

How Are Native Birds Doing at the Pu'u Wa'awa'a Forest Bird Sanctuary?

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Native songbirds in the Kona districts of Hawai'i Island are in trouble because of the historic and ongoing conversion of their native forest habitat to pasture. In the forests that remain, the incursion of various non-native species, particularly bird diseases, have eliminated most species of forest birds at low and middle elevations (Scott et. al. 1986, Gorresen et al. 2009). Thirty-one years ago, in 1978, the Hawai'i Forest Bird Survey found the endangered forest bird species restricted in Kona to two small areas of high elevation forest, one on the northern slope of Mt. Hualālai and the other in central Kona on western slope of Mauna Loa (Scott et al. 1986). Significant portions of these areas are now protected by the State of Hawai'i's Pu'u Wa'awa'a Forest Bird Sanctuary on Hualālai and by the U.S. Fish and Wildlife Service's Kona Forest Unit of the Hakalau Forest National Wildlife Refuge in central Kona.

The 3,800 acre (1,500 ha) Pu'u Wa'awa'a Forest Bird Sanctuary (hereafter just Pu'u Wa'awa'a) was established in 1984 to protect habitat for the 'Alalā or Hawaiian Crow (*Corvus hawaiiensis*) (Banko 2009). Although the sanctuary no longer harbors this species, it may someday be a site for release of captive-reared 'Alalā. Endangered forest birds that are still present in the sanctuary are the 'Io (*Buteo solitarius*), Hawai'i Creeper (*Oreomystis mana*), and Hawai'i 'Ākepa (*Loxops c. coccineus*). To improve habitat for these species and the other forest birds that are not endangered, the sanctuary was enclosed by a cattle fence in 1989, and cattle were removed from 1985 to 1989, allowing for natural recruitment of native trees (J. Giffin, pers. comm.). In 2005, the cattle fence was replaced by a new fence that would also exclude feral pigs, goats, and sheep. Division of Forestry and Wildlife personnel are now removing these animals and controlling weeds to accelerate forest recovery. In light of these habitat improvement efforts,

and realizing that habitat outside the sanctuary has been lost at the same time (Blackmore and Vitousek 2000), how have native forest birds fared at Pu'u Wa'awa'a?

We report the highlights of the 2009 forest bird count at Pu'u Wa'awa'a, held April 4 and 5, and compare these to the results of previous counts. The Pu'u Wa'awa'a count is conducted every six years or so, and birds are counted along four transects (Fig. 1). Methodology for the counts follows the same point-transect procedures (otherwise known as variable circular plot counts) established by Scott et al. (1986) and continued ever since by

