6 Oregon Trawl Enhanced Data Collection Project

6.1 Introduction

The evaluation of the Oregon Trawl enhanced data collection project (EDCP) is one of a set of case studies performed by the National Fisheries Conservation Center and intended to assist NMFS and industry in designing more effective cooperative data gathering efforts. As with the other case studies, we relied primarily on interviews and a review of the available written record (see Tables 6.1 and 6.2 and the Methods chapter (chapter 3) for more detail). This review examines both the experimental enhanced logbook and the observer program, which combined to gather previously unrecorded information on fishing strategies, discard, and fish biology.

Table 6.1. Interviewees. ODF&W refers to the Oregon Department of Fish and Wildlife and NMFS to the National Marine Fisheries Service.

Name	Title & Organization	ODF&W	Fisher	Other
Greg Davis	Observer, Skipper FV *Aja*		X	
Joe Easley	Administrator, Oregon Trawl Commission			X
Tim James	Owner FV *Endevour*; Former Commissioner OTC		X	X
Keith Matteson	ODF&W, EDCP team	X		
Richard Methot	NMFS, NWFSC, Seattle			X
Robert Rees	Observer; fishing guide			X
Mike Retherford	Owner/Skipper FV *Excaliber I*		X	
Mark Saelens	ODF&W, EDCP coordinator	X		
Cyries Schmitt	NMFS-NWC, Newport			X
John Wallace	NMFS, NWFSC, Seattle			X

Table 6.2. Additional sources. ODF&W refers to the Oregon Department of Fish and Wildlife, PFMC to the Pacific Fisheries Management Council, and NMFS to the National Marine Fisheries Service.

Source	Description
ODF&W	Research proposed to OTC from ODFW, March 1995: Enhanced Data Collection Project
PFMC	Report of the Observer/Data Collection Steering Group, Supp. Report E6 June 1995
NMFS	Preliminary Results from the Enhanced Data Collection Project: Trip Limit Induced Discardings Supplemental NMFS Report B. 12, April 2000
ODF&W	Sample pages, Coastwide Uniform Logbook and Travel Logbook
ODF&W	Sample Pages, EDCP Observer report forms

6.2 The setting

The Pacific Fisheries Management Council sets annual harvest guidelines for the dover sole, thornyhead, sablefish (DTS) trawl complex fishery. Decisions about catch levels are based on assessment models that rely for their validity on good estimates of landed as well as discarded catch (and resulting mortality). By 1994 it was clear that more scientific information was needed to prudently manage this fishery, as many of the species involved were thought to be at or near MSY (maximum sustainable yield). The Oregon Trawl Commission (OTC) suggested that a

program be developed to collect more and broader-based information on both the total removals and the biology of species involved in this complex. This would be accomplished through a voluntary enhanced data collection project (EDCP), with fishers recording additional information in an expanded logbook and with a subset of vessels also having observers placed on board to collect data. The Oregon Department of Fish and Wildlife developed the program for and with the OTC. It was in operation for three full years, 1996-1998, with a startup phase beginning in 1995 and some activities carried over to 1999.

6.3 The story

Sablefish and thornyhead are highly prized West Coast groundfish species, and subject to heavy fishing pressure by the trawl fleet. In recent years, dover sole, thornyhead, and sablefish have accounted for almost half of Oregon's groundfish catch and over half of the ex-vessel value. The best scientific information possible is required to conservatively manage these stocks and ensure their continued viability. Essential to this effort is knowledge about non-landed fish, or discarded catch. Prior to this project, much of the discard information used in stock assessments came from research performed by Pikitch in 1985-1987 while she was in residence at OSU. This left the Council's Groundfish Management Team to use wildly disparate figures for discard of various target and protected (salmon, halibut) species, with little accurate data on the survivability of discarded fish. Furthermore, little biological (age composition, year class strength, etc.) information existed for species prior to their entry into the fishery because sampling of landed catches at shoreside missed the opportunity to account for smaller or less desirable fish discarded at sea. The project described here was jointly agreed upon to try to remedy some of these gaps.

A voluntary, enhanced data recovery program for Oregon-based vessels was established to be administered by ODF&W, coordinated by Mark Saelens of the Marine Finfish Technical Services sector and funded in part by the OTC. After startup, additional funding was secured from NMFS and the project became a coastwide program including vessels from Washington and California. Owners and shippers of vessels would agree to record information on an expanded logbook and some would also carry observers who would record additional catch and discard data. A vessel was to commit to participation in the program for a four-month period. Enhanced logbooks would collect further information such as fishing strategy, gear deployment and problems, fishing depth, and estimated retainable and discarded catch. Observers would record all catch as target, weighback, or discard. All species of groundfish catch as well as prohibited species would be enumerated. Finally, biological sampling of catch usually discarded would be carried out, and an attempt made to determine survivability for species such as sablefish.

