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State of the Society: Annual Report for 2023

By Susan Scott, President

NAMES MATTER

"Are you going to change the name of the Hawai'i Audubon Society?"

This question came to me often last year after details of John James Audubon's (1785-1851) blatant racism came to light.

J.J. Audubon was dead for 35 years when two Boston women, outraged over the killing of millions of birds for feather hats, created the first U.S. bird conservation organization in 1896, calling it the Massachusetts Audubon Society. The founders chose Audubon's name because of his extraordinary bird paintings, an instance of art inspiring activism.

As other states, and regions within states, launched their own Audubon societies, the name became nationally synonymous with birds, and protection of birds. Today, over 450 Audubon chapters and 41 Audubon centers exist in the U.S.

This past year, however, the world became acutely aware that the artist, naturalist, and ornithologist, J.J. Audubon, was also a slaver and vocal white supremacist. For those reasons, Seattle, Chicago, San Francisco, and several other Audubon societies changed their names. For example, Seattle Audubon became "Birds Connect Seattle," and Washington D.C. Audubon Society changed to "Nature Forward."

National Audubon Society, however, did not change its name, reasoning that it would have a negative impact on the well-known organization's mission to protect birds. Instead, NAS's Board of Directors voted in March to commit to a program of diversity and inclusion.

Even though Hawai'i Audubon Society is independent of National and other Audubon societies in finances, geography, and culture, we share a name. Through that name, people near and far support HAS as members, volunteers, and donors.

The Hawai'i Audubon Society's Board of Directors grappled repeatedly with this name change issue. We believe that J.J. Audubon's exquisite art set the stage for centuries of bird appreciation, yet sadly, he had despicable behavior and appalling beliefs. As a result, we're in that uncomfortable and controversial space of loving the art, but not the artist.

The Hawai'i Audubon Society's board members abhor racism, slavery, and white supremacy. At this time, we will continue using our limited time, energy, and resources on education, protection, and joy of birds, and will delay changing our name. We hope that in the future, National Audubon will declare a new title that unites us all.

COMMUNICATION, EDUCATION, AND OUTREACH

In the first 'Elepaio issue of 1939, ornithologist George C. Munro wrote about the founders' intention to teach young people about Hawai'i's birds. We carry on that legacy by our recent hiring of Kailua artist and educator, Kate Righter, to manage our Communication, Education, and Outreach programs.

Kate joined HAS in 2021 as a classroom visit volunteer. Since then, she has reached 9 schools, 22 classrooms, and 843 students from preschool through high school, sharing bird facts through slide shows and drawing lessons.

In addition to teaching, Kate shares content to HAS's Facebook and Instagram (over 5,600 followers combined), and posts tours, updates, and volunteer opportunities on our website. As an avid bird fan, Kate also gives tours that integrate art and science, and is the 'Elepaio journal's new Managing Editor.

BIG ISLAND

Speaking of avid bird fans, this year we welcomed our first Hawai'i Island board member, Mike Carion, of Kona. Joining HAS in 2022, Mike, with wife Nicole, created Facebook and Instagram pages for Big Island events (458 followers combined), hosted and attended bird functions, and led tours. In November, Mike volunteered to help with HAS management, and joined the Board of Directors.

KŌLEA

This year brought us a living, breathing celebrity in the National Memorial Cemetery of the Pacific (Punchbowl). A kōlea named Mr. X, for the cemetery section he has chosen as his wintering foraging grounds for over two decades, now holds the Pacific Golden-Plover longevity record. This grand old bird is at least 21 years, 6 months old, flying approximately 6,000 roundtrip miles each year.

We know this fact because Bozeman-based plover expert, Dr. Wally Johnson, who has been studying Hawai'i's kōlea for decades, banded the adult bird in that area in 2004. At the time, Wally determined by feather colors that the bird was at least 1½ years old.