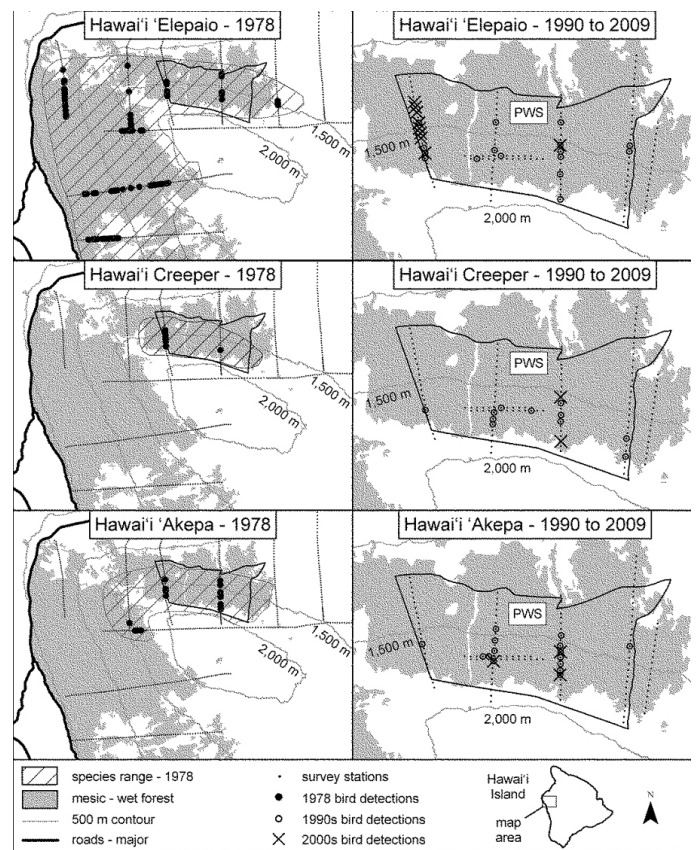


Figure 1. Distribution of detections of rare forest birds on Mt. Hualālai and at Pu'u Wa'awa'a Forest Bird Sanctuary (PWS), Hawai'i Island. In addition, there were sightings in 2009 of Hawai'i 'Ākepa along the eastern boundary of the sanctuary (see text).

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bird surveys throughout the state (Camp, Reynolds, et al. 2009). During this year's survey, we enjoyed the hospitality and expert logistics of Nick Agorastos and his Natural Area Reserve crew. The weather was fine for counting birds.

ENDANGERED FOREST BIRDS

Pu'u Wa'awa'a supports perilously small, isolated populations of Hawai'i Creeper and Hawai'i 'Ākepa, so we were delighted to find both species still present, albeit just a few birds. We encountered only one Hawai'i Creeper, a bird that was heard singing but was not seen. This species seems to be barely hanging on at Pu'u Wa'awa'a, with only two detections in the past 10 years (Figs. 1 and 2, Table 1).

There seem to be more Hawai'i 'Ākepa than creepers at Pu'u Wa'awa'a, as indicated by recent surveys (Figs. 1 and 2, Table 1). We detected four Hawai'i 'Ākepa. Two were seen, both bright orange males, and two other detections were of

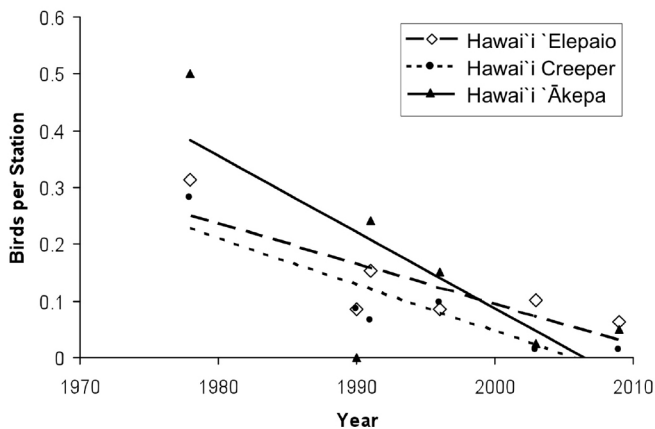


Figure 2. Trends in rare forest bird detections during point counts at Pu'u Wa'awa'a Forest Bird Sanctuary, Hawai'i Island. Shown are number of detections per station and associated trends for the three rarest species. Only detections by primary counters were used.

Year	Month	No. Stations	HAEL	HCRE	HAAK
1978	June	32	10	9	16
1990	May	35	3	3	0
1991	May	91	14	6	22
1996	May	93	8	9	14
2003	April	78	8	1	2
2009	April	80	5	1	4

Table 1. Detections of Hawai'i 'Elepaio (HAEL), Hawai'i Creeper (HCRE), and Hawai'i 'Ākepa (HAAK), in the Pu'u Wa'awa'a Forest Bird Sanctuary. Detections are from primary counters only.

singing birds. This species also has been found less frequently in this decade as compared with the 1990s and 1970s. Hawai'i Creeper and Hawai'i 'Ākepa occupied tall, old growth forest on the two central transects in a thin elevational band above 5,000 feet (1,500 m). However, subsequent to the survey, on May 20 and about a week later, sightings of single male 'Ākepa were made on two occasions along the eastern boundary of the sanctuary above 5,000 feet elevation (1,500 m; N. Agorastos and M. Donoho, pers. comm.).

In addition, several 'Io were seen incidentally during our survey. This species is regarded as fairly common at the sanctuary but has not been monitored there.

