2022 Seabird Report to the North Pacific Fishery Management Council

April 2022

The NMFS Alaska Groundfish and Halibut Seabird Working Group (Working Group) did not meet in March 2022; however the Working Group did want to provide updates to the Council.

This report broadly summarizes 1) estimated 2021 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) 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 2021 estimated seabird bycatch for the combined groundfish and halibut fisheries (4,431 birds) was less than the 2012 through 2020 annual average of 6,294 birds, but greater than the estimated seabird bycatch in 2020 (3,614 birds). Estimated bycatch of blacked-footed and Laysan albatross was greater in 2021 than 2020, although still below the 2012 through 2020 annual average. 2021 estimated bycatch of black-footed albatross (277 birds) was 9% lower than the 2012-2020 average (304). 2021 estimated bycatch of Laysan albatross (66 birds) was 48% lower than the 2012-2020 average (128). **We did not have reported takes of ESA-listed seabirds (endangered short-tailed albatross, threatened spectacled eider, and threatened Alaska-breeding population of Steller's eider) in 2021.**

This increase in seabird bycatch rates over 2020 levels can be partially explained by two factors related to the COVID-19 pandemic. First, fishing effort increased in 2021, as the industry recovered from disruptions caused by the pandemic in 2020. This increase in effort increased the opportunities for interactions with seabirds. Second, observer deployments also increased in 2021, particularly in the partial coverage sectors, as COVID-related observer deployment restrictions were relaxed. 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. As more fishing trips had an observer onboard in 2021, there was more seabird bycatch reporting, and higher bycatch estimates.

Aside from pandemic-related factors, it is worth noting that the sablefish IFQ fishery continued

to expand the use of pot gear in 2021. This continued shift away from hook-and-line gear may partially explain the low seabird bycatch estimates in 2021 relative to the 2012-2020 average, particularly with lower albatross bycatch estimates as seen in 2021, even as fishing effort and observer coverage rates both increased. 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 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 2020 bycatch report is available here: https://repository.library.noaa.gov/view/noaa/32076.

The 2021 report will be available on NMFS seabird bycatch webpage in June 2022: 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 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. 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 on Seabird Population Status and Trends in 2021

The U.S. Fish and Wildlife Service (USFWS) annually monitors select representative seabird species and colonies across Alaska. In 2021 seabird colonies were monitored in the Bering Sea, Aleutian Islands, Alaska Peninsula, and Gulf of Alaska. Due to COVID-19 mitigation measures, colonies in the Pribilof Islands and Cape Lisburne were not visited in 2021. The results from monitored colony sites show reproductive success was generally average overall for several seabird species in Alaska (Figure 1). But, in the Bering Sea monitored murre and puffin species showed low reproductive success, while black-legged kittiwakes experienced a complete failure at the monitored colony site on Hall Island. Least auklets at this site were the exception where reproductive success was average.

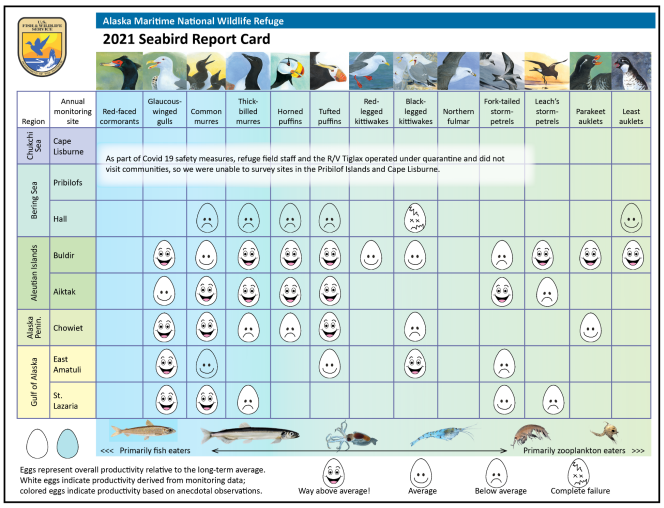


Figure 1. The 2021 Alaska Seabird Report Card summarizing seabird productivity at colony sites monitored by the U.S. Fish and Wildlife Service Alaska Maritime Refuge. "Way above average" means more than 1 standard deviation above the long term mean at that site. "Below average" means more than 1 standard deviation below the long term mean.

