



'ELEPAIO

Journal of the
Hawai'i Audubon Society

For the Protection of
Hawai'i's Native Wildlife

VOLUME 72, NUMBER 2

MARCH/APRIL 2012

State of the Society 2011: Report to the Membership

MISSION STATEMENT: To foster community values that result in the protection and restoration of native ecosystems and conservation of natural resources through education, science and advocacy in Hawai'i and the Pacific.

The Hawai'i Audubon Society (HAS) was founded in 1939 as an independent, nonprofit membership association dedicated to the protection of Hawai'i's native wildlife and habitats through education, science and advocacy. Current membership consists of approximately 1,500 individuals and institutions and operates in accordance with a constitution and by-laws under the supervision of a Board of Directors elected by the members. In 1978 HAS became a certified chapter of the National Audubon Society, while continuing to function independently in all fiscal, policy and programmatic matters. An office manager and several independent contractors provide administrative and professional services for HAS, but many necessary tasks and responsibilities are accomplished through the efforts of dedicated volunteers statewide. HAS publishes the 'Elepaio, a peer-reviewed journal and operates two websites: www.hawaii-audubon.com and www.pacfish.org.

Officers, Directors, Managers and Volunteers

The 2011 HAS Board of Directors consisted of President John Harrison, First Vice President Wendy Johnson, Treasurer Melissa Kolonie, Recording Secretary Missy Sprecher, and Directors Phil Bruner, Nicole Galase, Landin Johnson, Laura Sheehan and Kristen Nalani Mailheau. The Board met bi-monthly; the Executive Committee, comprised of the officers and in-house counsel, met as needed. We are grateful to all the Directors who have given so much of their time voluntarily to further the mission of HAS. We also gratefully acknowledge the constant advice and support of our in-house counsel, Linda Paul, who works tirelessly to keep us in compliance with federal and state regulatory provisions, and we thank Casey Primacio, our office manager. Scientific Editor Dave Leonard and Managing Editor Casey Primacio were responsible for assembling and editing nine issues of the 'Elepaio this year.

Membership

Membership records for HAS are managed through our office with regular updates from the National Audubon Society, whose members residing in Hawai'i are also HAS members. We encourage all such "joint" members to enroll directly as supporting members of HAS to have the opportunity to contribute to local programs and activities in Hawai'i. Gull Rock

Services, a professional membership development consultancy, operated direct mail invitation services for the Society in 2011 as a part of ongoing efforts to increase the HAS membership base in Hawai'i and throughout the United States. An annual membership meeting was held in December.

Operations

HAS supports its basic operations by leveraging income derived from donations, product sales, grants, scholarships and membership dues with the volunteer efforts of a committed Board of Directors, engaged members, and our dedicated office manager. The operations budget covers payroll and employee overhead, office rent, contract services, printing and reproduction, postage, and utilities. Contract services include accountant services, website maintenance, and more recently membership development.

Committees

In fulfillment of our mission, many of the tasks taken on by HAS are delegated to committees voluntarily chaired and populated by Board members and other HAS members. Reports from committee chairs at regular HAS Board meetings help focus attention on timely issues of educational and conservation interest, as well as addressing the programmatic and functional needs of HAS. The Board of Directors oversees the operation of committees on Conservation, Education, 'Elepaio, Field Trips, Fundraising, Grants & Scholarships, Marketing, Membership, Programs, Publications, and Website. HAS members are welcome to participate as members or chairs of any of these committees.

Conservation

The HAS Conservation Committee, working to prevent threats to native wildlife and habitats, reviewed and submitted comments on a variety of proposed projects and activities statewide. Members actively screened documents (news releases, permit notices, and environmental compliance) for issues relevant to HAS conservation concerns, assuring accuracy and comprehensiveness of the presentations. In addition, Directors

continued on page 10

and members represented HAS at conferences, workshops, hearings, and on several steering committees, teams, and task forces. HAS is also an active member of a number of other partnerships, coalitions, boards, advisory groups, and committees working to protect, conserve and restore Hawai'i's resources, including the Hawai'i Conservation Alliance steering committee and the Environmental Legislative Network. During the 2011 State legislative session, HAS Legislative Analyst George Massengale and HAS in-house counsel Linda Paul tracked over three-dozen conservation and environmental bills, and actively supported those most closely related to the HAS mission, including bills on invasive species, environmental impact statements, threatened and endangered species, habitat conservation plans, aquarium fish sales, offshore aquaculture; establishing a Marine Life Conservation District on Maui, a South Kona wilderness area, a community-based fishery management area on Lanai; and climate change.

