

PROPOSED PROCEDURES FOR ESTIMATING PACIFIC HALIBUT BYCATCH IN THE GROUNDFISH SETLINE FISHERIES

The National Marine Fisheries Service (NMFS) Northwest Fisheries Science Center (NWFS) has been developing methodology to estimate Pacific halibut bycatch and bycatch mortality in Council-area groundfish setline fisheries. In September 2008, the subject was raised during Agenda Item E.1, which focused on trawl bycatch estimates. At that time the Council recommended NMFS continue to refine methods, including methods to disaggregate data using port of landing and seasonal landing data. The Council scheduled a two meeting process to consider the estimation methodology and the policy implications of any resulting estimates with International Pacific Halibut Commission activities and domestic fishery management activities. The initial consideration of these issues was scheduled for the June 2009 Council meeting, with the second consideration at the September 2009 Council meeting, coincident with the Council's review and recommendations on trawl fishery bycatch estimates.

The NWFS has reviewed the halibut mortality rate estimation methodology associated with fixed gear fisheries (Agenda Item D.1.b, NWFS Report). Dr. Jim Hastie, NMFS, will brief the Council on the status of bycatch estimates for Pacific halibut in setline fisheries.

Council Task:

- 1. Provide Council guidance on procedures to estimate bycatch and bycatch mortality of Pacific Halibut in Council Area set line fisheries.**
- 2. Consider policy implementations of utilizing such new information.**

Reference Materials:

1. Agenda Item D.1.b, NWFS Report: Letter Regarding Mortality of Pacific Halibut in the Fixed Gear Fishery.
2. Agenda Item D.1.d, Public Comment.

Agenda Order:

- a. Agenda Item Overview
- b. Northwest Fisheries Science Center Report
- c. Reports and Comments of Management Entities and Advisory Bodies
- d. Public Comment
- e. **Council Action:** Review and Provide Guidance on Appropriate Bycatch Estimation Procedures

Chuck Tracy
Jim Hastie

PFMC
05/28/09



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Fisheries Science Center
2725 Montlake Boulevard East
Seattle, WA 98112-2097

May 21, 2009

Mr. John DeVore, Groundfish Management Team
Pacific Fisheries Management Council
7700 Ambassador Place, Suite 101
Portland, OR 97220

RE: SSC Request Regarding Mortality of Pacific Halibut in the Fixed Gear Fishery

Dear Mr. DeVore,

The methods used to estimate Pacific Halibut mortality in the west coast fishery will remain largely consistent with the methods used to estimate total mortality of other west coast species. However, one aspect of the analysis that was discussed is the mortality rate applied to discarded Pacific halibut. Historically, a 25% mortality rate has been applied in west coast fixed-gear fisheries. In discussions with Mr. Gregg Williams from the IPHC, it was determined that a 16% mortality rate was more applicable to west coast fixed-gear fisheries. Therefore, moving forward, the NWFSC/FRAM will apply the 16% mortality rate to the estimated total Pacific halibut fixed-gear discard estimate. The table below illustrates the Pacific halibut total mortality since 2002 with a 25% and a 16% mortality rate.

	Discard (mt)			Landings (mt)	Total Catch (mt)	
	Estimated (mt)	25% mortality rate	16% mortality rate		Assuming 25% mortality	Assuming 16% mortality
2002	139	35	22	103	138	126
2003	225	56	36	115	171	151
2004	185	46	30	142	188	172
2005	228	57	36	147	204	184
2006	679	170	109	154	323	262
2007	170	43	27	133	176	160

If you need further information, please contact me at (206) 860-3293.

Thank you,

Janell Majewski
Observer Program Supervisor
Fishery Resource Analysis and Monitoring Division



Changes in the estimation of Pacific halibut discard mortality in off-shore fixed-gear fisheries:

- Fixed-gear discard mortality of P. halibut was first estimated for the 2006 fishery (12/07 TM report)
 - Estimates by gear and area (N/S of 40°10')
- Discard mortality in the 2007 fishery (in 12/08 TM report) was based on separate estimates for:
 - LE primary, LE DTL, and OA fisheries, by area / gear.
- Recent discussion with IPHC has identified a lower discard mortality rate as more appropriate.
 - Old = 25% ; New = 16% (rate used for Gulf of AK discards in the halibut ITQ fishery).

