



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

April 5th, 2021

2021 Seabird Report to the North Pacific Fishery Management Council

The NMFS Alaska Groundfish and Halibut Seabird Working Group (Working Group) held its 2021 annual meeting (virtually) from March 10th – 11th. This meeting included contributions from staff from NMFS (Alaska Regional Office, Alaska Fisheries Science Center, Northwest Fisheries Science Center, and Pacific Islands Regional Office), U.S. Fish and Wildlife Service (USFWS), and the North Pacific Fishery Management Council (Council). The meeting was joined by staff from other management agencies and institutions, as well as, several members from the public.

This report broadly summarizes 1) estimated 2020 seabird bycatch in Federal fisheries operating off Alaska, 2) fisheries take of Endangered Species Act (ESA) listed seabirds and the new 2021 Biological Opinion, 3) seabird population status and trends in 2020, and 4) meeting notes and recommendations from the 2021 Working Group meeting.

Seabird Bycatch in Federal Fisheries off Alaska

Please note that all bycatch values are reported as “estimates” and not actual numbers of seabirds. For a detailed explanation of seabird bycatch estimation procedures please refer to NMFS annual seabird bycatch report (Krieger et al. 2020):

<https://repository.library.noaa.gov/view/noaa/25244>

The 2020 estimated seabird bycatch for the combined groundfish and halibut fisheries (3,462 birds) was below the 2011 through 2019 annual average of 6,956 birds, and considerably lower than the estimated seabird bycatch in 2019 (8,974). Estimated bycatch of blacked-footed and Laysan albatross was also lower in 2020. An estimated 82 black-footed and 31 Laysan albatross were taken in 2020. These values are well below the annual average from 2011 through 2019 (325 black-footed albatross and 157 Laysan albatross). We did have 2 reported takes of short-tailed albatross in 2019. These takes are described in more detail below. These were the first reported takes of short-tailed albatross since 2014.

While a reduction in seabird bycatch in the Federal fisheries off Alaska is positive, several events occurred during the 2020 fishing seasons which may partially explain this reduction. As with many other things in 2020, the COVID-19 pandemic disrupted normal fishing operations throughout Federal fisheries. In Alaska, such disruptions included lost fishing days due to closures and stand-downs (primarily at the beginning of the pandemic) and reduced market prices for fish as restaurants and other buyers were not operating at normal levels and thus were not purchasing as much fish product. Less fishing effort would reduce the opportunities for



interactions with seabirds and less seabird bycatch. Another disruption to normal fishery operations created by the pandemic were limitations on available air travel and “shelter in place” restrictions, particularly in many remote Alaskan communities. These situations impacted observer deployment. Under the emergency rule signed on March 24, 2020, NMFS temporarily waived the requirement for some vessels to carry observers on fishing trips. This is especially true for the IFQ fisheries (sablefish and halibut) that operate out of smaller ports. Observers serve as the primary data collectors and monitors of seabird bycatch in our fisheries. If less fishing trips had an observer onboard in 2020 there would be less seabird bycatch reporting and lower bycatch estimates.

Aside from disruptions associated with the COVID-19 pandemic, there was also a major shift in gear usage in the sablefish IFQ fishery that could partially explain the relatively low seabird bycatch estimates in 2020. Many vessels in this fishery shifted from using hook-and-line gear to using pot gear. This was primarily done in an attempt to avoid whale depredation on sablefish catch. Take of seabirds by pot gear is relatively rare compared to take of seabird by hook-and-line gear. If the sablefish IFQ fishery continues to increase its use of pot gear over hook-and-line gear, we would continue to expect to see reduced take of seabirds in this fishery.

NMFS annually produces a comprehensive summary of seabird bycatch estimates for Alaska Groundfish and Halibut fisheries. Please refer to this report for a more detailed description of seabird bycatch estimates for Federal fisheries off Alaska. The 2019 report is available here: <https://repository.library.noaa.gov/view/noaa/25244>

The 2020 report will be available on NMFS seabird bycatch webpage in June 2021: <https://www.fisheries.noaa.gov/alaska/bycatch/seabird-bycatch-alaska>.

