



# ‘ELEPAIO

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For the Protection of  
Hawai‘i’s Native Wildlife

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## For the Birds

By Peter Young

The following article was first published on <https://imagesofoldhawaii.com/for-the-birds/> on February 3, 2023. The author’s posts are part of a personal learning experience; he explains that because of his planning work across the Islands, as well as previously serving as Director of the State Department of Land and Natural Resources, State Historic Preservation Officer and Deputy Managing Director for Hawai‘i County, he has had the opportunity to see some places and deal with some issues that many others have not had, nor will have, the same opportunity. His informal historic summaries are presented for personal, non-commercial and/or educational purposes, <https://imagesofoldhawaii.com/>.

“The spread of civilization and the utilization of wild lands, added to the destruction of animals for food, adornment, clothing, and sport, threaten the very existence of many species of native birds and mammals.”

“The necessity of regulating the killing of game was perceived early in our colonial history, and even the need of caring for our insectivorous birds found recognition about 1850.”

“Only in comparatively recent years, however, has the importance been recognized of protecting the large class of birds which, although they do not destroy insects or other creatures inimical to agricultural interests, are nevertheless worthy of preservation because of their beauty, grace, and harmlessness.”

“If such birds add nothing to our material wealth, they beautify the world and greatly increase the joy of living.”

“Though by no means the first to recognize the importance of protecting its wild life, the United States has taken a leading place among the nations of the world in this respect.”

“One of the most efficient of the conservation measures adopted by the Government is the setting apart here and there of islands and sterile tracts of land, worthless for other purposes, upon which our native wild birds and mammals may live and perpetuate their kind for the pleasure and profit of our own and future generations.” (Yearbook of the US Dept. of Agriculture, 1911)

“The National bird reservations under the care of the Department of Agriculture already number 51 and play a very important part in the preservation of our wild game and birds.”

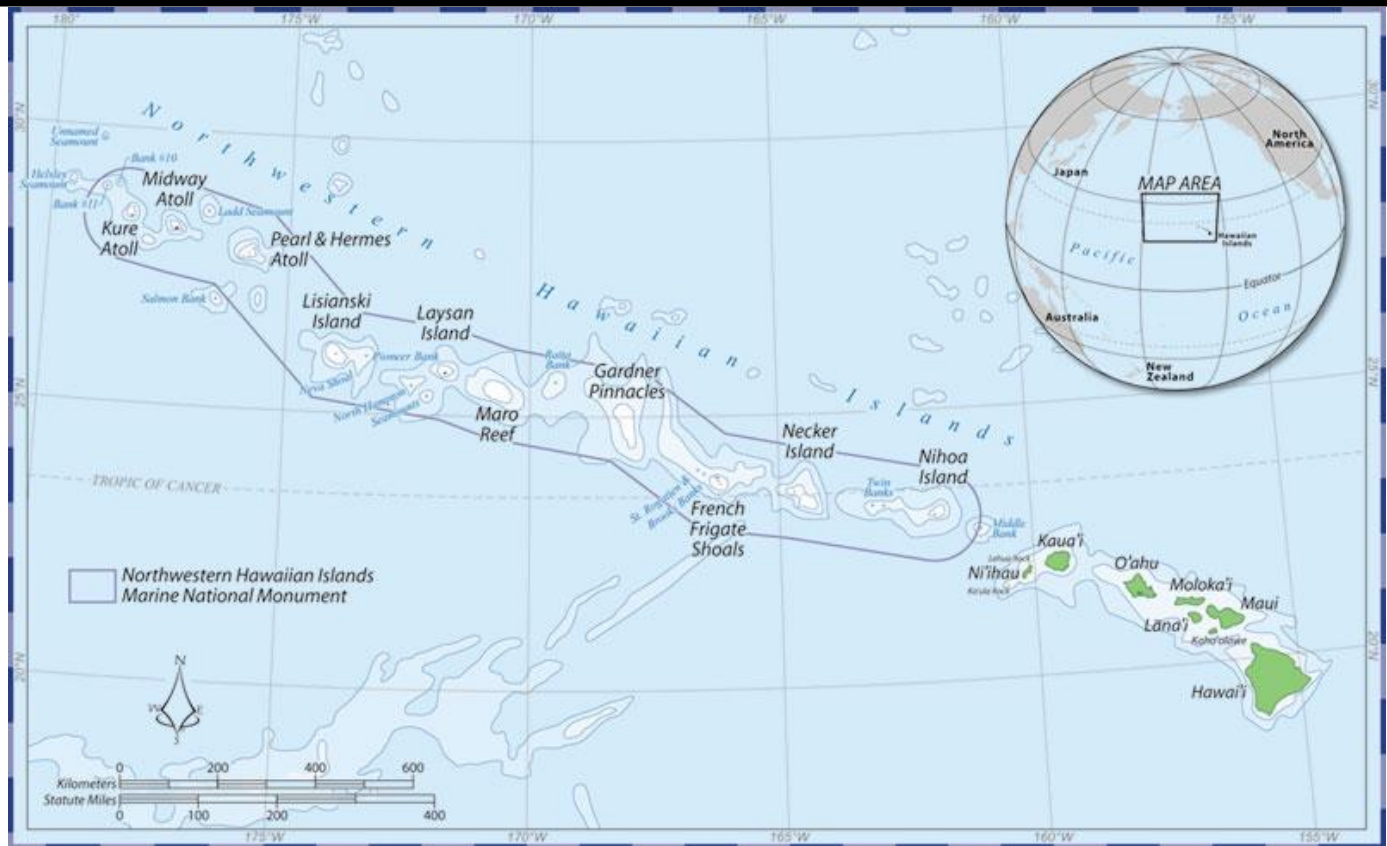
“One of the most unique and interesting of these is the Hawaiian Islands Bird Reservation in the mid-Pacific, which, at certain seasons of the year, harbors millions of sea fowls that repair thither to establish rookeries and rear their young.”