Freeman Seabird Preserve (FSP)

In 2007 HAS received a generous gift from Mr. and Mrs. Houghton Freeman of a one-acre ocean front property at Black Point on O'ahu's southeast coastline. This parcel has long been a nesting area for a colony of wedge-tailed shearwaters ('ua'u kani, *Puffinus pacificus*), and the preservation and restoration of this unique native ecosystem will help this state and federally protected species at a time when habitat and other resources are becoming scarce. The seabirds nest between March and December, leaving January and February available for major habitat restoration work. During 2011, members and other volunteers again made numerous service visits to the FSP, clearing overgrown and invasive vegetation, opening up blocked shearwater burrows, cleaning and removing litter and trash, establishing and servicing predator (rats/mice/mongoose) control bait stations, and creating barriers to prevent shearwaters from burrowing under neighboring fences. After discovering evidence of cat predation on shearwater chicks in the summer of 2011, Pacific Rim Conservation was contracted to provide additional predator control services. Four live cage cat traps were deployed on site, along with infrared cameras. Traps were checked frequently to ensure that no trapped cats were harmed. No signs of cat predation occurred after trapping was initiated in September, but three different domestic cats were photographed in and around the traps. One of the cats was trapped and subsequently released by a neighbor. Trapping continued until shearwater chicks had fledged at the end of November.

The second and final phase of major landscape improvements began on schedule in January of 2011. Rick Barboza and his team of habitat restoration specialists at Hui Kū Maoli Ola completed Phase II of the project, extending new plantings of indigenous and endemic species throughout the mauka portion of the parcel to create a unique example of native dryland coastal habitat. Thriving native plants new to the site include: Hinahina, Kipukai, 'Ilima, Pa'uohi'iaka, Naio, Nehe, Ohelo kai, Popolo, 'Ohai, and many others. The botanical assemblage and creative landscaping features provide a remarkable contrast to the weeded spare lot of 2007. Several sand mounds with rock

bases were created to serve as additional nesting habitat for the wedge-tailed shearwaters. The majority of this work was funded by generous private donors, who have been instrumental to the success of this ambitious project.

Although much of the funding was in hand to proceed with the final stages of habitat restoration at the FSP, identifying and successfully concluding a funding grant with a philanthropic organization was an objective that the HAS Board had set early in the year. Upon learning of the close correspondence between mission objectives of the Society and the Bendon Family Foundation, HAS initiated correspondence with a member of the Bendon Family in mid-January of 2011. The Mission statement of the Bendon Family Foundation reads, "The Bendon Family is dedicated to sustaining and improving the communities in which the Bendon family resides, specifically in the areas of education, social services, and environmental protection." HAS President John Harrison and First Vice President Wendy Johnson met with Annie Bendon at the FSP on February 11th, as restoration work was in progress. The tour and explanation of our goals and objectives met with an enthusiastic response, and HAS was invited to submit an application for a \$5,000 grant to support the continuing work. Our application, submitted on February 21st, was accepted a week later, and the Society looks forward to a continuing partnership with the Bendon Family Foundation in the coming years.

Population monitoring of the wedge-tailed shearwater colony at the FSP continued for its third year in 2011. Studies conducted by Dr. David Hyrenbach, Assistant Professor of Oceanography at Hawai'i Pacific University, and his students monitored comprehensive population statistics of the shearwaters, including numbers of adult birds, and the state of development of eggs and chicks on a regular basis. A summary of the investigations and results appear in a separate article in this publication.

Pacific Fisheries Coalition (PFC)

In 2011 the PFC, under the direction of Linda Paul, continued its marine conservation work. The PFC produces a variety of reports, publications, brochures, posters, and curriculum materials on marine resources in Hawai'i and the Pacific, which are distributed to the general public, students, fishermen, resource managers and policy makers throughout the U.S. and internationally. The PFC website continued to provide updates on events, conservation and research activities, and materials available for educational purposes, and is found at <http://www.pacfish.org>.