Wally visited Hawai'i twice this year to retrieve the last of the satellite tags he placed on 20 Punchbowl kōlea in 2022. Of the 14 birds that returned, Hawai'i Audubon volunteers helped Wally recapture 11, relieving them of their tiny backpacks.

The devices don't appear to hinder the birds' migrations. The three still carrying tags (with batteries long dead) are back at Punchbowl, looking healthy and behaving normally.



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"Every Kōlea Counts" is a sentiment clearly shared by citizen scientists who continue to participate in our Kōlea Count project. This is the study's third year with plover fans reporting the presence and behavior of our amazing shorebirds in yards, parks, and city centers. Volunteers are helping analyze the reports.

In June, twenty Hawai'i Audubon members visited Nome, Alaska with Wally and his experienced Anchorage-based helpers to try to find, and admire, kōlea chicks. On our last day of "Kōlea Quest," as we drove toward the airport, we struck gold. The well-camouflaged eggs we had located hatched, giving us the thrill of a lifetime: four tiny golden kōlea chicks.

MANU-O-KŪ by Rich Downs

Hawaiʻi Audubon Society continued its powerful partnership with Hui Manuo-kū in 2023. The cornerstone of the Hui's work is the White Tern Citizen Science project. Last year, over 40 citizen scientists, armed with training and passion, submitted an impressive 9,986 surveys, documenting breeding activity in 1,404 of the 2,984 trees that



terns previously used for breeding or night roosting.

A new app I created uses the ArcGIS platform, allowing volunteers to quickly record data on their smartphones. The app also enables easy sharing of information with researchers and the public. These improvements help us monitor the growing number of White Terns breeding on Oʻahu.

Volunteers also flagged over 1,000 trees with familiar blue ribbons, alerting trimmers to the presence of nesting manuo-kū. This helps tree workers safeguard the birds' eggs and chicks.

One White Tern Citizen Science goal in 2023 was to survey the terns' O'ahu breeding range. We completed the last survey in 2016, documenting over 2,300 breeding adults. Early analysis of the 2023 survey confirms that Oʻahu's White Tern breeding population continues to grow. The number of breeding adults increased by 50% over the past 7 years.

In 2023, caring people placed over 130 calls to the Manuo-kū Hotline (808-379-7555) to report downed White Terns, mostly chicks fallen from their nesting spots. Trained volunteers reunited almost half these chicks with their parents, showing the effectiveness of community-driven conservation. Volunteers transported birds that could not be reunited to Feather and Fur Animal Hospital, Honolulu Zoo, or Hawaiʻi Wildlife Center.

The Hui Manu-o-kū is grateful for Hawaiʻi Audubon Society's continuing support which enables us at Pacific Rim Conservation to increase awareness, appreciation, understanding, and conservation of Honolulu's official city seabird.

FREEMAN SEABIRD PRESERVE (FSP)

by Wendy Johnson, HAS Recording Secretary

The Hawai'i Audubon Society's Freeman Seabird Preserve is the site of a thriving community of breeding 'ua'u kani (Wedge-tailed Shearwaters) and energetic volunteers who work January through March each year to enhance the birds' nesting habitat while the adults are at sea.

In 2007, after discovering about 60 'ua'u kani nesting on their vacant property, Black Point residents Houghton and Doreen Freeman donated the one-acre plot near Diamond Head to the Hawai'i Audubon Society. In 2023, workers counted 427 wedgie eggs. Of those, 308 chicks hatched.

In 2023, existing monitoring and research projects expanded to include geolocator tagging of adult birds and installation of a solar-powered live nest camera that recorded the hatching and fledging of a healthy chick. HPU graduate student, Alyssa Piauwasdy, recovered 24 of the 25 geolocator tags she had placed on adult shearwaters in August of 2022 to gather information about the migrating patterns of the Preserve's shearwater population.

Most of the tagged birds returned in March to the same burrows they used during the 2022 nesting season. The geolocators recorded time and light levels at each bird's location twice per day. These data correlate to earth's longitude and latitude to determine positions at sea.

