole       2       2       4       320       3273	Speckled RF				1									1
Vermilion RF       2       2       21       35       73       60       73       45       1       4       4       320         Widow RF       1       1       32       21       59       33       40       33       15       235         Rockfish spp       1       3012       19       39       37       166       3273         Sand sole       2       2       4       4       320         California halibut       2       2       4       320         Pacific sanddab       1       1       1       233         Rock sole       1       1       1       233         Rock sole       1       1       1       1       233         Rock sole       1       1       1       1       1       1         Lingcod       29       119       62       223       255       382       285       293       297       93       72       61       2171         Kelp greenling       11       7       77       63       215       71       102       90       22       15       20       693         Rock greenling       3	Tiger RF		1		7	5	3	8	26	11				61
Widow RF       1       1       32       21       59       33       40       33       15       235         Rockfish spp       1       3012       19       39       37       166       3273         Sand sole       2       2       4       8       3273       3273       3273         Sand sole       2       2       4       8       3273       323       33       3273       323       33       3273       323       323       3273       3273       3217       3217       3217       3217       3217       3217       3217       3217 <td< td=""><td>Vermilion RF</td><td></td><td>2</td><td>2</td><td>21</td><td>35</td><td>73</td><td>60</td><td>73</td><td>45</td><td>1</td><td>4</td><td>4</td><td>320</td></td<>	Vermilion RF		2	2	21	35	73	60	73	45	1	4	4	320
Rockfish spp       1       3       4         Pacific halibut       3012       19       39       37       166       3273         Sand sole       2       2       4       8       3213       3273         Sand sole       2       2       4       8       3273       3273         Sand sole       2       2       4       8       3273       3273         California halibut       1       1       9       2       4       8         California halibut       1       1       1       23       23       255       382       285       293       297       93       72       61       2171       11       1<	Widow RF		1	1	32	21	59	33	40	33	15			235
Pacific halibut       3012       19       39       37       166       3273         Sand sole       2       2       4       8       8       8         California halibut       1       1       2       2       4       8         Pacific sanddab       1       1       2       2       4       10       13       23         Rock sole       1       1       1       1       11	Rockfish spp		-	-			1		3					4
Sand sole       2       2       4       8         California halibut       1       1       2         Pacific sanddab       10       13       23         Rock sole       1       1       1         Arrowtooth flounder       1       1       1         Lingcod       29       119       62       223       255       382       285       293       297       93       72       61       2171         Kelp greenling       11       7       77       63       215       71       102       90       22       15       20       693         Rock greenling       3       3       1       1       1       9       9       62       527       61       2171         Kelp greenling       5       9       8       60       68       137       97       68       24       16       9       26       527         Red Irish lord       1       2       1       2       3       3       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1 <t< td=""><td>Pacific halibut</td><td></td><td></td><td></td><td></td><td>3012</td><td>19</td><td>39</td><td>37</td><td>166</td><td></td><td></td><td></td><td>3273</td></t<>	Pacific halibut					3012	19	39	37	166				3273
California halibut       1       1       1       2         Pacific sanddab       10       13       23         Rock sole       1       1       1       1         Arrowtooth flounder       1       1       1       1         Lingcod       29       119       62       223       255       382       285       293       297       93       72       61       2171         Kelp greenling       11       7       77       63       215       71       102       90       22       15       20       693         Rock greenling       3       3       1       1       1       9       9       64       16       9       26       527         Red Irish lord       1       2       1       2       3       3       1<	Sand sole				2	2		4						8
Pacific sanddab       10       13       23         Rock sole       1       1       1         Arrowtooth flounder       1       1       1         Lingcod       29       119       62       223       255       382       285       293       297       93       72       61       2171         Kelp greenling       11       7       77       63       215       71       102       90       22       15       20       693         Rock greenling       3       3       1       1       1       9       9       62       527       68       24       16       9       26       527         Red Irish lord       1       2       1       2       3       3       1       1       1       1       1       1       1       3       3       1       1       1       1       1       1       3       3       1	California halibut						1	1						2