NON-ENDANGERED FOREST BIRDS

Hawai'i 'Elepaio (*Chasiempis s. sandwichensis*) were either unusually quiet or generally absent. We found only four of these birds during counts, all but one of them on the western-most transect. In comparison, research on Hawai'i 'Elepaio in 2006 and 2007 found this species to be common at certain locations in the sanctuary (E. VanderWerf, pers. comm.). Although the sanctuary was the site of an experimental release of wild and captive-reared 'Āma'o (*Myadestes obscurus*) in 1996 (Fancy et al. 2001), surveys since 1999 have not heard or seen any,

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nor did we. Good numbers of 'I'iwi (*Vestiaria coccinea*) were present, with 2-3 birds heard or seen at nearly all stations above 5,000 feet (1,500 m). 'Apapane (*Himatione sanguinea*) were abundant throughout the sanctuary as expected, and Hawai'i 'Amakihi (*Hemignathus v. virens*) were superabundant from the top to the bottom of the steep mountainside.

We also recorded a single detection of the Japanese Bush-Warbler (*Cettia diaphone*), a non-native bird of interest because it is rapidly spreading on Hawai'i Island. This species was first detected at Pu'u Wa'awa'a in 1998 (U.S. Geological Survey, Hawai'i Forest Bird Database, unpub. data).

An analysis of bird counts at Pu'u Wa'awa'a from 1978 to 2003, when the previous counts were conducted, found the following trends for the native birds (Camp, Gorresen, et al. 2009). Hawai'i Creeper, Hawai'i 'Ākepa, and Hawai'i 'Elepaio populations at the sanctuary have diminished to the point where these birds are now localized and very rarely detected (Figs. 1 and 2), a trend that did not improve with the 2009 count data. 'I'iwi densities showed a steady decline from 384 birds/km² in 1978 to 196 birds/km² in 2003, for a ballpark estimate of 3,000 birds in the sanctuary. Over the same period, 'Apapane densities changed little starting with 978 birds/km² and ending with 1,039 birds/km², or approximately 15,000 birds. However, Hawai'i 'Amakihi densities essentially doubled from 939 to 2,189 birds/km², or about 33,000 birds.

NATIVE FOREST BIRDS AT PU'U WA'AWA'A FOREST BIRD SANCTUARY: IS THE GLASS HALF EMPTY OR HALF FULL?

On the face of it, the declining bird trends at Pu'u Wa'awa'a are discouraging news. The last sighting of an 'Alalā there was in the early 1990s (Banko et al. 2002). Populations of four native forest bird species—Hawai'i 'Elepaio, Hawai'i Creeper, Hawai'i 'Ākepa, and 'I'iwi—are shrinking at Pu'u Wa'awa'a, and the creeper and 'Ākepa are so rare they seem about to disappear altogether. The glass for them looks nearly empty.

Perhaps these population declines can be explained by the recent 30-year history of habitat disturbance inside and outside the sanctuary. Inside the sanctuary, portions of old growth forest were selectively logged by the leasee of Pu'u Wa'awa'a Ranch in the 1980s, and cattle grazing ended there only in the late 1980s (Tummons 1991). Fire destroyed a swath of forest in the eastern portion of the sanctuary in 1995 (J. Giffin, pers. comm.). Although the forest in the sanctuary has been regenerating spectacularly for two decades in the absence of cattle, other feral animals—pigs, feral sheep, and mouflon—have been interfering with forest recovery until very recently. Outside the sanctuary, cattle grazing continues to the west. To the east, state lands were designated as forest reserve in 2007, but game animals remain for public hunting. Thus, the habitat on both sides of the sanctuary has had a long history of forest disturbance by ungulates.

Another environmental factor, rising temperatures associated with global warming, is likely to be favoring two deadly mosquito-borne diseases, avian malaria (*Plasmodium relictum*) and avian poxvirus (*Avipoxvirus*; Benning et al. 2002, Atkinson and LaPointe 2009). These diseases would

be expected to most affect Hawai'i Creeper, Hawai'i 'Ākepa, and 'I'iwi either because of their greater susceptibility to the diseases or because of intrinsic life history factors, such as low fecundity, that would hinder their population recovery after losses to disease (Banko and Banko 2009). The feral pigs in the sanctuary have likely been facilitating avian malaria and avian pox because the animals create conditions for mosquitoes breeding (LaPointe et al. 2009).

