'ELEPAIO

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For the Protection of Hawaii's Native Wildlife

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THE REDISCOVERY OF BISHOP'S O'O' ON MAUI

by Stephen R. Sabo

Bishop's 'O'o (Moho bishopi) was described by Baron Rothschild (1893) from a series of 16 specimens collected by H. C. Palmer on Molokai. The bird was last sighted in 1904 (Munro 1944). This note reports the sighting of a probable Bishop's 'O'o in the windward montane rainforest of Haleakala; the first observation of the species from Maui.

I was on a small ridge at 1900 m elevation in the Ko'olau Forest Reserve on 10 May 1981, when at 10:00 HST I heard a series of unfamiliar bird songs about 150-250 m away. These songs each comprised 2-3 repetitions of a pair of spondee-accented notes "owh - owh" with low pitch and soft. rich tonal quality. About 10 such songs were given over a 5 min interval. I stalked towards the songs, and came to a sheer gulch overlook at 1850 m elevation. Here I surveyed the 'ohi'a-lehua ('Metrosideros collina) forest along the gulch walls for 3 hours. At 11:15 I saw a long-tailed black bird fly into the subcanopy of an 'ohi'a tree below me from the understory of Cheirodendron trigynum, Coprosma ochracea, and Styphelia tameiameiae. The bird moved actively from branch to branch in short flights, perched upright for about 10 seconds, and then flew away at subcanopy level. Dense understory and steep topography prevented pursuit. I had excellent dorsal, lateral, and frontal views of the bird through 8x30 binoculars during about 30 seconds of observation from a distance of 30-40 m. The weather was clear and the sun was behind me. At 11:45 I heard 5 songs, identical to those heard earlier, given in the gulch. These songs and sighting were the only ones of their kind encountered during 10 continuous field days in the vicinity.

The following description is taken from on-the-spot notes and sketches: "Total length 25-30 cm. Bill about 4 cm long, black, slightly decurved, not compressed. Eye dark. Body and wings smoky black, crown with gloss; ear coverts cadmium yellow, tufted appearance; axillary wing tufts 2-3 cm long, cadmium yellow; crissum appeared yellow but not seen clearly. Legs 5-6 cm long, black. Tail black, much graduated, very elongate central feathers about 15 cm long, streaming in flight". One other medium-sized all-dark bird, the immature Crested Honeycreeper (Palmeria dolei), also occurs in these forests. It differs from the 'O'o by its smaller size, stouter appearance, normally proportioned tail and lack of yellow patches.

This description matches the characters that Rothschild (1900) gave for the adult male of Bishop's 'o'o, with the combination of yellow auricular and axillary tuffs and completely black tail being diagnostic for this species. Although I never saw the bird vocalizing, the songs I heard conform to Perkins' (1903) description of the voice of this species on Molokai and resemble tape recordings of the song of the Kauai 'O'o (Moho braccatus).

Maui and Molokai were connected as recently as 10,000 years ago (Juvik and Austring 1979), and thus any 'o'o on Maui is likely to be Bishop's. Early anecdotal evidence indicates that an 'o'o did indeed occur on that island. In 1828 L.F. Judd was escorted across the West Maui Mountains by "a company of 25 athletic men, trained to catch the little black birds called the oo, each producing a few yellow feathers under the wings" (Judd 1880). The first reliable sighting of an 'o'o on Maui was that of Henshaw (1902), who saw and heard an adult male 'o'o northeast of Olinda, Maui. on 9 June 1901. He suggested the bird was Bishop's 'O'o, but reported no details. On 18 May 1980 J.M. Scott and I saw a black bird with an 'o'o silhouette feeding at 'ohi' a flowers within 500 m of the 1981 bird. This bird was about 25 cm long, had a black slightly decurved bill 4-5 cm long, a graduated streaming tail 10-12 cm long, and a light axillary wing patch. It was seen from a distance of 35 m for 20-25 seconds, but heavy overcast obscured details of color. Several other sightings of supposed 'o'os were made during the 1970's by untrained observers in the East Maui rainforest (C.B. Kepler, J.M. Scott, pers. comm.). In 1973 J.D. Jacobi (pers. comm.) heard 'o'o-like songs in the upper Hanawi watershed, but did not see the bird. These observations indicate that Bishop's 'O'o was earlier more widespread on Maui, and still exists in very low numbers. No photograph or specimen is yet known from Maui, and additional corroboration is needed.