Rock sole       1       1         Arrowtooth flounder       1       1         Lingcod       29       119       62       223       255       382       285       293       297       93       72       61       2171         Kelp greenling       11       7       77       63       215       71       102       90       22       15       20       693         Rock greenling       3       3       1       1       1       9       9       22       15       20       693         Rock greenling       3       3       1       1       1       9       9       26       527         Red lrish lord       5       9       8       60       68       137       97       68       24       16       9       26       527         Red lrish lord       1       2       1       3       3       1	Pacific sanddab						-	10		13				23
Arrowtooth flounder       1       1         Lingcod       29       119       62       223       255       382       285       293       297       93       72       61       2171         Kelp greenling       11       7       77       63       215       71       102       90       22       15       20       693         Rock greenling       3       3       1       1       1       9       9       22       15       20       693         Rock greenling       3       3       1       1       1       9       9       663       693       9       26       527         Red lrish lord       5       9       8       60       68       137       97       68       24       16       9       26       527         Red Irish lord       1       2       1<	Rock sole							1						1
Lingcod       29       119       62       223       255       382       285       293       297       93       72       61       2171         Kelp greenling       11       7       77       63       215       71       102       90       22       15       20       693         Rock greenling       3       3       1       1       1       9       9       22       15       20       693         Rock greenling       3       3       1       1       1       9       9       22       15       20       693         Rock greenling       5       9       8       60       68       137       97       68       24       16       9       26       527         Red Irish lord       1       2       1	Arrowtooth flounder							-	1					1
Kelp greenling       11       7       77       63       215       71       102       90       22       15       20       693         Rock greenling       3       3       1       1       1       9       9       22       15       20       693         Rock greenling       3       3       1       1       1       9       9       22       15       20       693         Cabezon       5       9       8       60       68       137       97       68       24       16       9       26       527         Red Irish lord       1       2       1       1       1       3       3       1       1       1       1       3       3       3       3       3       3       3       3       1       1       1       3       3       3       1       1       1       3       3       3       3       1       1       1       3       3       3       1       1       1       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3	Lingcod	29	119	62	223	255	382	285	293	297	93	72	61	2171
Rock greenling         3         3         1         1         1         9           Cabezon         5         9         8         60         68         137         97         68         24         16         9         26         527           Red Irish lord         1         2         1         3         3         1         1         1         3           Buffalo sculpin         1         2         1	Kelp greenling		11	7	77	63	215	71	102	90	22	15	20	693
Cabezon         5         9         8         60         68         137         97         68         24         16         9         26         527           Red Irish lord         1         2         1         3 <t< td=""><td>Rock greenling</td><td></td><td></td><td></td><td></td><td>3</td><td>3</td><td>1</td><td></td><td>1</td><td>1</td><td></td><td></td><td>9</td></t<>	Rock greenling					3	3	1		1	1			9
Red Irish lord123Buffalo sculpin11Striped seaperch257Pacific mackerel11Sablefish11Giant kelpfish11	Cabezon	5	9	8	60	68	137	97	68	24	16	9	26	527
Buffalo sculpin1Striped seaperch2Pacific mackerel1Sablefish1Giant kelpfish1	Red Irish lord				1		2							3
Striped seaperch257Pacific mackerel11Sablefish11Giant kelpfish11I11	Buffalo sculpin				-		_			1				1
Pacific mackerel11Sablefish11Giant kelpfish11I11	Striped seaperch								2	5				7
Sablefish 1 1 Giant kelpfish 1 1	Pacific mackerel								1	-				1
Giant kelpfish 1 1	Sablefish									1				1
	Giant kelpfish						1			-				1
	Jacksmelt						-	2						2
Rock prickleback	Rock prickleback						1	-						-
Spotted ratfish 1	Spotted ratfish					1	-							1
Grand Total 46 209 151 1173 4508 2560 1776 2188 1706 545 651 485 15998	Grand Total	46	209	151	1173	4508	2560	1776	2188	1706	545	651	485	15998

