

Pollock Conservation Cooperative Bycatch Committee

Halibut bycatch action

May 30th, 2014

Background

The fishable biomass of halibut in the Bering Sea is declining, with impacts to the fishing opportunities for directed users under the current minimum landing size and legal gear regulations. There are several hypotheses for the causes of the decline, and the CP pollock fleet understands that responsible management of the resource by all users is important.

The Bering Sea pollock fishery is allocated 250mt of halibut PSC as part of the apportionment to trawl limited access harvesters, who, in total (pollock, yellowfin sole and pacific cod combined), receive 875mt. The Amendment 80 sector receives 2,325mt of halibut PSC, and also any halibut PSC not caught by the trawl limited access harvesters can roll over into the Amendment 80 sector. Over the past 10 years, the trawl limited access sector has stayed below its 875mt halibut PSC allowance, and the pollock fishery alone has contributed roughly eight percent of the total halibut mortality from groundfish fisheries in the Bering Sea.

In February, 2014, The NPFMC heard a report on the status of halibut PSC in Bering Sea groundfish fisheries, and consequently passed the following motion:

The Council requests an expanded discussion paper focused on developing an understanding of the status of the BSAI halibut resource and the impact of halibut PSC in the BSAI trawl and fixed gear groundfish fisheries on halibut stock biomass, the reproductive potential of the halibut stock, and short and long-term halibut yields to the directed halibut fisheries.

The paper should also identify the observer sampling protocols and regulatory changes necessary to provide for deck sorting of halibut on BSAI trawl catcher processors for fisheries in which this has been identified as a feasible and effective tool to reduce the halibut discard mortality rate.

The Council also requests that the BSAI groundfish sectors (AFA CP, AFA CV, A80, FLC, CDQ) move forward with measures in their cooperative and/or inter-cooperative agreements to minimize halibut PSC, including:

- Development of effective and verifiable measures for halibut avoidance*
- Individual accountability and use of incentives to reduce PSC*

The Council requests a report from representatives of these sectors at the June 2014 Council meeting.

In response to this request, the Pollock Conservation Cooperative (PCC) has convened several meetings of its bycatch committee, and examined the CP fleet's halibut PSC use in detail to consider how the cooperative is working and can continue to work toward the above aims.

Process

A number of tables, graphs, and maps were prepared pertaining to halibut PSC in the CP pollock fishery in attempt to isolate factors which may explain differences in halibut PSC rates among member vessels in space and time. Such factors as towing speed and fishing location by week were looked at, and neither factor corresponded well with differences in halibut PSC rates among fleet vessels.

Committee members discussed these findings as well as potential other factors that could potentially influence halibut PSC in the fishery, and agreed that more information was needed to get a better understanding.

Suggested actions and rationale

Topic: *Development of effective and verifiable measures for halibut avoidance.*

Action: Initiate conversations among member companies and vessels about operational fishing practices and gear use to identify best practices that could lead to lower halibut PSC within the fleet as a whole.

Rationale:

Because it was clear from the initial data exploration that halibut PSC is variable in time and space everywhere on the pollock fishing grounds (see Figure 1 comparing Chinook bycatch rates and halibut bycatch rates over the fishing grounds), a time-area based rolling-hotspot type of program to reduce halibut PSC did not appear to be a useful solution especially when the fleet is already moving around on the grounds to avoid salmon.

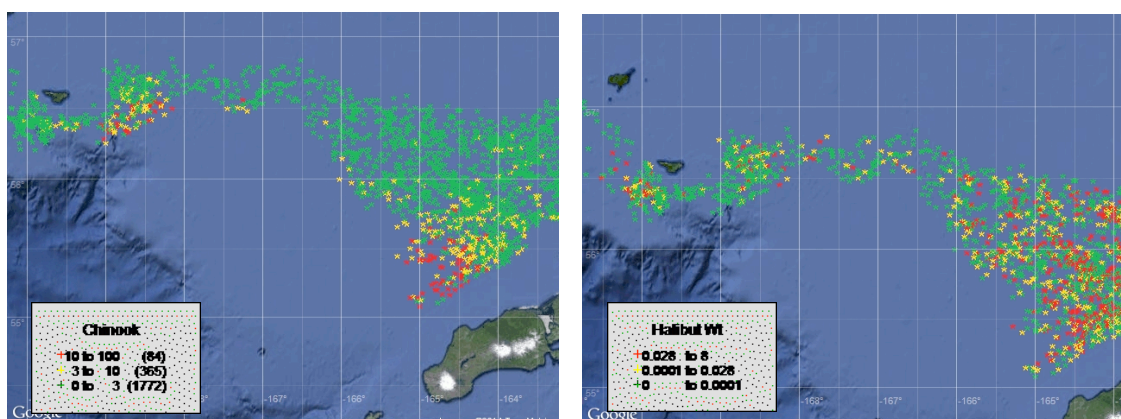


Figure 1. Chinook (n per tow; left) and halibut (tons per tow; right) bycatch rates in the pollock fishery over the fishing grounds in the 2014 A-season. It is clear that there are discrete areas of relatively higher Chinook bycatch rates on the pollock grounds, whereas halibut bycatch rates are much more variable throughout, indicating that time-area closures for halibut avoidance may not be an appropriate tool.