In 2021 seabird mortality events were reported in the Chukchi and Bering seas, and the Gulf of Alaska. The USFWS received reports of ~2,100 seabird carcasses primarily from the Bering Strait region. The majority of species reported included: shearwaters, murres, auklets, puffins and gulls. A total of 12 carcasses from the region were submitted for necropsy analysis and

starvation was determined to be the cause of death. In the Gulf of Alaska, a localized seabird mortality event was detected on Middleton Island in July. During a 10-day period black-legged kittiwakes, glaucous gulls and herring gulls were found dead on the island. Necropsy analysis was performed on select carcasses from Middleton Island and after other potential causes of death were eliminated, avian botulism testing was conducted. Two of the tested kittiwakes were positive for avian botulism type C. This form of botulism does not affect humans and is the first recorded case of botulism in the State of Alaska.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 mortality events.

The USFWS is in the process of proposing a Migratory Bird Treaty Act (MBTA) rule to address the incidental take of seabirds in fisheries. The proposed rule is currently undergoing development and an internal review process. The rule will include permit exceptions, general permits, and specific permits to address seabird bycatch. We anticipate the draft rule being published in Summer 2022 where it will be open for public comments. Additional information on the Migratory Bird Treaty Act (link) and Incidental Take (link) are provided in the attached links here.

Other Updates

Seabird Observer Notes

Seabird Observer notes comprise all the information on seabirds collected by observers outside their standard species composition samples. This information is being explored for usefulness in a wide suite of issues. The seabird observer notes were originally hand-written in logbooks but have been captured electronically since 2010. Staff recently used the 2010-present information to update the legband recoveries to the U.S. Geological Survey Bird Banding Lab. 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.

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 plan will be available soon as a NMFS/AFSC Technical Memorandum. We thank all listening session participants for their valuable feedback and ideas for future work and foci.

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 6-16)
- Bird Vessel Strike Avoidance Measures (pg 17-18)

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 Anne Marie Eich (AnneMarie.Eich@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.

IDENTIFICATION OF SHORT-TAILED ALBATROSS, STELLER'S EIDERS AND SPECTACLED EIDERS

U.S. Fish and Wildlife Service, Alaska

Identification tips to help you distinguish ESA-listed birds from other commonly seen bird species in marine areas around Alaska

Think you may have encountered an ESA-listed bird?

Below are tips to help you identify Short-tailed albatross, Steller's eiders and spectacled eiders

- Don't rely on feather color! Color can vary with age, sex and season.
- Examine the **head** and **bill**
    - Compare the **head** and **bill** of the encountered bird, to details and photos in this packet.
- Call the USFWS anytime for help with bird identification.

Claire Montgomerie

claire_montgomerie@fws.gov

(808) 756 - 8398

U.S. Fish and Wildlife Service Southern Alaska Conservation Office
(907) 271-2888

Neesha Stellrecht

neesha_stellrecht@fws.gov

(907) 347- 8906

SHORT-TAILED ALBATROSS

- There are **three species of albatross commonly seen at sea around Alaska**. One species, the **short-tailed albatross,** is **protected** under the Endangered Species Act.

- **Don't rely on feather color to identify short-tailed albatross**.
  - May appear similar in color to other species of albatross
  - Change colors as they age

