

GROUND FISH MANAGEMENT TEAM REPORT ON
FINAL CONSIDERATION OF INSEASON ADJUSTMENTS

Commercial Fisheries

Limited Entry Whiting Trawl

The Groundfish Management Team (GMT) updated the scorecard estimates for both tribal and non-tribal whiting based on the Council's action under G.1. We examined the estimates of Pacific Ocean perch (POP) in the scorecard for the non-tribal whiting sectors and note that the updated numbers are based on years (2003-2006) and are reflected in Attachment 1.

Recreational Fisheries

Unidentified Rockfish

In October 2008, RecFIN staff brought to the GMT's attention the fact that angler reported unidentified rockfish catch from the recreational fishery has not been accounted for in historical annual estimates of recreational impacts. The angler reported unidentified rockfish catch from the recreational fishery has not been accounted for in historical annual estimates of recreational impacts. Unidentified rockfish catch is composed of rockfish that anglers have discarded during the course of their fishing trip or retained catch that is unavailable to the sampler (filleted, given away etc.). Prior to accounting for the unidentified rockfish, the catch must be apportioned to the species level using existing data on the proportion of discarded and retained catch. The GMT first discussed this issue in January 2009 and has identified several issues regarding the accounting of unidentified rockfish catch that the Council should be aware of. The GMT requests Council guidance on the appropriate timing for reconciling the accounting of unidentified rockfish catch in all aspects of the Council management process.

Five processes are typically undertaken in a management cycle, each of which will be affected by accounting for unidentified rockfish: 1) stock assessments, 2) allocation between sectors, 3) interstate catch sharing agreements, 4) regulatory development, and 5) inseason catch tracking relative to management targets (e.g. harvest guidelines). Historical catch data is used in all aspects of each next management cycle. For example, accounting for unidentified rockfish catch inseason in 2009 could result in increased catch accruing in the recreational fisheries without the mitigating effect of this catch having been accounted for in historical data used in the intersector allocation process that determined the 2009-2010 recreational harvest guidelines.

The GMT is asking the Council for guidance on whether or not to address this issue:

- A. Immediately through inseason action in 2009-2010, or
- B. Within the 2011-2012 management cycle, while additional actions are taken in the field sampling procedures to reduce the number of unidentified rockfish reported by anglers.

Implications for the Recreational Fishery

In order to understand the implications, the total number and metric tons of unidentified rockfish from 2005-2008 by state is shown in Table 1 below.

Table 1. Estimated Catch of Unidentified Rockfish from 2005-2008 by State (Data from RecFIN).

		2005	2006	2007	2008	Total
California	Number of Fish	465,395	521,871	245,605	165,943	1,398,814
	<i>Weight (mt)</i>	<i>140.8</i>	<i>183.2</i>	<i>82.8</i>	<i>50.3</i>	<i>457.10</i>
Oregon	Number of Fish	401	989	1,083	1,121	3,594
	<i>Weight (mt)</i>	<i>0.2</i>	<i>0.6</i>	<i>0.7</i>	<i>0.6</i>	<i>2.10</i>
Washington	Number of Fish	460	249	248	247	1,204
	<i>Weight (mt)</i>	<i>0.6</i>	<i>0.4</i>	<i>0.3</i>	<i>0.3</i>	<i>1.60</i>
Total	Number of Fish	466,256	523,109	246,936	167,311	1,403,612
	<i>Weight (mt)</i>	<i>141.6</i>	<i>184.2</i>	<i>83.8</i>	<i>51.2</i>	<i>460.8</i>

Washington, Oregon, and California staff have done some preliminary analysis to determine the quantity of unidentified rockfish by geographic area, sector, and whether or not the fish are reported as retained or discarded. This information provides an initial indication of the overall impacts of accounting for unidentified rockfish. The unidentified rockfish from Washington are approximately 50 percent angler-reported discarded fish. Oregon's unidentified rockfish are 99 percent angler-reported discards and 95 percent of those are from private vessels targeting halibut and bottomfish. Of the unidentified rockfish represented in Table 1, 99 percent originated from California, of which, 93 percent are from charter and private rental vessels and more than 50 percent are angler-reported discarded fish.

The much higher amount of unidentified rockfish in California is largely a result of the higher effort combined with greater species identification issues. California is the transition zone for the range of many rockfish species, so there are many more species for anglers to confuse with one another making identification of species and recollection of daily catch more difficult for anglers. California's recreational rockfish catch routinely includes 41 species while the Oregon catch is comprised of 25 species and Washington catch is comprised of 11 species. The number of unidentified rockfish in the California recreational fishery has decreased from 2006 to 2008 (see Table 2). In California, 75 percent of the 50.3 mt of unidentified rockfish in 2008 originated from south of Point Conception, which could ultimately increase the estimated impacts for cowcod, bocaccio, and Minor Nearshore Rockfish South. The unidentified rockfish catch north of Point Arena is relatively low and is not expected to significantly change yelloweye catch estimates.