Taking a more optimistic view, however, could the glass be half full? Luckily, the Hawai'i Creeper and Hawai'i 'Ākepa still survive at Pu'u Wa'awa'a, an encouraging prospect considering the extirpation of these birds everywhere else in Kona except for their equally small and tenuous presence at the Kona Forest refuge. Persistence of these endangered birds indicates that conditions at Pu'u Wa'awa'a have been right for their continued, albeit diminished, existence. This might buy time to control the factors that threaten the birds so that their populations could improve.

It would be informative to learn how large the endangered creeper and 'Ākepa populations are both inside and adjacent to the Pu'u Wa'awa'a Forest Bird Sanctuary, and where they are distributed. Survey results so far have yielded insufficient data to estimate their population sizes but suggest that the sanctuary populations of these species amount at best to only a few dozen birds each. Because current surveys are limited to only four transects that cut across the narrow band of high-elevation forest occupied by the endangered birds, expanded sampling should follow the contour of the forest band. Sampling for creeper and 'Ākepa could entail either more point count stations or a different technique—systematic rare bird searches using taped recordings (Camp, Reynolds, et al. 2009). Focused surveys using playbacks are also recommended for Hawai'i 'Elepaio and could shed light on that species' seemingly patchy distribution within the sanctuary. Sampling could be extended to the west and include suitable habitat on the northwest rift of Hualālai where 'Ākepa were found by the Hawai'i Forest Bird Survey (Fig. 1).

Note that the two common species—Hawai'i 'Amakihi and 'Apapane—are still abundant. 'Amakihi have increased, probably because of the widespread secondary growth of koa (*Acacia koa*) and māmane (*Sophora chrysophylla*), especially at the lower elevations in the sanctuary. This adaptable species has shown a similar positive response to koa regrowth at the Hakalau Forest Unit of the Hakalau Forest National Wildlife Refuge, but not at Keauhou, both also on Hawai'i Island (Camp, Jacobi, et al. in press; Camp, Pratt, et al. in press). The resurgence of banana poka vines (*Passiflora tarminiana*) following cattle removal may also have benefited 'amakihi, which take nectar from these flowers. Hopefully, the populations of other forest bird species at the sanctuary may increase as the vegetation, especially 'Āhi'a-lehua (*Metrosideros polymorpha*), so important for food and nest sites, gradually recovers. This process will take many decades.

What steps could be taken to further help the birds at Pu'u Wa'awa'a and fill the glass back up? From any angle, habitat at Pu'u Wa'awa'a looks to be in short supply. Only about half

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of the 3,000 acres (1,200 ha) with old-growth forest in the sanctuary lies above 5,000 feet (1,500 m) elevation, where native birds can be expected to escape avian malaria and pox. Completing the removal of feral pigs, feral sheep, and mouflon is an immediate and necessary first step to speed up habitat recovery and decrease the transmission avian malaria and pox.

A second important step is to restore the forest outside the sanctuary. Mid to tall-stature forest on northern slopes of Hualālai totals to about 4,500 acres (1,800 ha), of which 3,000 acres (1,200 ha) are within the Pu'u Wa'awa'a Forest Bird Sanctuary. This means that about 30% (1,500 acres [570 ha]) of contiguous forest habitat lies immediately outside the sanctuary. This habitat long grazed by ungulates is a dying forest with essentially no understory and with such limited tree recruitment that dead trees are not replaced. Protection of this area from ungulates would lead to reforestation and provide habitat contiguous to the sanctuary that could be increasingly occupied by forest birds.

Pu'u Wa'awa'a Forest Bird Sanctuary offers one of two last chances to save endangered forest birds in Kona (the other opportunity being at the Kona Forest refuge). Habitat at the sanctuary has benefitted from the management set in motion twenty years ago and recently accelerated with renewed vigor by present efforts to remove the remaining ungulates. Only time will tell whether the endangered Hawai'i Creeper and Hawai'i 'Ākepa at Pu'u Wa'awa'a can turn around and make a comeback.

ACKNOWLEDGMENTS

Many thanks to Nick Agorastos and DOFAW for hosting this survey. Nick Agorastos, Jon Giffin, Lisa Hadway, David Leonard, and Eric VanderWerf provided comments on an early draft of this paper.

