



'ELEPAIO

Journal of the
Hawaii Audubon Society

For the Protection of
Hawaii's Native Wildlife

VOLUME 65, NUMBER 1

FEBRUARY 2005

Pox virus in Laysan Albatross chicks at Ka'ena Point, O'ahu: How can we help?

by Eric A. VanderWerf¹, Keith A. Swindle², and Lindsay C. Young³

Many residents and visitors to O'ahu have been pleasantly surprised by the recovery of native plants and wildlife at Ka'ena Point. After years of illegal dumping and erosion damage caused by off road vehicles, recovery of the coastal habitat at Ka'ena Point began in 1983 when 12 acres of land on the leeward side of the point was designated as a Natural Area Reserve (NAR) by the Hawai'i Department of Land and Natural Resources (DLNR undated). In 1986, 22 acres on the windward side of the point were added to the NAR, including fragile sand dune areas. Perhaps the most important step in restoring the native coastal ecosystem at Ka'ena Point was construction of barriers to prevent vehicle access, which was made possible by appropriation of additional funding for management of the NAR system by then Governor Waihe'e and the State Legislature in 1987 (DLNR undated). Another important action taken to protect native seabirds at Ka'ena Point was the control of non-native predators including feral dogs (*Canis familiaris*), feral cats (*Felis catus*), and mongoose (*Herpestes aurapunctatus*), first by the DLNR, then by the U.S. Department of Agriculture, Wildlife Services, under contract from the DLNR. This protection and management has resulted in the recovery of native plants including beach naupaka (*Scaevola sericea*), endangered 'ohia (*Sesbania tomentosa*) and 'akoko (*Chamaesyce celastroides* var. *kaenana*), and dramatic increases in the number of wedge-tailed shearwaters (*Puffinus pacificus*) and Laysan albatross (*Phoebastria immutabilis*) that successfully nest at Ka'ena Point (Sugimura et al. 2003). Nesting colonies of seabirds in the main Hawaiian Islands have been decimated by introduced mammalian predators (Hodges and Nagata 2001, Smith et al. 2002), but predator control efforts at Ka'ena Point and other areas have yielded a rebound in Laysan albatross and other seabirds. The presence of Laysan albatross in particular has attracted many visitors to the point because they are readily visible from the marked paths, making Ka'ena Point one of the few easily accessible sites in the world where these large seabirds nest.

In early 2004, visitors and biologists noticed unsightly growths and lesions on many of the albatross chicks at Ka'ena Point. The growths probably were caused by avian pox virus, a widespread disease in birds that is transmitted by mosquitoes. In most years there are very few or no mosquitoes at Ka'ena Point due to the dry climate on that part of the island, but in wet years, like 2004, rain puddles provide breeding habitat for mosquitoes, increasing the potential for transmission of pox virus to native seabirds. Being large, sedentary birds, albatross chicks are virtually defenseless against mosquitoes. A viral infection can develop at the spot where the bird is bitten by a mosquito, and uncontrolled replication of the virus within epithelial cells results in soft swellings and wart-like growths on the skin. Many of the albatross chicks at Ka'ena Point had numerous growths on the

feet and face, indicating they had been bitten by multiple mosquitoes. In some cases the infections were quite extensive, completely covering one or both eyes (Figure 1).

Pox virus occurs virtually worldwide and affects a variety of bird species (U.S. Fish and Wildlife Service 1987, Tripathy 1993), but the effects of this disease vary considerably among bird species. For many endemic Hawaiian forest birds pox is often crippling or fatal (Warner 1968, VanderWerf 2001, Van Riper et al. 2003). Less is known about the effects of pox on albatross and other seabirds, but some data indicate that Laysan albatross have much greater immunity to pox than Hawaiian forest birds. In 2004, 14 albatross chicks hatched at Ka'ena Point, all of which were infected with pox (L. Young, unpubl. data). Eleven of the chicks eventually recovered from pox and fledged without any assistance or interference from humans, even a severely infected bird that had both eyes completely covered by scabs for several weeks (Figure 1). Unfortunately, one chick was wrongly removed from its nest by a concerned citizen and brought to Sea Life Park, where it could not be accepted because of the possibility the disease would spread among other birds at the park. The bird was then taken to the Hawaii Humane Society in hopes that it would be treated for pox, but instead it was euthanized because it was mistakenly judged to be beyond help. Two of the 14 chicks at Ka'ena Point died in 2004, and their deaths could have been related to pox, but some natural mortality occurs every year, and it is possible they died for other reasons, such as being fed less by their parents than other chicks. For comparison, 19 of 23 or 82.6% of albatross chicks at Ka'ena Point fledged in 2003 (Sugimura et al. 2003), and the average fledging rate of Laysan albatross chicks at Midway is 85.8% (Whittow 1993), so the survival rate of albatross chicks at Ka'ena Point in 2004, 11 out of 13 or 84.6%, was actually quite high despite the pox infections. Based on the survival rate of chicks at Ka'ena Point, the euthanized chick probably would have recovered and fledged had it not been removed, but we will never know.