The history of collecting on Maui may explain why Bishop's 'O'o eluded scientific detection for so long. Maui was neglected by nineteenth-century ornithologists until Wilson began his studies in 1887 (Pratt 1979:206). By 1887 both Oahu and Hawaii had lost several species of birds. It is likely that on Maui Bishop's 'O'o had retreated to the remote forests by the time early ornithologists arrived.

Ornithological exploration of the windward montane forest of Haleakala (Ko'olau Gap to Kipahulu Valley, elevation 1200-2100 m) did not begin until the late 1940's. It was in these forests that the first sighting in the twentieth century of the Maui Parrotbill (Pseudonestor xanthophrys) was made in 1950 (Richards and Baldwin 1953), the Maui Nukupu'u (Hemignathus lucidus affinis) was rediscovered in 1967 (Banko 1968), and the Po'o Uli (Melamprosops phaeosoma) was discovered in 1973 (Casey and Jacobi 1974). In 1980 personnel of the U.S. Fish and Wildlife Service scientifically surveyed many regions of these forests for the first time.

From a management standpoint, Bishop's 'O'o faces the same potential threats to its existence as other native passerines on Maui: (1) diseases; (2) feral pigs (Sus scrofa) and other ungulates; (3) human disturbance; and (4) chance fluctuations in its population level. Although the bird occurs above the elevational range of mosquitoes, wanderers below 1500 m could contract disease (cf. Warner 1968). Pigs, however, are possibly a serious threat. Their foraging activities expedite erosion and are leading to longterm irreversible degradation of the montane rainforest ecosystem via nutrient loss (Baker 1979, F.R. Warshauer, unpub. data). Endemic lobeliads are preferentially uprooted by pigs, and lobeiad numbers have been decimated. Perkins (1903) found that Bishop's 'O'o favored lobelaid nectar over all other kinds, although it fed on 'ohi'a when lobeliads were not in bloom. Human disturbance of the habitat by inadvertent introduction of obnoxious weeds (e.g. Clidemia hirta) is another potential threat. Finally, chance fluctuations in population level are problems for any very rare species, but the fact that the bird has existed so long at low levels is

Bishop's 'O'o is recommended for legal protection under Federal and State statutes, and for listing in the Red Data Book of the International Union for Conservation of Nature and Natural Reserves.

ACKNOWLEDGMENTS

I would like to thank the Frank M. Chapman Memorial Fund of the American Museum of Natural History for financial support, J. Michael Scott for loan of equipment, James D. Jacobi for loan of an infrared aerial photograph, P. Holly McEldowney for a literature reference, John H. Carothers, Robert B. Hansen, and J. Michael Scott for comments on earlier drafts, H. Douglas Pratt for a very helpful review of the final draft, and Susan and Orion Mountainspring for their encouragement and support.

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P.O. Box 539 Volcano, Hawaii 96785



Bishop's 'O'o from the island of Hawaii from Rothschild (1893-1900)

VOLCANO, HAWAII CHRISTMAS COUNT

by Avery Taylor, Compiler

The tenth consecutive Volcano Count was conducted on 27 December 1981 by 24 birders in 10 parties. Fifty-eight party-hours in the field, with 30 miles traveled on foot and 76 by car, produced 8,306 individuals of 26 species; results very similar to the past two years.

Most of us were relieved that on the morning of the count the sky was clear, eventually becoming and remaining overcast in the afternoon, since Christmas Day was one of much rain and flooding on the Big Island. The inclement weather unfortunately led to the closure of Mauna Loa Strip Road; areas 3 (Mauna Loa Trail) and 5 (Mauna Loa Road) were therefore not covered. Although the upper sections of three U. S. Fish & Wildlife Service transects were covered, we were unable to field an experienced birder in area 9 (transect 31, 'Ola'a Tract) where 'O'u have been found in past years. On trips into this area on 29 and 30 December 1981, with excellent weather conditions, observers were unable to find any of these rare birds.