HAS is a member of the national Marine Fish Conservation Network and Linda Paul is a member of its Advisory Board, the U.S. delegation to the Western and Central Pacific Fisheries Commission (WCPFC), and the U.S. Advisory Council to the WCPFC. In September she gave a paper on Regional Fisheries Management Organizations at the annual American Fisheries Society meeting in Seattle. She is a conservation representative and Vice Chair of the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Advisory Council, represents HAS on the Alien Aquatic Organism Task Force and the multi-partner

Marine Debris Cleanup Group, and is a member of the international Species Survival Network Board, which advocates for species protection under CITES.

Kawainui Marsh

HAS is a member of Ho'olaulima Ia Kawainui, whose mission is to foster public awareness and understanding of the natural, historical, cultural, and scenic resources of Kawainui-Hamakua Marsh to ensure the long-term protection, restoration and stewardship of the area. Linda Paul and Wendy Johnson represent HAS on Ho'olaulima. In February the annual World Wetlands Day celebration was held on the edge of the Marsh, which included a HAS display table featuring our programs and educational materials. HAS has been working with Ho'olaulima on an educational interpretive plan for Marsh resources for a number of years and in the fall of 2011 several neighborhood outreach meetings were held to seek community input, one of which was hosted by HAS. The Kawainui Master Plan update process also began in 2011 and will continue into 2012. The Marsh is the largest wetland remaining in Hawaii and HAS is urging that the protection and restoration of native ecosystems and conservation of natural resources take precedence over providing visitor access and facilities. In 2012 HAS will be helping DLNR with its wetland restoration and habitat enhancement project which is located on 80 acres at the mauka end of the Marsh. In 2012 the long-awaited construction of the two Army Corps of Engineer water bird ponds will also finally begin, a project HAS began working on in the mid 1990s.

Education and Outreach

Our journal, 'Elepaio, has been the central component of HAS's educational outreach efforts since publication of Volume 1 in 1939. HAS published nine issues of the journal in 2011, which were mailed to all HAS members, subscribers such as libraries, and a number of complimentary recipients such as exchange institutions and other conservation organizations. Distribution of the 'Elepaio spans the U.S. and includes international recipients. Volume 71 included several peer-reviewed scientific articles, all of which were first published in 'Elepaio. Throughout this last year, 'Elepaio also included educational articles and news releases, book reviews, historic literature,

photographs of rare bird sightings, award announcements, program reports, event listings, and other important news of the Society.

The HAS website (www.hawaiiadubon.com) is a comprehensive source for up-to-date information relating to HAS and its mission. It provides access to electronic versions of the 'Elepaio, field trip and program meeting announcements, grant and scholarship application guidelines and deadline reminders, information on projects and activities, HAS membership information, an online store of HAS products, extensive information on birding in Hawai'i, a gallery of beautiful bird photos, and links to a number of related organizations and issues.

Educational Programs and Events

In August, HAS hosted the "Shearwater Soiree" at Thirtyninehotel in downtown Honolulu. The festivities included live entertainment, delicious food, and no-host cocktails, along with a silent auction and a timely presentation by Dr. David Hyrenbach on the shearwater monitoring activities at the FSP. The evening also served as a successful fundraiser and the launch party for the Society's new Adopt-A-Shearwater program. HAS members, volunteers and supporters thoroughly enjoyed the evening and are looking forward to repeating the experience in 2012. The Society's Annual Meeting in December featured an informational program by Ron Walker and Dr. Phil Bruner on the identification of the birds of Hawai'i. The audience gained valuable knowledge of Hawai'i's avifauna by viewing a comprehensive slide show and corresponding preserved bird "skins" from the Brigham Young University's collection.

HAS actively participated in community events at every opportunity, setting up a booth with volunteers present to speak with interested members of the public about our mission and accomplishments. HAS participation, along with other agencies, non-profits, and institutions contributes to solidifying within the fabric of Hawai'i's diverse populace a broad awareness of the importance of conservation and responsible environmental management. During the past year, HAS set up educational displays at five major venues, including World Wetlands Day, Earth Day, and the Honolulu Zoo Endangered Species Day.