Table 9. Average fork length (mm) by species and month sampled from the Oregon ocean boat recreational fishery during 2001.

					Mont	h					
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Overall Avg
Black RF	377	378	383	387	389	389	402	393	397	378	390
Blue RF	294	303	307	314	310	325	325	319	325	292	316
Yelloweye RF	425	432	419	461	457	437	439	443	454	508	445
Canary RF	339	329	343	350	361	354	362	377	382	333	361
China RF	355	350	334	335	333	344	348	345	340	360	343
Yellowtail RF	306	308	353	347	370	350	358	366	372	380	361
Copper RF	439	391	419	396	386	400	412	397	405	454	401
Quillback RF	337	362	354	352	358	351	353	366	369	387	358
Bocaccio RF				526	521	551	518	636	521		541
Brown RF						364	384				371
Chillipepper RF								298			298
Greenstriped RF					303	340	236	321	312	263	312
Grass RF			350		395	408	370	442			390
Redbanded RF					443	377		530			470
Redstripe RF				288	345	275	290	299	330		305
Rosethorn RF					264	269	292	255	273		271
Rosy RF			270	247	266	284	266	282	273	322	276
Tiger RF		429	448	371	371	380	389	374	397	401	383
Silvergray RF					485			473	510		488
Vermilion RF		423	423	413	419	425	448	443	589		446
Widow RF		282	339	374	402	386	374	396	350		380
Yellowmouth RF					515						515
Pacific halibut					1001	1054	1049	1024	1042		1013
Sand Sole		387	321	366	289		256	428			321
Starry Flounder		252						439	466		399
California Halibut							415	530			473
Pacific Sanddab								255	279		271
Butter Sole			317								317
Petrale Sole									368		368
Rock Sole									374		374
Arrowtooth Flounder					555			573			567
Lingcod	688	702	697	740	717	714	731	719	719	696	718
Kelp Greenling	356	348	347	355	349	341	345	345	340	346	345
Rock Greenling					350	343		245			325
Cabezon	468	501	460	470	474	481	476	464	478	448	474
Red Irish Lord			387	386	357		353	376	399		377
Buffalo Sculpin			350		280		322			332	321
Blue shark						820	889		1040		916
Jack Mackerel							543				543
Pacific Markerel						335					335
Pacific Whiting								500			500
Sablefish					623			738	717		729
Wolf Eel					1430		1340				1370
Jack Smelt						294					294
Coho salmon						601	623	659			616
Redtail Surfperch								375			375
Silver Surfperch							261				261
Striped Surfperch					306			303	311		305

Table 10. Average weight (kg) by species and month sampled from the Oregon ocean boat recreational fishery during 2001.

					Мо	nth					
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Overall Avg
Black RF	1.0	1.0	1.1	1.0	1.1	1.1	1.2	1.2	1.2	1.1	1.1
Blue RF	0.5	0.6	0.7	0.6	0.6	0.7	0.8	0.7	0.7	0.6	0.7
Yelloweye RF	1.7	1.9	1.7	2.0	2.0	1.8	1.9	1.9	2.2	3.9	1.9
Canary RF	0.8	0.8	1.0	0.8	0.9	0.9	1.0	1.1	1.2	0.9	1.0
China RF	1.0	1.0	0.9	0.9	0.8	0.9	1.0	1.0	1.0	1.2	1.0
Yellowtail RF	0.6	0.6	0.9	0.7	0.9	0.7	0.9	0.9	1.0	1.1	0.9
Copper RF	1.7	1.5	1.6	1.3	1.2	1.4	1.4	1.3	1.5	2.2	1.4
Quillback RF	0.9	1.2	1.1	1.0	1.0	0.9	1.0	1.1	1.1	1.2	1.1
Bocaccio RF				1.7	2.1	2.2	2.1	3.8	1.9		2.3
Brown RF						0.8	0.9				0.9
Chillipepper RF								0.4			0.4
Greenstriped RF					0.5	0.7	0.5	0.5	0.5	0.5	0.5
Grass RF			0.9		1.6	1.3	1.0	2.0			1.3
Redbanded RF					1.8	1.0		3.4			2.4
Redstripe RF				0.3	0.5	0.2	0.3	0.5	0.5		0.4
Rosethorn RF					0.3	0.3	0.4	0.3	0.4		0.4
Rosy RF			0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.7	0.4
Tiger RF		1.9	1.9	1.1	1.3	1.1	1.3	1.2	1.4	1.2	1.2
Silvergray RF					1.5			1.6	1.8		1.6
Vermilion RF		1.7	1.8	1.5	1.6	1.7	2.0	1.9	1.8		1.8
Widow RF		0.4	0.6	0.9	1.0	1.0	0.9	1.2	0.8		1.0
Yellowmouth RF					2.2						2.2
Sand Sole		0.8	0.3	0.4	0.2		0.4	0.8			0.5
Starry Flounder		0.3						1.4	1.3		1.1
California Halibut							0.6	1.6			1.1
Pacific Sanddab								0.2	0.2		0.2
Butter Sole			0.3								0.3
Petrale Sole									0.5		0.5
Rock Sole									0.6		0.6
Arrowtooth Flounder					1.8			2.1			2.0
Lingcod	3.3	3.5	3.5	3.6	3.9	3.9	4.1	4.2	4.2	4.0	3.9
Kelp Greenling	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.7
Rock Greenling	4.0		• •		0.7	0.7	• •	0.3	• •	4.0	0.6
Cabezon	1.9	2.5	2.0	2.1	2.2	2.3	2.2	2.0	2.2	1.8	2.2
Red Irish Lord			1.4	1.2	1.1		0.8	0.9	1.5		1.1
Buffalo Sculpin			1.0		0.4	4.0	0.7		6.7	0.8	0.7
Blue shark						4.2	3.4		0.7		4.8
Jack Mackerel							1.7				1.7
Pacific Warkerei						0.4		4.0			0.4
Pacific Whiting					2.4			1.0	4.6		1.0
					2.4		2.4	4.5	4.0		4.0
lack Smolt					5.0	0.4	5.4				3.5
Coho salmon						0.1	26	2 8			0.1
Podtail Surfnorch						2.2	2.0	2.0 1 2			2.5
Silver Surfnerch							0.4	1.3			1.3
Stringd Surfacesh					0 6		0.4	07	0 0		0.4
ou her ou her cu					0.0			V./	0.0		0.7