SIZE REFERENCE

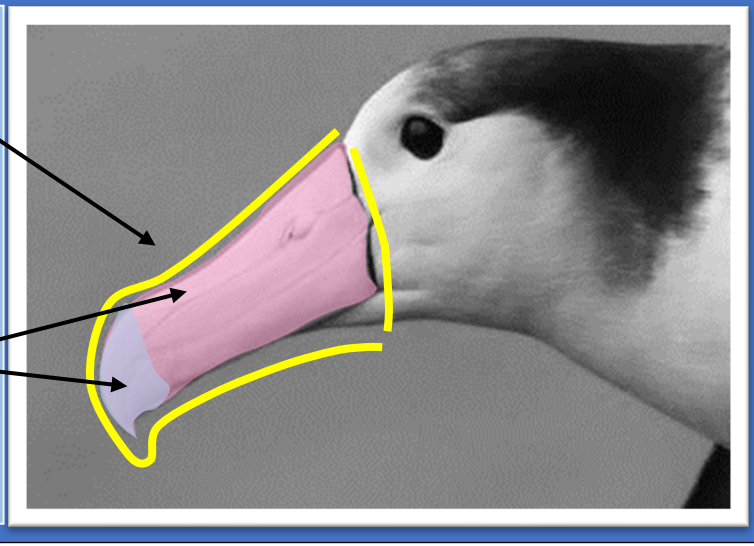
Short- tailed albatross can be distinguished from all other albatross by one defining characteristic: a bubblegum - pink bill

- Does the **shape of the bill look like this**?
  - Large
  - Thick, rectangular in shape
  - Small hook at end of bill

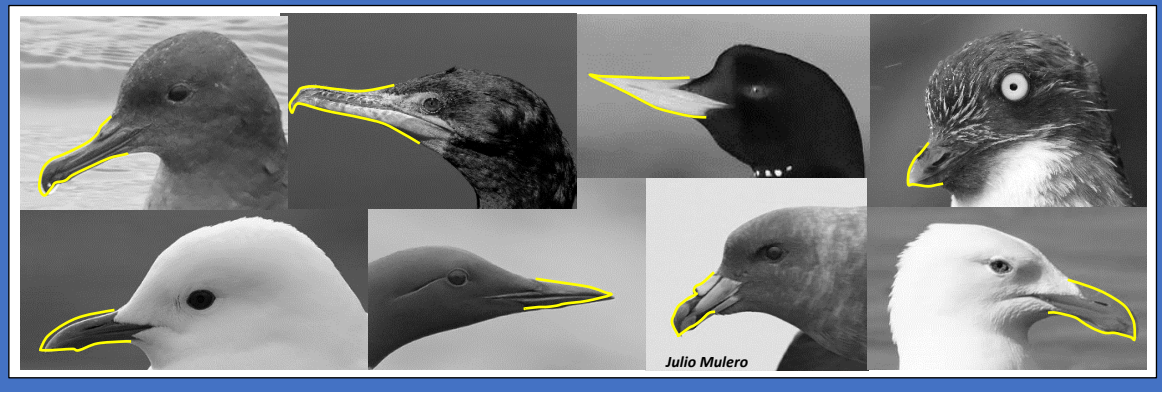
  If so, you are likely looking at an albatross.

- Is the bill **bubblegum-pink with a blue tip**?

  If so, you are looking at a short-tailed albatross.



Compare bill shape to other commonly seen birds at sea around Alaska



SPECTACLED & STELLER'S EIDERS

- There are **four species of eider commonly seen in marine areas around Alaska**. **Two species, spectacled and Steller's eiders** are **protected** under the Endangered Species Act.

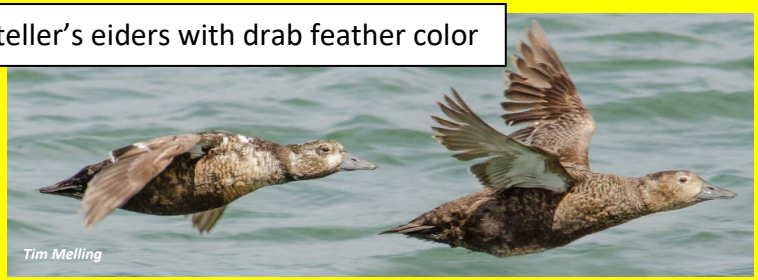
- Don't rely on color to identify listed eiders:

