

2023 Seabird Report to the North Pacific Fishery Management Council

April 2023

The NMFS Alaska Groundfish and Halibut Seabird Working Group (Working Group) did not meet in March 2023; however the Working Group is planning on meeting in November and did want to provide updates to the Council.

This report broadly summarizes 1) estimated 2022 seabird bycatch in Federal fisheries operating off Alaska, 2) fisheries take of Endangered Species Act (ESA) listed seabirds and the 2021 Biological Opinion, 3) USFWS update on seabird population status and trends in 2021 and an upcoming Migratory Bird Treaty Act rule to address the incidental take of seabirds in fisheries, and 4) other updates from the Working Group. This report includes contributions from NMFS (Alaska Regional Office, Alaska Fisheries Science Center) and U.S. Fish and Wildlife Service (USFWS).

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 the most recent NMFS annual seabird bycatch report:

<https://repository.library.noaa.gov/view/noaa/32076>.

The 2022 estimated seabird bycatch for the combined groundfish and halibut fisheries (4,620 birds) was less than the 2013 through 2021 annual average of 6,170 birds, but greater than the estimated seabird bycatch in 2021 (4,590 birds). Estimated bycatch of black-footed albatross (*Diomedea nigripes*) and Laysan albatross (*Phoebastria immutabilis*) was lower in 2022 than 2021, and well below the 2013 through 2021 annual average. In 2022, the estimated bycatch of black-footed albatross (251 birds) was 23% lower than the 2013-2021 average (327). The 2022 estimated bycatch of Laysan albatross (45 birds) was 62% lower than the 2013-2021 average (119). We did not have reported takes of ESA-listed seabirds (endangered short-tailed albatross (*Phoebastria albatrus*), threatened spectacled eider (*Somateria fischeri*), and threatened Alaska-breeding population of Steller's eider (*Polysticta stelleri*)) in 2022.

The increase in estimated seabird bycatch rate over 2021 levels can be seen as a return to pre-pandemic fishing effort and observer coverage. The overall seabird bycatch numbers continue to be driven by Northern fulmar (*Fulmarus glacialis*) bycatch. In 2022, an estimated 2,224 Northern fulmars were caught, almost twice that of 2021 (1,120) but well below the 2013 -2021 average of 3,041 birds.

As was noted in 2021, the sablefish IFQ fishery continued to expand the use of pot gear in 2022. This continued shift away from hook-and-line gear may partially explain the low seabird bycatch estimates in 2021 relative to the 2013-2021 average, particularly with lower albatross bycatch estimates as seen in 2022, even as fishing effort and observer coverage returned to pre-

pandemic levels. Seabird takes by pot gear are relatively rare compared to takes by hook-and-line gear. If the sablefish IFQ fishery continues to increase its use of pot gear over hook-and-line gear moving forward, we expect 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 2021 bycatch report is available here: <https://repository.library.noaa.gov/view/noaa/46629>.

The 2022 report will be available on NMFS seabird bycatch webpage in June 2023: <https://www.fisheries.noaa.gov/alaska/bycatch/seabird-bycatch-alaska>.

ESA-Listed Seabirds and 2021 Biological Opinion

ESA-listed seabirds in the Alaska Region include the endangered short-tailed albatross (*Phoebastria albatrus*), the threatened spectacled eider (*Somateria fischeri*), and the threatened Alaska-breeding population of Steller's eider (*Polysticta stelleri*). Two other populations of Steller's eider occur in waters off Alaska but only the Alaska-breeding population is listed under the ESA.

The March 8, 2021 USFWS Biological Opinion ([2021 USFWS](#)) for Alaskan groundfish fisheries provides incidental take statements for ESA-listed seabirds:

- The reported take should not exceed six short-tailed albatrosses in a 2-year period.
- 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.

These three incidental take statements for ESA-listed seabirds have not been exceeded at this time.

The prior interactions with ESA-listed eiders were due to vessel collisions, not direct gear interactions. To reduce vessel collisions, the 2021 USFWS Biological Opinion ([2021 USFWS](#)) provided the following recommendations:

- 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.

All injured and dead ESA-listed seabird species must be reported and carcasses retained to confirm proper species identification. In addition, the USFWS has asked NMFS to engage with fishing vessels operating in the northern Bering Sea to help document the occurrence of spectacled eider on the fishing grounds. The USFWS requests vessels voluntarily report other sightings of listed 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 – Seabird Population Status and Trends in 2022; Migratory Bird Treaty Act Incidental Take Regulatory Process

The U.S. Fish and Wildlife Service (USFWS) annually monitors select representative seabird species and colonies across Alaska. In 2022 seabird colonies were monitored in the Bering Sea, Aleutian Islands, Alaska Peninsula, and Gulf of Alaska (Figure 1). The results from monitored colony sites show reproductive success generally improved in 2022 with the majority of seabird species showing average or above average reproductive success across Alaska. Thick-billed murres on the Pribilof Islands were the exception where reproductive success was below average at monitored colony sites on St. George and St. Paul Islands. In the Gulf of Alaska, parakeet auklets also indicated below average reproductive success at Chowiet Island.