LITERATURE CITED

- Atkinson, C. T., and D. A. LaPointe. 2009. Ecology and pathogenicity of avian malaria and pox. Pp. 234-252 in T. K. Pratt, C. T. Atkinson, P. C. Banko, J. D. Jacobi, and B. L. Woodworth. Conservation biology of Hawaiian forest birds: Implications for island avifauna. Yale University Press, New Haven, CT.
- Banko, P. C. 2009. 'Alalā. Pp. 473-486 in T. K. Pratt, C. T. Atkinson, P. C. Banko, J. D. Jacobi, and B. L. Woodworth. Conservation biology of Hawaiian forest birds: Implications for island avifauna. Yale University Press, New Haven, CT.
- Banko, P. C., D. L. Ball, and W. E. Banko. 2002. Hawaiian Crow (*Corvus hawaiiensis*). In *The birds of North America*, No.

648. (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.

Banko, W. E., and P. C. Banko. 2009. Historic decline and extinction. Chapter 2 in T. K. Pratt, C. T. Atkinson, P. C. Banko, J. D. Jacobi, and B. L. Woodworth. Conservation biology of Hawaiian forest birds: Implications for island avifauna. Yale University Press, New Haven, CT.

Benning, T. L., D. LaPointe, C. T. Atkinson, and P. M. Vitousek. 2002. Interactions of climate change with biological invasions and land use in the Hawaiian Islands: Modeling the fate of endemic birds using a geographic information system. Proceedings of the National Academy of Sciences (USA) 99: 14246-14249.

Blackmore, M., and P. M. Vitousek. 2000. Cattle grazing, forest loss, and fuel loading in a dry forest ecosystem at Pu'u Wa'awa'a Ranch, Hawai'i. *Biotropica* 32: 625-632.

Camp, R. J., P. M. Gorresen, T. K. Pratt, and B. L. Woodworth. 2009. Population trends of native Hawaiian forest birds: 1976-2008. Technical Report HCSU-012. Hawai'i Cooperative Studies Unit, University of Hawai'i at Hilo, HI.

Camp, R. J., J. D. Jacobi, T. K. Pratt, P. Marcos Gorresen, and T. Rubenstein. In press. Status and trends of native birds in the Keauhou and Kīlauea forest, Hawai'i Island. Technical report, Hawai'i Cooperative Studies Unit, University of Hawai'i at Hilo, HI.

Camp, R. J., T. K. Pratt, P. M. Gorresen, J. J. Jeffrey, and B. L. Woodworth. In press. Population trends of forest birds at Hakalau Forest National Wildlife Refuge, Hawai'i. *Condor*.

Camp, R. J., M. H. Reynolds, P. M. Gorresen, T. K. Pratt, and B. L. Woodworth. 2009. Monitoring Hawaiian forest birds. Pp 83-107 in Conservation biology of Hawaiian forest birds: Implications for island avifauna (T. K. Pratt, C. T. Atkinson, P. C. Banko, J. D. Jacobi, and B. L. Woodworth, eds.). Yale University Press, New Haven, CT.

Fancy, S. G., J. T. Nelson, P. Harrity, J. Kuhn, M. Kuhn, C. Kuehler, and J. G. Giffin. 2001. Reintroduction and translocation of 'Ōma'o: A comparison of methods. *Studies in Avian Biology* 22: 347-353.

Gorresen, P. M., R. J. Camp, M. H. Reynolds, T. K. Pratt, and B. L. Woodworth. 2009. Status and trends of native Hawaiian songbirds. Pp. 108-136 in Conservation biology of Hawaiian forest birds: Implications for island avifauna (T. K. Pratt, C. T. Atkinson, P. C. Banko, J. D. Jacobi, and B. L. Woodworth, eds.). Yale University Press, New Haven, CT.

LaPointe, D. A., C. T. Atkinson, and S. I. Jarvi. 2009. Managing disease. Pp. 405-424 in T. K. Pratt, C. T. Atkinson, P. C. Banko, J. D. Jacobi, and B. L. Woodworth. Conservation biology of Hawaiian forest birds: Implications for island avifauna. Yale University Press, New Haven, CT.

