

A rare window on the lives of young albatrosses

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A new study provides a rare window the lives of young Laysan Albatrosses on Oahu. Credit: E. VanderWerf

Understanding population dynamics is crucial for the conservation of long-lived species like albatrosses, but collecting data on albatrosses before they reach adulthood and begin to breed is challenging. A new study from *The Condor: Ornithological Applications* provides the first direct estimates of the population size and annual survival of young birds



in Oahu's Laysan Albatross population, giving important new insights into the demographics of these "prebreeders."

Husband-and-wife team Eric VanderWerf and Lindsay Young of Pacific Rim Conservation spent 14 years banding 477 Oahu albatrosses as chicks and monitoring what became of them. Contrary to the prevailing belief that young albatrosses remain at sea until they're ready to breed, VanderWerf and Young found that 2% of birds first returned to the colony as one-year-olds, 7% as two-year-olds, and 17% as three-year-olds. These early returners provided a rare window into the lives of young birds, allowing VanderWerf and Young to determine that prebreeders make up almost half of the Oahu population. Once they made it through their first year after fledging, the annual survival of these young birds was very high, estimated at about 97%.

One threat to albatross populations is the mosquito-borne disease known as avian pox virus. "Although albatrosses and many other seabirds have strong immunity to avian pox virus, this disease has a negative long-term effect on their survival and chance of obtaining a mate," says VanderWerf. "As more albatrosses relocate to higher islands like Oahu in response to sea level rise, where mosquitoes are more prevalent, this disease, and perhaps others, will become a more important threat to the species, so we need to understand more about it and how to prevent its transmission."

"This study provides novel insight into early life stage demographics of a long-lived seabird from the long-term study of a small and highly tractable colony. It is an excellent example of the value of long-term demographic studies for long-lived species such as <u>albatrosses</u>," according to Oregon State University's Robert Suryan, a seabird ecologist who was not involved in the study. "These results are highly relevant to the study, conservation, and management of long-lived species."



More information: "Juvenile survival, recruitment, population size, and effects of avian pox virus in Laysan Albatross (Phoebastria immutabilis) on Oahu, Hawaii, USA" October 26, 2016, americanornithologypubs.org/do1650/CONDOR-16-49.1

Provided by The Condor

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