In 2022 seabird mortality events were reported in the Chukchi and Bering seas, and the Gulf of Alaska. The USFWS received reports of ~450 seabird carcasses primarily from the Bering Strait region and the Aleutian Islands. The majority of species reported included: murres, puffins, auklets, gulls, and shearwaters. Necropsy results determined starvation was the primary cause of death. Highly pathogenic avian influenza (HPAI) was also detected in Alaska in early 2022. Initial results indicate that seabirds were minimally impacted by the HPAI event. The USFWS will continue to work with partners, including local community representatives, the State of Alaska, National Park Service, U.S. Geological Survey, National Oceanic and Atmospheric Administration, and the Coastal Observation and Seabird Survey Team to regionally monitor and respond to potential future seabird health and mortality events.

The USFWS is in the process of proposing a Migratory Bird Treaty Act (MBTA) rule to address the incidental take of birds including fisheries. The proposed rule is currently undergoing development and an internal review process. The rule will include permit exceptions by regulatory authority, general permits, and specific permits to address seabird bycatch. We anticipate the draft rule being published in Summer 2023 where it will be open for public comments. Additional information on the Migratory Bird Treaty Act (<https://fws.gov/law/migratory-bird-treaty-act-1918>) and Incidental Take (<https://fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>) are provided on the U.S. Fish and Wildlife website.

