'ELEPAIO

Journal of the Hawaii Audubon Society



For the Protection of Hawaii's Native Wildlife

VOLUME 51 NUMBER 3

MARCH 1991

1990 CHRISTMAS BIRD COUNT FOR MAUI YIELDS 31 SPECIES

The island of Maui's 1990 Christmas bird count was a success, reports Dr. Fern Duvall II of Makawao, the compiler of the results of the 15 December operation.

Thirty-one birders spent the day in a 176-square-mile woodland area centered on the 4000-foot elevation on the northeastern flank of Haleakala about two miles east of Puu O Kakae. The temperature ranged from 42 degrees at 0645 when the count started to a high of 86 degrees. The wind was light and variable, while the sky went from clear to partly cloudy.

The six parties spent 29.25 party-hours in the field and

traveled 73 party-miles on foot and by car.

Participants in the count were Jeffrey Bagshaw, Elaine Bows, Lesley Bruce, Brenda Clawson, Kai Duvall, Mary Evanson, Renate Gassmann-Duvall, Carol Gentz, Lorna Harrison, Ian Kinnear, Lloyd Loope, Arthur Medeiros, Elias Poulson, Elizabeth Rave, Bunny Reeser, Donald Reeser, Ann Reid, Alan Swain, Dan Turk, and David Wilson.

Puu O Kakae, Maui

15 December 1990

Species and Numbers: White-tailed Tropicbird (Phaethon lepturus dorotheae) 1; Great Frigatebird (Fregata minor palmerstoni) 6; Cattle Egret (Bulbulcus ibis) 9; Black-crowned Night-Heron (Nycticorax nycticorax hoactli); Hawaiian Goose (Nesochen sandvicensis) 2: Black Francolin (Francolinus francolinus) 2; Gray Francolin (Francolinus pondicerianus) 1; Chukar (Alectoris chukar) 4; Red Junglefowl (Gallus gallus) 2: Ring-necked Pheasant (Phasianus colchicus) 5: Lesser Golden-Plover (Pluvialis dominica (fulva)) 96; Rock Dove (Columba livia) 110; Spotted Dove (Streptopelia chinensis) 46; Zebra Dove (Geopelia striata) 66; Common Barn Owl (Tyto alba) 1; Hawaiian Owl (Asio flammeus sandwichensis) 1*; Eurasian Skylark (Alauda arvensis) 44; Japanese Bush-Warbler (Cettia diphone)2; Hwamei (Garrulax canorus) 23; Red-billed Leiothrix (Leiothrix lutea) 20; Northern Mockingbird (Mimus polyglottus) 2; Common Myna (Acridotheres tristis) 189; Japanese Whiteeye (Zosterops japonicus) 126; Northern Cardinal (Cardinalis cardinalis) 11; House Finch (Carpodocus mexicanus) 32; Common (Maui) 'Amakihi (Hemignathus virens) 50; Maui Creeper(Paroreomyzamaculata)46; 'I'iwi(Vestiaria coccinea) 60; Akohekohe (Palmeria dolei) 5; 'Apapane (Himatione sanguinea) 237; House Sparrow (Passer domesticus) 59; Nutmeg Mannikin (Lonchura punctata) 18.

NO BATS ON MAUI? LOOK AGAIN

Olinda, Maui



Since moving to the island of Maui in November 1986 we have repeatedly sighted the endangered Opeapea or Hawaiian Hoary Bat (Lasiurus cinereus semotus). Furthermore, we have received numerous reports from other observers, have found and collected dead bats for the Bernice P. Bishop Museum in Honolulu, and have even rescued an injured bat for (successful) rehabilitation.

Consequently, we feel that Kepler and Scott's "Notes on Distribution and Behaviour of the Endangered Hawaiian Hoary Bat..." ('Elepaio Vol. 50 No.7 (July 1990)) should be updated. The paper mentioned only seven dated records of Hawaiian bats on Maui for a period covering nearly twenty years.

We have listed specific records for sixty bats from diverse elevations and habitat types collected from 1987 to 1990 (Table 1). All observations described here were random sightings and also likely to reflect the efforts of observerdependent movement, i.e. most of those providing records live in "Upcountry Maui" (on the slopes of Haleakala).

