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OREGON DEPARTMENT OF FISH AND WILDLIFE



2001 AGENCY REPORT

Prepared for the

ANNUAL MEETING OF THE TECHNICAL SUBCOMMITTEE OF THE CANADA-UNITED STATES GROUNDFISH COMMITTEE

compiled by

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OREGON DEPARTMENT OF FISH AND WILDLIFE AGENCY REPORT FOR TSC, 2001

2. OREGON

A. AGENCY OVERVIEW

Marine Resources Program (MRP) process of reorganization remained stalled in 2001. In the future, MRP still hopes to be realigned under three new divisions, and they will be: 1) Resource Assessment and Analysis under (vacant); 2) Resource Monitoring and Sampling under Rod Kaiser and Data Services under Phil Flanders. Retirements during the year included Jim Golden, Manager of the Marine Resources Program (effective January 1, 2002), Joe Rohleder, Asst Program Mgr; Darrell Pruden, South Coast Sportfish Biologist; and Tom Preston, Astoria Port Sampler.

B. MULTISPECIES STUDIES

1. Recreational Fisheries Project:

Sampling of the ocean boat fishery by the Ocean Recreational Boat Survey (ORBS) continued in 2001. Based on the results of year round sampling in 1999-2000, which indicated approximately 5 percent of the annual fishing occurred during the winter period, Oregon plans to continue sampling the March through October period during 2002.

Black rockfish continues to be the dominant species caught in the ocean boat fishery. Lingcod and several rockfish species (blue, yellowtail, China and canary) are also commonly observed. The fishery for Pacific halibut continues to be very popular.

The ORBS continued to expand its species composition and biological sampling of groundfish species during 2001. Black and rockfish otoliths were gathered, in addition to lingcod fin rays, for ageing. Age structures, genetic samples, and biological data were gathered from several species, such as bocaccio, brown, canary, China, copper, grass, quillback, tiger, vermillion and yelloweye. Samples were also taken from cabezon, kelp greenling, and lingcod. ORBS continued collecting of length and weight data from groundfish species.

Over 100 observations were made at-sea of fish released off charter boats to evaluate the effect of the one fish bag limit for canary rockfish. Approximately 11 percent of the canary rockfish caught were released. Many of the releases were due to the small size of the fish, rather than the bag limit restriction. We also observed this for other species, such as, yelloweye rockfish (6%), blue rockfish (7%), and yellowtail rockfish (14%), species with no daily sub-limit under the aggregate 10 fish bag limit.

Other management activities included participation in the RecFIN process, data analysis and sponsoring public hearings to discuss changes to the management of Pacific halibut, lingcod and rockfish fisheries. See the specific section for more details.

Contact Don Bodenmiller for more information (541) 867-4741, ext 223

2. Nearshore Studies:

Oregon completed the fourth of a five-year project to investigate nearshore bottomfish populations. Funded under the Interjurisdictional Fisheries Act, we plan to survey the

entire Oregon coast. Species composition, genetic samples, and age structure information will be gathered. This work is also coordinated with Oregon's habitat mapping project.

We continued nearshore work in 2001 with investigations in the area off the southern coast in the Brookings area. In 2002, we intend to initiate an exploitation rate tagging study of black rockfish on the central Oregon coast using P.I.T. tags.

Contact Don Bodenmiller for more information (541) 867-4741

3. Black Rockfish PIT Tagging:

We conducted some preliminary studies in 2001 to facilitate a large scale black rockfish PIT tagging project off Newport in 2002. We tested tag retention and related mortality in captive fish and explored some possible capture methods to minimize barotrauma problems.

Contact Bob Hannah and Steve Parker for more information (541) 867-4741

4. Marine Recreational Fisheries Statistics Survey:

Marine Recreational Fisheries Statistics Survey (MRFSS) samplers continued collecting demographic and creel data in 2001. Species composition sampling, length, and weight sampling was continued.

MRFSS samplers collect fishery data from boat and shore anglers in the ocean and estuaries. For groundfish species, black rockfish continue to dominate the ocean landings, surfperch make up the majority of shore based catch and salmon dominate the inland landings. For 2001, the program began to collect surfperch age structures and will continue in 2002.

