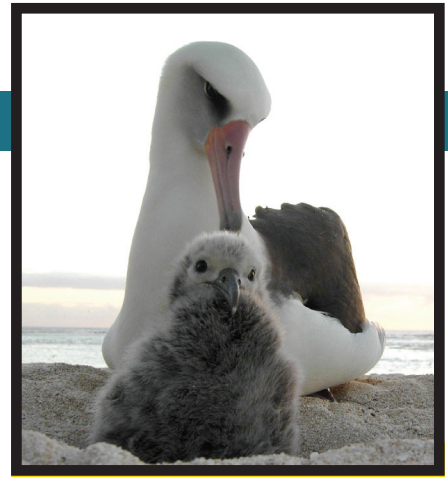


The Laysan Albatross

The Laysan albatross inhabits several islands in the Hawaiian Archipelago including Midway Atoll. It is a smaller species of albatross with a wing span of 195–203 cm. The life span of the Laysan albatross ranges from 40-60 years. Adults are considered to be monogamous and start producing offspring when they are around 8 years old. The courting process of mating pairs involves an intricate mating dance. Mated females typically produce one egg annually and rebuild their nests within a meter of their first nesting site. When eggs are laid, parents switch between taking care of the egg and finding food. They never leave the egg alone. After two months the baby albatross hatches, weighing approximately 190g.



A Laysan Albatross chick and parent nestle together in the sand on Laysan Island.

Photo Credit: Marcial Plazarte

Over the next three to four months, chicks grow rapidly, eventually weighing more than their parents. Parents take turns foraging for food offshore, traveling up to 900 kilometers and returning to feed their chicks every 2-3 days. Parents feed their young by regurgitating their stomach contents directly into the esophagus of their chicks. The Laysan albatross takes its first flight around the age of four months. The weight of an adult albatross is approximately 2.4 kilograms.

Before they fly away from the colony, chicks regurgitate a mass of indigestible material that has collected in their stomach called a bolus. After the ejection of their first bolus, juveniles typically weigh around 2.0 kilograms and are light enough to fly. They then head out to sea for 3-5 years until they return to the island where they hatched.

Diet

The bulk of the Laysan albatross diet is squid (86cm-150cm). They also consume flying fish eggs, fish, and crustaceans. Scientists discovered that they are active during the day but primarily feed at night using their enhanced nocturnal vision to see shiny objects, including squid that surface at night. Like other sea birds, the Laysan albatross gets water through its food and not through the consumption of water.

Ingestion of Foreign Matter

Due to their nocturnal vision and foraging methods of looking for shiny objects, the Laysan albatross easily confuses and eats non-prey items like plastics, floating pumice stones, and wood. Fortunately, the albatross has a natural mechanism to remove the built-up mass of non-digestible food matter from its stomachs. This process is the creation and regurgitation of a bolus. A bolus is made up of these non-prey items, as well as natural items like squid beaks, shells, and bones. Around the age of four months, an albatross regurgitates its first bolus, which weighs an average of 96 grams.

Conservation History

High sea drift nets were responsible for the death of approximately 17,000 Laysan albatross annually. Due to large volumes of bycatch (fish and other organisms caught unintentionally while intending to catch other fish) of Laysan albatross and other organisms, high sea drift nets were banned in 1993. However, longline commercial fishing is still a major problem for the albatross. Baited hooks are ingested, and once hooked, the birds drown. Roughly 20,000 Laysan albatross are killed annually from commercial fishing. Restrictions have been placed on offshore longlines, and fishermen are restricted from placing shallow sets on the West Coast of the United States since 2004.

Plastic, a large source of pollution, is found in 97.6 percent of Laysan albatross chicks, but cannot be linked directly to their death. It is scientifically difficult to determine a correlation between plastic and death rates because of the chicks' ability to form a bolus and regurgitate it. Scientists believe that chicks and adults suffer from malnutrition because they feel full from the plastics in their stomachs. It has been suggested that juveniles do not beg for as much food from their parents as needed, leading them to be fed less and die from dehydration and starvation. There are, however, clear connections between the negative health effects of sharp pieces of plastic perforating their stomach lining and lead poisoning from paint. The paint's original source is either from old Midway military buildings or plastic.



Trash covers the shoreline in Manila Bay, Philippines

Photo Credit: Sammy Primero

Conservation efforts have made large strides in recent years. According to the IUCN (International Union for Conservation of Nature), Laysan albatross were on the *Vulnerable* list in 2008, and have now improved to a status of *Near Threatened*. Despite this development, the health of the Laysan albatross is still a major concern, and conservation efforts will need to continue in order to stop the decline of this species.

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