

Observer Coverage Plan
(Sampling Plan and Logistics for West Coast Groundfish Observer Program)
Fall 2001

Introduction

This plan outlines the initial goals and methodology of the West Coast Groundfish Observer Program (WCGOP). It is expected that the program will evolve as it progresses and new information becomes available. Therefore the plan is intended to be a living document that will be continually reexamined and updated.

Background

Accurate information on landed catch and catch discarded at sea must be determined in order to assure accuracy in quota management, stock assessments, and allocations among user groups. Landed catch has been closely monitored for decades through a system of state landing receipts (fish tickets). These fish tickets provide a complete accounting of all landed catch. Information on discarded catch is meager in comparison.

Discarded catch occurs due to market and regulatory limits on the kinds, sizes and amounts of fish that can be retained and sold. For west coast groundfish, market limits affect the acceptable species and sizes of fish, and regulatory limits affect the amount and kind of fish that can be retained and/or landed. The west coast groundfish fishery uses regulatory catch limits to slow the pace of the fishery in order to maintain year round fishing, processing and marketing opportunities. These limits began as per trip limits for widow rockfish in the early 1980s, evolved to a complex set of per trip and trip frequency limits for several species by the late 1980s, and evolved further to cumulative monthly limits by the mid 1990s. Today, some cumulative limit periods extend to two months.

The best way to determine accurately the amount of discarded catch is through an at-sea observer program. A voluntary observer program conducted primarily off Oregon in 1985-1987 estimated that the total discard from all causes was 16-20% of the total catch for each of several species that were subject to catch limits. During the 1990s, these levels of discard were assumed to stay at the same level and applied to more species. However, it is possible that the actual level of discard increased during the early 1990s as the trip limits became more restrictive, decreased as cumulative limits were introduced to give vessels more operational flexibility, then increased as these cumulative limits were reduced further and applied to more sectors of the fleet. A second voluntary observer program was conducted during 1996-1998 and resulted in updated discard rates for some species.

Updated discard information is needed not only because the data supporting many current

estimates are outdated, but also because the projection of discard as a fraction of the total catch of a target species is no longer applicable to today's fishery. With several species now under severe restrictions to achieve rebuilding, discard must be examined as a consequence of fishing strategies for different species, rather than as a fixed fraction of the catch of the particular species that is being discarded. In addition, we need a new approach that will allow adjustment of estimated discard as catch limits change.

In 2001, the National Marine Fisheries Service (NMFS) received an appropriation to initiate the mandatory observer program authorized by Amendment 13 to the Pacific Coast Groundfish Fishery Management Plan (Groundfish FMP). The first observers were placed aboard vessels in August 2001. The program is not based on 100 percent observer coverage, but rather on sampling of portions of the groundfish fleet for data that can then be used to predict discards for the fishery as a whole.

Program Goals

- a. Improve management of groundfish by improving estimate of total catch, primarily through ongoing collection of information on discarded catch that will complement current shoreside information on landed catch
- b. Improve estimate of total catch of prohibited species in the groundfish fishery
- c. Improve management by collecting better biological information from the groundfish fishery
- d. Provide timely and efficient system for collection, storage, analysis and communication of information

Program Overview

NMFS, Pacific States Marine Fisheries Commission (PSMFC), and the states of Oregon, Washington and California are cooperating participants in the program. NMFS is responsible for observer training and debriefing; designating which vessels are to carry observers; determining observer assignments; data entry; and database development and maintenance. NMFS staff includes a team leader, database manager, and two field coordinators who train, debrief and coordinate observer activities. The core staff is in Seattle, with one coordinator in California and one in Newport, Oregon. PSMFC uses federal funds to hire, equip (including sampling, rain, safety, and computer equipment), insure, and transport approximately 20 experienced observers. In addition, a project manager at PSMFC serves as a program coordinator, and as a liaison with the three halftime state coordinators. The state coordinators assist NMFS and PSMFC with observer deployment; coordinate biological sampling by the observer program with the existing PacFIN shoreside sampling program; provide current information on vessel activities to facilitate observer logistics; and assist NMFS as needed to ensure that the designated vessels have obtained the necessary Coast Guard Safety Decal.

Observers collect data through onboard interviews of vessel captains and crew, observations of fishing operations, measurements of selected portions of the catch and fishing gear, and collection of samples. Observers enter data into a computer from paper forms and transfer data online to a NMFS-NWFSC database for debriefing, editing, and summarization.

Observer Selection and Support

Selection - The Observer provider was selected from among contractors that have supplied observer services in support of federal or other fisheries within the past two years. The PSMFC, in consultation with NMFS, evaluated potential contractors based on their past performance as service providers including: demonstrated ability to retain observers, benefit packages provided to observers, ability to quickly supply qualified experienced observers, ability to obtain the necessary insurance coverages, and cost. PSMFC selected Alaska Observers Inc.(AOI) to provide observers. Twenty observers and five alternates were provided by AOI. Observers are required to have a Bachelors degree in biological science, have at least 30 sea days experience as a fishery observer with adequate performance over the last two years, and have undergone and passed a full physical examination within the 12 months before hiring.

Training - Observers and alternates for 2001 attended a two-week training course to prepare them for participation in this fishery observer program. The course included training in safety, species identification, data collection methods, first aid, conflict resolution, and other matters relevant to their jobs. One or two training sessions per year are expected in the future.