Contact Don Bodenmiller or Linda ZumBrunnen 541) 867-4741

5. Species Composition Sampling:

Species composition sampling of rockfish, thornyheads and other bottomfish continues on commercial trawl landings, commercial fixed gear landings and recreational landings.

Contact Mark Saelens (commercial) or Don Bodenmiller (recreational) for more information (541) 867-4741

6. Measuring The Height of The Fishing Line and Its Effect on Shrimp Catch and Bycatch In an Ocean Shrimp Trawl (2001).

This project extended earlier work showing the importance of footrope configuration in determining bycatch of small flatfish and rockfish in ocean shrimp trawls. The relationship between fishing line height (FLH), shrimp catch and bycatch was investigated using a newly developed recording inclinometer. The inclinometer was effective at measuring FLH and indicating trawl performance deficits. FLH was determined to be stable during a haul and also between hauls within a given footrope and groundline configuration. FLH was readily adjusted with simple modifications to the footrope "dropper" chains. Inclinometer data showed that FLH can be unequal between double-rigged nets of identical configuration. Shrimp catch and the bycatch of flatfish and juvenile rockfish varied inversely with FLH, suggesting FLH can be adjusted to equalize the catch of shrimp, flatfish and juvenile rockfish between two double-rigged shrimp nets. Control of footrope configuration and fishing line height together can

virtually eliminate the bycatch of small flatfish and juvenile rockfish in shrimp trawls, but not without a small reduction in shrimp catch. Principal investigators were Bob Hannah an Steve Jones. Project completed, manuscript was submitted to Fisheries Research.

For more information contact Bob Hannah at (541) 867-4741.

7. Groundish Maturity Study

In 2001, we wrote up our results with respect to petrale sole and began writ-up of the maturity data for Pacific Ocean perch and yellowtail rockfish. Data collection continued for yelloweye, quillback and vermillion rockfishes.

For more information contact Bob Hannah at (541) 867-4741.

8. Whiting Bycatch Sampling:

ODFW continued to coordinate a cooperative observation program to monitor bycatch and collect biological samples of unsorted Pacific whiting landings made at shoreside processors. Cooperators are the fishing industry, ODFW, CDFG, WDFW, PSMFC, NMFS, and PFMC. Observers and staff obtained age samples from 1,050 yellowtail rockfish, 540 widow rockfish, 571 sablefish, 1,200 jack mackerel, 1,200 Pacific mackerel, and 1,600 Pacific whiting. Additional length frequency samples were taken on 2,696 Pacific whiting.

For more information contact Steve Parker (541) 867-4741

9. Nearshosre Reef Fixed Gear Survey.

During summer of 2001, Carla Sowell of our Brookings office continued the Nearshore Reef, Fixed Gear Survey using fixed hook and line gear to sample fish on nearshore rocky reefs. The long-term goal of the project is to develop the ability to consistently survey relative fish abundance on nearshore rocky reefs using fixed gear. The primary objective during this second year were to compare three reef areas to gain an understanding of among-reef variability an to test sampling in very shallow water (<10 m),. Cable gear was used in all of the sampling. Sampling was completed successfully at Orford Reef, Bandon Reef, and reefs off of Brookings on the southern Oregon coast. The 09 - 10 m depth stratum was also sampled successfully. Species that were previously unsampled in our efforts, such as grass rockfish, were caught. Data analysis for the study will be completed during 2002. The field work will also be continued in summer of 2002.

For information contact Carla Sowell at (541) 412-7395 or odfwbrookings@ wave. net.

10. Development and Testing of a Selective Flatfish Trawl (2001-2002) This project (begun in 2001) is a large scale field test of a trawl design developed

This project (begun in 2001) is a large scale field test of a trawl design developed in the Faroe Islands to target flatfish while minimizing the catch of roundfish. The trawl incorporates an extremely low-rise design with a severely cutback headrope. Initial results in the petrale sole fishery are very promising, with the trawl showing enhances flatfish catches and significant reductions in rockfish catches. This project is a cooperative venture between ODFW, NMFSS and Oregon State University, with most of the funding being provided by ODFW. The principal investigators were originally Bob Hannah and Steve Parker of ODFW, Craig Rose of NMFS and Steve Berkeley of OSU. Steve Berkeley has recently left OSU to take a position at US Santa Cruz and has been replaced on the project by Gilbert Sylvia of OSU's Cooperative Marine Experiment Station (COMES). A graduate

student at OSU, Sarah Banta, is the principal student investigator. The field work was about 50% completed in 2001 and will be finished in 2002.