The following is the executive order setting apart this refuge: “Executive Order No. 1019. It is hereby ordered that the following islets and reefs, namely: Cure Island, Pearl and Hermes Reef, Lysianski or Pell Island, Laysan Island, Mary Reef, Dowsetts Reef, Gardiner Island, Two Brothers Reef, French Frigate Shoal, Necker Island, Frost Shoal and Bird Island ...”

“... situated in the Pacific Ocean at and near the extreme western extension of the Hawaiian Archipelago between latitudes 23° and 29° north, and longitudes 160° and 180° west from Greenwich, and located within the area segregated by the broken lines ...”

“... are hereby reserved and set apart, subject to valid existing rights, for the use of the Department of Agriculture as a preserve and breeding ground for native birds.”

“It is unlawful for any person to hunt, trap, capture, willfully disturb, or kill any bird of any kind whatever, or take the



Map of Northwestern Hawaiian Islands Marine National Monument, <https://sanctuaries.noaa.gov/sos2006/nwhi.html>

eggs of such birds within the limits of this reservation except under such rules and regulations as may be prescribed from time to time by the Secretary of Agriculture.”

“Warning is expressly given to all persons not to commit any of the acts herein enumerated and which are prohibited by law. This reservation to be known as the Hawaiian Islands Reservation.” Signed by Teddy Roosevelt, Feb 3, 1909.

The names have changed, a bit, but the place remains the same.

“This refuge consists of a dozen or more islands, reefs, and shoals that stretch westward from the archipelago proper for a distance of upwards of 1,500 miles toward Japan. The average distance between them is something like 100 miles.”

“Some of them, like Necker, Bird Island, and French Frigate Shoal, are masses of volcanic rock thrust up out of the ocean and so steep and rugged as generally to be inaccessible to anything without wings.”

“Others are little more than diminutive sand spits, snatched from the grasp of ocean by the aid of coral animals. Still

others are larger, and a few, like Laysan, being covered with sandy soil, are clothed with a more or less flourishing growth of shrubs, vines, and grasses.” (Yearbook of the US Dept of Agriculture, 1911)

“As the islands are part of our National possessions and have been set apart as a bird reserve, the care and the protection of their avian inhabitants would seem clearly to devolve upon the Federal Government. It is true that their remoteness and inaccessibility render it difficult to guard them properly.”

“An effort, however, will be made to secure from Congress sufficient funds to provide for the services of a warden for Laysan and for an assistant. It is hoped also to secure a small power boat of adequate size to enable trips to be made between Laysan and the other islands and Honolulu.”

“These measures, if supplemented by an occasional visit from one of the Government cutters during the height of the breeding season, will ensure the continued safety of the nesting colonies. From a variety of causes sea birds are being reduced in numbers almost everywhere, chiefly as the

result of plumage hunting and of the growing scarcity of breeding sites.”