Restoration.

After the birds left to spend approximately 5 months at sea, habitat restoration activities began. A newly installed coconut-mesh erosion control material proved to be effective in holding moisture, so that new plantings (as well as unwelcome alien lawn grass) could flourish. Several new native plants were introduced to the site in pots as they acclimated to their new surroundings at FSP. Beginning in January 2023, more than 150 volunteers helped tend the one-acre preserve each week, working on weeding, trimming, erosion control, nest building, and replanting until the wedgies returned in March.

Outreach and education

HAS volunteers arranged on-site learning experiences for students and conservation-minded groups, and participated in community fairs, festivals, and other events focused on environmental education, conservation, and sustainability.

A SUCCESSFUL ANNUAL MEETING

On November 4th, we held our annual meeting at Bishop Museum's Atherton Halau, with catering by Da Spot. Molly Hagemann, the museum's Vertebrate Zoology Collections Manager, kindly brought to the gathering a set of the museum's Hawaiian honeycreeper sculptures, made by master wood-carver Haruo Uchiyama of Japan's Yamashina Institute of Ornithology. The life-sized birds added color to the already-colorful party that featured flower arrangements and bird decorations, created and donated by HAS board members and other volunteers.

Professor Patrick Hart from UH Hilo entertained our 110 guests with a slide show and bird songs from work through Hart Lab, the Listening Observatory for Hawai'ian Ecosystems (LOHE.) Pat Hart is also the host of Hawai'i Public Radio's popular, "Manu Minute." Hawai'i Audubon Society is one of the show's sponsors.

Participants gave the sculptures, slide shows, bird songs, food, and facility great reviews.



HAWAII'S BIRDS BOOK

Of all the Audubon chapters in the U.S., we are the only one publishing our own bird book. In 2023, we sold nearly 6,000 copies of *Hawaii's Birds*, its 2020 7th Edition created by our board member book committee. Book sales help us

pay for programs, and also advance our goal of educating residents and visitors to the names, origins, habitats, and cultural significance of Hawai'i's birds.

Thanks to all for buying our book for yourselves and as gifts, and in that, helping support our goals of sharing facts about, and appreciation of, Hawai'i's birds.

'ELEPAIO

HAS is also the only Audubon Chapter in the country publishing its own open-access, peer-reviewed scientific journal. We send our bimonthly issues to members via email link, as well as mailing 115 printed copies to libraries, institutions, and members who request paper copies.

You can read our 2023 'Elepaio issues on our website under the tab 'Elepaio Journal (archived since 1939).

MAHALO TO OUR VOLUNTEERS, MEMBERS AND DONORS

Countless volunteers help our 'ua'u kani, kōlea, and manu-o-kū programs thrive, and contribute greatly to our participation in local events. But, of course, we have to pay the bills. As an independent nonprofit, we depend on book sales, memberships, and donations for salaries, bird programs, and the usual rent, utilities, and office supplies.

Mahalo to all volunteers, and to those who renewed memberships and donated to Hawai'i Audubon Society in 2023. Your gifts of time and money keep our projects alive, and enable us to work with others in the conservation world to appreciate and protect Hawai'i's birds.



2023 Shearwater Nesting at Freeman Seabird Preserve:

'Ua'u kani Cope with El Niño Conditions

bv

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and

Alyssa Piauwasdy, Ecologist Hawaiʻi Pacific University & Oikonos Ecosystem Knowledge, alyssa@oikonos.org

We report on the ongoing monitoring and restoration efforts of the Freeman Seabird Preserve (FSP) by Hawai'i Audubon Society and Hawai'i Pacific University since 2009, share findings from the 2023 breeding season, and briefly discuss the plans for future monitoring, habitat restoration, and predator control at the site.



Figure 1. Hawai'i Pacific University students weigh 'ua'u kani chicks to study phenology, chick growth, and reproductive success.

