



# 'ELEPAIO

Journal of the  
Hawaii Audubon Society

For the Protection of  
Hawaii's Native Wildlife

VOLUME 68, NUMBER 1

FEBRUARY 2008

## State of the Society 2007

By John Harrison, President

*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 Hawaii Audubon Society (HAS) was founded in 1939 as an independent, nonprofit membership association dedicated to the protection of Hawaii'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 was named a certified chapter of the National Audubon Society, while continuing to function independently in all fiscal, policy and programmatic matters. An office manager, an aquatics programs director, 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](http://www.hawaii.audubon.com) and [www.pacfish.org](http://www.pacfish.org). It is my privilege, as the current President of the Society, to offer the following review of the past year's activities and our principal goals for the coming year.

**Board of Directors:** The 2007 HAS Board of Directors consisted of President Elizabeth Kumabe, First Vice President Ron Walker, Second Vice President Wendy Johnson, and Directors Phil Bruner, Arlene Buchholz, Norma Bustos, John Harrison, and Christine Volinski.

**Operations:** The Society derives operating and programmatic funding from four key sources including membership dues, generous gifts, product sales, and grants. During 2007, under the stewardship of the Board of Directors, annual income exceeded expenses by 4.5%, underscoring the sustainability of our operations and providing the basis for new program development as well as continuing activities.

**Committees:** HAS oversees the operation of committees on Conservation, Education, *'Elepaio*, Field Trips, Fundraising, Grants & Scholarships, Membership, Programs, Publications, and Website. HAS members are welcome to participate as members or chairs of any of these committees.

**Freeman Seabird Preserve:** In September 2007, HAS assumed ownership of a one-acre coastal property at Black Point on

O'ahu, thanks to the incredibly generous gift of Mr. and Mrs. Houghton Freeman (*'Elepaio* 67:8, November 2007). The Freeman Seabird Preserve is home to a colony of Wedge-tailed Shearwaters ('ua'u kani, *Puffinus pacificus*). 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. HAS recognizes this opportunity as an important avenue through which to implement our mission.

**Educational Outreach** (Additional information may be found in the Pacific Fisheries Coalition report): The *'Elepaio* is the central component of the Society's education and outreach efforts, and HAS published nine issues of the journal *'Elepaio* in 2007. This publication is 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. Two peer-reviewed scientific articles were published in the *'Elepaio* in 2007. "The history and rediscovery of the Lavender Waxbill, *Estrilda caerulescens*, on O'ahu island, Hawai'i" by Nicholas Kalodimos appeared in the August/September 2007 issue (*'Elepaio* 67:6). The December 2007/January 2008 (*'Elepaio* 67:9) issue featured an article by Hanna Mounce, Fern Duvall, and Kirsty Swinnerton entitled "Poli Poli fire demonstrates vulnerability of Maui 'Alauahio." News stories, book reviews, historic literature, program reports, event listings, announcements, and other important news of the Society appeared in Volume 67 of the *'Elepaio*.

Operating under the auspices of the Society, The Pacific Fisheries Coalition (PFC) program has produced a variety of reports, publications, brochures, posters, and curriculum materials on marine resources in Hawai'i and the Pacific. These products are distributed to the general public, students, fishermen, resource managers and policy makers throughout the U.S. and internationally.

HAS leaders and volunteers staffed informational booths at the UH Mānoa Earth Day Fair and the Pearl Harbor Earth Day Fair. The HAS website, [www.hawaii.audubon.com](http://www.hawaii.audubon.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

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photos, and links to a number of related organizations and issues.

The PFC project's website, [www.pacfish.org](http://www.pacfish.org), provides news and updates on the status of marine resources in Hawai'i and the Pacific and conservation efforts underway to protect them, as well as reports, white papers and links to other marine conservation sites.