MALES AND FEMALES CAN LOOK DIFFERENT

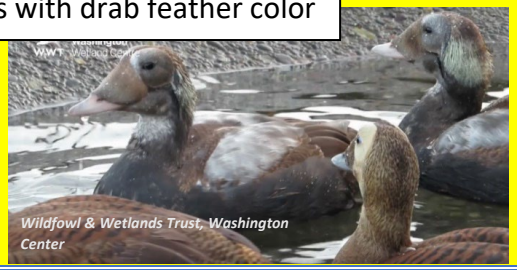
FEATHER COLOR VARIES WITH AGE, SEX AND SEASON

- In the fall, male and female spectacled and Steller's eiders may appear drab in color

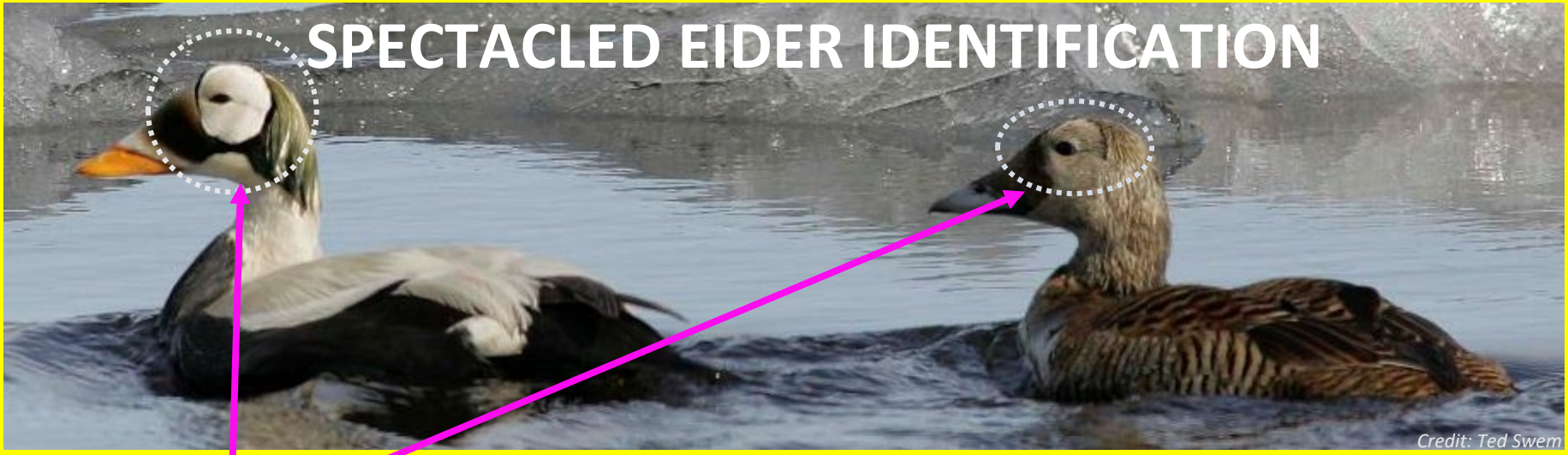
Steller's eiders with drab feather color



Spectacled eiders with drab feather color



SPECTACLED EIDER IDENTIFICATION


Credit: Ted Swem

Look for **"spectacles"**

- Subtle but still apparent on female and nonbreeding birds


USFWS, YKD Refuge

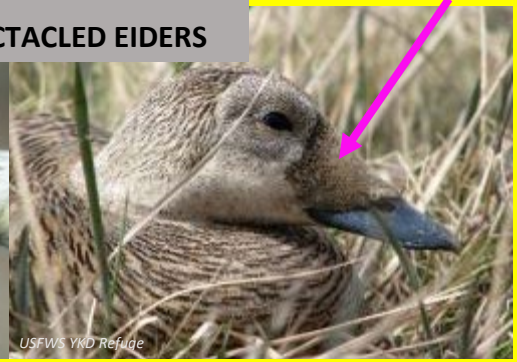

Wildfowl & Wetlands Trust, Washington Center

Compare the bill of spectacled eiders to that of other eiders

- **Head feathers of spectacled eiders extend far down bill, appearing to overlay bill**