Bats were seen in areas of pasture-agricultural, rural and urban lands, mixed exotic-native forest, alpine scrubland, and good quality endemic Hawaiian wet forest. Several people have commented that the bats appear to "come from eucalypt trees," and "like to feed over pineapple fields."

As noted by Kepler and Scott, "all but one of the live bats [was] found in late summer or fall." However, we report here sightings for November and December, also. Not listed in the table were four bats observed in January 1991.

NO BATS ON MAUI?

Continued from page 1

Most of the reported sightings come from Upcountry Maui, generally at elevations of 600-2000m or higher. The most bats were seen at 630m. Although most sightings occurred at dusk, F. Duvall repeatedly has seen bats during dawn hours at Olinda.

Observations of bats that were more general in nature and which did not report specific numbers or dates were not included in the table. These more general reports were very important, since they pertained to long-duration or regularly recurring sightings of bats on Maui in summer. Z. Brown Jr. reported regular bat sightings, with ten bats in total, for May and June 1990 above Ulupalakua Ranch headquarters. F. Duvall reported that it was normal for any given day in May, June, July and August to see bats above Olinda forest while on his daily dawn and dusk trips to feed the young Alala in 1988 and 1989. J. N. Martin stated that since moving to Pukalani in 1969 he has regularly seen bats in May, June, and July.

Kepler and Scott reported only two bats in summer on Maui and found the highest concentration in fall; they surmised that bats bred in early summer on Hawaii Island and it was only after the young had attained independence that they migrated and were seen on Maui. Our recent findings of bats on Maui, in contrast, seem to speak at least for a resident bat population, if not for a reproductively active one. Furthermore, several winter sightings make it unlikely that Maui bats hibernate.

Whether due to increased attention or an actual recent increase in numbers, bats were frequently seen on Maui in the past three years. The advent of an exotic and greatly altered landscape may not be so detrimental for the bats as it has been for many of Maui's native forest

We want to thank all who reported their sightings to us.

Fern Duvall Renate Gassmann-Duvall

The foregoing material is based on a letter to the editor of 'Elepaio from Fern Duvall and Renate Gassmann-Duvall, residents of the island of Maui. It has not been refereed.

Sightings of Hawaiian Hoary Bats on Maui 1987-1990

DATE	LOCATION	NO.	ELEV.(m)	HABITAT	OBSERVER	COMMENTS
24 Aug. 1987	Olinda	1	1140	eucalypt, pine	F. Duvall	Flying, 19:24
12 Sept. 1987	Haleakala summit	1	2760	alpine shrubland	HALE Park Staff	Dead; BPBM 175997
14 Sept. 1987	Olinda	1	1140	eucalypt, pine	F Duvall	Flying, 19:02
03 Oct. 1987	Olinda	1	1140	eucalypt, pine	F. Duvall	Flying
11 Nov. 1987	Haleakala summit	1	2760	alpine shrubland	HALE Park Staff	Male; 16gm; rehabilitated