**Conservation and Advocacy** (Additional information may be found in the Pacific Fisheries Coalition report): HAS is an active member of a number of partnerships, coalitions, boards, advisory groups, and committees working to protect, conserve and restore Hawaii's resources. Some of these groups include the Ho'olaulima Kawainui, the Alien Aquatic Organism Task Force, the multi-partner Marine Debris Cleanup Group, the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Advisory Council, the Hawai'i Conservation Alliance steering committee, and the Marine Fish Conservation Network Advisory Board. 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. In addition, Directors and members represented HAS at conferences, workshops, hearings, and on several steering committees, teams, and task forces.

During the 2007 State legislative session, HAS Legislative Analyst George Massengale tracked over three-dozen conservation and environmental bills, and actively supported those most closely related to the HAS mission, including the issues of global warming, invasive species, Kawainui marsh, and outdoor lighting. HAS advocacy activities fell well within the legally prescribed limitations for 501(c)3 organizations.

**Educational Programs:** The Society hosted six bi-monthly program meetings at UH Mānoa's St. John Botany building in 2007. These meetings are co-sponsored by the UHM Biology Program and are open to all HAS members and the general public at no cost and include informational presentations on a wide variety of topics related to the mission of HAS. Presenters and subjects covered in 2007 included the following: U.S. Fish and Wildlife Service representatives spoke on avian influenza surveillance in Hawai'i; Brenda Becker spoke about Hawaiian monk seals; John Harrison spoke about climate change and

sustainability; Sierra Club director Jeff Mikulina presented the "Inconvenient Truth" speech on global warming; Gus Bodner discussed Hakalau National Wildlife Refuge and his forest bird research there; and an annual membership meeting was held along with a bird identification lecture by HAS First Vice President Ron Walker in preparation for the Christmas Bird Count in December.

**Field Excursions and Service Activities:** During 2007, the Society offered eighteen field outings, continuing the recent upward trend, from 12 in 2006 and 11 in 2005. O'ahu field trips included two windward wetlands tours, a whale watch cruise, the Waimea Valley south ridge loop hike, the Makapu'u Lighthouse hike, a Ho'omaluhia gardens birding tour, three trips to Paikō Lagoon for reef and mudflat explorations and to observe migratory shorebirds, two behind-the-scenes tours of Bishop Museum's bird collections and the Honolulu Zoo bird collections, a tour of John Harrison's renewable energy house, the 'Aiea ridge trail hike, and a James Campbell National Wildlife Refuge birding tour. In addition, the Society offered two service projects on O'ahu in 2007, including weed removal and trash pickup at Ka'ena Point and habitat restoration at Kāne'ohe Marine Corps Base. HAS re-established its neighbor island field component in 2007 with one field trip held on the island of Hawai'i, during which participants visited several North Kona birding sites. The Society hopes to further expand its neighbor island presence next year.

In December 2007 and January 2008, the annual Christmas Bird Counts were held at Honolulu and Waipi'o on O'ahu, Waimea and Kapa'a on Kaua'i, 'Āao Valley and Pu'u o Kāka'e on Maui, Kualapu'u on Moloka'i, and Volcano and North Kona on Hawai'i Island. 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.

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.

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**Pacific Fisheries Coalition (PFC) (a project of HAS)**

**Tel: (808) 262-6859 Website: [www.pacfish.org](http://www.pacfish.org)**

**Board Roster:**

John Harrison President  
Wendy Johnson, First Vice President  
Ron Walker, Second Vice President  
Liz Kumabe, Recording Secretary  
Carol Bebb, Director  
Phil Burner, Director  
Arlene Buchholz, Director  
Norma Bustos, Director

**Staff:**

Lydi Morgan, Office Manager  
Linda Paul, Executive Director for Aquatics

**Committee Chairs:**

Conservation: Norma Bustos  
Education: Wendy Johnson  
Elepaio: Ron Walker  
Field Trips: vacant  
Fundraising: vacant  
Grants & Scholarships: Phil Bruner  
Membership: vacant  
Program: Arlene Buchholz  
Publications: Linda Paul  
Website: Lydi Morgan

**Volunteer Activities:** Members contributed to the Society by volunteering their time during service trips, staffing the HAS booth at fairs, and helping in the office. Special thanks go to Ron Walker of the HAS Board of Directors for his weekly contributions of time and expertise toward HAS office operations.