2023 Update

With participation of over 20 volunteers, we counted the number of Wedge-tailed Shearwaters (*Ardenna pacifica*) nesting at the Freeman Seabird Preserve during the incubation (July 14) and early chick-rearing (September 14) periods. In July, we documented 427 active nests, which is the highest count to date and surpasses the previous peak of 423 nests observed in 2022 (Hyrenbach & Piauwasdy 2023). Overall, the annual population counts continue to show a statistically significant trend (F = 395.939; df = 1, 13; p < 0.001), with an average increase of 24.7 (+/- 4.8 S.D.) nests per year, which captures 97 % of the variability in the 15-year time series (2009 - 2023; Fig. 2). This trend suggests that the colony continues to grow, in part due to the collaborative restoration efforts.

The July 14 count of 427 active nests (occupied by an incubating adult or an egg) was followed by a count of 308 chicks on September 14. This represents a loss of 27.9 % of the nests during the two-month period between peak egg laying and the first half of chick rearing. This loss rate is comparable to those documented during the same time period of the last three La Niña years: 2022 (22.7 %), 2021 (25.0 %) and 2020 (26.8 %) (Hyrenbach & Hester 2021, 2022, Hyrenbach & Piauwasdy 2023).

Despite the similar nest success rates during the last four years, the weekly monitoring of developing chicks revealed that 2023 was characterized by a slightly delayed timing of breeding (phenology), and slower chick growth. This year, chick hatching dates spanned from August 8 to 22, with a mean of August 13 (+/- 3.3 S.D. days), and the maximum chick weights ranged from 361 to 599 grams, with a mean of 501.7 grams (+/- 48.2 S.D.). Chick masses started declining at the end of October, and fledging started the first week of November (Fig. 3). Altogether, these observations suggest that the foraging conditions during the 2023 chick rearing period (August - November) were not as favorable as those during the previous three La Niña years.

After 34 months of the cold-phase of the El Niño-Southern Oscillation climate pattern (from May-June 2020 to February-March 2023), the tropical Pacific Ocean switched to the warm

phase of the El Niño-Southern Oscillation climate pattern in July-August of 2023. El Niño is expected to continue through spring, with a likely (73 % chance) shift to neutral conditions during April-June (See NOAA's Climate Prediction Center ENSO Diagnostic Discussion, www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/). Thus, we anticipate that 2024 will be an "average" year for 'ua'u kani breeding at the Freeman Seabird Preserve.

Ongoing Efforts

Habitat restoration efforts continued during 2023. From January through March, while the shearwaters were at sea, Hawai'i Audubon Society members and other volunteers removed alien plant species and improved natural nesting sites.

The 2024 winter marks the second year of a tracking and tag effects study to determine where in the big Pacific Ocean the 'ua'u kani migrate and spend winter, after leaving FSP in late November. In August 2022, we tagged 25 adults with a geolocator (GLS) tag mounted on a USFWS metal band. In April 2023, we retrieved 24 out of 25 tags (96% recovery rate), gathering over 5,700 days of data that revealed their atsea movements. We tagged an additional 30 adults in August 2023 to learn about 'ua'u kani post-breeding movements during the El Niño. We will retrieve these GLS tags starting in April 2024, along with the one remaining GLS from the 2022-23 winter.

To investigate potential tagging effects, we monitored chicks raised by tagged (experimental) or untagged (control) parents every week of the chick rearing period (Fig. 1). The first year of the tag effects study revealed that chick mass, length of wing chord, and length of tenth primary feather grew at the same rate between the two groups, suggesting that tagging adult shearwaters did not affect their ability to feed their chicks. Chick survival to the end of the season was the same: 92% of the chicks fledged in both groups. Moreover, tagged adults showed a 96% return rate the next year to breed again in the colony, compared with 92% for control adults, further suggesting that tagging did not change their breeding behavior. These results are critical to ensure our findings are not biased by the attachment of

geolocators, and that handling and tagging does not impact adult shearwaters or their chicks.