“Hence these island bird colonies, one of the wonders of the world, will become of increasing importance with each succeeding year. They should be regarded as a National heritage, and the birds be adequately protected, not only for the sake of our own citizens, but for those of other countries whose people go down to the sea in ships.”

“Otherwise these birds will suffer the fate that overtook those on Marcus Island, also one of our possessions, where, as reported by Bryan, in six years a colony of albatrosses almost as large as that of Laysan was reduced to less than a score of birds through the unchecked activities of feather hunters.” (Yearbook of the US Dept of Agriculture, 1911)

Unlike all other islands and atolls in the Northwestern Hawaiian Islands, Kure Atoll is the only land area owned by the state of Hawai‘i – all of the other Northwestern Islands are owned by the US government.

While I was at DLNR, we created Refuge rules that established “a marine refuge in the Northwestern Hawaiian Islands for the long-term conservation and protection of the unique coral reef ecosystems and the related marine resources and species, to ensure their conservation and natural character for present and future generations.”

This started a process where several others followed with similar protective measures. The BLNR unanimously adopted the State’s Refuge rules, President George W Bush declared it a Marine National Monument and UNESCO designated it a World Heritage Site.

To me, this action reflects the responsibility we share to provide future generations a chance to see what it looks like in a place in the world where you don’t take something.

One of the issues about the rules, and in protecting the place, relates to access. Due to the sensitivity of the area, permits are limited – so, rather than taking the people to the place, there are tools now in place to bring the place to the people.

\*\*\* END \*\*\*

**KEEP CATS SAFE INDOORS**

Keep Cats *and* Birds Safe

## HONOLULU CHRISTMAS BIRD COUNT

DECEMBER 26, 2022

By Pete Donaldson

This article contains a summary of the Audubon Honolulu Christmas Bird Count on December 26, 2022 including information about the location and history of the count, the number of participants, with comments on the species recorded and special aspects of the count.

The Hawaii Audubon Society has sponsored Christmas Bird Counts since 1939. The Honolulu Count has covered the same area since 1944. The Honolulu Count for the 2022-2023 season was originally scheduled for December 18, 2022. The count was cancelled for that day due to lightning and flooding rain and rescheduled for December 26. The date change meant that we were not able to cover much of the U.S. Marine Corps base in Kaneohe (including the Red-footed Booby colony).

Many thanks to all the people who went out counting. Unfortunately, some people didn’t hear about the cancellation of the count on December 18th and went out that day. Others who had planned to count on the 18th were unable to count on the 26th. We still had 32 participants on the 26th, well above the 23-person average for the previous 10 counts. We did have beautiful weather on the 26th - light winds, lots of sun and no rain.

Participants: Monet Agae, Nilou Ataie, James Carr, Alec Christensen, Bonnie Curtin, Naomi Davis, Alyce Dodge, Peter Donaldson, Richard Downs, Beth Flint, Lillian Fujii, Steven Hayashi, Peggy Horton, David Johnson, Jennifer Lane, Melissa Mau, Jerrod Melander, Rowan Melander, Alii Miner, Colin Morita, Michon Morita, Pat Moriyasu, Janet Onopa, Iokepa Paty-Miner, Paul Radley, Kate Righter, Kristi Streiffert, Thomas Streiffert, Christopher Tipton, Diane Trenhaile, Jack Trenhaile, Eric VanderWerf.

The 51 species counted was just over the average of 50 species for the previous 10 counts. We had no very unusual species. Migrant waterfowl and shorebirds were sparse. Feral Red Junglefowl continue to increase on O‘ahu, so a high count was no surprise. We did not have access to Ulupau Crater, so the count of Red-footed Boobies was low.

White Terns and Rose-ringed Parakeets have been increasing on O‘ahu, so high counts are not a surprise. Perhaps the earlier drought conditions and the lack of trees in bloom affected the numbers of the native forest birds. In my own experience, all the native forest birds were scarce on O‘ahu this winter.