SPECTACLED EIDERS


Nick Athanas


USFWS YKD Refuge

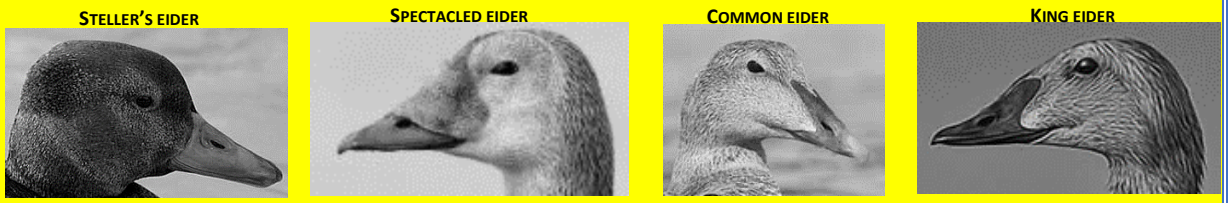

COMMON EIDER


KING EIDER

Mike Thompson

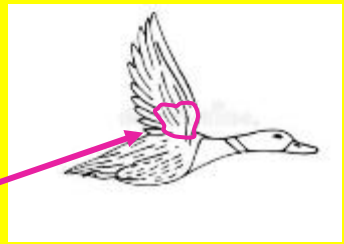
STELLER'S EIDER IDENTIFICATION

- Look quite different than the other three species of eider
  - Smallest of the eider species
  - Head/bill shape is different



- May be hard to distinguish from other, non-eider, sea duck species.

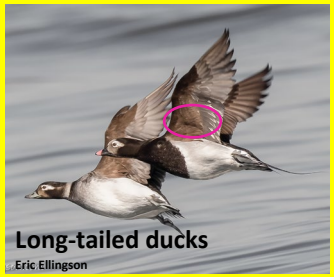
Look for white underwing or "armpit" feathers



Steller's eiders of varying sex and age but all showing white armpit feathers

- Other, similar sized, sea duck species overlap in range with Steller's eiders, but lack white underwings.

Two other commonly seen species of sea duck, similar in size to Steller's eiders, but without white armpit feathers



TIPS TO HELP YOU DISTINGUISH ESA-LISTED EIDERS FROM OTHER EIDERS

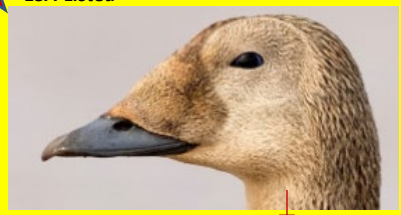
ESA-listed eiders

Not ESA-listed eiders

FEMALE EIDERS MAY BE PARTICULARLY DIFFICULT TO TELL APART

FEMALE SPECTACLED EIDER

★ *ESA-Listed*



FEMALE COMMON EIDER

Not ESA-Listed

FEMALE KING EIDER

Not ESA-Listed

FEMALE STELLER'S EIDER

★ *ESA-Listed*

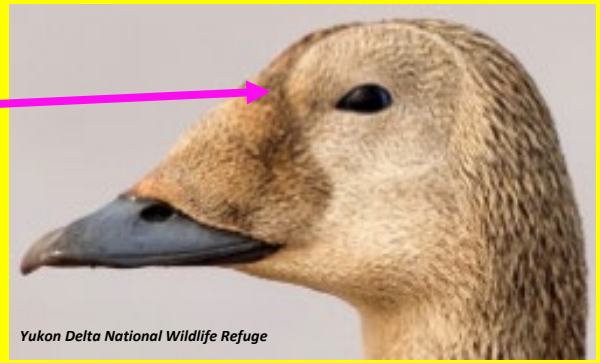
Note details of the head and bill of an encountered duck. Refer to the head shots below to help determine if the duck is an eider, and if so, if it's an ESA-listed eider.

Remember, don't rely on color! Feather and bill color can vary with age, sex and time of year.