**Awards:** At the 50th Hawai'i State Science and Engineering Fair, HAS awarded two prizes for outstanding student research relating to Hawaii's natural history. Emma de Vries, a freshman at Le Jardin Academy on O'ahu, received the HAS Senior Division Research award for her project entitled "The Correlation Between Salinity and Bullfrog Distribution." Emma Tunison, an eighth grader at Volcano School of Arts and Sciences on the island of Hawai'i, received the HAS Junior Division Research award for her project entitled "Makin' Moa Koa" (*'Elepaio* 67:4, May 2007).

Kamaile Nichols 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.

In October, the Society held its fourteenth Annual Awards Dinner at Treetops Restaurant at Paradise Park in Mānoa. Four awards were presented to distinguished members of the conservation community. Peter Young, former Chairman of the State Board of Land and Natural Resources, received the President's Award for his commitment to natural resource protection and community outreach. Scott Fretz, Wildlife Program Manager for the State Division of Forestry and Wildlife, received the Conservation Award for his ability to build strong coalitions for the protection and recovery of native wildlife. The Hawai'i Conservation Alliance (HCA) received the Environmental Education Award for its actions to raise public awareness about environmental issues in Hawai'i, particularly through their sponsorship of the annual Hawai'i Conservation Conference. *Environment Hawai'i* received the Environmental Journalism Award for covering issues that raise public awareness about the need to protect Hawaii's native wildlife and ecosystems.

**Grants and Scholarships:** Two of the HAS summer/fall research grants were awarded in 2007. Bobby Huang-Suo Hsu of UH Hilo received a grant in support of his research on the transfer of maternal antibodies in Hawai'i 'Amakihi (*'Elepaio* 67:6, August/September 2007). Jacqueline Gaudioso of UH Hilo received a grant for her study on the plumage coloration of Hawai'i 'Amakihi (*'Elepaio* 67:6, August/September 2007). Nancy Chaney of UH Hilo was awarded the 2007 winter/spring research grant to assist her study on the role of larval development in determining the population structure of Hawaiian micro-gastropods (*'Elepaio* 68:1, February 2008).

Usha Herold was awarded HAS's Rose Schuster Taylor full tuition scholarship to the University of Hawai'i for the 2007-2008 school year. Usha is a senior at UH Hilo majoring in agroecology and environmental quality, and minoring in ecology, evolution, and conservation biology, with a certificate in environmental studies (*'Elepaio* 67:6, August/September 2007).

**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" which connects local and visiting birders, giving them the opportunity to arrange excursions outside of the Society's scheduled field activities.

HAS also promoted participation in the annual Federal Junior Duck Stamp Contest, a project of the U.S. Fish and Wildlife Service.

HAS was acknowledged by the City and County of Honolulu and Mayor Mufi Hannemann and was awarded an official proclamation at the April 2, 2007 naming of Manu o Ku (white tern, *Gygis alba*) as the official bird of the City and County of Honolulu (*'Elepaio* 67:4, May 2007).

**Products:** *Hawaii's Birds* is a 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. In 2007 the State Division of Conservation and Resource Enforcement (DOCARE) acquired a number of *Hawaii's Birds* books for the purposes of training new Conservation Officers, and to assist and encourage them in their duty to protect Hawaii's wildlife and natural resources (*'Elepaio* 67:4, May 2007).

Other educational products produced by HAS include the companion cassette set *Voices of Hawaii's Birds*, the *Hidden Treasures of O'ahu* map featuring locations and detailed information on sites for exploring nature and ancient Hawaiian culture, Hawaii's rare and endangered birds 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 Hawaii'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.

**Special Mention:** On July 29, 2007, Robert L. Pyle passed away. Bob may have single-handedly done more for the Society than any other individual, having served repeatedly as HAS President, and as a member of the HAS Board of Directors intermittently between 1955 and 1983. Bob received the HAS Lifetime Achievement Award in 1995 and an Honorary Life Membership in 2001. He created the "Checklist of the Birds of Hawai'i" and the HAS field check card, and he was the bird sightings collector for the state. He remained active with HAS as long as he was able, serving as the source for an endless supply of expert information and opinion (*'Elepaio* 67:7, October 2007). I had the pleasure and honor of serving with Bob as an HAS Director for a number of years, and it was always a delight to be a beneficiary of his vast repertoire of knowledge, both of avian biology and of the long and storied history of the HAS.