SPECIES	TOTALS
Muscovy (domestic type)	4
Muscovy X Mallard (hybrid)	3
Mallard (domestic type)	3
Hawaiian Duck X Mallard (hybrid)	268
Northern Pintail	1
American Wigeon	1
Gray Francolin	11
Red Junglefowl	445
Indian Peafowl	7
Red-footed Booby	12
Cattle Egret	401
Black-crowned Night-Heron	47
Hawaiian Gallinule	38
Hawaiian Coot	97
Pacific Golden-Plover	530
Black-bellied Plover	2
Hawaiian Stilt	52
Wandering Tattler	5
Ruddy Turnstone	14
Sanderling	10
White Tern	90
Rock Pigeon	881
Spotted Dove	743
Zebra Dove	2814
Rose-ringed Parakeet	307
Red-masked Parakeet	97
Red-crowned Parrot	539
parrot sp.	2
Oahu Elepaio	4
Red-vented Bulbul	860
Red-whiskered Bulbul	218
Japanese Bush-Warbler	3
White-rumped Shama	200
Red-billed Leiothrix	200
Warbling White-eye	432
Northern Mockingbird	1
Common Myna	1931
Saffron Finch	25
Red-crested Cardinal	569

## Mysteries of the James Campbell National Wildlife Refuge

By Susan Scott

The following article was first published on <https://www.susanscott.net/mysteries-of-the-james-campbell-national-wildlife-refuge/> on Mar 3, 2023.

Last week, I visited the James Campbell National Wildlife Refuge (JCNWR), a haven to Hawai‘i’s wildlife, and a mystery to Hawai‘i’s residents. Well, a mystery to me. Every time I pass the sign during my North Shore excursions, I have questions. Is this a natural wetland? A wastewater treatment plant? Are the ponds from the sugar industry? Do birds and turtles nest here?

Now that I’ve recently had an official tour by U.S. Fish and Wildlife volunteers and birders, Dick May and Pete Donaldson, I have answers to my drive-by questions: yes, to all of the above. The current JCNWR lies in the Kahuku ahupua‘a, the Hawaiian term for a pie-slice division of land that extends from mountain to ocean. Ancient Hawaiians surely used the area’s lower spring-fed wetland area to grow crops, raise domestic animals, and harvest birds and turtles for food.



JCNWR: A place for birds and people who love them. A shelter inside the refuge, Susan Scott photo.

In 1890, the Scots-Irish sugar baron, James Campbell, forever changed the lower wetland part of the ahupua‘a by

starting the Kahuku [Sugar] Plantation, and building settling ponds in the marsh. Settling ponds allow solids in wastewater to drop out, or settle, to the bottom. Kahuku plantation closed in 1971. Because Hawai'i's endangered waterbirds fed and nested in the area, in 1976 the U.S. Fish and Wildlife Service leased, and later bought, the former wetland from the Campbell Estate. The purpose of the purchase was to protect and manage the region for the federally-protected birds that frequented the place. Sea turtles also lay eggs in sand nests on the bordering beach. In 1980, the City and County of Honolulu built the Kahuku Wastewater Treatment Plant to serve the town of Kahuku. Because the wastewater facility shares the entrance road with the refuge, this is the first structure you see when driving in at the JCNWR sign.

One reason it's unclear what's going on here is because it's a closed refuge, a designation that protects one of the few remaining nesting sites for O'ahu's waterbirds, seabirds, and sea turtles.



Another reason the area may be confusing is the presence of adjacent former shrimp farms. Some of these smaller ponds, visible from the road, are failed attempts at shrimp aquaculture on private land. The shrimp sold in the roadside restaurants there are imported. The Romy's menu also offers tilapia. A worker there told me these fish are grown in the ponds.



One of the aquaculture ponds visible from the road, Susan Scott photo.

The James Campbell refuge, totaling 1,100 acres (about 1.7 square miles) consists of two areas. One is the larger Punamano unit that contains a spring-fed marsh and upland grassland and shrubland, safe from rising sea levels. Researchers only work in this area where a predator-exclusion fence protects translocated seabirds and their chicks from cats, rats, mongooses, and dogs.

The smaller Ki'i unit contains several of the former shallow-water sugar mill settling ponds. Federal managers use water control systems to maintain depths for ideal feeding and nesting habitat. The invasive aquatic plants that thrive here need continual mechanical clearing to maintain open water. The USFWS offers guided tours near the Ki'i unit on Saturdays from October through February, when the birds are not breeding. But from March through September, the place is for birds only.

During our walk, we found along the edges of the former sugar settling ponds, countless shrimp and snail shells, discarded by the migratory shorebirds after eating the soft body parts. Our guides called these animals crayfish and apple snails. I knew these were not native species, and wondered where they came from. Crayfish are freshwater versions of lobsters. The crayfish in the refuge are red swamp crayfish, also called 'opae pake, scientific name *Procambarus clarkii*. Native to the rivers, lakes, and swamps of the southern U.S. and northern Mexico, the hardy little freshwater creature is now found in all inland waters of all continents except Antarctica.