Table 11. Number of fish sampled for average weight and length in the Oregon ocean boat recreational fishery during 2001.

	Month											
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total	
Black RF	152	245	161	294	451	431	410	856	375	46	3421	
Blue RF	120	155	106	97	145	183	216	512	228	32	1794	
Yelloweye RF	5	20	8	23	61	76	52	112	62	3	422	
Canary RF	26	116	69	73	194	158	203	262	179	12	1292	
China RF	4	21	15	36	34	72	97	99	67	7	452	
Yellowtail RF	6	21	31	37	96	111	82	237	125	23	769	
Copper RF	5	11	16	24	38	47	33	40	42	1	257	
Quillback RF	3	37	23	34	61	52	83	85	39	1	418	
Bocaccio RF				1	13	6	12	7	9		48	
Brown RF						21	11				32	
Chillipepper RF								8			8	
Greenstriped RF					13	1	1	36	28	2	81	
Grass RF			1		2	1	2	1		_	7	
Redbanded RF					1	1		2			4	
Redstripe RF				4	4	2	13	26	13		62	
Rosethorn RF				-	6	4	6	10	37		63	
Rosv RF			1	3	3	7	6	43	39	1	103	
Tiger RF		2	1	4	3	15	22	35	10	1	93	
Silvergrav RF		_	-	-	2			4	3	-	9	
Vermilion RF		14	16	19	37	63	60	39	25		273	
Widow RF		1	10	2	2	29	47	107	32		230	
Yellowmouth RF		-		-	1		••					
Pacific halibut					2973	148	9	1276	642		5048	
Sand Sole		2	2	2	2		4	1	•		13	
Starry Flounder		1	_	_	_		-	2	1		4	
California Halibut		-					1	1	-		2	
Pacific Sanddab							-	7	14		21	
Butter Sole			1					-			1	
Petrale Sole			-						3		3	
Rock Sole									1		1	
Arrowtooth Flounder					1			2	-		3	
Lingcod	38	109	167	170	271	283	329	309	207	70	1953	
Kelp Greenling	12	34	27	63	76	104	67	148	102	9	642	
Rock Greenling	.=	•••			1	3	•.	1		·	5	
Cabezon	10	34	29	101	91	103	93	136	85	9	691	
Red Irish Lord			1	2	1		3	2	3	-	12	
Buffalo Sculpin			1	-	1		1	-	•	1	4	
Blue shark			-		-	1	1		1	-	3	
Jack Mackerel						•	1		•		1	
Pacific Markerel						1	-				1	
Pacific Whiting						-		1			1	
Sablefish					1			34	14		49	
Wolf Eel					1		2	5.	••			
Jack Smelt					-	1	-				1	
Coho salmon						287	564	10			861	
Redtail Surfperch								1			1	
Silver Surfperch							1	•			1	
Striped Surfperch					3		-	3	1		.7	
Grand Total	381	823	686	989	4589	2211	2432	4455	2387	218	19171	

Table 12: Age distribution by Surfperch species sampled from the southern Oregon recreational fishery in 2000.