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We all remember and give abundant thanks for the time Bob shared with us.

**Looking to the Future:** The HAS Officers, Directors, and other leaders gathered in January 2008 for the Annual Chapter Leaders' Retreat to discuss the state of HAS and how best to guide the organization in the coming year. We look forward to building capacity by expanding our membership and services through the active pursuit of grants and through efforts to increase the visibility and accessibility of our programs. We also hope to continue expanding educational opportunities, with a particular focus on reaching out to young people. Finally, taking full advantage of the incredible opportunities at Black Point, we anticipate a year of exciting challenges and accomplishments in our conservation efforts through more service trips to the Seabird Preserve, as well as continued opportunities to build and expand conservation partnerships. On behalf of my fellow Officers and Directors, I sincerely thank each and every one of our members and supporters, and I look forward to another year of continued accomplishments.

### **HAS Field Trips**

Contact the HAS Office at:  
(808) 528-1432, [hiaudsoc@pixi.com](mailto:hiaudsoc@pixi.com)

#### **O'AHU**

**Saturday, March 15**

**Whale Watch Cruise with John Harrison**

**12:45 p.m. – 4:00 p.m.**

We will cruise off of Honolulu for two hours aboard the Star of Honolulu's "Starlet" while HAS Board President John Harrison answers questions about whales, seabirds, and other wildlife that we encounter. **Please make your reservations and payment at least one week in advance by calling Star of Honolulu at (808) 983-7827; ask for a reservation on the STARLET for Saturday, March 15.** Kama'aina rates are \$22.28 each for adults and \$13.37 for children. Please also call the HAS office to let us know you are coming. Check in is at 1:00 p.m. at Kewalo Basin (Slip D-1); the boat will leave at 1:30 p.m. Our group will meet at 12:45 p.m. at Kewalo D-1 (fourth slip from Fisherman's Wharf restaurant; park at meters behind restaurant). Bring a warm jacket, water, snacks, and binoculars.

#### **HAWAII ISLAND**

**Saturday, March 29**

**Hawai'i Volcanoes National Park with Carol Bebb**

**7:30 a.m. – 11:30 a.m.**

Join HAS Board member Carol Bebb for an easy beginner's birding hike to see wet forest avian species at Hawai'i Volcanoes National Park. Native plants will be highlighted as well. Space is limited. Please call (808) 387-1111 for more information and to register.

## **To Our Members Thank You**

Hawaii Audubon Society Board of Directors and staff send a sincere Mahalo to each one of you, our valued members. Your continued support and generosity make our work possible, and your enthusiasm and involvement help us grow! We hope you will enjoy this month's 'Elepaio issue and our State of the Society 2007 report, and that you'll be pleased to read about what we've accomplished and what is ahead. Your membership renewal for 2008 earns you a subscription to Volume 68 of the 'Elepaio, which we hope you will find interesting and informative. As always, we welcome your comments, suggestions, and submissions.

Let this year be one in which you become more involved with Hawaii Audubon Society! Join us on a field trip or at one of our bimonthly program meetings. Consider volunteering in the office or at an event, or joining one of our action committees. Vacant seats on the Board of Directors are also available. Do you live on a neighbor island? Why not volunteer to help organize a field trip? Contact the HAS office for more information at (808) 528-1432 or [hiaudsoc@pixi.com](mailto:hiaudsoc@pixi.com).

From all of us here at Hawaii Audubon Society, thank you, sincerely, for your support.

### **HAS Undergraduate Tuition Scholarship Available for the 2008-2009 School Year Applications Due May 1, 2008**

Through a trust set up by Yao Shen in memory of Rose Schuster Taylor, the Hawaii Audubon Society annually awards a full tuition scholarship to an undergraduate student in the University of Hawai'i system. Applicants must be majoring in a field related to Hawaiian or Pacific natural history. Applications for the 2008-2009 school year are due on May 1, 2008. Application guidelines are available at [www.hawaii.audubon.com](http://www.hawaii.audubon.com) under "chapter news," or by contacting the HAS office.