The species grows 4-to-5 inches long, and is raised worldwide as food, bait, aquarium pets, and laboratory research animals. The first red swamp crayfish were introduced from California into taro patches on O'ahu in

1923. In 1937, the crayfish were transplanted from O‘ahu to Maui and Hawai‘i Island. By the 1940s, the adaptable crayfish, which can flourish in water clear-to- murky and fresh-to-brackish, were found throughout the main Hawaiian Islands.

Apple snails, South America natives, were introduced to Hawai‘i as a food crop, and are for sale in aquarium stores. Although the round snails can grow to the size of an apple, the ones in Hawai‘i are about golf ball size. Today, apple snails are found on all islands except Moloka‘i and Lāna‘i. Because they harm taro plants, eat native species, and damage freshwater habitat, both the red swamp crayfish and apple snail are considered invasive pests in Hawai‘i — by us humans. Our shorebirds consider them gifts of the best kind: abundant protein in easy pickings.

The JCNWR was never a mystery to Hawai‘i’s shorebirds and waterbirds, and now, because of a tour (thank you, Dick and Pete) and some homework, it’s not nearly the mystery to me that it once was. But there’s so much more. As I read this over, I realize I’ve barely written anything about the birds that people work so hard here to protect. In researching this piece, for instance, I learned some amazing facts about our Bristle-thighed Curlews. But that’s for next time.

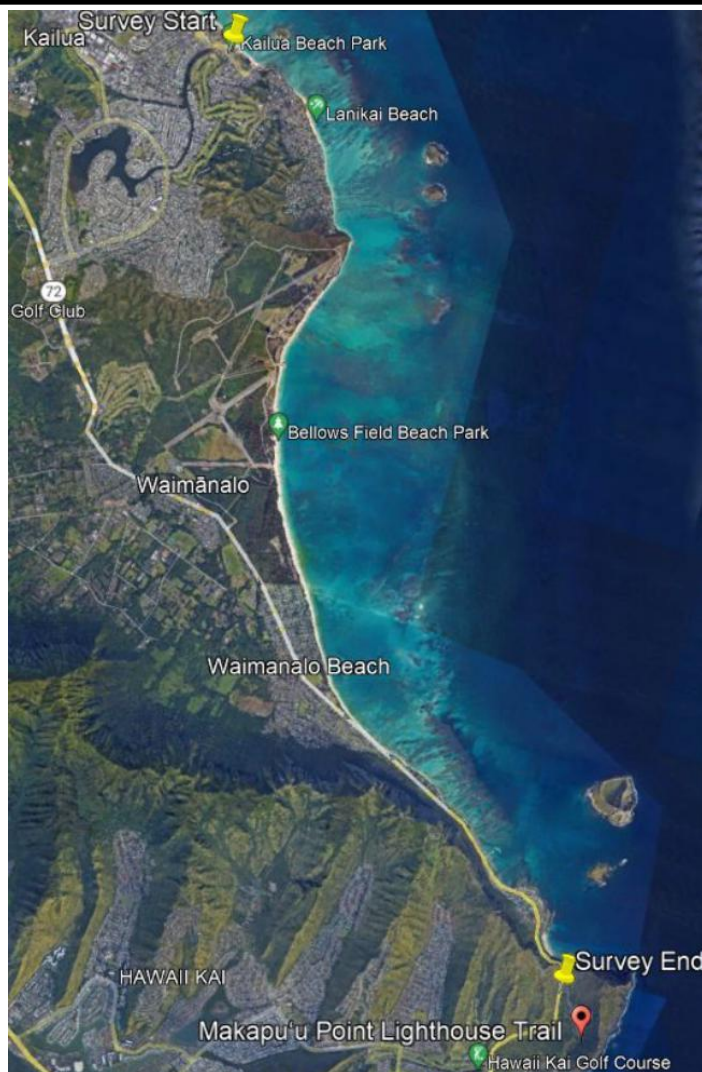
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## Road Surveys for Wedge-tailed Shearwater Fallout Expanded into Kailua Town

By David Hyrenbach, PhD

Following an 8-year study (2012-2019) to compare Wedge-tailed Shearwater fallout before and after the switch from yellow high-pressure sodium (HPS) bulbs to white light-emitting diode (LED) highway lights (Urmston et al. 2022), in 2020 we shifted our road surveys further north.