Table 2. Estimated metric tons of unidentified rockfish catch in California by California Recreational Fisheries Survey (CRFS) district and year. Note that metric tonnages were calculated using an average weight for all species combined and the total estimate will differ once catch is apportioned and species specific average weights are applied. (Data from CRFS)

CRFS District	2005	2006	2007	2008	District Total
South	36.7	20.5	24.4	28.2	109.8
Channel	20.2	11.3	12.6	9.1	53.2
Central	46.1	60.3	15.9	4.2	126.5
Bay	23.0	83.2	22.3	7.4	135.9
Wine	5.8	5.3	6.1	0.8	18.0
Redwood	9.0	2.7	1.5	0.7	13.8
Annual Total	140.8	183.2	82.8	50.3	457.1

All three states could be in jeopardy of exceeding their harvest guidelines for overfished species as a result of applying additional impacts that were not included in modeling the estimated impacts for the 2009-2010 management cycle. If the Council chooses to implement inseason accounting for unidentified rockfish during the 2009-2010 management cycle, reductions in season length, reduced bag limits, or other management measures will likely be necessary to prevent harvest guidelines from being exceeded. Depending on the number of unidentified rockfish in 2009, these management measures may still not be enough to avoid affecting other fishery sectors as the GMT balances the scorecard.

Implications for Stock Assessments

Though some stock assessments may account for unidentified rockfish from the recreational fishery, many do not and the effects on the relative abundance of these species through time are unknown. The composition and amount of unidentified rockfish is likely to vary from year to year due to variation in recruitment, fishing regulations, behavior of anglers, changes to the sampling programs, and oceanographic conditions. This makes it difficult to anticipate the effects for any one species before the unidentified rockfish catch is apportioned to the species level. Stock assessment scientists working on historic catch reconstruction may need to consider accounting for unidentified rockfish if they are using data for the recreational fishery. The GMT notes that each state has personnel that are designated points of contact for providing available data sources as well as highlighting any vagaries for the various data sets; however, it would be beneficial to assessment teams if uniform catch reconstruction methodologies for unidentified rockfishes could be identified.

Implications for Biennial Between-sector Allocations

The GMT produced estimated impacts for optimum yield species in the 2009-2010 regulatory specifications process for each fishery sector based on the apportionment structure approved by the Council. The apportionment and subsequent recreational management measures for 2009-10 did not include impacts for unidentified rockfish. To have the recreational fishery account for the unidentified rockfish impacts inseason, without having the mitigating effect of an increased harvest guideline from allocation between sectors, could result in recreational catches that exceed the projected estimates.

Accounting for this catch in 2009-2010, without the catch having been considered when allocating between sectors, could necessitate management actions that would reduce fishing

opportunity. Even though most unidentified fish are from the California recreational fishery, the affect of potential reallocation of available yields has an unknown potential for inseason management for all sectors in all three states. As historical catch of unidentified rockfish is accounted for in future biennial cycles when deciding intersector allocations, management measures can be built in ahead of time to accommodate the catch of unidentified rockfish.

Implications for Catch Projection Models

Unidentified rockfish were not considered in any of the recreational catch estimate models used to project 2009-2010 harvest estimates. Accounting for unidentified rockfish in the inseason catch during the 2009-2010 seasons would cause catch estimates to deviate from projected impacts produced by these models. The models would have to be re-parameterized to incorporate unidentified rockfish catch and would likely produce different catch estimates than those presented in the 2009-2010 Harvest Specifications and Management Measures Environmental Impact Statement (2009-2010 Specifications Environmental Impact Statement).

Data Quality and Methodological Issues

Each state is currently discussing the appropriate methodology for apportioning the catch of unidentified rockfish to the species level so that it can then be included in the recreational bottomfish mortality estimates in the future. The catch apportionment methodology would rely on the following catch composition data sources:

- 1) Data from onboard party/charter vessel sampling available coastwide except for North of Point Arena in California where onboard sampling of party/charter vessels began in 2008 and in Washington where no onboard sampling data is available. This data is representative of the party/charter vessel fishery, but may not be representative of the private/rental fishery due to potential differences in the depth distribution of effort between the two modes.
- 2) Reported catch data from anglers which are dependent on the angler's ability to identify and recall their catch, calling its reliability into question. Species that are easy to identify or that have species specific restrictions and prohibitions may be more prevalent in the reported identified catch and the resulting apportioned unidentified rockfish catch than in reality.
- 3) Data on the catch composition of retained fish which is appropriate for use in apportioning the catch of unavailable unidentified retained fish, which may not be representative of discarded catch.