Scott, J. M., S. Mountainspring, F. L. Ramsey, and C. B. Kepler. 1986. Forest bird communities of the Hawaiian Islands: their dynamics, ecology, and conservation. *Studies in Avian Biology* No. 9.

Tummons, P. 1991. The 'saga' of the koa. *Environment Hawai'i*. 1(9):4.

Program Meeting - Monday February 22

CLIMATE UPDATE

Dr. Chip Fletcher, Chair of the University of Hawaii Department of Geology and Geophysics, will speak on global sea level rise and the possible impacts in Hawaii. Dr. Fletcher's research areas include coastal geology, Holocene and Late Quaternary sea-level change, sedimentary records of environmental change, coastal zone management, and coastal hazard management.

Program Meetings are sponsored by HAS and the UH Biology Department, and are held at UH Manoa's St. John lab building (Botany Building) in room 011 (ground floor auditorium). The address is 3190 Maile Way. Attendance is free and open to the public.

Freeman Seabird Preserve Fieldwork Opportunity

**Volunteers needed for Habitat Restoration
each Sat. morning January through March
2010**

During the month of December, Wedge-tailed Shearwater chicks and adult birds leave the Freeman Seabird Preserve at Black Point to live at sea for several months before returning in the latter part of March to nest. Volunteers are needed for fieldwork at the site on Saturday mornings from 9am to 1pm beginning January 2. We plan to continue removal of invasive plants, trash and debris, along with other activities to assist the professional landscaping crew from Hui Ku Maoli Ola who will be working at FSP during the week.

Please contact the Hawaii Audubon Society office by phone or e-mail in advance if you would like to participate. Plan on bringing drinking water, sun and rain protection, gloves, and any small tools you might find useful.

FREEMANS' CHALLENGE GRANT BOOSTS FUNDRAISING



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HAS needs only \$2,158 to complete our Drive, thanks to the pledge from Buck and Graeme Freeman to match every dollar raised up to \$15,000. Please help us reach our goal by sending in your contribution!

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New Book Reviews

Ron Walker 1/3/2010

The Alaka'i, Kaua'i's Unique Wilderness

by Fernando Penalosa

Sponsored by the Koke'e Resource Conservation Program.

2009. Quaking Aspen Books, Rancho Palos Verdes, CA.

207 pages with black and white photos, 46 color plates and maps.

This is a scrupulously researched and comprehensive story of the Alaka'i plateau on the Island of Kaua'i. The author is obviously enamored of the place which he first visited in 1997 and returned to frequently over the years. He covers the history of the Alaka'i in excruciating but fascinating detail and doesn't shrink from addressing controversies such as proposals to build a road through it, declare it a National Park or build a hydroelectric plant there. The author even brings the Superferry controversy into the picture. He doesn't avoid editorializing about the needs to address the threats to the integrity of the region including feral pigs, alien plants, helicopter overflights and expansion of Koke'e State Park. As an educational tool, discussions about native and introduced plants, birds, mammals, fungi and insects are covered in the book along with beautiful color photographs. A chapter on the "The Alaka'i in Song and Story" graces the end of the publication. For those who have visited there and enjoyed its ambiance or even those who have just read snippets about it, this book about the Alaka'i is highly recommended.

Conservation Biology of Hawaiian Forest Birds. Implications for Island Avifauna

Pratt, T.K., C.T. Atkinson, P.C. Banko, J.D. Jacobi and
B.L. Woodworth, Editors. 2009. Yale University Press,
New Haven and London. 707 pgs.

Not since 2001 has such a thorough discussion of the plight of native forest birds in Hawaii been provided. In that year, "Forest Bird Communities of the Hawaiian Islands: Their Dynamics, Ecology and Conservation" was written by J.M. Scott, S. Mountainspring, F.L. Ramsey and C.B. Kepler. Also in that year, J.M. Scott, S. Conant and C. Van Riper III produced "Evolution, Conservation, and Management of Hawaiian Birds: A Vanishing Avifauna". This book has been thoroughly researched (60 pages of references), updates what is known about the status of native forest birds, and gives recommendations for conservation.