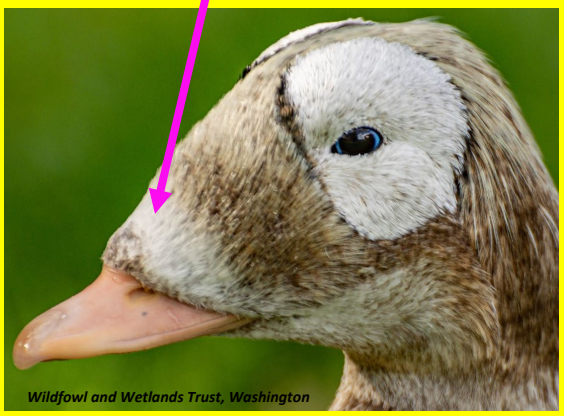
Spectacled eiders

- Look for spectacle pattern around eyes

- Head feathers extend far down bill


Yukon Delta National Wildlife Refuge


Yukon Delta National Wildlife Refuge


Wildfowl and Wetlands Trust, Washington


Alaska SeaLife Center


Wildfowl and Wetlands Trust, Washington

Steller's eiders

- Long, heavy bill
- Top of head appears flattened


Ted Swem

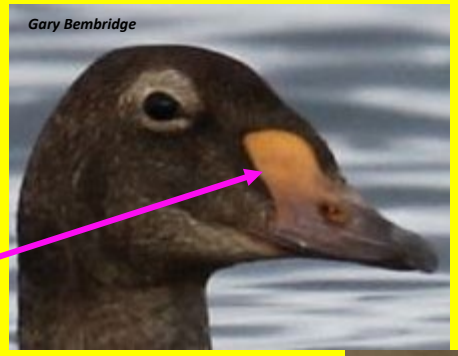

Tim Melling

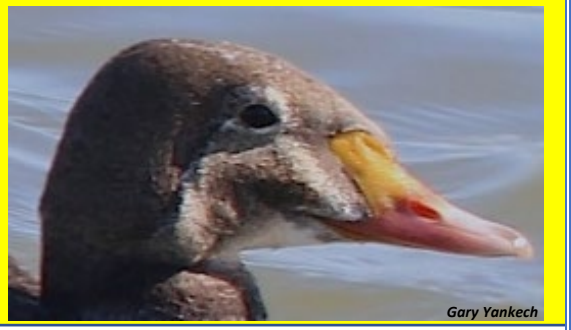

Ted Swem


Mick Thompson

King eiders

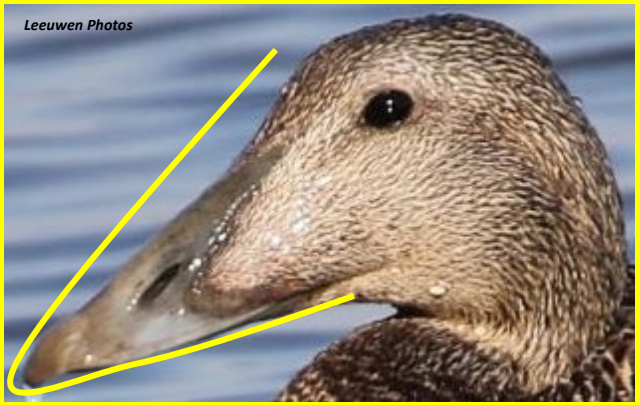
- Notice the enlarged frontal region or knob on bill
    - Reduced in females and young birds

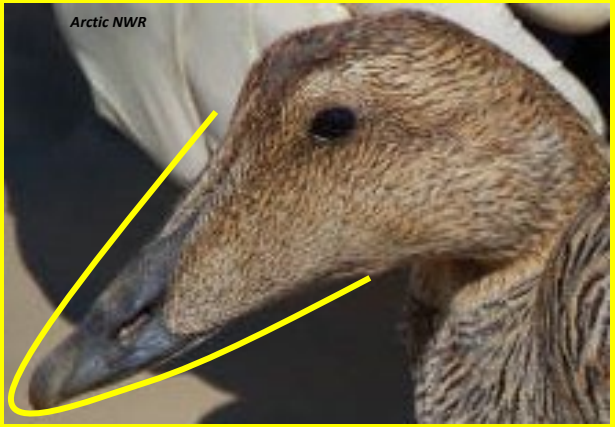




Common eiders

- Long, wedge shaped head and bill





Bird Vessel Strike Avoidance Measures

It is the Service's intent that mariners be cognizant of these recommendations, although we recognize that they may not always be suitable or practicable to implement. Health and human safety is always the first priority.