1 Nov. 987	Haleakala summit	1	2760	alpine scrubld	Park staff	dead; mummy
5 Aug. 988	Makawao	1	490	urban	E Duvall	Dead; BPBM 177155
Sept. 988	Olinda	2	1140	eucalypt	N. Murdoch	Flying
24 Oct. 1988	Haleakala summit	1	2760	alpine shrubland	HALE Park Staff	Flying
Mar. 1989	Pukalani Terrace	2	450	pasture, pineapple	J. N. Martin	Flying
17 Apr. 1989	Wailea Resort	1	sealevel	Hotel area	DLNR/DOFAW	Dead; BPBM 178067
16 Oct. 1989	Maliko gulch Kaluanui Rd.	2	420	rural, pineapple	C. Natividad S. Hodges	Flying 18:15
01 Aug. 1990	Puu Piiholo watertank	5	630	eucalypt, pineapple	G. Shishido F. Duvall	Flying
Aug. 1990	Olinda, Nene pens	1	1140	pines	W. Taka	Flying 18:00
02 Sept. 1990	Polipoli	6	1920	conifers	DLNR/DOFAW	Flying near forest fire
02 Sept. 1990	Waipoli Rd.	3	1920	pastures	DLNR/DOFAW	Flying
Sept. 1990	'Kula 200'	1	660	pastures	Z. Brown, Jr.	Flying
17 Sept. 1990	Puu Piiholo watertank	10	630	eucalypt, pineapple	E Duvall, R. Gassmann- Duvall	Flying
Sept. 1990	Crater Road, at last eucalypts	1	1440	pastures	R. Nagata	Flying 18:50
01 Oct. 1990	Crater Road at last eucalypts	7	1440	pastures	R. Nagata	Flying 18:30
09 Oct. 1990	Waikamoi flume	3	1290	wet ohia forest	W. Taka, E. Duvall	Flying 18:30
09 Oct. 1990	Koolau Forest Reserve	1	1290	wet ohia forest	W. Taka E Duvall	Flying 18:50
15 Oct. 1990	Maliko gulch	2	420	rural, pineapple	C. Natividad S. Hodges	Flying
Oct. 1990	Waipoli road at 377 jnct.	1	960	rural, farms	C. Moore	Dead
Oct. 1990	Keokea	2	870	pastures	T. Rodrigues	Flyin
29 Dec. 1990	Kula Copp Road	1	930	rural	E. Anderson	Flyin 19:3
29 Dec. 1990	Puu Piiholo watertank	1	630	eucalypt, pineapple	J. Cumming	

submitted to museum.

HALE = Haleakala National Park Staff

DLNR/DOFAW = Hawaii State Department of Land and Natural Resources/Div. of Forestry and Wildlife Staff Flying: implied probable chasing about and foraging sorties. Time at observation start indicated when known.

BIRDATHON-3 HAWAII CAN'T FLY WITHOUT YOU

Time is running out fast to sign up for Hawaii's Third Annual Birdathon, a joint fundraising event for the Hawaii Audubon Society and the Hawaii state office of the National Audubon Society. This year's event will be on Saturday, 23 March. We plan to field teams on Hawaii, Kauai, Maui, Molokai and Oahu islands.

This fun-filled event (it is not a field trip) operates much like a walkathon. Participants set out after breakfast, rain or shine, to look for, find, and identify individuals of as many resident bird species as they can on their chosen island. With luck, you won't get mired down (we do get off the beaten track) or have a peacock join the team, as one full-plumaged bird did in Birdathon-2.

In preparing for the Birdathon, participants seek sponsors who will contribute to HAS an agreed-upon amount of money (a \$10 minimum contribution is required) for each one seen and, hopefully, verified. The money goes into the Birdathon kitty for division between the Hawaii Auduubon Society treasury and the State Office of National Audubon.

You can participate in any of several ways. Join us as a birder. Novices and experts alike are welcome. All you need is a pair of binoculars, a reasonable store of energy, and a sense of adventure. Each Birdathon team is led by an expert birder, who takes pride in guiding his group to the best places for seeing the greatest numbers of species.

Sponsor sign-up forms and sample pledge letters are available at the HAS office. Remember that your sponsor can claim a tax deduction to the extent allowed by law. Get your friends and relatives to sponsor you, or a team, or the entire state.

To join a team on the Big Island, phone Regie David at 1-329-9141. On Maui, get in touch with Renate Gassmann-Duvall at 1-572-1584. If you want to work on Oahu, Kauai or Molokai or one of the other islands, get in touch with Lynne Matusow at 531-4260.

The Birdathon provides the community with an opportunity to participate in the sport of birding, while raising public awareness of the status of Hawaii's native and exotic species of birds and their habitats. No other event is quite like it.

L. M.

DON'T MISS KAUAI FIELD TRIP

The HAS March field trip to the Kilauea Point National Wildlife Refuge (KPNWR) is on for 17 March. Field trip coordinator Casey Jarman needs a head count. Phone her (956-7489 in Honolulu).

Birders coming to Kauai from the other islands may want to fly directly into Princeville (rather than into Lihue, which requires additional transportation) by the Aloha Island Air flight that arrives from Honolulu at 9:55 AM. They will be picked up between 10 and 10:15 AM by a Society representative for transfer to Kilauea.