		Total	٦	4	15	14	17	4	3						58
	lleye	Male	-		7	10	12	e	e						31
	Wa	Female		4	13	4	5	-							27
		Total			e	4	S	2							12
	alico	Male				-	-	7							4
	ö	Female			ę	ę	2								8
		Total		٦	2		4	٦							8
	ilver	Male		-				~							2
	S	Female			7		4								9
hs		Total			7	13	23	16	10	٢	۲	۲			72
er of Fi	Pile	Male			7		7	~	~						9
Numbe		Female			IJ.	13	21	15	6	٦	-	-			99
		Total		15	32	17	4	۲	٦	۲					71
	riped	Male		7	10	9	7			-					26
	St	Female		œ	22	1	2	-	-						45
		Total		7	49	83	31	12	7	-		-			181
	/hite	Male		-	ω	24	15	5	7						55
	\$	Female		-	41	59	16	7		~		~			126
		Total		62	795	436	276	180	104	31	19	4	-	٢	1909
	sdtail	Male		30	179	156	104	72	44	16	4	e			608
	Re	Female		32	616	280	172	108	09	15	15	-	-	£	1301
		Age	٢	7	ю	4	ß	9	7	ø	6	10	12	13	Total

<del>1</del>8

		Total	200			~	10	26	16	œ	~															62	217
	alleye	oleM					5	12	11	e																31	218
	×	Famala				-	5	14	5	5	-															31	217
		Total	100					ო	7	2	-	ო	-													12	235
	alico	Male						-			-	7														4	241
	c	Female						2	2	2		-	-													8	232
		Total	100	۲	2		2	2	-																	8	198
	ilver	Male		-				-																		2	196
	S	Female			2		2	-	-																	9	199
ish		Total	1000						٦		e	-	5	10	6	8	13	1	4	4	з					72	295
er of F	Pile	aleM							-		-			7	-		-									9	268
Numb		Female									2	-	5	8	80	80	12	1	4	4	ო					66	297
		Total	1010					5	10	1	6	10	13	9	ю	-	2	-								71	250
	triped	aleM						7	4	9	7	5	7	7	0	~										26	247
	S	Famala						ę	9	5	7	5	1	4	-		2	-								45	251
		Total				-		14	37	61	40	23	19	5												200	239
	Vhite	aleM						4	9	14	16	10	ß													55	240
	<b>v</b>	Female				-		10	31	47	24	13	14	5												145	238
		Total	2	5	e	٦	6	88	115	156	245	273	233	162	184	124	102	81	20	33	18	6	2	-	1	1917	266
	edtail	Male		7			9	82	86	43	80	88	87	61	50	18	7	4					-			610	249
	æ	Female	2	ę	ę	-	ę	9	29	113	165	185	146	101	134	106	100	11	20	33	18	6	-	-	٢	1307	274
		ForkLength in mm	160-170	170-180	180-190	190-200	200-210	210-220	220-230	230-240	240-250	250-260	260-270	270-280	280-290	290-300	300-310	310-320	320-330	330-340	340-350	350-360	360-370	380-390	400-410	Total	Average Length

Table 13: Length distribution by Surfperch species sampled from the southern Oregon recreational fishery in 2000.