So, the simple answer to the question posed in the title, how can we help albatross chicks that have pox, is to leave them alone and let their parents care for them. Many seabirds, including albatross, have very specific means by which they recognize their offspring; chicks that are removed from their nest and returned later may not be recognized by their parents and may be abandoned. Although the chicks may appear to be suffering, their best chance for recovery and survival is for their parents to continue feeding them.

Another way that people can help reduce the threat from pox is to remove plastic containers and other debris in which mosquitoes may breed. There is no treatment for avian pox, but birds

continued on page ---

February 21 Program Meeting (in a new location) - Whales!

Christine Brammer will present of an overview of the National Marine Sanctuary Program with an emphasis on the Hawaiian Islands Humpback Whale National Marine Sanctuary. Included in the presentation will be information on participating in the annual Sanctuary Ocean Count.

Christine is the O'ahu Programs Coordinator for the Hawaiian Islands Humpback Whale National Marine Sanctuary. She has been working for the Sanctuary for about five years now. Christine is the coordinator for the annual statewide Sanctuary Ocean Count and she also manages the other Sanctuary efforts on O'ahu as well as assists with efforts on the Big Island.

In addition to education and outreach Christine maintains the Sanctuary's website, and does graphic and display design. Her primary interest is in preserving Hawai'i's precious marine environment.

IMPORTANT: the location for our Program Meetings has changed. They will now be held at the University of Hawai'i's St. John Lab (Botany Building) in the ground floor auditorium at 3190 Maile Way, where it intersects East-West Road. The main entrance to the building is at ground level, street side (Hint: the Diamond head side stairs do not lead to the auditorium). Program meetings will also have a new time, running from 6:30pm to 8:30pm.

Hawaii Audubon Society Board of Directors for 2005

Results of the election of Board of Directors 2005 were announced at the December Program Meeting:

Newly Elected:

President: Liz Kumabe
Vice President: Ron Walker
Directors: John Harrison
Wendy Johnson
Nick Kalodimos

Re-elected:

Treasurer: Sal Pagliaro
Directors: Phil Bruner
Arlene Buchholz

Continuing Directors (unexpired terms):

Tonnie Casey
Jennifer Crummer

Field Trips for 2005

Alice Roberts, our longtime Field Trip Coordinator, is recovering from hip replacement surgery and is temporarily unable to schedule or attend Field Trips. We wish her a speedy and successful recovery! Field trips and leaders for 2005 will be decided upon at the January Board Retreat and will be listed in the March 'Elepaio.

Field Trip information is also available on the HAS office answering machine (528-1432) and on our website, www.hawaiiadubon.com.

February 26, Saturday: Whale watching aboard the vessel American Dream! We hope to see whales, seabirds, and possibly spinner dolphins. When we last took this cruise in 2003 several rarely-seen Pomarine Jaegers followed our boat very closely and for a long time! The one and a half hour cruise is being offered to us at a special rate of \$25.49 per person. The cruise will take place at 3:30pm. Bring sunscreen, water, snacks, binoculars, and a jacket/rain gear. Call the HAS office BEFORE FEBRUARY 16 to register, 528-1432.

Attention Plover Lovers! Kolea Watch Update:

In spring '04, Dr. Wally Johnson (Montana State University) and his team of volunteers attached temporary radio transmitters to 20 Kolea on O'ahu. The birds migrated in late April, and 6 of them were found on breeding grounds in Alaska during May and June. All 6 Kolea were from a wintering ground on the windward side at Hawai'i State Veterans Cemetery in Kane'ohe. These recent findings are a valuable addition to our understanding of where O'ahu's Kolea are going in the summer to raise their keiki.