This realization led the committee to determine that gathering qualitative information about operational fishing practices and gear would be a useful first step in identifying best practices that could lead to lower halibut PSC within the fleet as a whole. Once this information is shared, and relevant factors are identified, steps can be taken to modify practices or gear as appropriate to work toward lowering halibut PSC.

Action: Ongoing research and testing of halibut excluders in the pollock fishery.

Rationale: Initial work with halibut excluder designs continues within the PCC coop in 2013 and reveals that it may be possible to design a net section that reliably allows small halibut to escape while retaining the majority of pollock in the net (see Figure 2). Since pollock vessels are mostly encountering small halibut, this undertaking appears valuable in reducing halibut PSC overall. Companies are already experimenting with designs with the help of PCC staff, and will continue to do so.

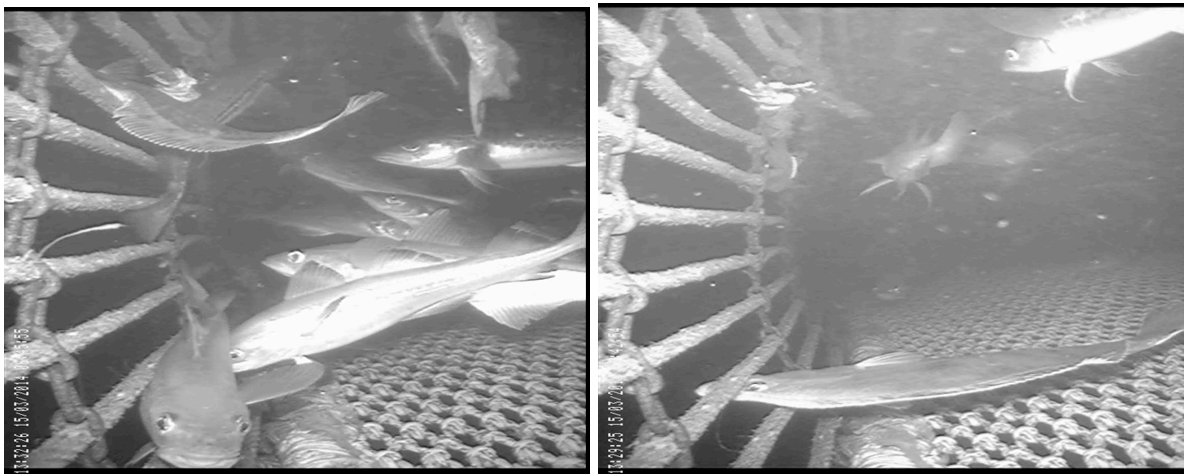


Figure 2. Snapshots of video showing an experimental halibut excluder in action. Flatfish are able to escape through the slots while pollock remain inside.

Action: Continued funding of research on halibut through the Pollock Conservation Cooperative Research Center (PCCRC) and Alaska Pacific University.

Rationale: Since 2000, APA members have donated their education tax credit dollars (more than 15 million dollars) to both University of Alaska and Alaska Pacific University. One of PCC's stated research priorities for the past several years has been halibut—both from a bycatch perspective, as well as an ecological perspective. APA member companies maintain halibut at the top of the research priorities list, and hope the growing body of knowledge on halibut biology, ecology, population dynamics, and harvesting will contribute to the ability to develop effective and verifiable measures for halibut avoidance by non-directed users.

Action: Collection and sharing of vessel-level information on halibut PSC rates and total halibut PSC in the pollock fishery.

Rationale:

PCC members already set co-op level guidelines for halibut PSC use in the pollock fishery, in their annual fishing plan. These guidelines correspond with the PCC pro-rata 'share' of halibut PSC under the sector-level limit identified in the harvest specifications. This means that if the co-op as a whole ends the year below the 'red light' level; they have caught fewer than their share of halibut. Information on halibut PSC use is shared with member companies on an ongoing basis throughout both pollock fishing seasons, and during all yellowfin sole fishing. Twice-weekly reports contain halibut bycatch rates by company and a cumulative trend for the co-op showing performance relative to red, yellow, and green light guidelines as established in the fishing plan.

Member companies agreed to extend this program to the vessel level. This means that, going forward, vessel-level information on halibut PSC rates and total halibut PSC will be gathered and distributed to the fleet regularly, and tracked against guidelines.

Setting more granular guidelines, and sharing vessel-level information on halibut mortality and PSC rates will facilitate increasing attention among vessels to halibut PSC. We already see that peer pressure is created simply by disseminating company-level information on a regular basis, and this is thought to increase by providing vessel-level information.

Action: Continue including both halibut and salmon PSC in the annual PCC bycatch competition, and increase the weight that halibut bycatch receives in the competition.

Rationale:

PCC skippers with the lowest combined halibut, Chinook and Chum bycatch rates receive a cash award at the annual PCC skippers meeting. This is a direct financial incentive to prioritize avoiding halibut and salmon PSC while fishing for pollock that PCC companies plan to continue. However, since all three species are combined in the competition with equal weights, members have agreed to change the weighting so that salmon species together receive 50% of the weight, and halibut also receives 50%.

Conclusion

The pollock CP IPA member companies are committed to ensuring their vessels minimize bycatch of halibut and other species to the extent practicable while fishing for pollock, and have begun the process of better understanding the factors influencing halibut bycatch. The actions described above are examples of ongoing and increasing focus on halibut bycatch mitigation by the fleet, particularly when directed users are affected by declines.