The last three years, we have continued seabird fallout surveys along the Kalaniana‘ole Highway, using an expanded route from the Makapu‘u Lighthouse to Lanikai. Our surveys during the shearwater fledging season (November – December) have yielded an average of 33.7 grounded birds per year, with a maximum of 45 in 2020 and a minimum of 25 in 2021.



In 2023, we will augment these expanded surveys by taking night-time measurements of ambient light intensity.

For more information about this ongoing project, visit: [https://www.pelagicos.net/research\\_lightpollution.htm](https://www.pelagicos.net/research_lightpollution.htm)

Links to open-access publications:

Urmston J, Hyrenbach KD, Swindle K. 2022. Quantifying wedge-tailed shearwater (*Ardenna pacifica*) fallout after changes in highway lighting on Southeast O‘ahu, Hawai‘i. PLoS ONE 17(3): e0265832. <https://doi.org/10.1371/journal.pone.0265832>

Hyrenbach KD, Urmston J, Swindle, K. 2022. Road surveys detect unusually high Wedge-tailed Shearwater fallout in SE O‘ahu during the 2011 fledging season. 'Elepaio 82(1): 1-5. [https://www.pelagicos.net/Reprints/2022/Hyrenbach\\_et\\_al.\\_2022\\_Elepaio82.1.pdf](https://www.pelagicos.net/Reprints/2022/Hyrenbach_et_al._2022_Elepaio82.1.pdf)

## Hawaii Audubon Society Membership and Donations

The mission of the Hawaii Audubon Society (HAS) is to foster community values that result in the protection and restoration of native wildlife and ecosystems, and conservation of natural resources through education, science and advocacy in Hawai'i and the Pacific. Founded in 1939, HAS is an independent nonprofit 501(c)(3) organization and does not receive dues paid to the National Audubon Society. Thank you for supporting your local Hawaii Audubon Society.

All annual memberships end on December 31. See details on <https://hiaudubon.org/membership>.

Please choose your membership level on our website <https://hiaudubon.org/membership>:

\$15 Hawaii Audubon Society Student Membership

\$25 Hawaii Audubon Society Regular Membership

\$40 Hawaii Audubon Society Family Membership

\$100 Hawaii Audubon Society Supporting Membership

Or, make a tax-deductible donation in any amount on <https://hiaudubon.org/donate/>.

**New** international membership ('Elepaio by email only) is now \$25; for international **renewals** requesting a print version, the fee is \$38.

All members will receive by email the bimonthly 'Elepaio journal, with peer-reviewed scientific articles and local environmental news and activities. To request the 'Elepaio by mail (**not available to new international members**), contact [office@hiaudubon.org](mailto:office@hiaudubon.org).

### Announcements

For regular updates, check out [hiaudubon.org/events](https://hiaudubon.org/events) and/or our social media sites.

#### White Terns Walks

We are offering twice-monthly White Tern walks during the breeding season (Feb – Jun). The walks will depend on the terns, so please check our website, Instagram, and Facebook for dates and locations.

#### 8th Manu o Kū Festival

May 6, 10 am to 2 pm on the Coronation Lawn of 'Iolani Palace. The festival in honor of Honolulu's official bird will feature entertainment, speakers, walking tours, a spotting scope, games, crafts and learning activities, and more. For details go to <https://www.conservehawaii.org>

#### Every Kōlea Counts

If you missed Susan Scott's webinar about the Pacific Golden-Plover Census Project, you can watch it now on: <https://sanctuaries.noaa.gov/education/teachers/every-kolea-counts.html>

### World Albatross Day

World Albatross Day will be celebrated on June 19, 2023, and has chosen Plastic Pollution as its theme. For more information go to <https://www.acap.aq/world-albatross-day/wad2023>.

#### Email us a piece

We welcome your submissions. If you would like to share your story, poem, field note, photo, etc., send it to [office@hiaudubon.org](mailto:office@hiaudubon.org) for review.

Guidelines can be found on <https://hiaudubon.org/elepaio-journal/>.

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#### NEW MEMBERSHIP MANAGEMENT SYSTEM

We are currently updating our donor/membership management and payment systems (we are now accepting credit cards in addition to PayPal payments) and apologize for any inconvenience this might cause.

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