Johnson is planning another round of Kolea Watch radio-tagging in April '05. Can you help with a donation? Any amount will be most welcome. However, if you contribute \$150 or more you can "adopt" a Kolea and name your bird. You'll also be informed if/when/where "your" plover is found in Alaska! Donations (to pay for transmitters and/or other expenses associated with Kolea Watch research) can be sent to: Hawaii Audubon Society, 850 Richards Street, Honolulu, HI, 96813-4709. Checks should be made payable to the Hawaii Audubon Society and earmarked "Kolea Watch." Mahalo nui!

'Elepaio

ISSN 0013-6069

Managing Editor: Linda Shapin
Scientific Editor: Ron Walker

The 'Elepaio is printed on recycled paper and published nine times per year: February, March, April, May, June/July, August/September, October, November, and December/January

850 Richards Street, Suite 505
Honolulu, HI 96813

Tel: (808) 528-1432 Fax: (808) 537-5294

E-mail: hiaudsoc@pixi.com Website: www.hawaiiadubon.com

Pacific Fisheries Coalition (PFC) (a project of HAS)
Tel: (808) 262-6859 Fax: (808) 537-5294 Website: www.pacfish.org

Board Roster:

Liz Kumabe, President
Ron Walker, Vice President
Sal Pagliaro, Treasurer
John Harrison, Director
Wendy Johnson, Director
Nick Kalodimos, Director
Phil Bruner
Arlene Buchholz
Tonnie Casey
Jennifer Crummer

Committee Chairs:

Conservation: Naomi Arcand
Education: Wendy Johnson
'Elepaio: Ron Walker
Field Trips: vacant
Fundraising: Sal Pagliaro
Grants & Scholarships: Phil Bruner
Membership: Linda Shapin
Program: Arlene Buchholz
Publications: Linda Paul
Website: Stephen Bibbs

Staff:

Linda Shapin, HAS Admin. Assistant
Linda Paul, PFC Executive Director

Po'ouli Death Leaves Species' Future Uncertain

An extremely rare Hawaiian forest bird that was hoped to be part of a last ditch effort to save the species has died. The po'ouli, a male that had been living at the Maui Bird Conservation Center in Olinda, Hawai'i since September, passed away close to midnight on Friday, November 26th.

The bird had been moved to the Conservation Center by the Maui Forest Bird Recovery Team with the hope of starting a captive breeding program with the last three individuals of this species. Unfortunately the two other birds, believed to be in the wild, have not been observed for several months.

The po'ouli is a small black and gray songbird that was discovered just 31 years ago. The bird that had been brought to the Center was believed to be of advanced age (with a known age of at least 8 years) and missing one eye. The bird was originally thought to be a female, but definitive DNA testing revealed the bird was a male. Animal care staff recently determined that the bird had contracted avian malaria (a mosquito borne disease not native to the Hawaiian Islands). The cause of death for this po'ouli has not yet been determined. Initial necropsy results (performed by pathologists at the San Diego Zoo) are inconclusive with regard to cause of death.

"We are always sad to lose an animal in our care," said Alan Lieberman, avian conservation coordinator for the Zoological Society. "In this case, we may not have lost just a bird, but one of the last remaining vestige of a species. It is difficult to realize that our last efforts to save this species rely on just two birds."

In light of this bird's death, biologists will review their plans for the remaining two birds that may still exist in the wild, which are believed to be a male and a female. A field team from the Maui Forest Bird Recovery Project will return to Hanawi Natural Area Reserve on November 30 in another attempt to locate the birds.

"Although we have not seen or heard them for many months, it may be that they have shifted their home ranges," said Eric VanderWerf, Hawaiian bird recovery coordinator for the U.S. Fish and Wildlife Service. "All of the birds are old for forest birds, but birds have been resighted after long absences in the past, and we are not willing to give up all hope yet."

The stocky little bird with a black mask is part of the Hawaiian honeycreeper family, but is so unique it occupies its own genus. It is the only Hawaiian forest bird to rely heavily on native tree snails as its food. The elusive po'ouli was not even discovered until 1973, when a group of University of Hawai'i students conducting research on the east slope of Haleakala sighted a bird they had never seen before. It was named "po'ouli," which means black head in Hawaiian, by Mary Kawena Puku'i, a renowned authority on Hawaiian culture.

The Maui Bird Conservation Center – like the Keauhou Bird Conservation Center on the Big Island – is operated by the San Diego Zoo. These centers work with in collaboration with the U.S. Fish and Wildlife Service, the State of Hawai'i and other entities to save endangered bird species on the Hawaiian Islands.