Field Excursions and Service Activities

In fulfillment of HAS's mission to foster enhanced community values in support of the protection and restoration of native systems and natural resource conservation, field and service activities offered for member and general public participation are one of the centerpieces of HAS operations. During 2011, HAS scheduled eight field outings, as well as cooperative wildlife surveys and field service opportunities. Scheduled O'ahu field trips included four tours of Paiko Lagoon, a hike to Ka'ena Point, trail maintenance at Moanalua Valley, a behind-the-scenes tour of birds at Honolulu Zoo, a service trip to Mt. Ka'ala, a guided tour of the Hilton Hawaiian Village bird collection, and a service trip to Palikea.

In December 2010 and January 2011, annual Christmas Bird Counts were held at Honolulu and Waipi'o on O'ahu, Waimea

continued on page 12

'Elepaio ISSN 0013-6069
Managing Editor: Nicole Galase
Scientific Editor: David Leonard

The 'Elepaio is printed on recycled paper and published six times per year

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continued from page 11

and Kapa'a on Kaua'i, 'Iao Valley and Pu'u o Kāka'e on Maui, Kualapu'u on Moloka'i, and Volcano and North Kona on Hawai'i Island. Three counts were held on the Northwest Hawaiian Islands at French Frigate Shoals, Laysan Island and Midway Atoll. HAS volunteers served as organizers and team leaders of the counts, which operated in conjunction with Christmas Bird Counts at thousands of locations in the U.S. and around the world. Results of the Christmas Bird Counts are published in the June/July issue of 'Elepaio (Vol. 71:5). HAS also promoted participation in the Great Backyard Bird Count, which is held each February as a joint project of the National Audubon Society and the Cornell Lab of Ornithology. Both bird counts serve to monitor changes in the size and health of bird populations.

Awards

At the 54th Hawai'i State Science and Engineering Fair, HAS awarded two prizes for outstanding student research relating to Hawai'i's natural history. 'Iini Kahakalau, who is a senior at Kanu o Ka 'Aina Charter School in Hilo, received the HAS Senior Division Research award for their project entitled "Rain-fall in Waipio Valley". The HAS award for outstanding Junior Division Research relating to Hawai'i's natural history went to a project submitted by Natalie Newhouse and Marissa Bryant-Manago, eighth graders at Kealahoke Intermediate School for her project entitled "Coral Reef Ecology Fields Study Comparing Kahalu'u and Kikaua Point Beach Parks". Both projects are more fully described in the April issue of 'Elepaio (71:3).

Elena Bryant received the George C. Munro Environmental Law Award, which is given to the top environmental law student at the W. H. Richardson School of Law for the preceding school year.

Grants and Scholarships

Review of scholarship and grant applications for some years has been the purview of Dr. Phil Bruner, Chair of the Scholarships and Grants Committee, and we gratefully acknowledge his hard work in administering this valuable program. This year HAS awarded \$500 scholarships to Marie VanZandt for her project on the spatial distribution and habitat restrictions of the Hawaiian petrel on the island of Lanai, Joanna X. Wu for her project studying seed dispersal ecology in endemic 'Ōma'o versus exotic Red-bill Leothrix birds in Hawai'i, and Oscar Wally Johnson for his geolocator study detailing the migration of the pacific golden plover between Hawai'i and Alaska.

Other HAS Activities

Hundreds of HAS members and other interested individuals have signed up for the HAS "Events Email List" through which recipients are sent HAS announcements via email. In addition to receiving timely information on field trips, program meetings, volunteer opportunities, and other announcements, participants can become a part of HAS's "Birder's Network" that connects local and visiting birders, giving them the opportunity to arrange excursions outside of the Society's scheduled field activities. HAS also continued promotion of weekly Thursday

night programming on 'Ōlelo Community TV offering various educational and conservation-related presentations for the benefit of Hawai'i's natural environment.

Products

Product sales are a vital component of HAS's annual income stream, and we are grateful to Ron Walker for the many hours he has devoted to processing and filling the steady stream of PayPal orders which are generated from the HAS website.

