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For the Protection of Hawaii's Native Wildlife

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Nomenclature of the Kauai Amakihi and Kauai Akialoa (Drepanidini)

Storrs L. Olson and Helen F. James

The nomenclature used by the 6th edition of the AOU Checklist (AOU 1983) for the Hawaiian finches (Drepanidini) follows the revision by Pratt (1979a). The rationalization for resorting to a work, the pertinent portions of which are as yet unpublished, was that Pratt's classification had been adopted in general by Berger (1981). Most of Pratt's departures from the long-influential classification of Amadon (1950) are justifiable, even commendable, reversions to earlier systematic practices. His placement of the "amakihis" (*sagittirostris* Rothschild, 1892; *parva* Stejneger, 1887; and the "superspecies" *virens* Gmelin, 1789) in the genus *Hemignathus*, however, was an innovation with no precedent in the entire literature of Hawaiian ornithology, for at no point had the trivial names associated with these birds ever appeared in combination with the generic name *Hemignathus*, even as a printing error.

It was almost inevitable that such an extensive merger, involving 9 nominal taxa in the "amakihi" group and 11 among *Hemignathus*, would result in the creation of homonyms. Pratt detected one of these, noting that the name *wilsoni* Rothschild, 1893a, used for the subspecies of Common Amakihi of Maui (and subjectively for the populations of Molokai and Lanai as well) has priority over *wilsoni* Rothschild 1893b, used for the Akiapolaau of Hawaii, if both of these are included in the genus *Hemignathus*. He therefore substituted the new name *Hemignathus munroi* for the Akiapolaau, for which the AOU Check-list (AOU 1983) gives the original citation as Dissertation Abstracts (Pratt 1979b), certainly an undesirable, although valid, vehicle for the introduction of new names. Incidentally, Berger (1981) did not use this new name and thus improperly carried two taxa named *wilsoni* in the genus *Hemignathus*.

Pratt (1979a), the AOU Check-list committee (AOU 1983), and all others who have followed these sources, have overlooked the fact that the name stejnegeri Wilson, 1890, in the combination Hemignathus stejnegeri or Hemignathus virens stejnegeri, is not available for the Kauai Amakihi. This combination is a junior homonym of Hemignathus stejnegeri Wilson, 1889, a name bestowed earlier on the Kauai Akialoa, a bird that has since been almost universally known by the younger name Hemignathus procerus Cabanis, 1890, which was actually published several months after Wilson's name (Olson and James, MS). On grounds of priority, the Kauai Akialoa should be known as Hemignathus stejnegeri, but the proper name for this bird does not affect the question of homonymy of the name for the Kauai Amakihi, which regardless cannot be known as Hemignathus stejnegeri. If the Kauai Amakihi, whether recognized as a full species or as a subspecies of virens, is to be referred to the genus Hemignathus, a new name will have to be proposed for it, as no other is available. In our view, this is unneccessary, as we disagree with Pratt and consider that the

amakihis do not belong in the genus Hemignathus. Pratt's (1979a) reasons for including the amakihis in Hemignathus involve mainly similarities in plumage (simple, unpatterned green and yellow) and voice (also simple), whereas differences in myology (presence versus absence of the plantaris muscle, Raikow 1977), and cranial osteology (e.g., the deep medial groove on the ventral maxilla, the shorter retroarticular processes of the mandible, the abruptly constricted nasals and long, attenuated premaxillae observable in Hemignathus [sensu Amadon 1950] as opposed to the Amakihi's), argue that these are distinct lineages that should be maintained in separate genera.

The amakihis may either be combined with the akepas in the genus *Loxops* Cabanis, 1847, as Amadon (1947, 1950) was the first to propose; segregated in a genus *Viridonia* Rothschild, 1892, to include both the Greater (*sagittirostris*) and "Common" Amakihis (*virens* + *stejnegeri*), and the Anianiau (*parva*); or be further split into two genera, *Viridonia* for *sagittirostris* and *Chlorodrepanis* "Perkins" in Wilson and Evans, 1899, for the remainder (the genus *Magumma* Mathews, 1925, is also available for *parva* should this group be even further split). Any one of these courses would be less misleading than placing the amakihis in *Hemignathus*, and if adopted would also result in reinstating the name *Hemignathus wilsoni* for the Akiapolaau.

Such generic treatments are by nature subjective, whereas the unavailability of the name *stejnegeri* for the Kauai Amakihi is not, being the result of objective application of the rules of nomenclature, which require the Kauai Amakihi to be renamed if it is included in the genus *Hemignathus*.

ACKNOWLEDGMENTS

We are grateful to Richard C. Banks for useful comments on the manuscript.

LITERATURE CITED

- Amadon, D. 1947. Ecology and the evolution of some Hawaiian birds. Evolution 1:63-86.
- Amadon, D. 1950. The Hawaiian honeycreepers (Aves, Drepaniidae). Bulletin of the American Museum of Natural History 95:151-262.
- American Ornithologists' Union. 1983. Check-list of North American birds. 6th ed. American Ornithologists' Union, [Washington, D.C.].
- Berger, A.J. 1981. Hawaiian birdlife. 2nd ed. University of Hawaii Press, Honolulu.
- Cabanis, J. 1847. Ornithologische Notizen. I and II. Archiv für Naturgeschichte 1847 (1):185-256; 308-352.
- Cabanis, J. 1890. [Description of Hemignathus procerus]. Journal

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für Ornithologie 37:331 [for October 1889, published not earlier than January 1890].