Changes in estimated fixed-gear halibut mortality, 2002 - 2007

	Halibut Discard (mt)		
	Estimated total (mt)	Discard Mortality	
		With a 25% mortality rate	With a 16% mortality rate
2002	139	35	22
2003	225	56	36
2004	185	46	30
2005	228	57	36
2006	679 (796*)	170 (199*)	109
2007	170	43	27

*** These values were included in the Total Mortality report for 2006, using less fishery stratification.**

GROUND FISH ADVISORY SUBPANEL REPORT ON PROPOSED PROCEDURES FOR ESTIMATING PACIFIC HALIBUT BYCATCH IN THE GROUND FISH SETLINE FISHERIES

The Groundfish Advisory Subpanel (GAP) received a briefing on this agenda item from Mr. John DeVore and Dr. Jim Hastie.

There was considerable GAP discussion regarding the results from the 2006 observer-based bycatch estimates of bycatch in groundfish setline fisheries. Dr. Hastie indicated that NMFS is conducting reviews of this analysis, which showed a high bycatch number. The number for 2007 seemed more in line with previous observations. The GAP was informed that International Pacific Halibut Commission had recommended a lower bycatch mortality associated with the limited entry (LE) setline tiered sablefish fishery. The rate will drop from 25 percent to 16 percent. This was recommended because the fishery is conducted in an Individual Fishing Quota format and not an open entry race for fish.

The GAP has several recommendations and observations from the discussion with Dr. Hastie that should assist in future bycatch estimations in the groundfish setline fisheries. The following reflects those thoughts:

1. The Council voted last fall to require the setline fisheries to fill out log books. This will presumably be implemented in the 2010 fishery. This should result in a new information base to help ground truth bycatch estimations for many species.
2. There needs to be recognition that bycatch rates of halibut drop the further south the directed daily-trip-limit (DTL) and LE tiered fisheries for sablefish are conducted. Dr. Hastie mentioned that NMFS was reviewing special and geographic differences in bycatch rates from the Olympic Peninsula area southward.
2. The 2009 sablefish season may provide an opportunity to see how the tiered limited entry fishery north of Pt. Chehalis operates their gear. With the allowed bycatch of only 2 halibut per trip bycatch rates may fall in the northern area as there is less economic importance in the bycatch. Additionally it was pointed out that it is important for the observer protocol for longline fisheries to observe efforts at different depths as the gear may be set from 200 fathoms out to 500 fathoms and there are significant differences in bycatch rates for different species by depth. Longline gear is generally set from shallow to deep. Dr. Hastie indicated that he believed that the observers were aware of this and that observations were being made throughout the range of depths fished by longline gear.
4. The GAP discussed the Port Orford proposal to allow for the bycatch of halibut in the daily trip limit and limited entry tiered sablefish fisheries south of Pt. Chehalis. The Pt. Orford fishermen are working with the State of Oregon currently and the Council can expect a formal proposal to amend the Area 2A halibut catch sharing plan on this issue later this year pending discussions between the fleet and ODFW.

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INTERNATIONAL PACIFIC HALIBUT COMMISSION

ESTABLISHED BY A CONVENTION BETWEEN CANADA
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June 11, 2009

Mr. Don Hansen, Chair
Pacific Fishery Management Council
7700 Ambassador Place, Suite 101
Portland, OR 97220

Dear Don:

The staff of the International Pacific Halibut Commission (IPHC) has read the letter of 26 May 2009 from Dr. Elizabeth Clarke to Mr. John DeVore regarding monitoring halibut bycatch mortality in the trawl IQ fishery. In the letter, Dr. Clarke states the National Marine Fisheries Service (NMFS) recommendation to continue with the current fleet-wide bycatch mortality rate, instead of tracking an individual vessel's bycatch mortality using real-time observer sampling. While we understand the substantial changes to observer sampling required by the IQ program, we believe the IQ plan provides a significant opportunity to reduce halibut bycatch to the benefit of both the halibut resource and the industry's ability to land groundfish.

The halibut IBQ program is an opportunity to implement incentives to reduce halibut bycatch mortality. Individual vessel quotas for halibut bycatch will allow each vessel operator to fish more efficiently and effectively for a given amount of groundfish. Incentives for improved handling and discard practices are created by monitoring the halibut mortality on each vessel. Continued use of fleet-wide mortality estimates will dissipate the benefits achieved through bycatch reduction by some operators when other operators do not undertake similar improvements. Vessel operators need to have individual bycatch accountability in order to realize increased groundfish fishing opportunities as a result of their own actions.