19

	Number of Fish										
Length in millimeters	Garibaldi	Pacific City	Depoe Bay	Newport	Charleston	Bandon	Port Orford	Total			
675-700				2				2			
750-775				3				3			
775-800	1			4	1	3		9			
800-825	30		12	52	26	8	3	131			
825-850	70	1	23	102	30	8	5	239			
850-875	95	2	49	150	31	5	3	335			
875-900	101		45	153	31	9	5	344			
900-925	142	1	38	174	39	8	3	405			
925-950	140	1	42	144	30	6	4	367			
950-975	137		42	160	31	3	4	377			
975-1000	116		45	167	34	5	5	372			
1000-1025	106	1	34	141	28	13	3	326			
1025-1050	106		29	118	29	4	2	288			
1050-1075	93	1	39	128	22	1	5	289			
1075-1100	103	1	29	108	27	6	3	277			
1100-1125	79		42	131	20	5	7	284			
1125-1150	72		32	69	11	4	6	194			
1150-1175	54	1	27	75	12	2	6	177			
1175-1200	49		26	52	15	3	1	146			
1200-1225	25		14	68	19	13		139			
1225-1250	26		14	54	13	1	2	110			
1250-1275	12		9	39	13	4		77			
1275-1300	7		6	30	11	3	2	59			
1300-1325	2		5	19	8	1	1	36			
1325-1350	3			13	2	2		20			
1350-1375	3			10	2	1		16			
1375-1400				4	1		1	6			
1400-1425	1	1		6	1			9			
1425-1450		1		1	1			3			
1450-1475				3				3			
1475-1500					2			2			
1500-1525					1			1			
1550-1575				1				1			
1875-1900						1		1			
Grand Total	1573	11	602	2181	491	119	71	5048			

Table 14. Length distribution of Pacific halibut sampled from the Oregon recreational fishery by port in 2001.

				N	umber of Fish	1				
	C	olumbia Area			Eureka Area		Total			
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total	
3	2	4	6	2	2	4	4	6	10	
4	21	20	41	26	25	51	47	45	92	
5	96	53	149	71	65	136	167	118	285	
6	61	40	101	58	49	107	119	89	208	
7	28	36	64	33	22	55	61	58	119	
8	14	15	29	20	11	31	34	26	60	
9	4	7	11	9	4	13	13	11	24	
10				3		3	3		3	
11				1		1	1		1	
12				1		1	1		1	
Total	226	175	401	224	178	402	450	353	803	
Average										
Age	5.7	5.9	5.8	6.0	5.6	5.8	5.8	5.7	5.8	

 Table15. Age distribution of lingcod sub-sampled from samples collected from the Columbia

 and Eureka management areas in the Oregon recreational fishery in 2000.

 Table 16. Length distribution of lingcod sub-sampled from samples collected from the Columbia

 and Eureka management areas in the Oregon recreational fishery in 2000.

Fork	Number of Fish										
Length		Columbia Area			Eureka Area			Total			
(mm)	Male	Female	Total	Male	Female	Total	Male	Female	Total		
less than 559	1		1	2		2	3		3		
560-569	2		2				2		2		
570-579											
580-589				1		1	1		1		
590-599	2	1	3	2		2	5	1	5		
600-609	8	7	15	2	3	5	17	10	20		
610-619	32	2	34	11	6	17	45	8	51		
620-629	29	5	34	12	9	21	46	14	55		
630-639	22	4	26	8	2	10	34	6	36		
640-649	21	6	27	16	5	21	43	11	48		
650-659	15	10	25	25	9	34	50	19	59		
660-669	16	7	23	10	6	16	33	13	39		
670-679	18	7	25	18	10	28	43	17	53		
680-689	7	12	19	17	8	25	36	20	44		
690-699	10	14	24	21	16	37	45	30	61		
700-709	10	8	18	9	9	18	27	17	36		
710-719	12	11	23	4	5	9	27	16	32		
720-729	3	6	9	10	12	22	19	18	31		
730-739	2	10	12	7	6	13	19	16	25		
740-749	3	6	9	7	14	21	16	20	30		
750-759	2	3	5	10	6	16	15	9	21		
760-769	2	8	10	8	7	15	18	15	25		
770-779	1	6	7	7	8	15	14	14	22		
780-789	2	5	7	3	8	11	10	13	18		
790-799	2	3	5	1	8	9	6	11	14		
800-809	1	7	8	2	2	4	10	9	12		
810-819		5	5	2	4	6	7	9	11		
820-829		1	1	2	3	5	3	4	6		
830-839	2	7	9	2	5	7	11	12	16		
840-849		2	2	3	1	4	5	3	6		
850-859		5	5	1	2	3	6	7	8		
860-869	1	3	4		2	2	4	5	6		
870-879		3	3				3	3	3		
880-889		2	2	1	1	2	3	3	4		
890-899											
900-909					1	1		1	1		
Total	226	176	402	224	178	402	626	354	804		
Average											
Length	651	718	680	681	714	695	666	716	688		