For more information contact Bob Hannah or Steve Parker at (541) 867-4741

11. Enhanced Groundfish Data Collection Project (EDCP):

A final CD containing data is expected to be released in mid-May 2002. A final report is also expected in 2002.

For more information contact Mark Saelens (541) 867-4741, ext 251.

12. Juvenile Rockfish Recruitment Index Study:

The Oregon Department of Fish and Wildlife's Marine Program conducted the second year of a pilot project to investigate the potential of sampling estuaries and intertidal areas to develop a juvenile rockfish recruitment index for selected nearshore species. Initial goals were to determine whether rockfish could consistently be captured in estuarine and open coast environments, to determine the best capture methods, and to determine the best capture sites. The study sites ranged from Coos Bay to Tillamook Bay and included four primary sites (Yaquina Bay estuary, Salmon River estuary, Boiler Bay and Seal Rock).

Contact John Johnson for more information at (541) 867-4741, ext 237.

13. Cooperative Research:

We provided catch, effort, catch-at-age and other data as need to support the stock assessments

14. Nearshore Reef Habitat Studies:

Nearshore reef habitat studies (formally referred to as the Cooperative Reef Ecosystem (CORE) study) continued on subtital rocky bottom habitats off the Oregon coast. ODFW biologists continued ROV survey work for a second year at Cape Perpetua and conducted an ROV survey of the reefs off of Siletz and Lincoln City, just north of Newport, OR. The purpose of the Cape Perpetua work was to begin to monitor year-to-year variation in fish abundance on a nearshore reef and to examine fish-habitat relations. The Siletz/Lincoln City reef survey was conducted to begin estimating fish abundance on a large, heavily fished nearshore reef complex.

The Cape Perpetua work showed little year-to-year variation in rockfish and other bottom fish abundance and species composition over the two years. This work will be continued in the future to generate a longer time series. The work also showed patterns of fish distribution with respect to the transitional habitat between rock an sand (edge habitat). Staff collected over 36 km of ROV transects at the Siletz/Lincoln City reef complex. Data from this survey will be worked up in 2002. In 2002 staff plan to continue ROV work at Cape Perpetua and Siletz to compare heavily fished and lightly fished reefs. Staff also plan a side-scan sonar or multibeam sonar survey of the Siletz/Lincoln City reef complex to develop a seafloor habitat map. In addition, ROV survey work will be conducted at Orford Reef. The results of the 2001 work are summarized in Amend, et al. (2001). The report can be downloaded from www.hmsc.orst.edu/odfw/habitat.

For information contact Dave Fox at (541) 867-0300 ext. 228 or dave.fox@hmsc.orst.edu.orst.edu.

GIS Description

The Marine Resources Program GIS was summarized in the 1997 TSC report. Additions to the GIS in 2000 are listed below.

For information contact Dave Fox at (541) 867-0300 ext. 228 or <u>dave.fox@hmsc.orst.edu.orst.edu</u>.

Base Maps and Baseline Data

Base Maps No additions for 2001.

Baseline Data

1) Fish densities by habitat type at Cape Perpetua Reef..

2) Fish densities by habitat type at Siletz/Lincoln City reef.

Software No additions for 2001.

Bathymetric Data Sources No additions for 2001.

15. Pelagic Species:

Refer to section on Pacific sardine

Contact Jean McCrae for more information (541) 867-4741

16. Developmental Fisheries Project:

The Developmental Fisheries Program was created to allow for controlled development of new fisheries. Each year, the Developmental Fisheries Board recommends to the Oregon Fish and Wildlife Commission a list of food fish species that are considered to be developmental and a harvest program which includes a limited entry system. The Developmental Fishery Board is made up of members from a broad range of fishing interests (harvesters, processors, and state agencies).

In 2001, a total of 131 permits were issued for all species, and 38 permits were for finfish species. The main finfish of interest was sardines, which had all 20 available permits issued. Other species for which we issued permits were hagfish (4), swordfish (9), blue shark (1), slender sole (1) and anchovy/herring (3).