<u>Habitat Restoration:</u> From January through March, volunteers will remove alien weeds, plant native species, and improve the existing rock nesting sites on the terrace.

Research: Starting in April 2024, we will check returning adult shearwaters to retrieve the GLS tags and to resight the tagged and control birds. With the second year of tracking underway, we are currently analyzing the 2022-23 winter data and developing statistical models to understand the oceanographic drivers of shearwater winter habitat. By comparing shearwater movements during the past La Niña (2022-23) and the current El Niño (2023-24), we seek to understand how changing oceanographic conditions influence the timing of their migration and their overwintering destinations.

Population censusing and nest monitoring for phenology, chick growth, and reproductive success will continue in 2024, to augment our 15-year time series.

<u>Predator Control:</u> Ongoing surveillance for predators is planned during the 2024 nesting season, to minimize and document predation by rats, cats, and mongooses on breeding shearwaters.

Acknowledgments

Funding from Disney Conservation Fund, Atherton Family Foundation, Hawaiʻi Audubon Society and individual donors. In-kind support from HPU and Oikonos. We thank the many volunteers and students who contributed to the restoration, monitoring and research efforts.

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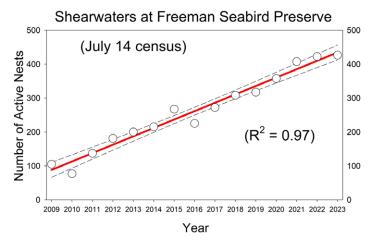


Figure 2. Trend in the number of Wedge-tailed Shearwater active nests at the Freeman Seabird Preserve, derived from the annual colony-wide census during the peak incubation period (July 14), showing the best-fit linear regression (solid line) and the 95% confidence interval envelope (dashed lines).

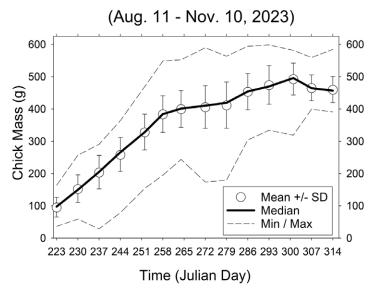


Figure 3. Time series of chick mass collected during the 2023 breeding season, showing the mean +/- S.D., the median, and the range (maximum – minimum) of weekly measurements. Sample size = 47 chicks.

Hawai'i Audubon Society Donations and Membership

Mahalo for helping us inspire people to love and protect birds.

Founded in 1939, Hawaiʻi Audubon Society is an independent nonprofit 501(c)(3) organization. Make a donation in any amount at https://hiaudubon.org/donate/

Your membership expires one year after you join or renew.

Membership includes:

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- Bird news and event notices
- Volunteer opportunities
- The knowledge that you're helping make a difference

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П	\$1,000	Hawai'i Auduhon Society Lifetime Membershin

Announcements

Volunteers needed to help survey or rescue fallen White Terns. Email huimanuoku@gmail.com

On January 12, Gov. Josh Green signed a proclamation declaring 2024 "Ka Makahiki o Nā Manu Nahele: The Year of the Forest Birds." Learn more at: https://dlnr.hawaii.gov/dofaw/manu/

Stay up-to-date by visiting us online.

Our website: hiaudubon.org

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Events

For more details, visit <u>hiaudubon.org/events</u> or email events@hiaudubon.org

March 3 Beginner Bird Walk & Nature Journaling at Ala Moana Beach Park

March 8 Every Kōlea Counts talk by Susan Scott at Wahiawā Botanical Garden

March 9-10 A Weekend in Volcano: Bird Talks and Walks on Big Island

April 13 Party for the Planet at Honolulu Zoo

April 27 Manu-o-kū festival at 'Iolani Palace

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Keep Cats Safe Indoors

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