"Our goal of saving the po'ouli is now very difficult and may not be achievable, but we must

continue to try to save the species we have left," said Gina Shultz, acting field supervisor for the Fish and Wildlife Service's Pacific islands office. "In addition to the po'ouli, we have 31 other endangered bird species in Hawai'i that are threatened by loss of habitat, introduced predators, and diseases. Rather than giving up hope, we need to rededicate our efforts to save these unique birds that are such an important part of Hawai'i's native forests."

The Maui Forest Bird Recovery Project is made up of a team of ornithologists supported by the U.S. Fish and Wildlife Service and the State Department of Land and Natural Resources. Guidance for the team's work and implementation plans to save the po'ouli from extinction are carried out by the Po'ouli Working Group, a team of more than a dozen experts from several agencies and organizations.

from a FWS News Release dated November 30, 2004

Contacts: Barbara Maxfield USFWS, 808 792 9530 or 808 753 0440

Deborah Ward, Hawaii DLNR, 808 587 0320

Christina Simmons, ZSSD, 619 685 3291

What Kine Manu?

Congratulations to our December/January What Kine Manu winners, Dale Paplham of Lahaina, Maui and Ann Viets of Kihei, Maui. They were the first (by phone and by email, respectively) to correctly identify the bird as an 'Akiapola'au. Maui no ka Oe!

February's bird is depicted above. The first correct answers by each method (phone, fax, email or letter) will win a set of Voices of Hawaii's Birds cassette tapes. All photos for What Kine Manu are by Dr. Tom Dove.



photo by T. Dove

National Audubon Releases Report, "State of the Birds"

On October 19, The National Audubon Society released the "The State of the Birds", a report documenting the health and abundance of North America's birds. Appearing in the October issue of Audubon Magazine, "The State of the Birds" paints a disturbing picture. Almost 30% of America's bird species are in "significant decline," a situation that signals seriously degraded environmental conditions in the habitats these birds call home.

The bottom line: the state of the birds in 2004 is not sound. In particular, a disturbing 70 percent of grassland species; 36 percent of shrub-land bird species; 25 percent of forest bird species; 13 percent of wetland species; and 23 percent of bird species in urban areas are showing "statistically significant declines."

According to "State of the Birds," these declines are abnormal. Not part of the natural, cyclical rise and fall of bird populations, "statistically significant declines" are due to outside factors such as loss of native grasslands, overgrazing, development of wetlands, bad forest management, invasive species, pollution, and poor land use decisions.

National Audubon's President John Flicker sees a clear message in this report. "Like the canary in the coal mine warning the miner of danger ahead, our birds are an indicator of environmental and human health," he said. "Birds signal that we are at risk next."

But, Flicker also sees a clear path out of trouble. "People may have created these problems, but people can solve them, if we act now," he stated. To that end, National Audubon is now addressing the findings of "State of the Birds" in its conservation agenda at the legislative and policy making level, and in the states where the greatest conservation challenges exist.

Compiled by National Audubon Scientist Greg Butcher, "State of the Birds" analysis makes the case for private and public action. Based on the report's findings, National is advocating for improved grassland, forest, and wetland protection, stronger

pollution controls, partnerships with private landowners, and backyard habitat programs for homeowners.

"State of the Birds" summarizes the status of nearly 700 bird species native to the continental United States, focusing on the condition of species in each of five habitat types: grasslands, shrublands, forests, wetlands, and urban areas (the fastest growing habitat type in the U.S.). Written using USGS Breeding Bird Survey and Audubon's WatchList - cross-referenced with Christmas Bird Count data, the report will be issued on a yearly basis, and will inform National's conservation agenda, identifying key areas requiring immediate action.

Birds not only serve as reliable indicators of environmental conditions, they also contribute greatly to the U.S. economy. Keeping birds - and their home habitats - in good condition is not only a good conservation policy, it is also good business. The worth of birds beyond their aesthetic and conservation value is something that is beginning to be more fully appreciated, a situation that has created allies for bird conservation in small and large business, and local governments - entities that have been historically unlikely conservation partners.

