

NOAA Fisheries' National Seabird Program

Supporting Seabird Science and Management



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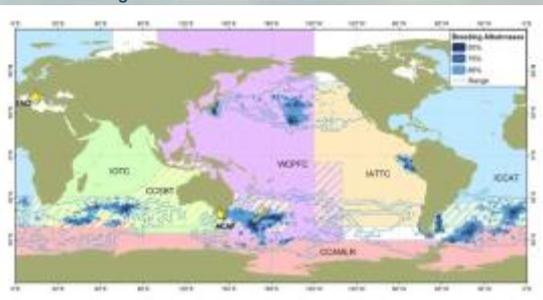
Mission

- Monitor and reduce seabird bycatch in U.S. fisheries
- Support global efforts to reduce seabird interactions with international fisheries
- Promote the importance of seabirds as ecosystem indicators and a vital component of healthy ocean ecosystems

National Seabird Program representatives come from all 6 Science Centers, 5 Regional Offices, and 6 NOAA Fisheries Headquarters Offices and work on seabird management and conservation issues around the world.

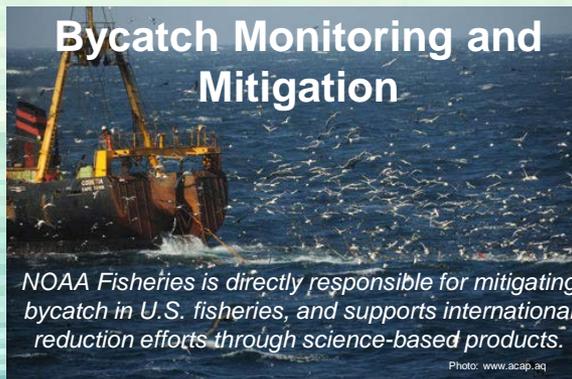


The range of many seabird species span entire ocean basins and requires engagement by multiple countries, which at times operate through regional organizations such as the ones shown here.



Activities and Accomplishments

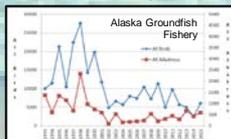
Bycatch Monitoring and Mitigation



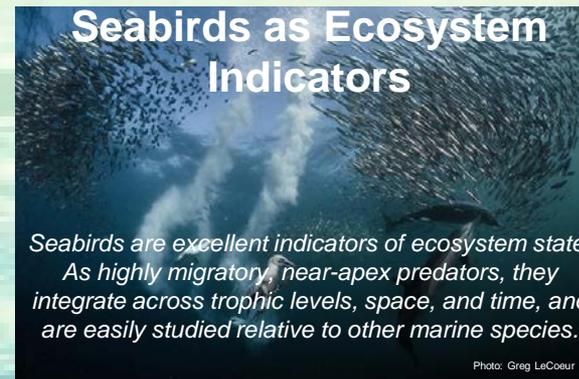
NOAA Fisheries is directly responsible for mitigating bycatch in U.S. fisheries, and supports international reduction efforts through science-based products.

Photo: www.acap.aq

- We track bycatch and implement mitigation measures, e.g.,
 - Summary Report: Seabird interactions and mitigation efforts in Alaska Fisheries: 2007-2015
 - Seabird bycatch in Hawaii Deepset Longline Tuna Fishery reduced by 74%
 - Seabird bycatch in Alaska groundfish fishery substantially decreased since implementation of mitigation measures
 - Biological assessment for reducing Marbled Murrelet bycatch in Puget Sound (Washington) Treaty-Indian and Non-Treaty Indian gillnet fisheries completed
- We support international bodies to develop and implement seabird bycatch mitigation measures, e.g.,
 - Food and Agriculture Organization of the United Nations (International Plan of Action on Seabirds, 1999)
 - Agreement on the Conservation of Albatrosses and Petrels
 - Regional Fisheries Management Organizations to which the United States is a party



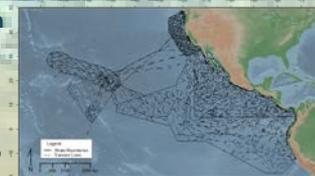
Seabirds as Ecosystem Indicators



Seabirds are excellent indicators of ecosystem state. As highly migratory, near-apex predators, they integrate across trophic levels, space, and time, and are easily studied relative to other marine species.

Photo: Greg LeCoeur

- We use seabirds to inform an ecosystem approach to fisheries management in Alaska, e.g.,
 - Auklet productivity (indicator of zooplankton) and puffin chick diets (indicator of forage fish) in the Aleutian Islands ("Aleutian Islands Fishery Ecosystem Plan")
 - Seabird diet (indicator of capelin and sand lance) in the Gulf of Alaska
 - Seabird productivity and phenology in the eastern Bering Sea ("Bering Sea Fishery Ecosystem Plan")
- We use at-sea data on seabirds in the eastern Pacific to estimate abundance and trends, locate biodiversity hotspots, determine overlap with fisheries, and disentangle fisheries from climate-related impacts to the ecosystem.
- We conduct necropsies on bycaught seabirds in Alaska and Hawaii fisheries (n ≥ 2,500) to document patterns in age, sex, and food habits, learn about food webs, and inform future mitigation efforts.



Acknowledgements:

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For more information: <http://www.st.nmfs.noaa.gov/national-seabird-program/>