ODF&W developed and field tested both EDCP logbooks and observer forms on several commercial vessels in 1995. They also held public meetings in several locations in Oregon prior to the implementation of the program in 1996. These were poorly attended by fishermen, although some boat owners and OTC members did come out.

Old logbooks were initially used to ease the transition to recording more information than usual. The printed information was lined out by the operator and retained catch was written at the top of the form and discarded catch at the bottom. This became unmanageable in practice and the enhanced logbooks were quickly distributed.

From its outset, the program intended to gather segregatable data and provide it to the larger community of interested and statistically sophisticated users for further analysis. ODF&W did provide summary information on how the program was progressing, most notably at the quarterly

OTC meetings, at the various council meetings, and in a series of forums offered in Washington, Oregon and California in March 1997. In these meetings, available summary data that was provided showed that this fishery could be discarding fully forty percent of its catch. A final report of the project is currently being prepared, while, concurrently, NMFS is using some of the data to ascertain how a full-scale program with enhanced logbooks and some type of consistent observer coverage might be designed.

6.4 Outcomes

From a scientific point of view, the results of the enhanced data collection project are still unknown. One of the most interesting and important aspects of the effort was to be a comparison of data from vessels that used the enhanced logbook and had an observer on board with data from vessels that used only the enhanced logbook. The OTC is currently releasing a request for proposals for this work. The program's interim results, however, have substantiated that the fishery does have a high discard rate. These results have also shown that the regulatory mechanism used to keep the fishery going year round – monthly trip limits – forces a dramatic increase in the discard of target species when each trip limit is reached.

The program utilized a number of volunteer vessels and shippers and over three years developed data that will continue to help improve management of the fishery. Interviews with captains suggested a problem with unrealistic expectations. Since fishers were told that the program would help them, they might have expected this to mean an increase in quotas or an easing of other restrictions. One said, "Just for once, when the government says it is for my own good, I'd like to benefit. I don't see any benefit at this point." Of course, he was willing to admit that in the longer term, a well managed fishery is one that is most likely to be available year after year after year, and that this requires the best available data for decision making. Another captain complained about an observer who he felt was dishonest in his reports and then, after being discharged from the vessel, made damaging public statements of questionable validity. This skipper suggested that there be a formal process for challenging observer data if participants felt justified in doing so. Some program participants felt that cooperation among comparable agencies in different states could be improved, and that this would benefit the fishery, and fishers, through use of more coordinated data gathering and analysis.

6.5 Conclusions and lessons learned

While the verdict is still out on the overall success of the Oregon Trawl Enhanced Data Collection Project, several conclusions are readily apparent from the story described above. We describe these and assess the degree to which these might be applicable in other situations.

6.5.1 Participation was less than hoped for

The level of participation – ten percent of the fleet – was less than hoped for, but does represent more than four thousand trawls for which there is much more extensive data than normal. Financial and logistical constraints contributed to the lower than expected coverage (original plans had been to put observers on ten to fifteen percent of the fleet and enhanced logbooks on up to forty percent). The program could not afford a crew of twenty to thirty observers on staff (the number needed to meet the goal of ten to fifteen percent coverage) when a portion of those might be drawing pay without a vessel slot. At the same time, if a smaller number were hired because of budget constraints, then there would be times when a space was available to the program but

there was no observer to fill the berth. Future such efforts should evaluate goals under real-world conditions to ensure they can be met with the available financing and personnel.

6.5.2 Participants were enthusiastic about the program

Many of the participants who were rewarded for their involvement by fleece coats, jackets, or caps were enthusiastic about aiding in the development of better science. Observers, in general, did not have problems with crew members and did not think their presence changed the way the vessel and crew went about their fishing. While the old logbook is back in use at this point and discarded catch is not being recorded, the Pacific Fishery Management Council and NMFS are considering implementing portions of the program on a more permanent basis, largely as a result of the successful operation of the program. All participants agree it has been a successful cooperative venture. An important element in this success has been NMFS' awareness of the logistic and economic pressures industry must operate under. As a NMFS official, involved in the EDPC, said, "fishermen are operating a business out there on the water and government needs to keep that in mind when designing a voluntary enterprise such as this."

6.5.3 Summary

To summarize, conditions in the fishery made the need for improved information clear and the approach taken to designing the program fostered a cooperative attitude among participants. The program did not meet its goals for level of observer coverage but did produce data with significant management implications. The true tests of the program's success will be the degree to which enhanced data collection becomes a permanent feature of the fishery and the usefulness of the program's data in decision making.