"According to the U.S. Forest Service, 70 million Americans - one-third of all adults in this country - call themselves birdwatchers. The U.S. Fish & Wildlife Service notes that they contribute at least \$32 billion in retail sales, \$85 billion in overall economic output, and \$13 billion in state and federal taxes, creating 863,406 jobs," continued Flicker. "Birds also contribute to the bottom line in more subtle ways, providing free pest and weed control, distributing seeds, and pollinating flowers and crops. American businesses and communities simply cannot afford to ignore the state of the birds."

A digest of the report was published in the October issue of Audubon magazine and a further analysis is available on National Audubon's website, www.audubon.org/bird/stateofthebirds <<http://www.audubon.org/bird/stateofthebirds>>

KEEPING CATS INDOORS ISN'T JUST FOR THE BIRDS!

Indoor cats are safer, healthier and live longer than free roaming cats. Millions of outdoor cats kill hundreds of millions of birds and other wildlife in the U.S. each year. Protect cats, birds and other wildlife by keeping cats indoors!



For more information, contact: **AMERICAN BIRD CONSERVANCY**
Cats Indoors! The Campaign for Safer Birds & Cats
1834 Jefferson Place, NW, Washington, DC 20036
Phone: 202-452-1535; Fax: 202-452-1534;
E-mail: abc@abcbirds.org; Web: www.abcbirds.org

8th Annual Great Backyard Bird Count Invites Everyone to Go Out and Count for the Birds in America's Great Backyard

During the weekend of February 18 through 21, people across the North American continent are encouraged to count the birds in their backyards and report them over the Internet, as part of the Great Backyard Bird Count (GBBC), one of the world's largest volunteer efforts of its kind. In addition to its value as a research study, the GBBC allows people of all ages and backgrounds to celebrate birds and provide vital information about North America's birds.

This is the eighth year of the popular event, developed and managed by the Cornell Lab of Ornithology and the National Audubon Society, with sponsorship from Wild Birds Unlimited store owners. This year's theme, "North America's Great Backyard," was chosen as a way to celebrate the beauty of birds found across the continent. People are encouraged to enjoy the birds around them by going out into the "Great Backyard" during any or all of the count days and keeping track of the highest numbers of each bird species they see. People then report their sightings over the Internet at www.birdsource.org/gbbc

"We call it the Great Backyard Bird Count to make the point that anyone can participate," says John Fitzpatrick, director of the Cornell Lab of Ornithology. "But really, a 'backyard' can be anywhere you happen to be, a schoolyard, a local park, the balcony of a high rise apartment, a wildlife refuge. No matter where you go in this 'Great Backyard,' you're almost certain to find birds in all their beauty. By participating in the Great Backyard Bird Count, you can help researchers better understand bird population numbers and distribution across the continent."

An important part of North America's Great Backyard is the 730 million acres of land (around one-third of the land area of the United States) held in trust by federal agencies. The U.S. Fish and Wildlife Service, Forest Service, Bureau of Land Management, National Parks Service, Department of Defense, and Bureau of Reclamation are among the stewards of lands that support significant populations of wild birds. For this year's Great Backyard Bird Count, Cornell and Audubon, along with these federal agencies, are encouraging families and individuals to visit their local national wildlife refuge, national forest, national park, and other federal wild lands, in addition to reporting the birds they see in their own backyard.

"In addition to counting the birds in your own backyard, this remarkable event gives you the opportunity to visit some of our most special places and wild lands," says Bob Perciasepe, Audubon's chief operating officer. "In this way, the Great Backyard Bird Count reminds us that North America's birds consider the whole continent to be one great big backyard; and in a sense, it is our backyard as well."

To encourage the public to enjoy their public lands, federal agencies are getting involved in the Great Backyard Bird Count by encouraging visitors in what can be a slow period for visitation. "Although the Great Backyard Bird Count takes place during just four days in February, our public lands are important areas for birds at all times of year," Perciasepe says. "Many act as important breeding areas, some as stop-over sites, and some as winter residences. They also serve as wonderful places for

people to connect with the birds and other animals that are part of our great natural heritage."

The Great Backyard Bird Count helps everyone prepare for their trip to the backyard, whether they choose to watch birds only around their home or make the effort to see which birds are using public lands. The web site is full of tips of all kinds, including information on bird feeding; how to use binoculars; how to make your yard bird-friendly; and how to identify birds, especially those tricky, similar-looking species. There are even tips on how to be a bird-friendly family.

"Kids are the future caretakers of the environment upon which we all depend," says Fitzpatrick. "The Great Backyard Bird Count is a terrific way to nurture their inborn curiosity about birds and nature." Educators and parents alike will find the bibliography, vocabulary, and geography sections useful and handy, and there are suggestions on how to conduct the count with groups of children.