### **Hawaii Audubon Society Research Grant Available Applications Due April 1, 2008**

Hawaii Audubon Society offers two grants per year for research in Hawaiian or Pacific natural history. Awards are oriented toward small-scale projects and generally do not exceed \$500. Grants are reviewed semiannually. Deadlines are April 1 for summer/fall grants and October 1 for winter/spring grants. Application guidelines are available at [www.hawaii.audubon.com](http://www.hawaii.audubon.com) under "chapter news", or by contacting the HAS office at (808) 528-1432 or [hiaudsoc@pixi.com](mailto:hiaudsoc@pixi.com).

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## PACIFIC FISHERIES COALITION ANNUAL REPORT 2007

The Pacific Fisheries Coalition (PFC), a project of the Hawaii Audubon Society, is a unique coalition of conservationists and fishermen who promote the protection and responsible use of marine resources in Hawai'i and the Pacific. The project is directed by Linda Paul with guidance from William Aila and others. Independent contractors in 2007 included Ellyn Tong, the Outreach Coordinator, Laura Kloepper, the Ocean Awareness teacher, and interns Naomi Arcand and Cassandra Brooks.



Convict tang (*manini*, *Acanthurus triostegus sandvicensis*). Photo by Paulo Marin, PFC Archives.

In 2007 the Society received a grant to implement an Ocean Awareness Project for the purpose of creating an ocean stewardship ethic in 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade students. In the Fall Laura began the process of creating a curricula and lesson plans to be implemented initially in intermediate schools on windward O'ahu. Cassandra assisted her in locating resource materials and she was given periodic feedback and advice from an advisory group of professional educators. Ellyn drafted new questions for a Paradise Pursuits Quiz show aimed at the intermediate school level with a focus on watersheds and the nearshore environment.

In January a number of bills related to fishing were introduced and heard in the Legislature and the PFC continued its efforts to educate the public on the need for sustainable fishing and habitat protection. The bills included the Administrative Inspection bill, which was drafted by the PFC in 2003 at the invitation of the State. It proposes statutory changes needed to enforce fishing rules. It was introduced in both the House and the Senate, but was held in the last committee hearing. The Aquatic Stewardship Act, which PFC drafted in partnership with State officials and fishermen to counteract two right-to-fish bills, was introduced in the House but not heard. The two "right-to-fish" bills were heard, but were ultimately deferred. William Aila drafted an op-ed letter on Native Hawaiian cultural fishing practices, which was signed by a number of Native Hawaiians and submitted to the newspapers.

The Northwestern Hawaiian Islands Reserve Advisory Council (RAC) met in June and was briefed on the status of the NWHI Marine National Monument management plan. Linda (Vice Chair) assisted with the agenda and William Aila (Secretary) and Ellyn Tong attended the meeting. The World Heritage Site designation process for the NWHI is also moving forward. Public scoping meetings for the Monument's Natural Resources Science Plan were held in November and comments were submitted.

The 14<sup>th</sup> meeting of the Conference of the Parties to the Convention on Trade in Endangered Species (CITES) was held in June, which Linda attended. There were more marine species proposals than ever before, including two species of sharks, the red and pink corals, an ornamental cardinal fish, two species of lobsters and the entire sawfish family. In preparation for the meeting the PFC prepared a 20-page, illustrated report *The Global Shark Fin Trade: Destroying Biodiversity and Ecosystems* for distribution at the meeting, as well as fact sheets

on the corals, the cardinal fish, and the lobsters. The PFC *Marine Aquarium Trade* report was also distributed. The sawfishes were listed on Appendix I, but the rest of the proposals ultimately failed.