It is important that Ms. Jarman know your travel plan, however. Leave a message on her answering machine if she doesn't answer personally.

Kilauea Point is a special place for seeing Hawaii's sea birds— Laysan Albatross, the Black-footed Albatross, the Wedge-tail Shearwater, the Red-footed Booby, the White-tail Tropicbird, Red-tail Tropicbird, Brown Booby, and the Great Frigatebird, to name the most spectacular. It has equal promise for humpback whales, green sea turtles, spinner dolphins and an occasional Hawaiian monk seal.

Before the KPNWR tour begins, wildlife artist Patrick Ching and the refuge staff have scheduled a slide show on Hawaiian sea birds. After visiting the lighthouse area, the group will hike up Crater Hill for a spectacular over-all view of Kauai's north shore.

ENVIRONMENTAL LAW CORNER

M. Casey Jarman

Hawaii Audubon Society Vice President M. Casey Jarman is an assistant professor of law at the University of Hawaii Law School, specializing in environmental concerns. This commentary is on Hawaii's Environmental Impact Statement Law, commonly known as Chapter 343.

Chapter 343 requires Hawaii state and county agencies to prepare an environmental assessment (EA) whenever any of eight types of action is proposed: 1. use of state or county land or funds (other than for acquisition of unimproved land) and for feasibility or planning studies for future projects; 2. use of conservation district land; 3. use in areas designated by law as "shoreline;" 4. use within historic sites included on either the National or Hawaii Register of Historic Places; 5. use within the Waikiki Special District of Honolulu; 6. amendment (by anyone other than the county) to county general plans when such use is for other than agriculture, conservation, or preservation; 7. reclassification of land from conservation district status; and 8. construction or modification of helicopter facilities that may affect land classified as conservation or shoreline or designated as, or considered for, placement as a historic site.

The purpose of the EA is to determine whether a proposed action may have a significant effect on the environment. If the EA so concludes, an Environmental Impact Statement (EIS) will be required. Notice of the decision must be filed with the state Office of Environmental Quality Control (OEQC) which provides public notice of the decision in its **Bulletin**. (Any member of the public can be put on the **Bulletin** mailing list by calling the OEQC.) A decision not to proceed with an EIS is a "negative decision" or "neg dec."

Any action that falls within Chapter 343 cannot go forward until a negative declaration is issued, or a final EIS is accepted.

Responsibility for preparing an EIS lies with the proposer of the action, whether it be a government agency or a private party. Notice of availability of a draft EIS is published in OEQC **Bulletin**. Anyone can request a copy of a draft EIS from the OEQC. Forty-five days are allowed for public comment, after which the preparer must make revisions as well as respond to comments.

If a state agency proposes the action, the Governor is responsible for final acceptance of the EIS. For a county-prepared EIS, this role is played by the mayor. The decision on a party's EIS lies with the agency responsible for project approval.

In all cases, notice of a decision to accept an EIS must be published in the OEQC **Bulletin**. In addition, the parties must be notified personally of the decision and the reasons for it within thirty days. Should the agency fail to do so, the EIS is considered to be accepted and the applicant can begin the project.

Opportunites for citizens or citizen-groups to appeal an EIS decision are limited. An agency's failure to do an EA or an EIS can be challenged by someone other than an applicant only with specific court permission. The same handicap applies to efforts to stop a project for failure to issue a "neg dec" upon completion of the EA.

Public challenge to acceptance of an EIS is permitted only if the objecting party submitted written comment during the EIS review process. Furthermore, specific issues can be litigated only if they were brought up in the earlier written comments.

The existence of this provision underscores the importance of thorough evaluation of an EIS and the submission of all possible objections.

The following agencies can provide detailed information on the EIS process:

Office of Environmental Quality Control 220 South King Street, 4th Fl. • Honolulu, HI 96813 Tel: 1-548-6915

Environmental Center Crawford Hall Room 317 University of Hawaii at Manoa • Honolulu, HI 96822 Tel: 1-956-7361

MAHALO HMSA! MAHALO DONORS! MAHALO VOLUNTEERS!