Researchers hope that by learning more about the birds and habitats in their own backyards, families will decide to become part of Project FeederWatch, a winterlong survey of birds that visit feeders. FeederWatch data have been instrumental in our scientific analyses of winter finch movements and Varied Thrush cycles, and have even helped researchers discover a new avian disease, mycoplasmal conjunctivitis, or House Finch eye disease. These findings were possible thanks to dedicated FeederWatchers.

"Taking part in the Great Backyard Bird Count takes as little or as much time as participants wish," says Audubon's director of citizen science Paul Green. "The important thing is to just take part, count for the birds, and enjoy North America's Great Backyard."

Instructions for participating can be found at www.birdsource.org/gbbc. There's no fee or registration. Those who would like to participate but who aren't online can try their local library, and many Wild Birds Unlimited store owners who are online will be accepting observations made by their customers. Libraries, businesses, nature clubs, Scout troops, and other community organizations interested in promoting the GBBC or getting involved can contact the Cornell Lab of Ornithology at 800/843-2473 (outside the U.S., call 607/254-2473), 159 Sapsucker Woods Road, Ithaca, New York 14850, or the National Audubon Society at citizenscience@audubon.org or (215) 355-9588, Ext 16, Audubon Science Office, 545 Almshouse Road, Ivyland, PA 18974.

Editor's Note: This article is from Birdsource's website, address above. **And yes, participation by Hawai'i residents is welcome and encouraged!**

Pox virus...continued from page 1

that survive have increased immunity to subsequent infections (Tripathy 2003). Preventative vaccines have been developed to protect birds before they become infected, primarily for use in the poultry industry. There are several strains of pox virus, however, each of which requires a specific vaccine (Tripathy 2003), and we do not yet know which strain(s) infects albatross. If rainfall is high again in the winter of 2004-05, as it has been thus far, it is likely that albatross chicks at Ka'ena Point will again be afflicted with avian pox. If the appropriate vaccine were available, the albatross chicks could be immunized soon after hatching in an attempt to prevent infection, but if mosquito populations are high it could be difficult to administer vaccinations before the chicks are bitten. Otherwise, the best way to help is to leave the chicks alone and give their parents a chance to care for them, no matter how seemingly heart-wrenching they appear.

Furthermore, Laysan albatross and other native birds are protected by law under the Migratory Bird Treaty Act (MBTA). The MBTA is one of our nation's oldest and strongest federal wildlife laws. Enacted in 1918, the MBTA was born out of congress' recognition of the need to end the commercial trade in birds and feathers. The MBTA implements the United States' obligations under several international treaties between the U. S. and Canada (1916), Mexico (1936), Japan (1972), and the Soviet Union (1976). The MBTA recognizes the migratory nature of birds and the resulting need for international cooperation in conservation efforts. Despite its title, congress did not limit the MBTA's protection to birds that migrate per se, but included nearly all species held in common by the U.S. and the other treaty nations. Unlike the Endangered Species Act, the MBTA does not protect habitat beyond the active nest itself. The MBTA states: "Unless and except as permitted by regulations..., it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill,

possess, offer for sale, sell any migratory bird, any part, nest, or egg of any such bird included in the terms of the conventions... [between the U.S. and Canada, Mexico, Japan and USSR]"

Federal regulations implementing the MBTA do, however, recognize the occasional need for people to assist birds: "...a rehabilitation permit is required to take, temporarily possess, or transport any migratory bird for rehabilitation purposes. However, any person who finds a sick, injured, or orphaned migratory bird may, without a permit, take possession of the bird in order to immediately transport it to a permitted rehabilitator."

We emphasize that before picking up an apparently orphaned bird, it is extremely important to ascertain that the bird really has been orphaned or abandoned by its parents, and that they are not simply away foraging or were temporarily scared off by the approach of people. The first course of action should always be to watch the bird from a distance to observe its behavior and that of the parents. In the case of albatross and other seabirds, the parents may leave the chick unattended for hours or even days at a time before returning with food, and larger chicks may wander some distance from the nest and may not be in the immediate vicinity of the nest. The parents can still recognize them under these circumstances by their calls and possibly by their smell. Only if it is certain that the chick is orphaned or abandoned and in immediate danger of dieing should it be picked up and brought to a licensed bird rehabilitator.