For the first time in 2011, Adopt-A-Shearwater packets created by HAS were available for purchase. Adoption packets include: a colorful adoption certificate, a round "FSP wedge-tailed shearwater" sticker, an information card with a map and photo of an adult bird with an egg, and a glossy chick photo. Sales of the 2-disc CD set of *Voices of Hawai'i's Birds*, which became available in July of 2009, culminating many years of hard work by HAS, Dr. Doug Pratt, and the Cornell University Ornithology Laboratory, have been brisk. This audio companion to HAS's book, *Hawai'i's Birds*, includes unique recordings of species which, sadly, no longer are found, such as the Kama'o, 'O'u, the Kauai 'O'o, and probably the Po'o-uli. *Hawai'i's Birds* remains the definitive, full color, soft cover field guide published by HAS. Now in its sixth edition, this field guide serves as an important educational tool for thousands of residents, visitors, educators, and decision makers. Other educational products produced by HAS include the *Hidden Treasures of O'ahu* map featuring locations and detailed information on sites for exploring nature and ancient Hawaiian culture, *Hawai'i's Rare and Endangered Birds* art collection greeting cards with artwork by Patrick Ching, current checklists of the Birds of Hawai'i, Micronesia, and the Mariana Islands, a field check card of Hawai'i's birds, and the *Edge of Forever* poster, an art-quality, limited edition print featuring two endangered nēnē. HAS also offers several T-shirt designs, an embroidered patch featuring the 'elepaio, and polo shirts embroidered with the HAS logo. Sales proceeds go to support HAS efforts to protect and conserve native species and habitats in Hawai'i and the Pacific.

Looking to the Future

HAS Officers, Directors, and other leaders gather every year in January for the Annual Chapter Leaders' Retreat to discuss the state of HAS and how best to guide the organization in the coming year. The Retreat offers an annual opportunity to assess and evaluate the progress made towards meeting our mission goals in the prior year, while laying out plans and goals for the future.

The Hawaiian Islands often are called the endangered species capital of the nation, drawing attention to the State's disproportionate share of both listed species in peril and historical extinctions. As noted earlier, many HAS activities serve to either directly support recovery efforts or to offer educational outreach to raise local and national awareness of endangered species issues. Through the programs and activities of HAS, the community has opportunities to become involved in some

continued on page 13

continued from page 12

of the most pressing conservation issues of our time, including but not limited to ongoing efforts to control invasive species, the struggle to ensure the survival of Palila in the Big Island, and the challenge of bringing additional resources to bear on the recovery of the Hawaiian Monk Seal. Looking back on 72 years of continuous dedication by HAS members to solving environmental conservation challenges we face in Hawai'i, our

commitment, expertise, and hard work have built an impressive record of accomplishment. Taking full advantage of the resourcefulness of our membership, as well as the incredible opportunities we have to pursue effective conservation at the FSP and elsewhere, we anticipate another year of exciting challenges and accomplishments as well as continued opportunities to build and expand conservation partnerships.

2011: A Mixed Year at the Freeman Seabird Preserve

by K. David Hyrenbach, Assistant Professor of Oceanography, Hawai'i Pacific University, khyrenbach@hpu.edu
and Wendy Johnson, Hawai'i Audubon Society, johnsonw002@hawaii.rr.com

We briefly report on the ongoing monitoring and revegetation program at the Freeman Seabird Preserve, and provide updates on the findings from the 2011-12 breeding season and the plans for future monitoring, habitat restoration, and predator control at the colony.

2011 Update

This was a mixed year for the Freeman Seabird Preserve, with good and not-so-good news.

First the good news: 2011 was a peak year of Wedge-tailed Shearwater (*Puffinus pacificus*) nesting at the preserve and of rapid and sustained chick growth. The yearly July 14 colony-wide census yielded the highest nest count to date (123 nests), substantially higher than previous counts in 2009 (106) and 2010 (78). It was particularly noteworthy that the shearwaters were nesting within the Naio (*Myoporum sandwicense*) hedge planted along the preserve's rock wall (6 nests), in the "condo" rock wall (10 nests) and in the rock piles (4 nests) provided as part of the habitat restoration efforts. This high incubation period nest count was followed by another high count of 87 nests in early September, after the peak hatching date, underscoring the continued growth of the shearwater colony.