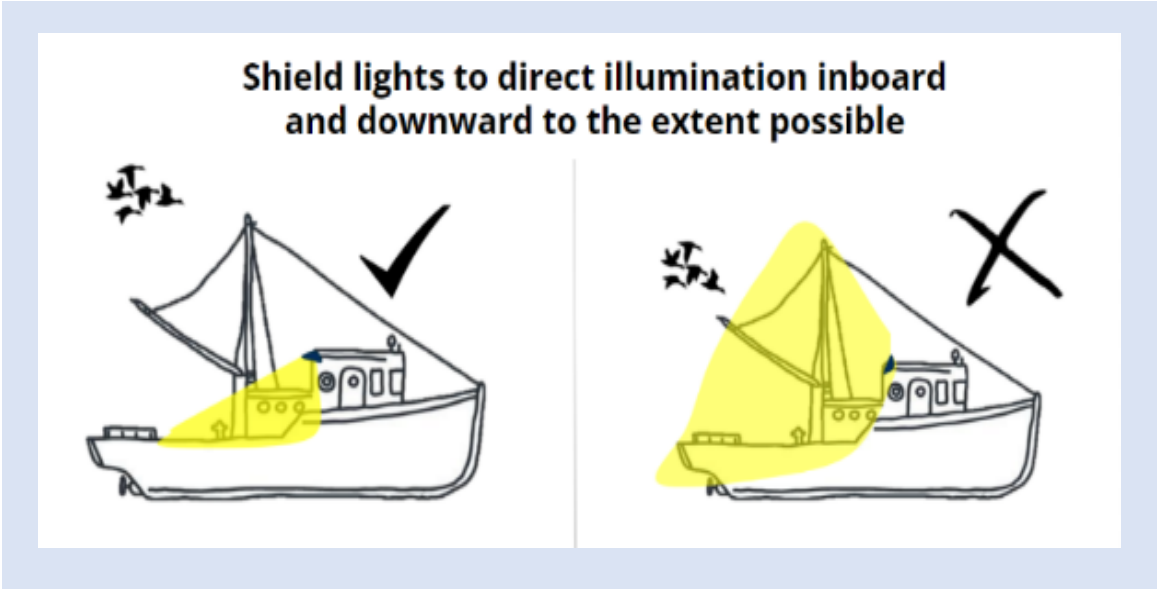
Factors identified to increase the risk of bird – vessel strikes/collisions include:

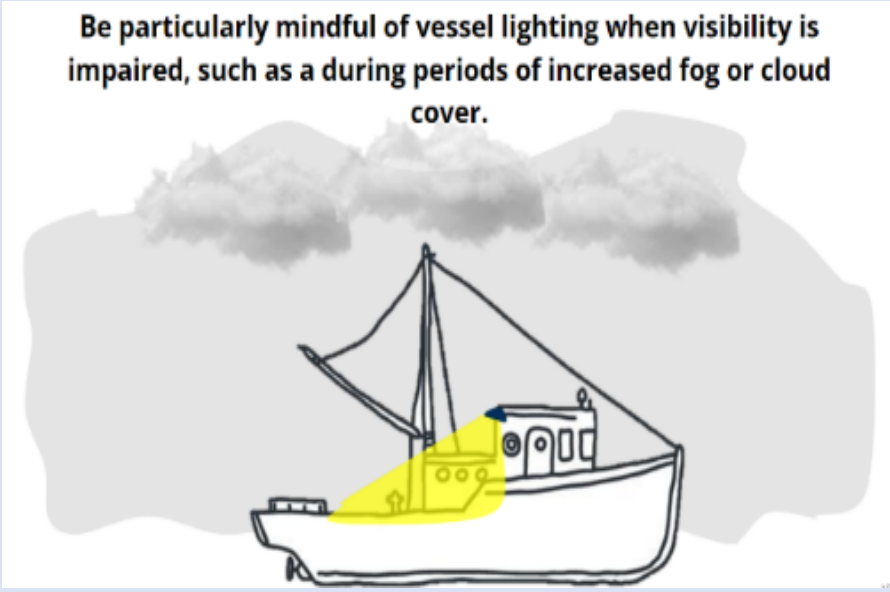
1. **Vessel lighting** (may confuse and can even attract birds)
2. **Impaired visibility** (i.e., night or during inclement weather)
3. **Vessel gear** (gear that may not be visible to birds, such as lines and towing equipment.)
4. **Seasonal timing** (during bird migration and molt)