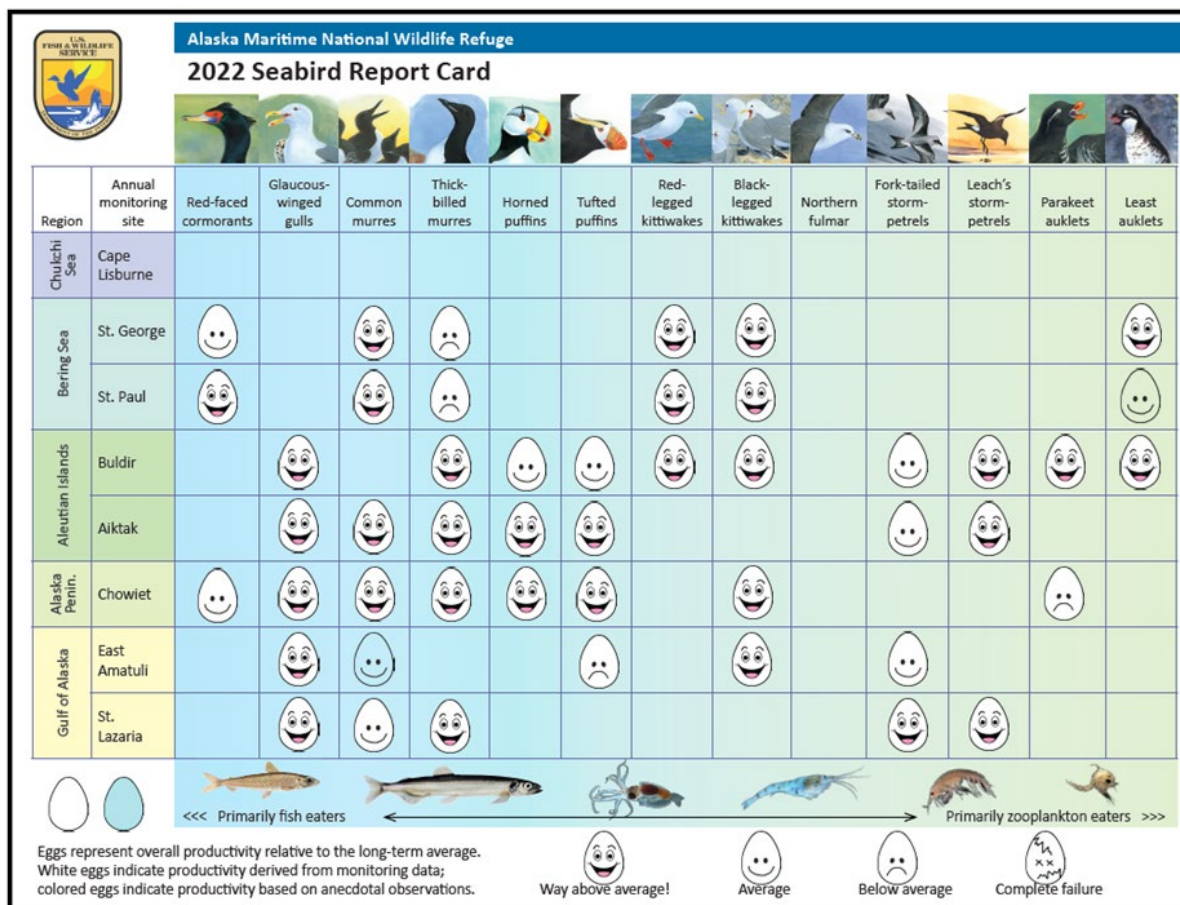


Figure 1. The 2022 Alaska Seabird Report Card summarizing seabird productivity at colony sites monitored by the U.S. Fish and Wildlife Service Alaska Maritime Refuge. "Way above average" means more than 1 standard deviation above the long term mean at that site. "Below average" means more than 1 standard deviation below the long term mean.

Other Updates

Alaska Fisheries Science Center Seabird Studies Planning

During May-July 2021, a broad suite of stakeholders, partners, and collaborators participated in feedback sessions regarding a strategic plan for the Alaska Fisheries Science Center's Coordinated Seabird Studies group (CSS). We compiled feedback from 20 listening sessions and written responses, from 37 individuals, representing 22 different groups. The AFSC Science Plan and the National Seabird Program Strategic Plan were among the important reference documents used in support of this effort. This feedback supported development of a strategic plan for seabird related activities at the AFSC and was approved by AFSC leadership in December, 2021.

The goals of this plan are:

1. Monitor, assess, and respond to seabird bycatch trends.

2. Co-create and implement mitigation measures to reduce seabird bycatch.
3. Integrate and synthesize seabird data for ecosystem-based fisheries management (EBFM) efforts.
4. Contribute to, and summarize basin-wide seabird trends in support of EBFM.
5. Represent CSS initiatives and results nationally and internationally.

The challenges identified are:

1. Changes in the timing, distribution, and abundance of seabirds and their prey.
2. Changes in the timing and distribution of fishing effort.
3. Changes to fishing gear and/or fishing methods.

The full strategic plan is available at <https://doi.org/10.25923/wxtz-q514>. We thank all listening session participants for their valuable feedback and ideas for future work and foci. Staff involved in seabird-related activities at the AFSC will use the annual Activity Plan Prioritization process, continued outreach to clients and end-users, and available resources to determine specific work during each performance year.

Trawl/Seabird Cable Interactions

AFSC staff are completing several documents based on observer data collection of seabird mortalities related to trawl 3rd-wire, warp, and net entanglements that occur outside of the species composition sampling. These seabird mortalities do not get reported in the Annual Seabird Report, which provides estimates based on observer species composition sampling. Collecting data on these additional mortalities pose some difficulties with randomized data collection, so a report summarizing just the mortalities observers have noted since 2010 is being prepared to be used in concert with the annual report.

Seabird Mitigation Measure Research

AFSC staff are coordinating with the National Seabird Program to implement a proof-of-concept trial to determine if UV-phased lighting could be a deterrent to procellariid (albatross, fulmar, and shearwater) interactions with vessels. This technology has been tested on airport runways with success. If the technology works on seabirds it could have wide application to reducing seabird mortalities and a follow-up collaborative study would be implemented.

Seabird Observer Notes

We previously reported that we are exploring the Seabird Observer Notes which address seabird/fishery interactions other than the direct mortalities reported by observers during their species composition sampling. Staff are currently using the vessel collision information component of these notes to summarize interactions by species, regions, and other factors. This work helps identify next steps in data quality control and other measures to make full use of this source of information.

Outreach

The USFWS has developed draft 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). Please see the outreach materials at the end of this report.

- Identification of Short-tailed Albatross, Steller's Eiders and Spectacled Eiders (pg 7-17)
- Bird Vessel Strike Avoidance Measures (pg 18-19)

These materials will also be available on the NMFS seabird bycatch webpage soon:

<https://www.fisheries.noaa.gov/alaska/bycatch/seabird-bycatch-alaska>.

During the 2021 discussion with stakeholders at the Working Group meeting, individuals representing various trawl fleet operations pointed out that they were not familiar with 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 to avoid bycatch. The vast majority of seabird bycatch comes from the hook-and-line fisheries. However, the Working Group agreed efforts to engage the fisheries to help mitigate seabird interaction would be worthwhile. As such, NMFS will plan to disseminate draft seabird identification and vessel strike avoidance mitigation materials to vessels and will begin coordinating the development of new outreach materials for these fisheries.

A limited number of streamer lines continue to be available for free to fishermen using hook-and-line gear in Federal groundfish and halibut fisheries off Alaska. Contact Josh Moffi (joshua.moffi@noaa.gov) for more information.

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