The Hawaii Audubon Society thanks the Hawaii Medical Services Association (HMSA) for use of its telephone bank during the HAS January fund drive. Two days of phoning to members on Oahu resulted in pledges of more than \$3,000.

"This is the third year that HMSA has helped Hawaii Audubon," commented drive chairman Lynne Matusow. "We would not have been able to raise these much-needed funds without its continued support."

The Society also thanks members and friends whose donations were received between 11 and 31 January 1991:

Peter Adler, Allen Allison, Dr. and Mrs. Robert Ballard, Cynthia Bennett, David Bremer, Phil and Andrea Bruner, Bruce Carlson, Hampton and Meredith Carson, Thomas Cestare, Daniel Char, Walter Choy, Wilbur Collis, Margaret Cook, Ray C. Cranage, Marri Decosin, Donna de Haan, Satoru Doi, Rachelle Enos, Dr. James Fernandes, Donald and Jane Gambill, Sarah Gentry, Emily Giese, Harriet Gilbert, Alvin Grancell, Mary Grantham, Rob and Becky Hommon, Michael Hadfield, Beverly Haid, Lawrence Hirai, Karen Huffman, Robert Husic, and Stephen and Beverly Hyde.

Also, Joy Jeffus, Cully Judd, Judith Kearney, Helen Kiefer, Lt. Col. Larry Kimmel, Lucinda King, Thomas Kling, Fletcher Knebel, Eleanor Koes, William Kruse, Ken Kupchak, Umeno Kuranaka, Therese Kurtz, Douglas Lamerson, Dr. Ivar Larsen, Karen Lombard, Kathy Long, Monica McLaren, Mandy Meier, Fred Metzger, Toshio Minagawa, John and Barbara Mitchell, Steven Montgomery, Sherry Mossbarger, Clarence Nakashima, Valerie Nishida, Tsugito Nishimura, Tim Ohashi, Eric Oshita, Y. Otoshi, Kathy Payne, Leilani Peale, Sam Perri, Beverly Porter, and Robert and Leilani Pyle.

Also, Mrs. M. L. Randolph, Shaunagh Robbins, Burton Roberts, John Rogde, Neil Rolde, Marshall Ross, Craig Rowland, Ralph Saito, Kirk Smith, Ann Snyder, Dave Somerton, Randall and Sarah Stoddard, Bette Stuhlmacher, Catherine Summers, Craig Takahashi, Daniel Takata, Eileen Taylor, Wilma Tice, Thomas Tokumoto, Steven Tom, Lorraine Tokuyama, Mabel Trafford, Elaine Troiano, R. Uchibori, Michael Uyesugi, Margaret Wahlman, Genie Wery, Helen Wooley, and Kathy Yeager.

Special thanks is due to the tireless office and phonathon volunteers: Phil Bruner, Mark Caspers, Dorothy Cornell, Donna de Haan, Renate Gassmann-Duvall, Judith Kearney, Lynne Matusow, Kendall McCreary, John Mitchell, Lisa Nungesser, Elly Roberts, Alan Schneyer, and Marjorie Ziegler.

L. M

WILL THE E.P.A. CHANGE ITS SPOTS?

Arlington, VA

The U.S. Environmental Protection Agency's Science Advisory Board is urging Administrator William Reilly to reassign EPA's resources from current high priority programs such as the Superfund to programs such as ecological preservation now seen by the Agency to have lower risks. The report reviews *Unfinished Business*, a 1987 assessment of the worst health and environmental risks.

The scientists' draft report calls EPA's risk priorities misguided. They rank Superfund, radiation and hazardous landfills as the lowest risks although they pose the highest risks in the perception of the public and in EPA. The scientists rank ecological concerns— such as species extinction and loss of wildlife habitat— as much greater risks than previously believed.

There is no indication to date whether or how the EPA will respond. The prospect, however, that EPA might shift its funding priorities to ecological protection is encouraging conservationists, some twenty years after EPA was established by a 1970 presidential executive order.