The demographic monitoring also revealed that 2011 was characterized by early breeding and high peak chick masses. Chick hatching dates spanned from August 2 to September 6, with a mean of August 13 (Table 1). When compared with the two previous years, hatching dates were significantly delayed in 2010. There was a significant difference amongst years (One-way ANOVA, $F = 6.437$, $df = 2, 72$, $p = 0.03$), with post-hoc Tukey tests revealing that 2010 was later than 2009 and 2011. Moreover, peak chick mass was significantly higher in 2011 than in the two previous years (Table 1), underscoring the rapid and sustained growth of the chicks (Fig. 1). There was also a significant difference in chick peak mass amongst years (One-way ANOVA, $F = 26.963$, $df = 2, 57$, $p < 0.001$), with post-hoc Tukey tests revealing that 2011 was higher than 2009 and 2010. In summary, chicks hatched early in 2011 and reached the highest peak masses documented to date.

And now for the not-so-good news: 2011 was a year of low hatching and fledging success. Despite the high incubation count in mid-July, the early-September count showed a large relative decline in the number of active nests of 29.3%. Coincidentally, 25% (8 out of 32) of the nests we monitored from July 14 to



Native plants thrive at the Freeman Seabird Preserve.
(Photo taken by David Hyrenbach, July 2011)

December 14 were lost before the chicks hatched: two were cracked and infested by ants and six vanished from their nests. Additionally, chick losses were very high in 2011: 2 were lost to predators and 5 disappeared without leaving a trace. This unusually high losses of eggs and chicks lead to a low productivity year, with merely a 70.8% fledging rate (defined here as the proportion of hatched chicks that fledged); compared with previous rates of 95.4% (2009) and 82.7% (2010).

Thus, despite the anti-predator efforts at the Freeman Seabird Preserve (Young et al. 2012), the 2011 breeding season was characterized by depressed reproductive success. This disparity between the "good" oceanographic conditions, that supported early breeding and high provisioning rates, and the "poor" conditions at the colony, with substantial loss of eggs and chicks, made 2011 a mixed year.

continued on page 14

Ongoing Efforts

We anticipate that three ongoing efforts will continue in 2012: habitat restoration, colony monitoring, and predator control.

Habitat Restoration

From January through March 2011 professional native plant landscapers from Hui Kū Maoli Ola completed work begun in 2010, transforming a vacant house-lot into a unique example of pre-contact Hawaiian dryland coastal habitat with multiple shearwater nesting sites. Hawai'i Audubon Society volunteers and school groups tirelessly supported these efforts, removing invasive plants, trimming foliage, and maintaining burrows. Volunteers will continue to play a vital role in caring for the beautiful Freeman Seabird Preserve during the months that the wedge-tailed shearwaters are at sea.

Colony monitoring

Population censusing and nest monitoring for phenology, chick growth and reproductive success will continue in 2012, starting with a colony-wide survey in July 14. These data will add to the ongoing time series started in 2009 (Hyrenbach 2011).

Predator Control

Rat-bait stations have been maintained at the site since 2008, but in September of 2011, evidence of chick predation by cats necessitated further action. Pacific Rim Conservation was contracted to install and monitor infrared cameras and to deploy four live cage traps for the duration of the nesting season. Three domestic cats were photographed on or near the traps on several occasions, and one cat was trapped, but was

released by neighbors who heard its distress calls. No further signs of cat predation were noted after the cat monitoring and trapping program were initiated (Young et al. 2012). Planning is in process for predator control during the 2012 nesting season at Freeman Seabird Preserve.

Literature Cited

Hyrenbach, K.D. 2011. Tale of Two Years: Monitoring Wedge-tailed Shearwaters at Freeman Seabird Preserve in Black Point, O'ahu. *'Elepaio* 71(3): 17-20.

Young, L., VanderWerf, E.A., and Lohr, M.E. 2012. Freeman Seabird Preserve predator control. *'Elepaio* 71(1): 6.

Figure 1: Time series of chick mass collected during the 2011 breeding seasons, showing the mean +/- SD, median and range of values (maximum - minimum). Sample size = 18 chicks.