The majority of the landings of developmental species was as by-catch in other established fisheries. However, landings of Pacific sardines greatly increased in 2001. Eighteen vessels landed over 28.2 million pounds (12,798 mt); a 34% increase from 2000. Market samples were collected and we hired a seasonal worker to conduct ride-along trips to observe by-catch. Observed by-catch consisted of sharks, Pacific herring, and some salmon. Observed salon averaged 1.0 per trip, with 64% being release alive. Logs (accounting for 92% of the landings) show 73% of the harvest was taken off Oregon and

27% off southern Washington. Incidental landings of mackerel accounted for 0.2-0.3% of the catch.

Market samples were collected for length, weight, maturity and age data. The average length and weight for all samples was 212 mm (standard length) and 153.8 gm. Size of sardines did not show the general decrease over the season as in 2000. However, fishers commented on the large amount of very small fish (3-4 in) the latter half of the season. These fish were not captured in the biological samples ads the harvesters tried to avoid them. The samples taken during the first part of the season had the highest percent of more maturing fish (condition 3) and the samples later in the season had the highest percent of less mature fish (condition 1). Age structures were sent to California Department of Fish and Game to be analyzed and showed mostly 2-4 year old fish.

Contact Jean McCrae for more information (541) 867-4741.

17. Cooperative Ageing Unit:

Twelve months of in-kind supervision and "lead worker" oversight were provided for the Cooperative Ageing Project (CAP). Production ageing was completed to support this cycle of stock assessment for Dover sole, sablefish, and shortspine thornyhead. The lab participated in the annual Dover Sole Workshop in Eureka, California. Marion Mann assisted NMFS with a special growth study of shortspine thornyhead. During May-June, production ageing to support stock assessments for next year began - in particular canary rockfish. Because of the back log of sablefish otoliths, we will continue ageing them as well. Several smaller ageing projects were also completed to support various research projects. A special collection of Pacific ocean perch otoliths were read to support the POP rebuilding plan. In October, the NMFS/Alaska Fisheries Science Center transferred the obligation to age west coast Pacific whiting to our lab. Our reader, Patrick McDonald was trained in November and commenced production ageing. An additional ager, Jennifer Menkle, was added to meet production needs. During 2002, we will be adding tow additional age readers to the project for a total of six.

Contact Bob Mikus for more information on ageing (541) 867-4741, ext 247.

18. Logbooks:

Status of Oregon logbooks is as follows:

Туре		Years	Entered	Verified
1) Trawl Log		'76 – '01	'01	'01
2) LE Sable Logs		'79–'00	None	None
3) H&L Volunteer Logs	'88, '92 &	Thru '99 '94 – '00	None	

C. BY SPECIES

1. Pacific cod: no work was conducted on Pacific cod. Few fish were found in the trawl landings. Total Oregon Pacific cod landings were up 195% in 2001 at 71,352 pounds (32 mt) compared to about 24,164 pounds (11 mt) in 2000.

- 2. Shelf rockfish
 - a. Black rockfish

1) Coastwide sampling continues on recreational catches of black rockfish. Black rockfish are the most frequently caught fish in the ocean boat recreational fisher, and about 300,000 to 400,000 fish have been harvested annually in recent years. Port samplers take market samples from commercial landings. Sampling includes biological sampling for age, length, sex and maturity. Age determination is done by ODFW. Contact Don Bodenmiller for more information (541) 867-4741.

2) Total commercial Oregon landings were 326,107 pounds (147.9 mt) which was down from the 2000 landings of 239,852 pounds (about 109 mt mt). This is about a 36% increase from 1998. Contact Mark Saelens or Bill Barss for more information (541) 867-4741

b. Widow rockfish - coastwide sampling continues for age, length and sex. Age determination is done by NMFS, Tiburon. Oregon landings in 2001 were 3,744,423 pounds (1,698 mt) which is down from the 6,004,282 pounds (2,724 mt) in 2000. This is about a 37.6.6% decrease from 2000.

c. Canary rockfish - coastwide sampling continues for age, length and sex. Age determination is done by ODFW. Oregon landings in 2001 were 42,178 pounds (19 mt) which was about a 41% decrease from the 71,346 pounds (32 mt) in 2000.

d. Yellowtail rockfish - coastwide sampling continues for age, length and sex. We also continued sampling yellowtail rockfish landed by shrimp trawlers. Age determination is done by WDFW. Oregon landings in 2001 were about 2,434,562 pounds (1,104 mt) which was a 45% decrease from about 4,427,720 pounds (2,008 mt) from 2000.