Five endangered birds, the Nene, 'Io, Hawaii Creeper, Hawaii 'Akepa, and 'Akiapola'au were recorded on this years count, with most occurring in the upper Keauhou Ranch and Kilauea Forest Reserve areas. The above average number of 'Akepa may have been the result of their very vocal and visible nature on count day. There were several observations of group aerial flights, circling above the canopy while calling or singing, as other birds were calling from the trees below. It was an exciting and interesting behavior to view, possibly having something to do with mate selection. The low Creeper numbers are difficult to comment on; few were heard singing and possibly they were not as vocal as in previous years. One young 'Akiapola'au in Kilauea Forest Reserve and another on Keauhou Ranch were located by their loud chip calls and subsequently seen being fed by adult birds. Of some interest was a color-banded second-year 'Io observed on Keauhou Ranch.

The Kalij Pheasant was again recorded after a three-year absence.

Our thanks go to Kulani Correctional Facility and Bishop Estate Trustees for allowing our group access into their areas, and Hawaii Volcanoes National Park and C. J. Ralph for their assistance. I also thank Larry Katahira for help in organizing the count, and all who participated, making it possible.

AREAS COVERED

- 1 Kipuka Puaula (Bird Park), Golf Course and adjacent areas (Paul Higashino, Frank Matsuno, Ann LaRosa)
- 2 Rim of Kilauea Crater, Thurston Lava Tube, (Dina Kageler, Norma Godfrey, Chuck Stone)
- 4a Keauhou Ranch (Philip Ashman, Robert Pyle, Hakan Whitzell, Avery Taylor)
- 4b Keauhou Ranch, *Transect 29 (Mark Collins, John Eisenbiez)
- 4c Keauhou Ranch, *Transect 30 (Larry Katahira, Jim and Zoe Jacobi, Dan Nakamura)
- 6 Volcano Village (Jack and Marti Lockwood)
- 7 Stainback Hwy. and Pu'u Maka'ala (Bill and Mae Mull)
- 8a Kilauea Forest Reserve (same as 4a)
- 8b Kilauea Forest Reserve, Transect 29 (same as 4b)
- 8c Kilauea Forest Reserve, Transect 30 (same as 4c)
- 10 *Transect 27 (Paul Banko, Lani Stemmerman)
- 11 Kulani Correctional Facility (Josh
 Kohn, Sheila Doyle)
- *U. S. Fish and Wildlife Service (Scott and Kepler) Transects 27, 29, and 30

	1	2	4a	4b	4c	6	7	8a	8b	80	: 10	11	Total
White-tailed Tropicbird		3										1	4
Hawaiian Goose*	3	2			2								7
Hawaiian Hawk*			1		1	1		4				1	8
California Quail	15										•		15
Kalij Pheasant			1	3								1	5
Ring-necked Pheasant	1		1									1	3
American Golden Plover	20	6	63			16					6	46	157
Spotted Dove	9	3				25							37
Barred Dove	2					٠.							2
Skylark	8		35								•	3	46
Hwa-mei	4		2	1				1					8
Red-billed Leiothrix	27		25	15	4			21	1	6	9	2	110
Hawaiian Thrush	1	9	237	110	51	1	320	147	70	50	69	90	1155
'Elepaio	26	4	68	10	8		18	28	20	7	3	14	206
Common Myna	42	5	34			54					5	6	146
Japanese White-eye	60	12	138	35	6	21	153	82	50	12	87	24	680
'Amakihi	9	8	99	30	16		9	26	7	11	5	5	225
Hawaiian Creeper*			2		1			6				4	13
'Akepa*			29	11				14		2		15	71
'Akiapola'au*			9					7		2			18
'Apapane	115	75	728	205	150	174	1037	317	240	170	1175	199	4585
'I'iwi		1	105	70	11		29	52	56	8	188	26	546
Spotted Munia		4	35	5	5	18						5	72
House Sparrow	29	8	2			14						1	54
Northern Cardinal	26		26	4	14	1	1	2		1		2	77
House Finch	25	•	19		6	6	•	• 1,1	•	•	٠	•	56
Hours on foot	2	2	8	2.5	1.25	3	3.5	3	3	3.25	5.5	3	40
Hours by car	1	2	9			1.5	1.5				•	3	18
Miles on foot	4	5	4.5	1	1.25	3	1	3	2	1.75	2.5	1.5	30.5
Miles by car	5	5	28		•	10	13	•	٠.	•	•	15	76