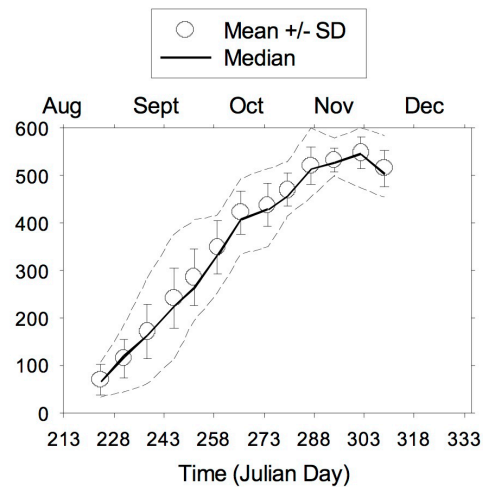


Table 1. Comparison of wedge-tailed shearwater phenology and provisioning (2009 - 2011).

		2009	2010	2011
Hatching Date	sample size	21	29	24
	mean	Aug. 13	Aug. 19	Aug. 13
	range	Aug. 4 - 28	Aug. 1 - Sept. 8	Aug. 2 - Sept. 6
Peak Chick Mass (grams)	sample size	19	21	18
	mean	447	483	562
	range	515 - 325	575 - 360	600 - 505
Final Chick Mass (grams)	sample size	19	21	18
	mean	379	383	516
	range	495 - 280	475 - 210	585 - 445

Hawai'i Audubon Society Annual Membership/Donation Form

Regular Member:	\$ 25.00	Foreign Membership (Airmail)	
Student Member:	\$ 15.00	Mexico.....	\$ 26.00
Supporting Member:	\$100.00	Canada.....	\$ 28.00
Family Membership	\$40.00	All other countries	\$ 33.00

Donations are tax deductible and gratefully accepted.

Name _____

Address _____

City, State, Country, Zip _____

Phone _____ Email _____

Membership \$ _____ + Donation \$ _____ = Total \$ _____

- New Membership Renewal
 I will read the 'Elepaio on-line I would like to receive 'Elepaio via e-mail Continue mailing my copy of 'Elepaio

Please make checks payable to Hawai'i Audubon Society and mail to us at 850 Richards St., #505, Honolulu, HI 96813.

PLEASE LET US KNOW IF YOUR ADDRESS CHANGES.

FIELD TRIPS

Sunset at Freeman Seabird Preserve March 17, 5-7:30pm

Enjoy the sunset at Freeman Seabird Preserve with light pupus and drinks while learning about recent landscape and maintenance projects as well as this years batch of nests and fledglings. Please bring a light pupu to share and a beverage of your choice as well as a blanket or chair to sit on. Space is limited so please e-mail kmailheauHAS@gmail.com to reserve your space.

Paiko Lagoon - Farewell to Shorebirds April 7, 9am

Say aloha to the migratory shorebirds as they head back to their summer homes. This is a great opportunity to view changing plumage patterns. Please RSVP to Alice Roberts at Mermaidshi@aol.com

Fieldwork & bird watching in the Waianae Mountains with Oahu Army Natural Resources May 12, 8am-5pm

This all day trip will consist of a 60 minute one-way hike (round-trip = 2 hours of hiking), service work to remove invasive plant species as well as time for bird watching (Elepaio nest in this area) and viewing native plants and endangered tree snails. Some areas along the trail have steep drop offs—this trip is not for the acrophobic! For more information e-mail kmailheauHAS@gmail.com, space is limited.

Paiko Lagoon - Summer Low-tide Walk June 2, 7am

View Paiko Lagoon at one of the year's lowest tides. Please RSVP to Alice Roberts at Mermaidshi@aol.com



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'ELEPAIO • 72:2 • MARCH/APRIL 2012

Calendar of Events

Table of Contents

Sunset at Freeman Seabird Preserve

March 17

For more information e-mail kmailheauHAS@gmail.com

Space is limited.

Paiko Lagoon - Farewell to Shorebirds

April 7

Please RSVP to Alice Roberts at Mermaidshi@aol.com

**Fieldwork & bird watching in the Waianae Mountains
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State of the Society 2011: Report to the Membership9

2011: A Mixed Year at the Freeman Seabird Preserve13

Membership Application15

Field Trips15