Fisheries Take of ESA-Listed Seabirds and 2021 Biological Opinion

At the December 2020 Council meeting, NMFS reported the take of two short-tailed albatross (*Phoebastria albatrus*) in the Pacific cod demersal longline fishery of the BSAI. The first occurred in September of 2020, near Zhemchug Canyon in NMFS reporting area 521. The second occurred in October of 2020, south of St. Matthew Island in NMFS reporting area 521. These are the first reported takes of short-tailed albatross by any fisheries operating in the BSAI or Gulf of Alaska (GOA) since 2014. NMFS posted two information bulletins to the fleet to inform vessels that these takes had occurred and to ask that they be cautious when fishing in these areas (NMFS information bulletins can be found here: <https://www.fisheries.noaa.gov/news-and-announcements/bulletins>).

At the June 2020 Council meeting, NMFS reported two mortality events resulting in the deaths of two other species of seabird that are listed as “threatened” under the ESA; the spectacled eider (*Somateria fischeri*) and the Alaska-breeding population of Steller’s eider (*Polysticta stelleri*). As a result of those mortality events, NMFS reinitiated formal consultation under section 7 of the ESA with USFWS to ensure BSAI and GOA groundfish fisheries are not likely to jeopardize the continued existence of either eider or adversely modify their designated critical habitat.

On March 8th, 2021, the USFWS finalized a new Biological Opinion focusing on fishery interactions with ESA-listed seabirds. The previous Biological Opinion covering the BSAI and GOA Groundfish Fisheries (2015) did not include incidental take statements for either species of eider because there had never been a reported take of either species in these fisheries. The 2021 Biological Opinion provides incidental take statements for short-tailed albatross, which remain the same as in the 2015 Biological Opinion, and it adds range of the species, avoidance measures, analysis, and incidental take statements for spectacled eider and Steller's eider as well ([2021 USFWS](#)). The 2021 Biological Opinion left in place most of the conservation measures that were specified in the previous 2015 Biological Opinion but did add new components:

- New Incidental Take Statements:
 - **The reported take should not exceed 25 spectacled eiders in a floating 4-year period.**
 - **The reported take should not exceed three Steller's eiders in a floating 4-year period.**
- The Incidental Take Statement for short-tailed albatross did not change from that provided in the 2015 Biological Opinion:
 - **The reported take should not exceed six albatrosses in a 2-year period.**
- The NMFS will recommend that to the maximum extent practicable vessels will minimize the use of external lighting at night and avoid the use of sodium lighting and other high-wattage light sources, except when necessary for vessel and crew safety. The NMFS will also recommend that all lights should be angled or shielded downward toward the surface of the water, except when necessary for safe vessel operation.

The Working Group supports the recommendations and the terms and conditions specified in the 2021 Biological Opinion.

The USFWS has also asked NMFS to engage with fishing vessels operating in the northern Bering Sea to help to document the occurrence of spectacled eider on the fishing grounds. The USFWS would like vessels to report any sightings of these eiders using the Threatened and Endangered Bird Species Encounter and Reporting Form found here: <https://www.fisheries.noaa.gov/alaska/bycatch/seabird-avoidance-gear-and-methods>.

U.S. Fish and Wildlife Service Update

The U.S. Fish and Wildlife Service (USFWS) annually monitors select representative seabird species and colonies across Alaska. In 2020 the seabird monitoring field season was significantly impacted by COVID-19. Several marine bird surveys were postponed or cancelled due to restrictions enacted to reduce individual and community exposure to COVID-19. The Alaska Maritime Refuge (AMNWR) was unable to deploy its annual camps to monitor seabird productivity at several long-term colony sites. These sites provide information on seabird productivity, population status, and diet data. In summer of 2021 the AMNWR plans to deploy field crews at select colony sites to conducting monitoring efforts. In 2020 the USFWS conducted limited seabird survey to provide information on seabird distribution and abundance