^{* =} Endangered

26 species 8,306 individuals

THE 'ELEPAIO'S NEW LOOK

As you may have noticed in the exciting lead article in this issue, on a trial basis the 'Elepaio has started to typeset some articles. This will simplify the job of our volunteer typists and editors, improve the quality and appearance of the journal, and encourage more articles of interest to Society members. Conservation matters, programs, and other notes of more timely matter, will continue to be typewritten. We will see if the added cost will offset these advantages. Readers with comments are strongly urged to write to the Editor, or the Society.

C. J. Ralph

VOLUNTEERS NEEDED

If you have a few hours a month or more that you would like to devote to helping conservation in Hawaii, please consider taking on one or more of the following jobs:

Conservation Writer. -- The 'Elepaio needs one or more people to take information and write it up. This can be done in a person's home and merely means putting down the important facts to inform our readers.

Conservation Committee.--Members are needed who can attend hearings and report back to the Committee, as well as other jobs.

'Elepaio Typists.and Production Staff.-Help on this would involve a few hours a
month.

"GLOBAL TOMORROW" COALITION FORMED

During its first six months the Global Tomorrow Coalition has grown to more than 50 organizations with a combined membership of well over five million Americans. Global Tomorrow is the organization that grew out of the Leadership Conference on Population, Resources and Environment that was held in January, 1981, in Washington, D. C. National Audubon President Russ Peterson headed the steering committee for that conference. Four months later the coalition was launched by some of the conference sponsors, and Peterson was elected chair of its board of directors.

The goal of the coalition is to contribute to broader public understanding of the long-term significance of the interrelated global trends in population growth, consumption of resources, and environmental degradation, and to foster an informed and responsible national policy. This winter the coalition began publication of a newsletter. You can receive it by becoming an individual member. Send your check for \$25 to: Global Tomorrow Coalition, 1525 New Hampshire Avenue NW, Washington D. C. 20036.

ERRATUM--GREAT BLUE HERON ON BIG ISLAND

As sharp-eyed readers will have noted, the article "Second Hawaii State Record of a Great Blue Heron" by Ashman et al. in the January 1982 'Elepaio, had five misplaced lines. On the first page of the article (p. 61), the last five lines of the second column should have been at the bottom of the first column. We apologize to the authors for flawing their excellent manuscript.

C. J. Ralph

REPRINTS OF ARTICLES

Reprints of articles in the 'Elepaio are available to authors and others at the following rate if ordered before publication date: for 100 copies, \$10 per page of the article. For each additional 100 copies, add \$3.00 per page.

NEW OFFICERS FOR SOCIETY

At the December Annual Meeting the following were elected to serve for the next year:

President lst Vice-Pres. 2nd Vice-Pres.	Charles Lamoureux David Woodside Robert L. Pyle
Rec. Secretary	Marie Morin
Corres. Sec.	Barbara Johnsen
Treasurer	Norris Henthorne
Director	Peter Donaldson
Director	Wayne Gagne
Director	Paul Kores
Director	Barbara Lee
Director	Audrey Newman
Director	Maile Stemmermann

BISHOP MUSEUM SCHEDULES SERIES

Bishop Museum presents a series of lectures through June on new discoveries in, and contemporary understandings of, the cultural and natural history of Hawai'i and Polynesia. Lectures begin at 7:45 p.m. in Atherton Hālau on the second and fourth Thursdays of each month. Admission is by voluntary donation. The February talks are as follows:

Feb. 11. Prehistoric Hawaiian Birds; Dr. Alan C. Ziegler, Vertebrate Zoologist and Head of the Division of Vertebrate Zoology, Bishop Museum.

Feb. 25. Hawaiian Land Snails: Past, Present, and Future; Dr. Carl C. Christiansen, Assistant Malacologist and Acting Division Head, Division of Malacology, Bishop Museum.