Linda, Ellyn, and other members of the PFC and NWHI Network continued to monitor meetings of Western Pacific Regional Fishery Management Council and its committees. Linda, as a member of the U.S. delegation, also pushed for conservation measures at meetings of the Central & Western Pacific Fisheries Commission and its Technical and Compliance Committee, where she distributed copies of *The Global Shark Fin Trade* report. Linda continued to serve on the national Marine Fish Conservation Network Advisory Board, which is now focusing on implementation of the Magnuson Stevens Fishery Conservation and Management Act as amended in January 2007.

In January Linda and Dr. Alan Friedlander were invited to represent Hawai'i at an EPA MPA workshop in Annapolis, MD. The workshop results will form one chapter in a report to Congress. Ellyn was invited to attend the International Year of the Reef for 2008 meeting in Washington D.C. The PFC will hold its 5<sup>th</sup> Aquatics Conference in 2008 to celebrate the event.

Linda attended the U.S. Coral Reef Task Force meeting in American Samoa in August and presented oral and written comments, urging the Task Force to host a technical meeting on the extent and impact of harvesting red and pink corals in the Pacific for the jewelry trade, to support the protection of important reefs across the Pacific through the creation of a network of World Heritage Sites, to take action to prevent the spread of alien invasive aquatic species by hull fouling, to co-sponsor a series of international technical workshops to assess the impacts of the aquarium trade on coral reef populations, habitats, distributions, trophic structures, and marine biodiversity, and to support a prohibition on imports of all processed shark fins.

Educational outreach activities included broadcasting programs on PFC's Thursday evening slot on 'Ōlelo Community Television, including the proceedings of the 2006 State Aquatics Conference, Dr. Bill Walsh talking about marine resource enforcement problems, and Buzzy Agard and William Aila explaining traditional fishing management practices. PFC educational materials were distributed at the Hawai'i Conservation Conference, 300 copies of our *Importance of Refuges for Reef Fish Replenishment in Hawaii* were sent to Guam, and Kamehameha Schools distributed 800 of our posters. Ellyn worked on a four-color version of the large, older females poster, which will be used to educate the public on the importance of leaving enough of these reproductively important fish in the wild to ensure sustainability.

## What's Happening with Wedge-tailed Shearwaters?!

By Norma Bustos

In November of 2007 I was forwarded an email from a concerned citizen regarding several Wedge-tailed Shearwater chicks picked up by a local rafting company near the Molokini islet off of the island of Maui. The individual, in her email, expressed concern that air horns used by charter tour boat operations around the island were spooking the fledgling seabirds out of their nests and into the ocean. Concerned about the birds I immediately contacted Dr. Fern Duvall, one of our biologists on the island of Maui.

Dr. Duvall informed me that he had recently witnessed, for the first time in his experience on Maui, many Wedge-tailed Shearwater chicks being found both underweight and stunted developmentally. He made it clear that he did not believe that it was the air horns that were causing the fledgling Shearwaters to fall into the ocean; rather it was the inability of these developmentally stunted birds to successfully sustain flight, or in some cases to even take off, that was leading them to stumble down the steep Molokini slopes and into the waters surrounding the island.

The “dwarfed” birds on Molokini were showing weights of 160-200g instead of the average 400-460g for fledglings of this species. Interestingly enough reports of severely undernourished fledgling Wedge-tailed Shearwaters with weights way below normal were also coming in at around the same time from the Mariana Islands (Hawley, Nate. “[pacificseabirds] wedgie weights” email to Pacific Seabird Group, 01 November 2007) These reports sparked concern in the U.S. Fish and Wildlife Service Hawai'i office.

In an effort to see how widespread this phenomenon was, the U.S. Fish and Wildlife Service's Refuge Manager at Tern Island, David Zabriskie, and a volunteer, Matthew Barbour, evaluated the relative weights for Wedge-tailed Shearwater fledglings on Tern Island so as to compare them to available data from a 1998 study. Analysis showed that although the



Wedge-tailed Shearwaters ('ua'u kani, *Puffinus pacificus*).  
Photo by Norma Bustos.

chicks' fledging weights were lower in 2007, they were not significantly lower than the 1998 weights and remained at the upper levels of estimated fledging weights for the species. This indicated that the Wedge-tailed Shearwater chicks out at Tern were doing relatively well (Zabriskie, David. “Re: Fw: [pacificseabirds] wedgie weights and other signs” email to Beth Flint, 28 November 2007).