3. Slope rockfish

In 2001, most sampling was limited to species composition sampling. Length frequency samples were taken on selected species, and we took age structures on darkblotched rockfish and Pacific ocean perch. Pacific ocean perch landings were 427,112 pounds (194 mt) which was a % increase from about 220,168 pounds (100 mt) in 2000. Darkblotch rockfish were sorted for the first time in 2001, and 148,929 pounds (about 68 mt) were landed.

4. Thornyheads

Sampling included sampling for species composition, length frequency, age and sex. Oregon landings of longspine thornyhead decreased to 1,369,461 (765 mt) in 2000, which was about a 19% decrease from the 1,685,484 (765 mt) in1999. Oregon landings of shortspine thornyhead were 497,671 pounds (226 mt) in 2001, which was about an 21% decrease from 628,308 pounds (285 mt) in 2000.

5. Sablefish

Routine age samples were obtained on sablefish. Otoliths were sent to the NMFS / ODFW Cooperative Ageing Project in Newport, Oregon for age determination. Oregon landings were 5,713,226 pounds (2,592 mt) in 2001, which was down 9% from the 2000.

6. Flatfish

a. Age sampling continued and ages were determined on Dover sole. Contact Bob Mikus for additional information on aging (541) 867-4741.

Except for English sole, most Oregon flatfish landings were down in 2001. Dover sole were 8,282,496 pounds (3,757 mt) down 20.3% from 10,390,699 pounds (4,713 mt) in 2000. Landings of English sole were 903,481 pounds (410 mt) up 66% from 542,991 pounds (246 mt) in 2000. Landings of petrale sole were 2,056,693 pounds (933 mt), up 9% from1,895,552 pounds (860 mt), in 2000. Landings of arrowtooth flounder were down by 11% at 2,262,236 pounds (1,040 mt) compared to 2,580,307 pounds (1,170 mt) in 2000. Pacific sanddab landings were down 27% at 234,483 pounds (106 mt) compared to at 321,829 pounds (146 mt) in 2000.

- b. Pacific halibut
 - 1) Weekly harvest in the recreational and also the commercial fishery were monitored for quota tracking purposes. The majority of recreational caught fish continue to be landed into Newport and Garibaldi. In 2001, the directed recreational fishery was open 10 days, which was drastically down from a decade age when it was open nearly year round. The commercial directed fishery was open for five 10-hour periods. In 2001 as in recent years, the recreational and commercial fisheries received equal allocations.
 - 2) Public meeting were held to discuss 2001 recreational fishery structuring and proposed changes to the 2002 catch sharing plan for Oregon recreational fisheries.
 - 1) Oregon commercial fishers landed 252329 pounds (114 mt) down 23% from 329,821 pounds (150 mt) in 2000.

Contact Don Bodenmiller for more information (541) 867-4741

7. Pacific whiting

In 2001, ODFW continued to coordinate a cooperative observation program to monitor bycatch and collect biological samples of unsorted Pacific whiting landings made at shoreside processors. Cooperators are the fishing industry, ODFW, CDFG, WDFW, PSMFC, NMFS, and PFMC.

Oregon landings and observations were made at Newport, Astoria and Charleston. Landings and observations were also made at Ilwaco and Westport, WA through WDFW and at Crescent City and Eureka, CA through CDFG. Overall, 24% of whiting landings were observed over the course of the season. Sampling and observations were conducted from April through the season end in late September. Two Washington, three California and seven Oregon processors, and twenty-nine vessels participated in the program. Exempted Fishing Permits (EFPs) were issued by NMFS through CDFG and ODFW to participating vessels to permit the landing of unsorted whiting; participating vessels with EFPs were exempted from prohibitions on landing prohibited species (Pacific halibut and salmon) and groundfish trip limit overages. Prohibited species and the monitory value of trip limit overages were turned over to the state of landing.