REFERENCES

Department of Land and Natural Resources. Ka'ena Point Natural Area Reserve Management Plan. Undated management plan. 18 pp.
Hodges, C. S., and R. J. Nagata. 2001. Effects of predator control on the survival and breeding success of the endangered Hawaiian Dark-rumped Petrel. *Studies in Avian Biology* 22:308-318.

continued next page

Natural and Cultural History Tours of Kailua Ahupua'a and Kawai Nui Marsh

Sponsored by the Kawai Nui Heritage Foundation, 'Ahahui Malama I ka Lokahi and The Kailua Hawaiian Civic Club

Educational tours of Kailua Ahupua'a and Kawai Nui Marsh are offered to inform residents and visitors about the Hawaiian archaeological, historic and ecological resources of the marsh. There are also service learning trips for elementary through college age students to various sites around the marsh.

The tour groups meet at Ulupo Heiau next to the Windward Kailua YMCA at 8:30 am and walk as well as car pool to the various sites. Return trip is usually back at the Windward YMCA by 1:00 pm. A donation fee of \$5.00 for non-members and \$3.00 for members will be accepted for the tour. Monies are used to support cultural and ecological restoration work at Kawai Nui Marsh. Group size will be limited to 25 persons.

DATES OF 2005 KAWAI NUI TOURS

- Sat. February 5 Native Plant Revegetation Projects in Kawai Nui Marsh
- Sat. March 2 Aquatic Animals & Insects of Kawai Nui Streams & Marsh
- Sat. April 3 Archaeological sites and historic sites of Maunawili Valley

- Sat. June 4 Ho'olaulea at Ulupo Heiau
- Sat. September 3 Cultural and Natural History Tour of Kawai Nui Marsh.
- Sat. October 1 Geology of the Kailua Ahupua'a
- Sat. November 5 Archaeological & Historic Sites of Kawai Nui Marsh
- Sat. December 3 Birds of the Marsh (Kawai Nui, Hamakua & Kaelepulu)

(Dates or tours may be subject to change depending on weather or other circumstances. Check update at website: <http://www.ahahui.net/>)

WHAT TO BRING: Backpack or Fanny-pack, walking shoes, water bottle, mosquito repellent, sunscreen, rainwear, hat or cap, sunglasses. Optional camera and binoculars.

Please call Chuck "Doc" Burrows for more information and to register for these educational tours at: **595-3922** or email: ahahui@hawaii.rr.com

Smith, D.G., J.T. Polhemus, and E.A. VanderWerf. 2002. Comparison of managed and unmanaged Wedge-tailed Shearwater colonies: effects of predation. *Pacific Science* 56:451-457.

Sugimura, N., D. G. Smith, M. Ono, B. R. Liesemeyer, and C. Swenson. 2003. Effects of predator control on seabird breeding at Ka'ena Point, O'ahu, Hawai'i. Poster presentation, Hawai'i Conservation Conference, Honolulu, Hawai'i.

Tripathy, D. N. 1993. Avipox viruses. Pp. 5-15 in *Virus infections of Birds* (J. B. McFerran and M. S. McNulty, Eds.). Elsevier, New York.

U.S. Fish and Wildlife Service. 1987. Field guide to wildlife diseases. Volume 1. General field procedures and diseases of migratory birds (M. Friend, Ed.). U.S. Department of the Interior, Fish and Wildlife Service, Resource Publication 167. Washington, D.C.

VanderWerf, E. A., 2001c. Distribution and potential impacts of avian poxlike lesions in 'Elepaio at Hakalau Forest National Wildlife Refuge. *Studies in Avian Biology* 22:247-253.

van Riper, C., III, S. G. van Riper, M. L. Goff, and W. R. Hansen. 2002. Epizootiology and effect of avian pox on Hawaiian forest birds. *Auk* 119:929-942.

Warner, R.E. 1968. The role of introduced diseases in the extinction of the endemic Hawaiian avifauna. *Condor* 70:101-120.