Vessel Lighting

To reduce light distraction/attraction to birds, the Service recommends:

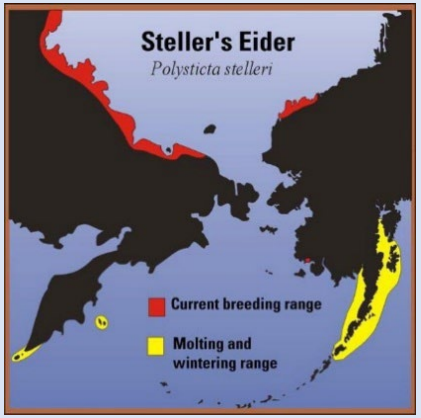
- Mariners attempt to keep deck lighting to a minimum, and **shield lights to direct illumination inboard and downward** to the extent possible while still maintaining compliance with navigation rules.
- If **red lighting** is used, lights be **limited to interior spaces**.
- **Windows be shaded** to the extent practicable when indoor spaces are lit.

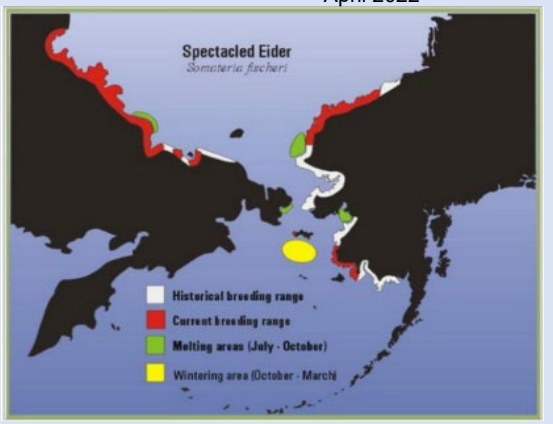




Eider Timing Considerations

1. Concern for eider- vessel **collision risk is particularly high between August and November**, during which time Steller's and spectacled eiders frequently fly in large groups between nesting, molting and wintering areas. This timing coincides with decreasing hours of daylight and a high potential for inclement weather, both of which may impair eider visibility and increase the likelihood that birds may become disoriented by ship lighting. We can predict where spectacled and Steller's eiders are likely to nest, molt and spend winter months.





2. **Less is understood about the path's that eiders take between these locations**. Factors such as weather, food availability and annual variation in breeding success, likely contribute to route selection Therefore, **there is the potential to encounter Steller's and spectacled eiders over large regions of the Beaufort, Chukchi, Bering seas and in the Gulf of Alaska, including along shipping lanes. Vessels moving in these areas after daylight may encounter flocks of migrating eiders.**

3. Areas have been designated as critical habitat for both spectacled and Steller's eiders. These areas are critically important to each species during seasonal timing of molt and winter feeding. Individuals are particularly vulnerable to disturbance in these areas.

We ask that mariners are cognizant of the importance of these locations to each species; please avoid and/or limit transit and activities (research, fishing, etc.), and habitat disturbance, in these areas. Additionally, always avoid congregations of eiders within these areas as they may be flightless and unable to move away from vessels.