The book is organized into 5 parts: part 1 introduces the Hawaiian avifauna; part 2 reviews the biology of Hawaiian forest birds and their limiting factors; part 3 discusses conservation of forest birds and ecosystems; part 4 gives case studies with necessary actions; and part 5 covers trends and the future of research and conservation. There are 32 color plates featuring photographs by award-winning photographer, Jack Jeffrey.

A review by Dr. John W. Fitzpatrick, director of the Cornell Laboratory of Ornithology and member of the 'Alala Recovery Team, aptly praises this publication:

"This book is at once an encyclopedia chronicling a global-scale tragedy, and a masterpiece call-to-arms for

saving and restoring what remains of the unique and beautiful Hawaiian avifauna. Thane Pratt and coeditors are outstanding biologists and conservation heroes. For this compendium they assembled the entire who's who of experts on Hawaiian birds and conservation, and they detail the complicated historical, cultural, biological, political, and even ethical aspects of the plight of Hawaiian forest birds. From habitat destruction and agricultural monocultures to alien mammals and a pair of wicked, introduced diseases, Hawaiian birds have steadily succumbed to the full litany of human environmental scourges. The authors make a compelling case that significant conservation investment in Hawaii is vastly overdue, for we still can save the precious few species that remain".

(For another review, see "Environment Hawaii" monthly newsletter, Vol. 20, #7, January 2010, pgs. 1, 4-8.)

A Photographic Guide to the Birds of Hawai'i; The Main Islands and Offshore Waters

J. Denny. 2010. University of Hawaii Press, Honolulu, HI.

This beautifully presented publication features exquisite photographs of Hawaiian birds mostly by Jack Jeffrey and the author.

Some will see this as competitive with the Hawaii Audubon Society 2005 issue of "Hawaii's Birds" in terms of a guide for identifying our local birds. Others will value it as complementary to it. "Hawaii's Birds shows 137 species; this one has pictures and descriptions of 170 species. Similar to the Audubon book, this guidebook separates into broad habitat descriptions labeled "Urban Birds", "Country Birds",

"Forest Birds", "Wetland Birds" and "Seabirds". It also gives a code to the reader's chances of seeing a bird by categorizing each as "Abundant", "Common", "Endangered", "Rare", "Threatened" or "Uncommon" and listing the distribution by island in an appendix. For any birder in Hawaii, this would be a valuable reference.

Hawaiian Birds of the Sea. Na Manu Kai

R.J. Shallenberger. 2010. University of Hawaii Press,
Honolulu HI. 110 pgs.

This classy publication is more than an attractive "Coffee Table" book. It combines a recognized ornithologist's knowledge of seabirds and a competent photographer's view of them under one cover. There are 135 color photographs, mostly by the author, which depict our seabirds including the very rare Short-tailed Albatross. The discussions of each species give insight into their life cycles and styles peppered with delightful personal anecdotes. From a practical standpoint, the book lists places to look for seabirds, appends a seabird classification chart, and gives observation and photographic tips. It also includes discussions of seabird cultural connections and conservation challenges. Creating this book was obviously a labor of love for "Rob".

Elepaio Submissions

We are currently looking for submissions for 2010.

Please send us your Hawaii wildlife artwork, poems, short stories, and scientific articles.

Who knows - maybe it will make an issue!

Field Trip Saturday February 27th

Come join the Hawai'i Audubon Society on board the Starlet for a Wild Whale Watch! John Harrison will be leading this trip. Fun for the whole family! Please call Casey at the office for more information and to reserve your spot! We look forward to whale watching with you!

Reminder

Please remember to renew your memberships for 2010 fill out the form on pg 5 and return it to us ASAP!