The question remains as to why the Mariana Island and Molokini Wedge-tailed Shearwaters fledged such underweight chicks this year. Is this a widespread natural phenomenon in the Pacific? Is global warming to blame? Managers and researchers will have to wait and see what the numbers say once the data starts to come in. At the moment the question of “What's happening to our Wedge-tailed Shearwaters?” will have to go unanswered.

*Norma Bustos is the Wildlife Program Specialist for the Hawai'i Division of Forestry & Wildlife, and member of the Hawaii Audubon Society Board of Directors.*

### BOOK REVIEW by Ron Walker

#### *Kelanola, The Raven Princess of O'ahu*

By Debra Gannon Neuberger  
Illustrated by Kathleen Michele Nail



This 16-page children's booklet features colorful illustrations wrapped around a story of two ravens, Kelanola and Kanoa, who were raised in captivity by two sisters, Kakalina and Kaniele on the island of Hawai'i. Kelanola is the Raven Princess of the title. It tells of the separation and reuniting of the two ravens in the context of the island of O'ahu.

It is a tale simply told and would be ideal to be read aloud to preschoolers. People familiar with the plight of the 'Alalā, an extremely endangered Hawaiian bird now found only in captivity, may be disconcerted by a tale of two ravens living

on O'ahu, though a paragraph on the back cover does explain their plight.

The 'Alalā and the North American raven are in the same family and genus (*Corvus*), and the 'Alalā is often referred to as a “crow-raven” because of its large thick bill. The 'Alalā is the world's rarest and most endangered corvid species, and Hawaii Audubon Society readers may have preferred a story with a conservation message. But considering the target audience, this little book may help to foster wildlife appreciation while providing a simple message of filial love and a happy ending.

Attention: Middle School Students (Grades 6 to 8)

### Kawai Nui Special to Air on ‘Ōlelo

#### “My Hawai‘i” Story Project

What makes Hawaii’s environment special to you? Join the “My Hawai‘i” writing contest by sharing your feelings about our environment and telling us about your Hawai‘i. Stories should be typed, no longer than 1,000 words. Poems should be 150 words or less. Submit your story or poem online at [www.hawaiiconservation.org/myhawaii](http://www.hawaiiconservation.org/myhawaii). **DEADLINE:** Your story or poem must be received by **5 p.m. Friday, April 18, 2008**. This writing contest is sponsored by the Hawai‘i Conservation Alliance and the Pacific Writers’ Connection. For details visit [www.hawaiiconservation.org/myhawaii](http://www.hawaiiconservation.org/myhawaii) or call (808) 586-0923.

‘Ōlelo Community TV will air a special show on Kawai Nui Marsh, produced by the Hawaii Audubon Society. Tune in to find out how the area of Kawai Nui was used in the past and how volunteer and community groups are helping to mālama the marsh in order to restore it as a properly functioning ecosystem.

Hawaii’s Ocean Issues: (special) Kawainui Marsh  
Channel 52

3/6/08	Thu	4:00 p.m.
3/13/08	Thu	11:30 p.m.



#### DOFAW Specialty License Plates Now Available

Proceeds from the sale of these license plates will go toward projects relating to Hawaii’s species of greatest conservation need and their affiliated habitats. To purchase a DOFAW Specialty License Plate, complete the application form at your local Satellite City Hall and surrender your Certificate of Registration for your vehicle. The cost for the new plate is \$30.50; annual renewal is \$25.00 – for a great cause! Call (808) 532-4325 for more information.