Approximately 53,376 mt of Pacific whiting were landed at shoreside processors, compared to approximately 85,400mt in 2000. Oregon processors received approximately 73% of total landings, Washington processors received approximately 24%, and about 3% was landed in California. The overall salmon bycatch rate was 0.042 salmon per mt whiting; this is higher than in 2000 (0.039 salmon/mt). An increase in salmon returns and abundance appears to have contributed to the increased salmon bycatch rate in the 2001 season. A total of 3,005 salmon (2,634 Chinook, 304 pink, 35 coho, and 32 chum salmon) were taken as bycatch in this fishery and turned over to state agencies in 2001 - this compares to 3,321 Chinook in 2000, 1,712 Chinook in 1999 and 1,713 Chinook salmon in 1998. In Oregon, all salmon in acceptable condition are turned over to hunger relief agencies. Other species with notable bycatch volumes are yellowtail rockfish (95.9 mt), widow rockfish (42.3 mt) and mackerel (chub and jack mackerel combined – 615 mt). Bycatch rates for mackerel were much higher than in 2000. Bycatch of yellowtail and widow rockfish were very low compared to 1997 through 1999 levels.

For more information contact Steve Parker (541) 867-4741

We provided catch, effort, catch-at-age and other data as need to support the Pacific whiting stock assessments.

For more information contact Mark Saelens (541) 867-4741

8. Dogfish

No work was conducted on dogfish. Landings decreased to 46,779 pounds (21 mt), down 47% from to 88,621 pounds (40 mt) in 2000.

9. Lingcod

a. Age samples were collected and sent to WDFW, Seattle for age determination. Oregon landings were 149,083 pounds (68 mt) which is up 6% from 2000 landings of 141,126 pounds (64 mt).

b. ODFW continued collecting age samples from the recreational fishery in 2001. For 2002, due to public opinion, the 34-inch maximum length restriction was dropped. Also in 2002, staff began ageing the lingcod fin rays sampled in the 1999-2000 recreational fishery.

c. Lingcod Discard Mortality in Trawls:

We wrote up this discard mortality study and submitted it for publication.

Contact Steve Parker for more information (541) 867-4741.

10. Other

a. Surfperch

Tagging of redtail surfperch was discontinued in 2001 with the retirement of longtime marine sport biologist Darrell Pruden. Surfperch activity was limited to biological sampling of carcasses and processing recaptured tagged surfperch. Most of the carcasses collected in 2001 were lost, due to a freezer failure. Carcasses processed without tags included only 15-redtail, 1-striped, 3-walleye and 3-calico surfperch. In 2001, 56 tagged surfperch were recovered, and 37 of these fish included frames which were sampled for biological information. Age determination will be done by ODFW at the Newport office.

Contact Don Bodenmiller at (541) 867-4741.

Processors reported receiving 2,876 pounds of surfperch in 2001, which is a 40% increase from 2,052 pounds in 2000. Interest continues for the commercial harvests of surfperch, especially in Oregon's south coast area. In 2001, commercial harvest of surfperch was again prohibited in the months of August and September to protect redtail surfperch during the months that they spawn off Oregon.

Contact Bill Barss or Mark Saelens (541) 867-4741.

b. Pacific herring

In 2001, commercial fishers did not to fish Yaquina Bay for roe herring due to the projected poor run. Commercial landings of herring were 48,096 pounds (22 mt) which was a 179% increase over the small landing in 2000.

Contact John Johnson for more information (541) 867-4741.

c. Hagfish

Landings of Pacific hagfish were down 77% in 2000 at 72,760 pounds (33 mt) compared to at 318,627 pounds (145 mt) in 2000.

d. Skates

Landings of skates in 2000 were 1,316,420 pounds (597 mt) which was down 26% from 1,772,114 pounds (804 mt) in 1999. Species composition and length frequency samples were taken.

e. Mackerel

Landings of Pacific mackerel and jack mackerel combined were 1,141,671 pounds (518 mt), up 85% 617,167 pounds (280 mt), in 2000. Almost all Oregon mackerel landings are landed as bycatch from the Pacific whiting fishery.

f. Pacific Sardine

Landings for sardine continue to increase. Eighteen vessels landed 28.2 million pounds (12,798 mt); a 34% increase from 2000. Most of the sardine catch was by seine gear (99%), and fish were landed into Astoria and processed as bait for the Japanese longline fishery. Incidental landings of mackerel accounted for 0.2-0.3% of the catch.

