

PROJECT COMPLETION REPORT

PROJECT TITLE: Marine Recreational Fishery Observers/Samplers
PROJECT NUMBER: 01-006
PROJECT PERIOD: July 1, 2001 through December 31, 2001

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MARINE RECREATIONAL FISHERY OBSERVERS/SAMPLERS

Project No. 01-006

Final Report

July 1, 2001 through December 31, 2001

Introduction

Recent regulatory actions have reduced marine recreational fishing opportunities for rockfish and further reductions are threatened. In particular, concerns that canary rockfish have been overfished resulted in an Oregon angler daily bag reduction from 15 to 1 canary rockfish. Further closures to all rockfish fishing have been discussed by the Pacific Fishery Management Council (PFMC) due to concerns over canary rockfish mortality resulting from discard when the angler has reached the one fish limit. Recreational anglers insist that few canary rockfish are discarded due to the 1 fish bag limit because they have altered their fishing practices and areas to avoid them.

This situation led to the funding (jointly by the Fish Restoration and Enhancement Fund and Sport Fish Restoration Program) of a project designed to gather discard data at-sea and to improve the biological database needed for Oregon and PFMC management of several nearshore bottomfish species.

Objectives

There were three objectives to this project; (1) document the magnitude of canary rockfish discard in the Oregon recreational fishery; (2) improve the biological database for several rockfish and bottomfish species; and (3) gather reef location information for future habitat mapping.

Discussion

A seasonal observer was stationed in each of the ports of Garibaldi, Newport and Charleston to ride recreational bottomfish charter vessels coastwide in Oregon from July through September, 2001. The Garibaldi observer covered boats out of Garibaldi, the Newport observer covered both Newport and Depoe Bay, and the Charleston observer covered Charleston, Bandon, and Brookings charter vessels.

During a typical day the observer would ride a 5 to 8 hour recreational bottomfish charter trip and spend the remainder of the day gathering biological and genetic data dockside from several rockfish and bottomfish species for which little is known mostly due to their infrequency in the catch. When allowed by the captain, the observer also obtained GPS locations of fishing sites for future use by the Habitat Mapping Project of the Oregon Department of Fish and Wildlife (ODFW) Marine Resources Program. Typically the observer worked four ten-hour days per week.

Results

Task 1: Document the magnitude of canary rockfish discarded in the Oregon recreational fishery

The three observers collectively observed a total of 105 recreational bottomfish charter boat trips. Based on estimated landings of canary rockfish during the July through September period, the samplers observed 3.2% of the catch landed on charter vessels and 2.3% of the combined charter and private boat landed catch.

The Oregon Coastal Sportfishing Association supported this study. Most Oregon charter boat captains were cooperative, although a few either would not allow the observer to ride or would not allow them to take GPS locations of the reef areas fished. A total of 32 charter boats participated in the study by providing free passage to observers.

Approximately 11 percent of the 150 canary rockfish caught were released (Table 1). The rate of release observed at-sea exceeded the overall rate of 8 percent reported released to fishery samplers at the dock by anglers on charter and private vessels during the period of study.

No attempt was made to determine the percent that survived. If all fish died, then the additional impact would be 12 percent above landed catch (total caught/total kept). Observers reported some fish released in good condition.

Not all releases were due to the 1 fish daily bag restriction. Some fish were released because of their small size. Fish of several other species were also released due to their small size. 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 in 2001. Based on these observations it appears the magnitude of canary rockfish released due to the one fish bag limit was relatively minor.

For some species, such as lingcod and Pacific halibut, the release rate was high due either to fishery closures (Pacific halibut) or minimum length restrictions (lingcod). These species are known to have high survival when caught and released.

Task 2: Improve the biological database for several rockfish and bottomfish species

Project staff collected genetic and biological samples from 14 bottomfish species. These included the following rockfish species: blue (Garibaldi only), bocaccio, brown, canary, china, copper, grass, quillback, tiger, vermillion and yelloweye. In addition samples were taken of cabezon, kelp greenling, and lingcod. Each observer was instructed to gather up to 50 of each species, with expectations that goals would rarely be met due to the infrequency for which these species are observed. Biological samples included sex, length, weight and age structures. The total number of fish by species, sex and port are reported on Table 2. These samples will be

available for future genetic stock identification studies to help determine the range of each interbreeding stock.

Task 3: Gather reef location information for future habitat mapping

Project staff gathered GPS locations for the beginning and end of each drift. Species composition was also noted. This information will be provided to staff of the Marine Habitat Mapping Project for use in future habitat mapping of nearshore reefs.

Acknowledgements

Oregon acknowledges and appreciates the cooperation of the 32 charter boat operators who kindly provided free space for the observers. This study would not have been successful without their cooperation. We appreciate the hard work and excellent public relations demonstrated by Steve Johnson, Brian VanNice, and Larry Lundquist, the three seasonal observers.

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

Species	Number of Fish			
	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
Cabazon	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

RF = rockfish

Table 2. Number of fish by species, sex and port sampled for genetic tissue from the 2001 Oregon recreational fishery.

FishName	Number of Specimens														Total	
	Garibaldi		Depoe Bay		Newport		Charleston		Bandon		Brookings		Total			
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male				
Blue RF	38	12														50
Yelloweye RF	29	19	1	4	2	2	9	1	3							71
Canary RF	34	26	33	16	10	11	6	2	2	2	2	12			17	171
China RF	20	9	14	7	13	11	8	1	9	6	2	9	6		2	100
Yellowtail RF			5	2	18	7	2	2	5	2	2	5	2		2	43
Copper RF	6	3	1	3	8	9	2	1	1	1	1	1			1	37
Quillback RF	25	18	17	17	13	11			2	1		1				105
Boccacio	14	6														20
Brown RF							4									4
Tiger RF	11	8		5		2		2								30
Vermilion RF	2	1	2	1	1	1	2	3		12		1			1	32
Lingcod	35	4					7	12	6	7		2			2	75
Kelp greenling	22	18	6	4	7	13	3	1	1			1				76
Cabezon	6	19	4	5	5	11										50
Grand Total	242	143	83	64	77	78	43	23	41	26	19	25				864

RF = rockfish