in the offshore waters of the GOA. Surveys were conducted along the Seward Line in July and September. In July seabird densities were found to be highest along the shelf-break and in nearshore waters. In September, overall seabird density was average compared to prior seasons where more variability was detected. The USFWS is currently coordinating marine bird surveys for the 2021 field season. Surveys are planned for the GOA, Bering Sea, and Chukchi Sea in May, July, and August. Seabird mortality events have been occurring annually in Alaska the last several years. In 2020 USFWS received reports of ~330 seabird carcasses primarily from the northern Bering Sea. Overall seabird mortality reports were lower in 2020 compared to recent years. The majority of species reported included puffins, murre, shearwaters, kittiwakes and auklets. In 2020, a total of 25 seabird carcasses were examined for cause of death including the potential exposure to disease and harmful algal toxins. The examinations indicated that the cause of death was emaciation likely caused by lack of food. The USFWS will continue to work with partners, including local community representatives, the State of Alaska, National Park Service, U.S. Geological Survey, NOAA, and the Coastal Observation and Seabird Survey Team to regionally monitor and respond to potential seabird mortality events.

Meeting Notes and Recommendations

The Working Group received updates on three specific items of interest that the group will continue to track and report on to the Council as more information is developed.

#1 Seabird Observer Notes

During the meeting, the Working Group received an update on a project being led by several of its' members to collect and extract data from the NMFS seabird observer notes to help provide information on seabird-vessel interactions (and other issues). These data consist of a comprehensive list of attributes describing each interaction, and are recorded whenever there is a known seabird interaction with a vessel or a sighting of a "species of interest". These data were originally (1993-2009) handwritten notes made by onboard observers and have been collected electronically since 2009 but have never been analyzed extensively. The project leads are working to rectify this. These data contain valuable information about non-bycatch seabird mortality events such as cable strikes and bird storms, which are not captured in estimates of seabird bycatch mortality. In addition, the seabird observation notes may provide other valuable information about seabirds including sightings of rare or threatened species, descriptions of seabirds following vessels, and descriptions of how seabirds behave around certain gear types in different fisheries. These data may also provide information useful for management uses such as, helping to document take of seabirds, information on seasonal seabirds distribution near fishing vessels, supporting demographic analysis based on legband recoveries, and could help to identify occurrences of seabird strikes and "bird storms" where birds don't end up in the observer sample and consequently, are not represented in the bycatch data.

The Working Group was very supportive of this work and requested that it receive periodic updates as this project progresses. The Working Group will report on the progress of this project to the Council when it received these updates.

#2 Short-tailed Albatross Species Designation

Among seabirds that occur in the Federal fisheries off Alaska, the short-tailed albatross has been the species of greatest concern and interest for both the Working Group and the Council for several decades. The short-tailed albatross is currently listed as “endangered” under the ESA. While the species is known to travel to waters off Alaska to forage, they also spend considerable time in waters off of Japan where they nest on several islands.

Studies dating back to the mid-2000’s have noted morphometric differences between members of the species; these differences are substantial and there has been discussion about whether or not the short-tailed albatross is in fact two disparate species. The Working Group received a presentation which summarized a growing body of work (mostly driven by Japanese researchers) that has attempted to address this question. Several different studies which used a range of analytical methods were discussed and their findings presented. This evidence recently compelled the Japanese government to formally designate the short-tailed albatross as two separate species.

However, this decision by the Japanese government does NOT affect the species designation of the short-tailed albatross in the US. When considering listing species and subspecies, the USFWS usually defers to the species and subspecies designations from the North American Classification and Nomenclature Committee of the American Ornithological Society. This would require formal recognition by the American Ornithological Union and buy-in from the USFWS. At this time, neither is looking to move forward with altering the current species designation of short-tailed albatross.

Given the impact this could have on Federal fisheries off of Alaska should the US follow suit with the Japanese government, the Working Group will continue to monitor any changes in the species status and will report any updates to the Council.

#3 Alaska Fisheries Science Center Seabird Studies Planning

Working group members reported on current efforts to develop a seabird strategic plan for the Alaska Fisheries Science Center (AFSC). The National Seabird Program produced a 5-year strategic plan in 2019¹ as an overarching guideline for its activities. The AFSC, in addition to its annual planning and guidance process, is engaged in a longer term strategic plan for 2022-2024. The AFSC has been engaged in seabird-fishery interaction work since the late 1970’s, but especially during the High Seas Driftnet Fishery years (1989-1993) and since 1992, the Alaska groundfish fisheries and halibut fisheries. In addition to current core operations such as fishery monitoring and bycatch reduction work, some efforts have also been made over many years to increase the use of seabird information for Ecosystem Based Fishery Management efforts.