Craig S. Harrison

CLEARING THE WEEDS AT IHIIHILAUAKEA

The Hawaii Audubon Society joined the Nature Conservancy on Sunday, 13 January, for a service trip to Ihiihilauakea Preserve on Koko Head, Honolulu to remove weeds competing for ground space with Hawaii's endangered endemic fern, *Marsilea villosa*. The preserve is managed by the Nature Conservancy under an agreement with the City and County of Honolulu.

This special fern, found at only two points on Oahu—Koko Head and Lualualei Valley— and at a recently rediscovered area on Molokai, resembles a four-leaf clover.

In the rainy season, the fern forms a carpet of green in a depression on Koko Head overlooking Hanauma Bay. During dry months it enters a dormant phase, a critical period when public access to the population is prohibited.

The HAS crew of fifteen heard Barrie Morgan of the Nature Conservancy and Lyndon Wester of the University of Hawaii Geography Department, describe the plants and the history of efforts to ensure their protection. The next two hours were spent avidly removing the introduced grasses and vines that were crowding the ferns, as well as weeding around the wiliwili (*Erythrina sandwicensis*) trees planted two years ago by the Nature Conservancy and the Hawaiian Botanical Society as a barrier against four-wheel-drive vehicles.

We turned in our gloves and trowels at 11 o'clock and rewarded ourselves with a lunch of nuts, cheese, fruit and other goodies on the Hanauma Bay cliff. Our watch for humpback whales "blowing" offshore was unrewarded, but we returned to Honolulu feeling good for having spent the morning away from the crowds and helping a fellow species hold on to the precious gift of life.

HAS members and others who were unable to join the 13 January expedition but who would like an opportunity to visit Ihiihilauakea can take part in the Nature Conservancy's biweekly weeding trips to the preserve. Call Barrie Morgan at 537-4508 for the schedule, as well as for information on other preserves under Conservancy guardianship.

Casey Jarman Field Trips Coordinator

NOTICE TO AUTHORS

'Elepaio, the Journal of the Hawaii Audubon Society, invites submission of scientific articles on the natural history of Hawaii and the Pacific. Such articles are subject to peer review, and usually are published six to twelve months after submission.

'Elepaio is also a newsletter dealing with conservation issues, Audubon Society events, and other subjects of interest to members. Pertinent Hawaii-Pacific nonscientific material is welcome.

Manuscripts of articles and newsletter items should be sent to The Editor, 'Elepaio, Hawaii Audubon Society, 212 Merchant St., Suite 320, Honolulu, HI 96813.

Articles not subject to peer review must be received no later than six weeks prior to publication (i.e.,material for a December issue is due October 15). Late-breaking news and short announcements may be accepted at the editor's discretion.

IMPORTANT: Scientific articles should be typewritten and double-spaced. Four copies must be submitted. In addition, authors are asked to submit the article on a computer diskette, with clear indication of the word-processing program used.

Photographs may be either color or black-and-white prints (they will appear in black-and-white) 3.5 by 5 inches or larger. Cropping lines (if needed) should be indicated. Keep 'Elepaio's size and format in mind (examine a recent issue) in preparing illustrations. The originals of figures, maps, graphs, etc. should be clean and clear, with lettering large enough to remain legible after reduction to fit journal format. Submit two good-quality xerographic copies along with each original illustration.

Advance discussion with the Scientific Editor is invited.

WHY NO SCIENTIFIC ARTICLE THIS MONTH?

Several subtle changes in 'Elepaio's contents, type style and page lay-out will be made in coming months. They will be more than aesthetic; the editors hope for a rewarding reduction in costs, too. The switch will be gradual.

Changes of this sort seldom go smoothly. We ask for your indulgence while we solve our publishing problems. Furthermore, we will welcome readers' comments, pro and con.

For the second month in succession, this issue of 'Elepaio lacks a refereed scientific article. The reason? Delays by half a dozen authors in returning their papers with needed revisions. This situation is beyond the control of the Scientific Editor.

Beginning later this year, scientific articles will be concentrated in two to four special issues of 'Elepaio, instead of appearing monthly as has been the practice in the past. The new schedule will have both editorial and, we hope, budgetary advantages.

Under this plan, the non-scientific issues of 'Elepaio will be devoted to news of Audubon Society activities, nature notes and conservation topics.