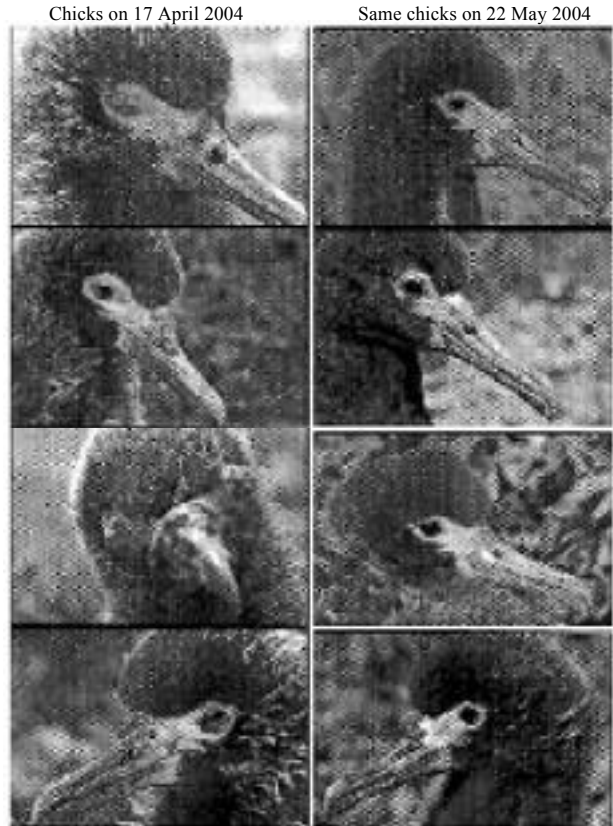
Whittow, G.C. 1993. Laysan Albatross (*Diomedea immutabilis*). In *The Birds of North America*, No. 66. (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.

¹ U.S. Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office, 300 Ala Moana Blvd., Room 3-122, Box 50088, Honolulu, HI 96821.

² U.S. Fish and Wildlife Service, Office of Law Enforcement, 300 Ala Moana Blvd., Rm. 7-235, Box 50223, Honolulu, HI 96850

³ University of Hawaii, Department of Zoology, Edmondson Hall, 2538 The Mall, Honolulu, HI 96822.

Figure 1. Laysan Albatross chicks at Ka'ena Point, O'ahu with lesions probably caused by avian pox virus, which is transmitted by mosquitoes. The same chicks are shown on 17 April 2004, when infections were severe, and on 22 May 2004 when most birds had fully recovered. All 14 albatross chicks at Ka'ena Point in 2004 were infected with pox; 11 of them recovered and fledged, 2 died, and 1 was wrongly removed from its nest and euthanized. All photos by Eric VanderWerf.



Membership in Hawaii Audubon Society

Regular US Member

(via bulk mail, not forwardable) \$ 15.00
 First Class Mail \$ 21.00
 Junior Members (18 and under) \$ 10.00
 Supporting Member\$100.00

Foreign Membership (Airmail)

Mexico \$ 21.00
 Canada \$ 22.00
 All other countries \$ 28.00

Donations are tax deductible and gratefully accepted.

Name _____

Address _____

City, State, Country, Zip _____

Phone _____ Email _____

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

New Membership Renewal

Please make checks payable to Hawaii Audubon Society and mail to us at 850 Richards St., #505, Honolulu, HI 96813.
 PLEASE LET US KNOW IF YOUR ADDRESS CHANGES.



HAWAII AUDUBON SOCIETY
850 RICHARDS STREET, SUITE 505
HONOLULU, HAWAII 96813-4709

Nonprofit Organization
U.S. Postage
PAID
Honolulu, Hawaii
Permit Number 1156

ADDRESS SERVICE REQUESTED

‘ELEPAIO • 65:1 • FEBRUARY 2005

Calendar of Events

Saturday, January 29 Annual Board Retreat and Board Meeting at Hawaiian Trail and Mountain Club 8:30am to 4:30pm.

February 21 Program Meeting Whales! Christine Brammer will present of an overview of the National Marine Sanctuary Program. See page 2

February 26 Field Trip Whale Watch Cruise. See page 2

April 18 Program Meeting Kolea Research Update by Dr. Wally Johnson. Look for a lecture description in the March ‘Elepaio.

Table of Contents

Pox virus in Laysan Albatross chicks at Ka‘ena Point, O‘ahu: How can we help?1

February 21 Program Meeting2

Board of Directors for 2005.....2

Field Trips for 2005.....2

Attention Plover Lovers! Kolea Watch Update2

Po‘ouli Death Leaves Species’ Future Uncertain3

What Kine Mane?3

National Audubon Releases Report, “State of Birds”4

8th Annual Great Backyard Bird Count5

Natural and Cultural History Tours6

Membership Application.....7