We also disagree with the implication that the dichotomous key is a negative factor to individual monitoring. As background, the key was developed in 2000 by IPHC staff to minimize the subjectivity that had previously existed in the release viability determinations by observers. It is the standard method used for bycatch mortality estimation and is successfully used by observers off Alaska, including vessels fishing with industry cooperatives. It will be used by observers whether a fleet-wide or individual vessel mortality monitoring plan is adopted for the west coast trawl IQ fishery.

The Canadian trawl fishery has successfully operated with a Groundfish IFQ and halibut IBQ program since 1995. Halibut mortality is monitored on each individual vessel. Observers do not

use the key but employ the same condition criteria developed by IPHC which forms the basis for the dichotomous key. Even without the key, observer sampling of halibut bycatch proceeds quickly when proper incentives are available to harvesters. For example, in 2007, 80% of the fish (n = 20,712) were sampled within 15 minutes of being dumped on deck.

NMFS/NWFSC may be reasonably concerned about an increase in the observer workload required for catch estimation and a subsequent inability to conduct individual vessel monitoring. If so, we recommend that the Council identify its priorities for observer sampling and request from NMFS/NWFSC and the West Coast Groundfish Observer Program an estimate of the resources that would be required to conduct individual vessel halibut mortality monitoring. Such resources are integral to successful implementation of the Individual Quota program and the maximizing of industry support, and should be a priority for Council action with participating agencies.

Gregg Williams of the Commission staff will be attending the Council meeting and can address any questions you may have.

Sincerely,



Bruce M. Leaman
Executive Director

cc: Commissioners

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON PROPOSED PROCEDURES
FOR ESTIMATING PACIFIC HALIBUT BYCATCH IN
THE GROUND FISH SETLINE FISHERIES

Dr. Jim Hastie described the rationale behind the recommended reduction in the estimated halibut discard mortality rate in the fixed gear fishery. Halibut bycatch occurs primarily in the sablefish longline fishery. Rates are set in consultation with the International Pacific Halibut Commission (IPHC). Initially the IPHC recommended a 25 percent mortality rate based on the misperception that Council sablefish fisheries were managed as a derby. With a better understanding of Council fisheries, the IPHC now recommends a 16 percent mortality rate consistent with similar fisheries in Alaska.

The left four columns in the table in agenda item D.1.b report halibut discard estimates calculated by the National Marine Fisheries Service (NMFS) Northwest Fisheries Science Center (NWFSC) and compare mortalities using both the 25 percent and 16 percent mortality rates for the years 2002 to 2007.

The SSC understands that the NWFSC is continuing to refine these estimates. The discard estimate for 2006 is about three times higher than estimates for the other years in this time series. The reason for this is not understood, and is under investigation by the NWFSC.

The SSC supports the use of the 16 percent discard mortality rate in this fishery, although it would be helpful to see documentation of the methods used by the IPHC to arrive at this rate. Further development and documentation of this analysis by the NWFSC is anticipated in September.

PFMC
06/13/09



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May 8, 2009

Mr. Donald K. Hansen
Chairman
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, Oregon 97220-1384

Dear Chairman Hansen:

At its September 2008 meeting the Pacific Council provided direction to staff and participating agencies to examine bycatch of Pacific halibut in the longline fishery for blackcod. The Port Orford Ocean Resource Team would like to have a status report on the progress made to date to evaluate bycatch in this fishery.

The Council indicated its intention to move towards evaluating potential impacts to halibut and sablefish longline fishery sectors should a management option be developed to allow retention of incidentally caught halibut. POORT feels that the 2009 and anticipated future reductions in the area 2A halibut TAC increase the need for timely analysis of halibut retention options for the directed longline fishery for blackcod.

POORT also wishes to thank the Council for its timely consideration and implementation of in season trip limit changes for the directed blackcod fishery and for adjusting allocation levels for yelloweye rockfish affecting nearshore hook and line fisheries. The new trip limit changes should increase the ability of small ports like Port Orford to access the available blackcod resource during more favorable weather periods and to more fully utilize the optimum yield, which has been underachieved in the past few years. Thank you!

Sincerely,

A handwritten signature in black ink that reads "Leesa Cobb".

Leesa Cobb
Executive Director
Port Orford Ocean Resource Team