We conducted 21 ride-along trips to observe by-catch. Observed by-catch consisted of sharks, herring, and some salmon. Observed salmon averaged 1.0 per trip, with 64% being released alive. Market samples of Pacific sardine were collected for length, weight, maturity, and age data. The average length and weight for all samples 212 mm (standard length) and 153.8 gm. Age structures analyzed by California Department of Fish and Game showed mostly 2-4 year old fish.

Contact Jean McCrae for more information (541) 867-4741.

Publications:

Hannah, R.W. and S.A. Jones (submitted to Fishery Research). Measuring the height of the fishing line and its effect on shrimp catch and bycatch in an ocean shrimp (*Pandalus jordani*) trawl.

Hannah, R.W. and S.A. Jones 2001. Bycatch reduction in an ocean shrimp (*Pandalus jordani*) trawl from a simple modification to the trawl footrope. J. Northw. Atl. Fish. Sci. 27:227-234.

Matteson, K.M., R.W. Hannah, J.T. Golden and P. Crone. 2001 Evaluation of pot and longline gear as survey tools for sablaefish. Oregon Dept. Fish Wildl., Information Rept. Ser., Fish. No. o1-03. 63p.

Parker, S.J. 2001. Shoreside whiting observation program: 2001. Oregon Dept of Fish & Wildlife. 19pp.

Parker, S.J., R.S. Rankin, R. W. Hannah and C.B. Schreck. Discard mortality of trawl-caught lingcod in relation to tow duration and time on deck. In review

Weeks, H., and S. Parker. 2002. Scientific and management uncertainty create competing precautionary needs for fishery managers. Fisheries. Vol 27, No. 3. P. 25-27.

APPENDIX A Marine Finfish Program Staff

Jim Golden, Marine Resources Program Manager Rod Kaiser, Program Leader	Newport	Newport
Joe Rohleder, Asst Prog Manager	Newport	1
Bill Barss, Project Leader, Field Operations Dave Douglas, Port Biologist Gary Hettman, Port Biologist John Seabourne, Port Biologist		Newport Astoria Newport Charleston

Darrell Pruden, Sportfish Biologist Carla Sowell, Port/Research Biologist Tom Preston, Port Sampling EBA Jill Smith, Port Sampling EBA Rhonda Haynes, Port Sampling EBA & Tuna Doris Kollodge, Port Sampling EBA Cathy Nist, Port Sampling EBA (seasonal) Morgan Grobe, P. Sardine Fishery EBA (seasonal) Tiffany Hughes, Whiting Sampling EBA (seasonal) Josie Thompson, Whiting Sampling EBA (seasonal) Nancy McLean-Cooper, Albacore EBA (seasonal) John Benson, Port Sampling EBA (seasonal) Dean Headlee, Port Sampling EBA Nick Wilsman, Port Sampling EBA Damon Zeller, Port Sampling EBA (seasonal)	Charleston Brookings Astoria Newport Charleston Astoria Astoria Newport Newport Newport Charleston Brookings Brookings	Astoria Astoria Newport
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Don Bodenmiller, Project Leader, Bevelopmental Fisheries Bill Miller, Biologist, Recreational Fisheries, Age Read Kaety Jacobson, Nearshore Bottomfish EBA (seasonal) Jennifer Conrad, Nearshore Bottomfish EBA (seasonal)	s er Newport	Newport Newport
Linda ZumBrunnen, PSMFC, MRFSS Supervisor Sheila Johanns, PSMFC, MRFSS Fishery Tech. Gway Kirchner, PSMFC, MRFSS Fishery Tech. Graig Filham, PSMFC, MRFSS Fishery Tech. Jock Headlee, PSMFC, MRFSS Fishery Tech.	Newport Tillamook Newport	Newport Gold Beach
David Sampson, Consultant, OSU Clayton Creech, Contract Programmer, OSU	Newport Newport	

Projects planned for year 2001:

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1. We hope to complete the testing of the selective flatfish trawl, possibly in combination with a larger scale test fishery. We may conduct some additional testing in the deepwater complex, slope trawl fishery.

Contact Bob Hannah for additional information (541) 867-4741.

2. Maturity data will be collected for several nearshore rockfish species as samples are available. Contact Bob Hannah for additional information (541) 867-4741.

3. A large scale PIT tagging project aimed at estimating the exploitation rate in the CPFV (charter boat) fishery will be initiated with black rockfish.

Contact Bob Hannah for additional information (541) 867-4741.