REQUEST FOR INFORMATION HERMAN INGALLS AND LAYSAN

The Bishop Museum Registrar's Office is documenting the collections resulting from William Alanson Bryan's April-May 1903 trip to Laysan Island. Among the clues found in Museum records are two receipts from Bryan to Herman Ingalls for "wages & supplies" and "birds, etc." Initial research has not revealed Mr. Ingalls' connection to Bishop Museum or Laysan. Anyone with information on Ingalls, please write Mrs. H. Hamlin, B. P. Bishop Museum, Registrar's Office, P. O. Box 19000-A, Honolulu, Hawaii 96819.

ALOHA TO NEW MEMBERS

MAHALO TO CONTRIBUTORS

We welcome the following new members and encourage them to join in our activities.

Joint: J. A. Balthrop, Honolulu; Cindy Biggers, Haleiwa; Bart Bridges, FPO San Francisco; Lionel W. Carvalho, Volcano; Anson Chong, Honolulu; Nancy Davlante, Kailua; Raymond M. Dettay, Kailua; K. Emory, Honolulu; Preston A. Gaylord, Lahaina; Alice Goo and Family, Kailua-Kona; Janet Grosseto, Kaneohe; Mr. & Mrs. L. C. Hampton, Honolulu; Susan L. Heftel, Honolulu; David L. Jones, Kaneohe; Dana M. Kirley, Pepeekeo; Alice A. Kopstein, Kaneohe; A. F. Madlener, Honolulu; Dennis A. Newman, Kaneohe; Mrs. Nancy Orr, Kailua; Tom D. Paratore, Honolulu; Ralph Robertson, Koloa; C. F. Shoemaker and Family, APO San Francisco; Ann T. Sprenger, Kailua; and Martha Welhes, Honolulu.

Kammy Wong

Local: Tempy Atwater, Kaneohe; Lee Bauer, Kailua; Sandra G. Brady, Kamuela; Randy Buettner, Honolulu; Haruko O. Chang, Hilo; Matthew H. L. Chang, Hilo; Marybeth Clark, Honolulu; Colette Cobb, Kapaau; John Dobovan, Kailua; Sheila Dobovan, Kailua; Kenneth Emory, Honolulu; Diane Espejo, Hilo; Helen F. Harrison, Honolulu; Susan Carter Harrison, Honolulu; Maralyn D. Herkes, Kailua-Kona; Tsuruko Higa, Hawi; Paul K. Higashino, Volcano; Clark Jones, Kailua; Raymond Kawamata, Kamuela; Paul Kores, Honolulu; C. H. Lai, Hawi; Joan S. Lai, Hilo; Mary E. Lauchis, Kamuela; Ray W. Lauchis, Kamuela; Ah Fat Lee, Kamuela; Barbara B. Lee, Kamuela; H. M. Logan, Kamuela; Jean M. Manly, Wahiawa; Philip J. Manly, Wahiawa; Tsuneo Mikaru, Hawi; Elizabeth D. Miles, Kamuela; Thomas B. Miles, Kamuela; Robert F. Miller, Kaneohe; Arleen Moniz, Hilo; Arlene Murphy, Hawi; Kenneth Murphy, Hawi; Wayne M. Pitluck, Honolulu; Mollie Sperry, Kamuela; W. Y. Thompson, Aiea; Mia Touw, Honolulu; Carl C. Wamser, Kailua; and Sister Carolyn White, Honolulu.

Subscriber: Elizabeth Hone, Portola Valley, California; Michael P. Moulton, Lubbock, Texas; Sally Walters, Newark, California; and Kenneth F. Ward, Bayport, New York.

Susan Schenck

We would like to thank the following contributors whose gifts have arrived since the last 'Elepaio acknowledgements:

Galen R. Campbell, Hampton, Virginia;
Marybeth Clark, Honolulu; Lydia Cooke,
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California; W. Lee Lynn, Portland, Oregon;
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New York, New York; James Thropp, Paauilo;
Masako Westcott, Haiku; and Hayato Yamanaka,
Honolulu.

Norris Henthorne

IF NOT A MEMBER, PLEASE JOIN US

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Contributing									250.00
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Special rates for full time students and Senior Citizens (65 years of age or older) are available. Please write for application form.