Insurance - PSMFC requires the observer contractor to provide insurance adequate to cover injury, liability, and accidental death for observers. The contractor provides insurance during the entire period an observer is employed, including training or briefing, travel to and from port, standby time in port, at sea deployment, and debriefing. The insurance includes workers compensation and employer's liability; maritime employer's liability adequate to cover observer, vessel owner and contractor; commercial general liability; cure, maintenance, wages, and transportation; Longshore and Harbor Worker's Compensation Act; and automobile liability.

Observer Duty Stations - In order to achieve a reasonably uniform coverage of trips along the coast, the 20 observers cover approximately 13 major port groups averaging one to three observers per port group (Appendix A, Table 1). To enable observers to best familiarize themselves with the fleet vessel schedules and port biologists, each observer is permanently assigned to a port group. As an example, an observer housed in Bellingham can cover vessels operating primarily from Blaine, Bellingham or any other port in that general area. It is possible that in the future the number of primary observer duty stations could be fewer than the number of major port groups, but observers will need to be able to travel from their current location to the vessel within the 24 hour trip notification period. We will adjust duty stations as needed to do so.

Communication and Outreach - The observer program maintains a toll free phone number and an email address to facilitate communications with fishers and other interested parties. Updates on the observer program are posted on the NWFSC web site (www.nwfsc.noaa.gov/fram/Observer) and are included in the newsletters that are mailed to constituents. At the inception of the program public informational meetings were held at 10 ports. We plan to continue these local meetings on a regular basis. Observer coordinators located in each state are on the docks on a daily basis and maintain one-on-one communication with the fishing fleet.

Vessel Selection

The information in Appendix A describes the rationale for the initial sampling plan that is expected to provide at least 10% coverage coastwide to the limited entry trawl fleet in the first year of operation and provide pilot observer coverage in the limited entry fixed gear sablefish and rockfish fisheries. Vessels are selected randomly from the pool of vessels that have not been observed recently to assure that coverage will cycle through all the trawl vessels approximately every two years, and will prevent vessels from being drawn in consecutive periods. The initial vessel list is then reduced so as to place observers on vessels representing a reasonably proportional distribution along the coast, and to eliminate those vessels that do not plan to fish groundfish during the upcoming fishing period. For example, the program selects approximately 40 limited entry trawl vessels and 40 limited entry sablefish-endorsed vessels at random and sends a written notification to them. The program subsequently determines the vessels' intention to fish groundfish and their primary port, and subsequently selects a subset of at least 20 vessels that would roughly represent proportional coastwide coverage. Vessel operators are required to inform NMFS 24 hours prior to the beginning of fishing, using a toll free phone number provided for that purpose. Prior to an observer boarding the vessel, the observer and observer coordinator verify the status of the vessel's safety inspection. Depending upon the vessel's expected level of activity, observers may be assigned to cover more than one vessel.

Vessels that indicate that they do not plan to fish groundfish in the selected period are placed in a holding category, and are asked to notify NMFS when they next plan to fish groundfish so that they can be assigned an observer for that period. Vessels that are selected but do not get an observer in the first period carry over to the next period.

Once selected for observer coverage, the vessel must call in 24 hours before initiating a trip so that the selected observer can arrange to accompany the vessel. Before an observer makes a first trip on a vessel, he or she conducts a pre-trip visit to arrange for a sampling station on the vessel and determine any safety or equipment concerns. Whenever possible, the observer is accompanied by a NMFS observer coordinator on the first trip to the vessel.

A similar vessel notification and selection process is used for the coverage of other federal limited entry fisheries (i.e., the non-trawl rockfish sector). As the program cycles coverage to groundfish fishing activities by the open access fishery, a modified

notification process that relies more upon state fishing licenses will be used.

Data Collection

An observer collects information on a selected vessel for all of its fishing trips throughout a cumulative limit period. This spreads the observations out so that data will be collected from trips for which the vessel is far from its cumulative limits as well as for trips for which it is close to or at its limit for some species.

Observers follow the procedures for obtaining data and collecting samples specified during training and documented in the West Coast Observer Manual. The goal is to obtain tow by tow information from each market category so that observer information will dovetail with the market category information currently provided in the fisher's logbooks and on the fish tickets. Data collected by the observer is separate from the data routinely collected by the fishers and processors. For example, fishers continue to record tow-by-tow catch and effort information in logbooks even when there is an observer on board collecting similar information. Comparison of observer data to fishers' logbook data will allow better standardization of the logbook data and improved ability to use logbook data from unobserved trips.

Observers enter data onto paper forms and onto laptop computers. The observers conduct preliminary edits of their data and then transmit data electronically to the Seattle laboratory of the NWFSC for final data checking, summary and analysis.

The data collected by the observers includes:

- Begin and end time and location of tow/set
- Description of fishing gear and method
- Estimated total cod end weight (including tows for which there is 100% discard due to unmarketable species).
- Weight of discard by catch category
- Reason for discard by catch category or by species
- Species composition of discard by catch category
- Weight of retained catch by catch category
- Species composition of retained catch by catch category
- Document catch of prohibited species (salmon, halibut, marine mammals, birds, turtles)
- Size composition, tags, survival viability code of prohibited species.
- Size composition of discarded fish (from randomly selected categories)
- Size composition of retained fish (from randomly selected categories)
- Basic taxonomic composition of non-fish bycatch
- Special biological collections (otoliths, maturity, food habits, genetic samples, etc.)