#### Membership in Hawaii Audubon Society 2008

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

*These are annual membership dues, valid January 1 through December 31.  
Donations are tax deductible and gratefully accepted.*

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# Maui's Mitred Parakeets (*Aratinga mitrata*) – Part 2 of 2

Douglas E. Runde and William C. Pitt<sup>1</sup>

Continued from 68:1 February 2008

## OTHER ENCOUNTERS

In spring of 2006, the Maui Invasive Species Committee (MISC) sponsored an aerial survey to identify specific nesting sites at the Huelo Point sea cliffs and to see if these could be accessed by rappelling. Although the parakeets left the cliffs before we arrived, a flock of approximately 80 birds was spotted from the air near Kailua about 5 km (3.1 mi) from the nest cliffs. Apparently the rotor noise flushed them, and they were easily spotted flying above the forest canopy. As we followed the flock from a distance, the pilot was able to influence their direction of flight. Upon close approach (*ca.* 10-20 m) the flock scattered; but when the helicopter moved away they re-grouped and perched high in the canopy. They were easily flushed again and formed two loose flocks, above and below the helicopter, but stayed in the general vicinity of Pāpa'a'ea Reservoir. After 10 min we stopped following them to avoid moving them from the area, but could have continued tracking them without difficulty.

After obtaining landowner permission, MISC field biologists rappelled down the sea cliffs to three areas of concentrated parakeet to locate nests and remove as many young birds as possible. This was unavoidably delayed until early-July and no occupied nests were located. A group of 12 fledglings was perched on the cliff face. Surprisingly, they appeared undisturbed by the climbers and did not take flight. Meanwhile, other members of the flock protested loudly and flew directly overhead, and circled in front of, and above, the cliff face. On an earlier visit, the flock reacted similarly when a frigate bird slowly soared past the cliff face. Our presence above the cliffs elicited this response many times over the course of several hours, however, while the cliffs were being climbed the intensity of this display did not seem to increase.

## MANAGEMENT ALTERNATIVES

Mitred parakeets have established at least three non-indigenous and persistent breeding populations: California, Florida, and Hawai'i. The Maui flock is considered a threat to the ecology of the island and thus eradication, as opposed to population control, has been proposed. Eradication is not easy and removal tactics must be carefully and persistently executed to minimize the likelihood that the flock will abandon their traditional core area and fragment into smaller groups scattered across the island.

Since the nest cliffs can be safely climbed, oiling the eggs (Animal and Plant Health Inspection Service 2003) or removing young from nests are feasible approaches to slowing population growth. Both of these tactics require knowledge of nesting phenology which will be time consuming and difficult to obtain from nests hidden in the sea cliffs. More importantly, slowing population growth is unlikely to lead to eradication. Parrots are long-lived and extirpation by slow attrition could take decades. Many other tactics for removing parakeets by using nets, snares,



*Mitred Parakeet, Aratinga mitrata. Drawing by Ron Walker, January 2008. Plumage is green, with red crown, lores, cheeks, and thighs. Adapted from Parrots by Tony Juniper and Mike Parr. Yale University Press, 1998.*

and traps on and above the sea cliffs were discussed in detail but most were judged to be slow, impractical, and dangerous to implement. It also seemed unlikely that more than a few parakeets could be caught before the others became trap shy. Thus, a wide variety of methods would be required to remove the numbers needed to significantly reduce the population.

While certainly unpopular, we believe direct lethal control to be the shortest path to eradication. Viable options include wing-shooting with shotguns as the flock returns to the cliffs, and using silenced small-caliber rifles to remove parakeets perched on the cliffs or in trees. Clearly, shooting may be highly disruptive to the flock and must be carefully timed and executed. Using skilled, well-camouflaged, marksmen with silenced weapons from blinds would be the least disruptive tactic. Even so, persistent shooting may result in a few shy and scattered survivors. Thus, plans for eradication need to consider how to deal with such birds.

If direct control becomes ineffective, or impossible to implement, then eradication may eventually depend on the various control options available if the parakeets can be attracted to bait stations. Success to date has been poor, and

*continued on page 16*



any future work might exploit the highly social nature of the parakeets, perhaps by using a captive flock of parakeets in a large flight cage. The area would be heavily baited with highly favored treats such as sunflower seeds, peanuts and cracked corn and a trap site established nearby, but out of sight. Consistently attracting and trapping the parakeets would take careful management over several months, but any other wild parrots in the area might also be attracted.

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