Table 17. Estimated landings of non-salmonid finfish by speices and month from the 2000 Oregon ocean boat recreational fishery (in numbers of fish)

Species name	January	February	March	April	Мау	June	July	August	September	October	November	December	Total
Albacore Tuna	0	0	0	1	0	0	126	2147	1193	5	0	0	3472
Arrowtooth Flounder	0	0	0	0	11	2	0	3	0	0	0	0	16
Big Skate	0	0	0	0	0	0	0	2	0	0	0	0	2
Black RF	1921	4465	12761	26715	38110	49476	74798	76045	36526	12632	5610	4992	344051
Blue RF	1007	2300	5363	5810	9853	8985	6120	14842	5194	2825	3012	2153	67464
Blue Shark	0	0	0	1	3	1	6	22	1	0	0	0	34
Bocaccio RF	1	2	19	4	292	15	49	46	9	5	1	2	445
Brown RF	61	0	0	0	0	4	0	0	0	0	0	0	65
Buffalo Sculpin	0	0	0	2	0	0	2	2	0	0	0	0	6
Butter Sole	0	0	0	0	0	0	0	0	2	0	0	0	2
Cabezon	74	182	228	499	963	1456	1602	1597	541	178	59	133	7512
California Halibut	0	0	0	0	0	4	5	0	0	0	0	0	9
Canary RF	153	522	671	998	2667	2872	2843	6844	1804	513	160	315	20362
Chilipepper RF	0	3	0	0	5	0	0	0	0	0	0	0	8
China RF	21	106	70	255	458	749	795	1064	409	145	67	59	4198
Copper RF	21	91	78	169	560	544	461	788	257	46	38	49	3102
Dover Sole	0	0	0	0	2	0	0	0	0	0	0	0	2
Flatfish Species	Ő	Ő	Ő	1	0	ő	9	2	Ő	Ő	Ő	Ő	12
Grass RF	Ő	Ő	ő	2	ő	4	ő	0	2	ő	Ő	ő	8
Greenspotted RF	0	ů	1	0	4	0	ő	20	0	0	ő	ő	25
Greenspolled RF	3	6	21	78	404	157	114	20	35	3	3	6	1010
look Mookerel	5	0	21	,,,		137	114		55	5	5	0	1013
Jack Mackerei	0	0	0	0	0	0	3	0	0	0	0	0	3
Jack Shlen	111	224	246	546	017	1700	4457	4004	750	246	0	450	21
Keip Greenling	111	224	340	340	917	1/00	1457	1904	102	240	03	152	0490
	131	533	554	1158	2874	2/88	2304	2676	1334	431	237	328	15348
Longnose Skate	0	0	U	U	22	U	2	0	0	0	0	0	24
Misc. Fish Species	0	0	0	2	2	0	0	0	0	0	0	0	4
Pacific Halibut	0	0	0	0	5706	30	66	82	308	0	0	0	6192
Pacific Mackerel	1	1	5	0	0	2	5	101	0	0	1	1	117
Pacific Ocean Perch	0	0	0	0	0	3	0	0	0	0	0	0	3
Pacific Sanddab	0	0	0	0	3	1	406	40	77	0	0	0	527
Pacific Whiting	0	0	0	0	3	0	17	0	0	1	0	0	21
Petrale Sole	0	0	6	1	18	0	4	9	6	0	0	0	44
Quillback RF	21	91	116	100	510	705	511	1093	263	84	51	39	3584
Ratfish	0	0	0	0	1	0	1	0	0	0	0	0	2
Red Irish Lord	0	0	0	5	3	4	10	8	2	0	0	0	32
Redbanded RF	0	0	0	0	20	3	0	5	0	0	0	0	28
Redstripe RF	0	1	3	6	10	2	17	46	25	14	0	1	125
Redtail Surfperch	0	0	2	0	0	0	0	3	0	0	0	0	5
Rock Greenling	0	0	0	1	7	36	36	57	9	7	6	6	165
Rock Sole	0	0	0	2	0	0	37	1	2	0	0	0	42
Rockfish Species	1	1	2	1	20	2	111	15	0	3	0	2	158
Rosethorn RF	2	4	16	12	87	25	93	138	60	16	2	4	459
Rosy RF	0	0	6	24	161	45	43	96	25	0	0	0	400
Sablefish	0	0	0	2	97	4	13	9	5	1	0	0	131
Sand Sole	1	4	4	19	18	106	60	38	266	3	0	0	519
Sculpin Species	11	0	0	0	0	0	0	3	0	0	0	0	14
Silvergrev RF	1	Ō	Ō	ō	43	13	19	8	4	Ō	Ō	Ō	88
Skate Species	0	Ō	Ō	ō	1	0	0	Ō	0	Ō	Ō	Ō	1
Spiny Dogfish Shark	Ō	Ō	Ō	ō	22	3	4	2	Ō	Ō	Ō	Ō	31
Starry Flounder	Ō	Ō	Ō	4	6	7	7	20	2	Ō	Ō	0	46
Striped Surfperch	0	0	0	1	15	0	4	6	0	1	0	0	27
Surf Perch Species	Ő	Ő	ő	n	1	ő	0	1	4	, 0	Ő	ő	
Tiger RF	2	15	13	39	50	47	98	227	64	11	5	Š	576
Vermillion RF	7	43	58	130	275	447	568	646	238	62	24	44	2561
Widow RF	19	-5 26	151	260	213	003	870	1450	670	62	14	35	4504
Wolf Fel	10	50		200	514	2	10	1450	0/0	00	14		
Vollowovo PE		141	01	286	1400	574	670	1169	506	E 4	20	50 50	5010
		141	31	200	1409	5/4	0/0	1100	200		39	09	3019
	120	200	833	1160	2636	3527	2002	4597	34	704	110	260	20822
Grand Total	2724	0061	21/12	38212	68691	75025	07/0/	4307 11706F	5400	18149	0520	200	522022
Grand Total	3121	9001	21410	30312	00001	10035	91404	11/905	34117	10140	9520	0045	522027