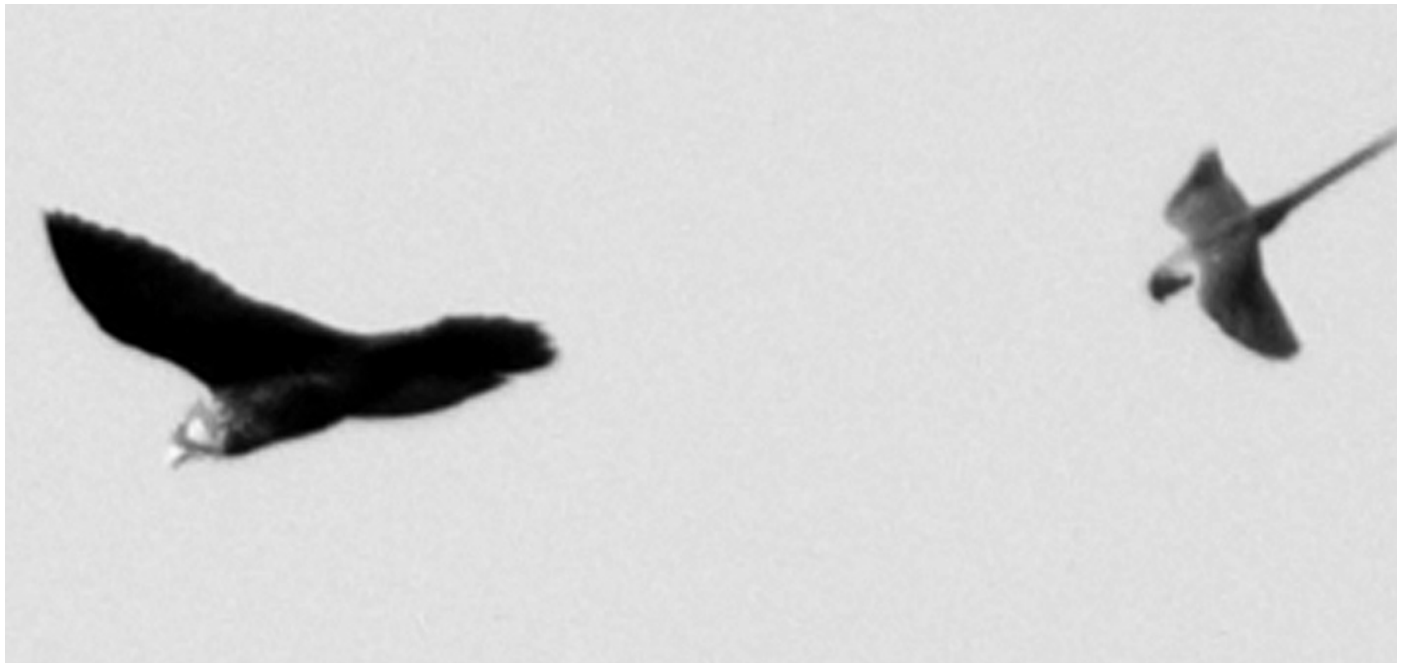
Christmas Bird Count (Molokai)

By 9 year old Eric Svetin 12/14/09

Yesterday, I participated in the 109th Annual Christmas Bird Count. The kids counting with me were Moriah and Lily Jenkins, Noah Keanni, and Genivive Kikukawa. We went with Aunty Arleone. First, we went to Koleo wetland and saw 3 stilts. There was two babies and a mother stilt. The dad wasn't there. It was odd. Second we went to the Molokai Shrimp Farms. We got to see how the shrimps are farmed. When we got in the ponds, we saw tons of birds. We saw Wandering Tattlers, Kōlea, Curlews, Auku'u. Then we went to Palau House. Third, we went to Ohiapilo. We saw Stilts, Coots, Pintails and Auku'u. Then, we had lunch at Koheo Wetland. While we were there, we saw 2 Curlews and a Whimbrel. Fourth we went to the Waste Water Treatment Plant. We saw at least 20 stilts and 70 Coots there. We saw the rare Greater White Fronted Goose from the North Arctic! Wow! Finally, we went to the Kualapu'u Waste Water Treatment Plant. We saw 30 Pintails and a Shovler. But, my highlight of the day was the Bufflehead. Unfortunately, the daddy stilt was probably killed by a cat because it wouldn't abandon its kids. But, I had a great time. I can't wait until next year!

MAHALO

The Hawai'i Audubon Society would like to send out a huge MAHALO to everyone that has helped us reach our fundraising goals! MAHALO NUI LOA



A Rose-ringed Parakeet chasing a visiting Peregrine Falcon over Punchbowl. Photo taken by Gerald Emmerich.



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Calendar of Events

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