It will be important to consider several issues in developing the methodology for accounting for these unidentified rockfish. These issues include: spatial (i.e. latitudinal and depth) differences in bycatch rates and effort shifts, stratifying catch data by trip type and boat type, the percentage of unidentified fish that are reported retained and discarded, when to apply the estimate (inseason vs. post season), the capability of current sampling programs and the timeline over which changes can be achieved. Each state will also be exploring ways to reduce the number of unidentified fish through sampling methods

Other Considerations for Review and Implementation

Given the implications of incorporating estimates of unidentified rockfish into the historical and inseason catch estimates, the GMT notes that the Council may wish to have any new methodology reviewed by the Scientific and Statistical Committee (SSC).

State agency staff have indicated that addition of an entire catch stream into existing catch estimation methodologies, allocation between sectors, and catch projection models is a time and labor intensive undertaking that would divert hundreds of hours of time from existing duties and assignments. With current furloughs and overtime restrictions on many state staff due to budget issues, the time devoted to this item will have to be taken from other priorities.

GMT Recommendations:

1. The GMT requests that the Council provide guidance on when to develop and implement methodologies to incorporate accounting for unidentified rockfishes into all Council processes that use historical and current recreational catch data.

Attachment 1. Updated Bycatch Scorecard

Projected mortality impacts (mt) of overfished groundfish species updated with most recent West Coast Groundfish Observer data for LE trawl, nearshore, OA DTL, LE FG.

Fishery	Bocaccio b/	Canary	Cowcod	Dkbl	POP	Widow	Yelloweye
Limited Entry Trawl- Non-whiting	15.1	16.2	1.3	214.4	82.1	18.1	0.3
Limited Entry Trawl- Whiting							
At-sea whiting motherships a/		4.3		6.0	0.5	60.0	0.0
At-sea whiting cat-proc a/		6.1		8.5	0.5	85.0	0.0
Shoreside whiting a/		7.6		10.5	0.1	105.0	0.0
Tribal whiting		1.4		0.0	0.7	3.7	0.0
Tribal							
Midwater Trawl		3.6		0.0	0.0	40.0	0.0
Bottom Trawl		0.8		0.0	3.7	0.0	0.0
Troll		0.5		0.0	0.0		0.0
Fixed gear		0.3		0.0	0.0	0.0	2.3
Fixed Gear Sablefish	0.0	0.3	0.0	1.0	0.2	0.3	1.1
Fixed Gear Nearshore	0.0	2.9	0.0	0.0	0.0	0.1	0.9
Fixed Gear Other	5.0	0.0	0.0	9.0	0.0	0.7	0.0
Open Access: Incidental Groundfish	2.0	0.9	0.0	0.0	0.0	4.0	0.3
Recreational Groundfish c/							
WA		20.9					5.2
OR						1.0	
CA	67.3	22.9	0.1			6.2	2.8
EFPs	13.7	2.7	0.3	1.3	0.0	5.5	0.3
Research: Includes NMFS trawl shelf-slope surveys, the IPHC halibut survey, and expected impacts from SRPs and LOAs.							
	2.0	8.0	0.2	2.0	2.0	1.1	2.4
TOTAL	105.1	99.4	1.9	252.7	89.8	330.7	15.6
2009 OY d/	288	105	4.0	285	189	522	17
Difference	182.9	5.6	2.1	32.3	99.2	191.4	1.4
Percent of OY	36.5%	94.6%	47.5%	88.7%	47.5%	63.3%	91.9%
Key	= either not applicable; trace amount (<0.01 mt); or not reported in available data						
a/ Non-tribal whiting values for canary, darkblotched, and widow reflect bycatch limits for the non-tribal whiting sectors. The widow bycatch limit is the difference between the OY and the projected impacts in all non-whiting fisheries. All other species' impacts are projected from the GMT's whiting impact projection model. The Council may elect to change these bycatch limits when setting final whiting management measures in March of 2009 or 2010 or under any inseason action at any of their future meetings.							
b/ South of 40°10' N. lat.							
c/ Values in scorecard represent projected impacts for all species except canary and yelloweye rockfish, which are the prescribed harvest guidelines.							
d/ 2009 and 2010 OYs are the same except for darkblotched (291 mt in 2010), POP (200 mt in 2010), and widow (509 mt in 2010).							