

TIME SERIES

2007-2018

391 Black-footed Albatross
examined from PIRO

252 Laysan Albatross
examined from PIRO

36 Sooty Shearwaters
examined from PIRO

2473 Seabirds examined
from N. Pacific Obs Program

17 Seabirds examined
from At-Sea Hake Obs Program

METRICS INCLUDE

AGE	BODY CONDITION
SEX	PLASTIC INGESTION
PREY	TISSUE SAMPLES
MOLT	POLLUTANTS

NOAA FISHERIES & OIKONOS ECOSYSTEM KNOWLEDGE SEABIRD BYCATCH NECROPSY PROGRAM



Program Description

Oikonos works with NOAA's observer programs and William Walker (MML) to maximize the scientific value of birds caught incidentally in fisheries. Examinations inform conservation by documenting demographic patterns such as age and sex-related differences. Such examinations give insight into plastic and contaminant loads, diet, and seabird ecology. This program is administered by the NOAA Fisheries Alaska Fisheries Science Center and Oikonos, and supported by the Pacific Islands Regional Office - Fisheries Observer Program.

Program Value

- Important source of healthy specimens
- Improves understanding of fishery-seabird interactions
- Long-term data provides insight on seabird ecology in relation to oceanographic trends
- Seabirds are ideal indicators for marine debris and pollutant loads in the North Pacific
- Integrates seabird data from 3 different observer programs

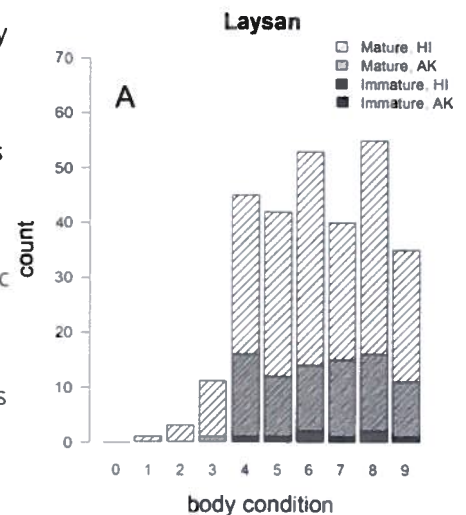


Fig. 4 from Nevins et al. 2018



Future Directions with Hawai'i albatross

- Track the female and age class biases in Black-footed Albatross
- Quantify trends in plastic exposure of healthy adults
- Study endocrine disruption from different types of ingested plastic
- Conduct genetic studies to assign provenance and study distribution trends
- Work with NOAA Fisheries to integrate demographics into spatial and temporal analysis of bycatch

Contacts

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Published Products

- Morra, K.E., Y. Chikaraishi, H. Gandhi, H.F. James, S. Rossman, A.E. Wiley, A.F. Raine, J. Beck, and P.H. Ostrom. 2019. **Trophic Declines and Decadal-Scale Foraging Segregation in Three Pelagic Seabirds.** *Oecologia* <https://doi.org/10.1007/s00442-018-04330-8>.
- Vokshoori, N.L., M.D. McCarthy, P.W. Collins, M.A. Etner, T. Rick, M. Eda, J. Beck, and S.D. Newsome. 2019. **Broader foraging range of ancient short-tailed albatross populations into California coastal waters based on bulk tissue and amino acid isotope analysis.** *Marine Ecological Progress Series* 610: 1-13.
- Nevins, H.M., J. Beck, P.E. Michael, M. Hester, J. Peschon, E. Donnelly-Greenan, and S. Fitzgerald. 2018. **Demographics of Laysan Phoebastria immutabilis and Black-footed P. nigripes Albatross caught as bycatch in Alaskan groundfish and Hawaiian longline fisheries.** *Marine Ornithology* 46(2): 187-199.
- Donnelly-Greenan, E., D. Hyrenbach, J. Beck S. Fitzgerald, H. Nevins, and M. Hester. 2018. **First quantification of plastic ingestion by Short-tailed Albatross Phoebastria albatrus.** *Marine Ornithology* 46(1):79-84.
- Walker, W.A., S.M. Fitzgerald, and P.W. Collins. 2015. **Stomach contents of seven Short-tailed Albatross Phoebastria albatrus in the eastern North Pacific and Bering Sea.** *Marine Ornithology* 43: 169-172.



CURRENT PARTNERS



North Pacific Observer Program
PIRO Observer Program
At-Sea Hake Observer Program
Alaska Fisheries Science Center
Northwest Fisheries Science Center

SWFSC Molecular Ecology and Genetic Analysis Team



CDFW Marine Wildlife Veterinary Care and Research Center



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Carlos Garza & MEGA Team



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