The AFSC seabird strategic plan will address current activities and identify important areas where critical seabird work can be accomplished. It will delineate current operations for seabird bycatch monitoring, improvements to monitoring, potential conservation engineering or outreach

¹ Ballance, L. T., Benaka, L. R., Ellgen, S. U., Fitzgerald, S. M., Henry, A. E., Kim, M. A., Nathanson, S. L., and Joyce, T. W. 2019. National Seabird Program Five-Year Strategic Plan: 2020-2024. NOAA Tech. Memo. NMFS-F/SPO-202 190 p.

efforts for further seabird bycatch reduction, maintaining important science-based operations such as the NOAA Pacific Seabird Necropsy Program, strengthen the many partnerships that have been developed over many years within and beyond NOAA Fisheries, address Endangered Species Act seabird/fishery interactions, and other such work. Focal attributes of this planning document will address (1) continue the close and collaborative work between the AFSC, the U.S. Fish and Wildlife Service, and the Alaska Regional Office, (2) capitalize on the tremendous accomplishments industry has made in reducing seabird bycatch through application of the collaborative approach and to further reduce bycatch and address other fishery interactions issues, and (3) how to improve and further the use of seabird information from many sources in Ecosystem Based Fishery Management.

Staff are currently drafting the seabird strategic plan and concurrently conducting listening sessions with a broad suite of collaborators, end-users of the data, and sources of information supporting many activities. The plan is anticipated to be completed by September 2021.

Recommendations and Outreach

Recommendations

The Working Group recommends that the Council emphasize strong support for the exploration of new analytical methods to estimate uncertainty associated with estimates of seabird bycatch within its broad suite of management and conservation priorities. The currently used monitoring approach and methods for the expansion of estimates is well designed using a stratified (by gear type) random sampling strategy. Currently, variance estimates are being developed by NMFS AKRO. The Working Group applauds those efforts and recommends that variance estimates be developed for seabirds and eventually provided with annual estimates. In addition, the Working Group recommends that the resources be provided for the NMFS AKRO to explore recent statistical developments for estimating rare events such as short-tailed albatross bycatch. Deriving estimates from data with very few detections (many zeros) can result in biased and inaccurate estimates. The Working Group believes that the ability to both generate unbiased estimates for rare events and deriving uncertainty estimates around seabird bycatch data would help provide a clearer picture of what actual seabird bycatch is occurring in Alaska fisheries. If the Council were to elevate this on its list of priority projects, this could perhaps help with securing additional funding which could be allocated for this work. Further, efforts in Alaska should coincide with and take advantage of the annual workshops being held by NMFS to address issues related to rare-event bycatch and take effort for mammals, seabirds, and marine turtles.

Outreach

NMFS and the USFWS are in the process of developing updated materials for fishing vessels to help fishers both identify seabirds of special interest (ESA-listed) and to know what to do should they encounter or see ESA-listed seabirds or should they witness or experience an extraordinary seabird event (e.g., a bird storm involving an ESA-listed species).

During discussion with stakeholders at the Working Group meeting, individuals representing various trawl fleet operations pointed out that they were not familiar with these seabird outreach

materials. This is likely because regulations around seabird bycatch mitigation are generally focused on the use of streamer lines in hook-and-line fisheries. In addition, the vast majority of seabird bycatch comes from the hook-and-line fisheries. However, the Working Group agreed that efforts to engage the trawl fishery to help mitigate seabird bycatch were worthwhile. As such, NMFS will plan to disseminate its seabird bycatch mitigation materials to trawl vessels and will begin coordinating the development of new outreach materials for these fisheries.

Both NMFS and the USFWS are hoping to collaborate with industry stakeholders on these efforts to ensure these materials are effective and useful. Staff from both agencies may begin to engage with industry stakeholders to elicit input and feedback.