	Number of Fish									
Species	Kept	Released	Total Caught	% Released						
Black RF	3306	44	3350	1.3						
Blue RF	583	41	624	6.6						
Yelloweye RF	32	2	34	5.9						
Canary RF	134	16	150	10.7						
China RF	57	0	57	0.0						
Yellowtail RF	431	70	501	14.0						
Copper RF	31	0	31	0.0						
Quillback RF	50	0	50	0.0						
Bocaccio RF	17	0	17	0.0						
Brown RF	10	0	10	0.0						
Greenstriped RF	9	0	9	0.0						
Redbanded RF	1	0	1	0.0						
Rosethorn RF	14	0	14	0.0						
Rosy RF	1	0	1	0.0						
Tiger RF	13	0	13	0.0						
Vermilion RF	40	0	40	0.0						
Widow RF	85	0	85	0.0						
Pacific Halibut	0	7	7	100.0						
Lingcod	195	347	542	64.0						
Kelp Greenling	67	1	68	1.5						
Cabezon	57	3	60	5.0						
Red Irish Lord	2	4	6	66.7						
Blue shark	0	1	1	100.0						
Pacific Whiting	0	9	9	100.0						
Mackerel species	2	4	6	66.7						
Pacific herring	0	5	5	100.0						

Table 18. At-sea disposition of groundfish on Oregon charter vessel bottomfish tr from July 1 through September 30, 2001.

		Number of Fish											
		Arago Reef		B	andon Reef	F							
Age	Male	Female	Total	Male	Female	Total							
3	4		4										
4	7	7	14	2	2	4							
5	41	35	76	26	21	47							
6	81	85	166	62	64	126							
7	50	58	108	27	39	66							
8	26	37	63	21	33	54							
9	22	24	46	15	11	26							
10	17	13	30	9	8	17							
11	4	12	16	2	5	7							
12	4	3	7	2	2	4							
13	1		1	1		1							
14	2	3	5										
15	1		1	1	1	2							
16	2	1	3	2		2							
17	2		2	1		1							
18	1		1	1	1	2							
19	1		1	2		2							
20				1		1							
22		1	1										
29				2		2							
Total	266	279	545	177	187	364							
Average													
Age	7.2	7.2	7.2	7.6	7.1	7.3							

Table 19. Age distribution of black rockfish by reef area sampledduring 2000 nearshore at-sea research.