LOCAL MEMBERSHIP

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Life	
(payable in three equal annual install	ments)

New members who send in dues between January and September will receive, <u>if</u>
they request them, all back issues of the 'Elepaio' for that year. After September, the dues are counted for the following year.

FIELD TRIP TO H3's NORTH HALAWA VALLEY

The February field trip will be a day hike up the North Halawa Valley, the planned corridor for the controversial H-3 freeway. The valley features interesting bird and plant life (including the Gray Swiftlet) as well as ethnological points of interest. Pete Donaldson will lead this interesting and timely hike on 14 February (note change from usual date). He may be contacted at 456-5662 for more information.

PUBLICATIONS OF THE SOCIETY

HAWAII'S BIRDS by the Society (1981). This is the best field guide to our birds, and includes colored illustrations of all native andcwell-established exotic species. \$3.95 plus postage: 70¢ (surface mail) or \$1.03 (air). Hawaii residents only: add 16¢ for tax.

FIELD CHECKLIST OF BIRDS OF HAWAII by
R. L. Pyle (1976). A pocket-size field
card listing 125 species found in Hawaii
with space for notes of field trips.
(Postpaid) \$.25
(ten or more, 10¢ per copy)

ENDANGERED WATERBIRDS OF THE HAWAIIAN
ISLANDS by R. J. Shallenberger (1978).
Hawaiian Stilt, Coot, Gallinule and
Duck, each described in 2 pages of photos
and text. Covers description, ecology,
status, and distribution.
(Postpaid) \$1.00

NEWCASTLE DISEASE: FACT AND FANTASY

The February meeting will feature a talk by Dr. Alan Miyahara on "Newcastle Disease: Fact and Fantasy". This disease, most often detected in wild birds, is a constant threat to the poultry industry. Shipments of wild "cage" birds have been recently detected with this in Hawaii. Dr. Miyahara will also discuss how its importation might have serious effects on native birds as well.

Dr. Miyahara's talk will feature a short movie and slides and promises to be an interesting talk about an intriguing sidelight of wildlife in Hawaii. The meeting will be at the McCully-Moiliili Library, 2211 S. King Street, at 7:30 p.m.

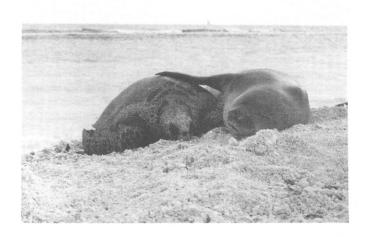
MEMBERS WELCOME AT BOARD MEETINGS

The Board encourages members to attend and participate in the monthly Board meetings. It is a good way to get more involved in conservation issues and in the workings of the Society.

HAS POSTCARD NOW AVAILABLE

A high quality color postcard, shown below, that depicts a Hawaiian monk seal and green sea turtle sleeping in the Hawaiian Islands National Wildlife Refuge can now be purchased from the Society in lots of 50 for only \$6.00 postpaid. Please mail your check to: Hawaii Audubon Society

(attention- George Balazs) P.O. Box 22832 Honolulu, Hawaii 96822



CALENDAR OF EVENTS

Feb. 8 (Monday). Board meeting at the home of Charles Lamoureaux, 3426 Oahu Ave., at 7 p.m. (988-2255). All members welcome.

- Feb. 15. (Sunday). Regular meeting, featuring
 Newcastle Disease: Fact and Fantasy.
 To be held at the McCulley-Moiliili
 Library 2211 S. King; 7:30 p.m.
- Feb. 15 (Sunday). Field Trip to N. Halawa Valley. Meet at 7:30 a.m. on the Punchbowl St. side of the State Library. Bring lunch, water and, if possible, your car. For more information, call Peter Donaldson at 456-5662.

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IMPORTANT NOTICE!!!

This will be the last issue of 'Elepaio sent to 1981 LOCAL members and subscribers who have not renewed for 1982. If you haven't yet paid 1982 dues, please send to the Society at the address below your \$6 dues. This does NOT apply to JOINT members of National and Hawaii Audubon Societies who receive separate notice from the National Society when it is due.

HAWAII AUDUBON SOCIETY P. O. Box 22832 HONOLULU, HAWAII 96822

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