A GOOD EDITOR IS HARD TO FIND

'Elepaio editor Sheila Conant has informed the Hawaii Audubon Society directors that she wants to be relieved of her editorial duties at the end of 1991. A professor of zoology in the General Science Department of the University of Hawaii at Manoa (Honolulu), Dr. Conant has served as scientific editor since 1980.

The Society needs a successor. Ideally, the new editor should have scientific credentials and an interest in birds. He or she would be responsible for the peer-reviewed contents of 'Elepaio. Editing nonscientific material, printing and distribution fall to the managing editor and a volunteer staff.

Quite by coincidence, the managing editor is eager to resume his full-time professional career. He also has asked to be relieved by the end of the year and is even prepared to give a private course in practical journalism to anyone interested. Candidates can phone Stuart Lillico at 734-3703.

Both editor jobs are, alas, unpaid.

YOUR BEQUEST CAN HELP

The late George C. Munro, a tireless naturalist and field ornithologist, bequeathed to the Hawaii Audubon Society funds to be used exclusively for the protection of Hawaii's native dry forests. Today, the Munro Fund finances research on those forests.

A bequest to the Hawaii Audubon Society is an excellent way to advance the cause of conservation. Although an attorney should be consulted in drafting a will, a model clause would be: "I hereby give, devise, and bequeath to the Hawaii Audubon Society, Honolulu, Hawaii, the sum of dollars (or identify property) to be used for the general purpose of said organization."

Further information and assistance is available from the Hawaii Audubon Society, 212 Merchant Street, Suite 320, Honolulu, HI 96813. Tel: (808) 528-1432.

GRANTS AND SCHOLARSHIPS

The Hawaii Audubon Society makes grants annually for research in Hawaiian or Pacific natural history. Awards generally do not exceed \$500 and are oriented toward small-scale projects within this state. HAS also awards a \$1,000 tuition scholarship to an undergraduate in an accredited university majoring in a field related to Hawaiian or Pacific Basin natural history.

The deadline for receipt of grant applications is 1 April; for scholarships, 1 May. For information and application forms, contact John Engbring, Chairman HAS Grants and Scholarship Committee, P.O.Box 4443, Honolulu, HI 96812 Tel: (808) 541-2749 (days).

THE HAWAII AUDUBON SOCIETY

212 Merchant Street, Suite 320 Honolulu, Hawaii 96813 (808) 528-1432

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HAS Dues for 1991

All amounts in U.S.dollars Includes Delivery of 'Elepaio

U. S. Zip Code addresses	\$6.00
(Delivery of 'Elepaio as bulk mail, not forwardable to ne	w address.)
Life Membership	150.00
Payable in three equal installments.	
Junior Membership (18 and under)	3.00
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Mexico (airmail only)	12.00
Canada (airmail only)	13.00
All other countries	13.00
(By surface mail. Delivery 6 weeks to 3 months) By airmail	24.00

CALENDAR OF EVENTS

Mar. 11 Regular HAS Board meeting. (Mon.) 7 PM at the HAS office.

Mar. 17 Field trip to

(Sun.) Kilauea Point National Wildlife Refuge, Kauai. See page 3 for details.

Mar. 23 Third Annual Birdathon, all islands. (Sun.) See page 3 for times, places and details.

Apr. 21 World conditions permitting, we will tour the Redfooted Booby colony at the Kaneohe Marine Corps Air Station on Mokapu Peninsula. New security concerns severely restrict civilian access to the base, and the field trip may have to be cancelled but it remains on the schedule for now. The party will be limited to 25 persons. You MUST register in advance for the trip by phoning Casey Jarman at 956-7489 or 949-1943.

OFFICE HELP STILL NEEDED

Volunteers are still needed at the Hawaii Audubon Society office one day a month to answer the telephone, sort and distribute mail, and do other office-keeping chores. George Campbell, 941-1356, can give you more information.

HAWAII AUDUBON SOCIETY 212 MERCHANT STREET, ROOM 320 HONOLULU, HAWAII 96813

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Correspondence regarding 'Elepaio should be addressed to The Editor, c/o Hawaii Audubon Society, 212 Merchant Street, #320, Honolulu, HI 96813.

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