- Gmelin, J.F. 1789. Systema naturae. Volume 1, part 1. Georg. Emmanuel, Leipzig.
- Mathews, G.M. [Descriptions of new genera of birds]. Bulletin of the British Ornithologists' Club 45:93-94.
- Pratt, H.D. 1979a. A systematic analysis of the endemic avifauna of the Hawaiian Islands. Ph.D. dissertation, Louisiana State University.
- Pratt, H.D. 1979b. [Abstract] A systematic analysis of the endemic avifauna of the Hawaiian Islands. Dissertation Abstracts 40B:1481.
- Raikow, R.J. 1977. The origin and evolution of the Hawaiian honeycreepers (Drepanididae). Living Bird 15:95-117.
- Rothschild, W. 1892. Descriptions of seven new species of birds from the Sandwich Islands. Annals and Magazine of Natural History, series 6, 10:108-112. [July].
- Rothschild, W. 1893a. [Descriptions of three new Hawaiian birds.] Bulletin of the British Ornithologists' Club 1:41-42. [1 May]
- Rothschild, W. 1893b. The avifauna of Laysan and the neighbouring islands: with a complete history to date of the birds of the Hawaiian possessions. Part 2. R.H. Porter, London. [November].
- Stejneger, L.H. 1887. Birds of Kauai Island, Hawaiian Archipelago, collected by Mr. Valdemar Knudsen, with descriptions of new species. Proceedings of the United States National Museum 10:75-102.
- Wilson, S.B. 1889. On three undescribed species of the genus *Hemignathus* Lichtenstein. Annals and Magazine of Natural History, series 6, 4:400-402. [1 November].
- Wilson, S.B. 1890. Descriptions of some new species of Sandwich-Island birds. Proceedings of the Zoological Society of London [for 1889]:445-447. [April].
- Wilson, S.B., and A.H. Evans. 1899. Aves Hawaiienses: the birds of the sandwich Islands. Part 7. R.H. Porter, London.

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Figure 1. Lesser Yellowlegs at Takapoto Is., Tuamotu Archipelago, December 1984. Photo by A. Intes

Lesser Yellowlegs in the Tuamoto Archipelago, French Polynesia

A. Intes

The South Central Pacific is a regular wintering area for some North American birds such as the Bristle-thighed Curlew (Numenius tahitiensis), the Wandering Tattler (Heteroscelus incanus), and the Lesser Golden-Plover (Pluvialis dominica). These birds can be seen in French Polynesia on the Society Islands as well as on the atolls of the Tuamotu Archipelago.

During a visit to Takapoto Island (14°30' S, 145°20' W) in the Tuamotus on 9-15 December 1984, I observed several individuals of an unusual species of sandpiper (Figure 1). They had long yellow legs and were similar in size to the Lesser Golden Plover or the Wandering Tattler. Without doubt, I identified these birds as Lesser Yellowlegs (*Tringa flavipes*). At least four individuals were counted in an area 3 km long and 300 m wide.

There are two similar species which could possibly be confused with the birds observed, the Greater Yellowlegs (*Tringa melanoleuca*) and the Wood Sandpiper (*Tringa glareola*). The Greater Yellowlegs is larger, has a longer and thicker bill, and has a different call than the birds seen on Takapoto. The Wood Sandpiper is similar in color and a little smaller in size, but it is an Old World migrant and is much less likely to occur in French Polynesia than the Lesser Yellowlegs.

During the week of observation the birds were encountered every day on freshwater ponds, either among coconut trees or bushes (*Tournefortia argentea* and *Scaevola sericea*). They were never seen on the ocean or lagoon shore of the atoll and were always alone, with only one individual to a pond. The first occupant of a pond aggressively chased intruders of the same species. This behavior is often observed in other wintering or migratory shorebirds.

This record seems to be the first for this species in French Polynesia. One observation from the Cook Islands, recorded by Holyoak and Thibault (1984) refers to either the Greater or the Lesser Yellowlegs, but the description is too vague for positive identification. The Lesser Yellowlegs has not been recorded from Fiji, Tonga, or Samoa (Watling 1982). The birds we observed were no doubt on the margin of their wintering range.

LITERATURE CITED

- Holyoak, D.T., and J.C. Thibault. 1984. Contribution à l'étude oiseaux de Polynésie orientale. Mém Mus. Nat. Hist. Nat., Paris. Nvelle Sér., sér. A, Zool. p 127.
- Watling, D. 1982. Birds of Fiji, Tonga and Samoa. Millwood Press, Wellington, New Zealand. 176 pp.

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CONSERVATION NEWS

FEDERAL FUNDS TO IMPACT BIG ISLAND WILDLIFE HABITAT

The year-end spending bill for fiscal 1988 passed by the US Congress on 27 December 1987 contains a number of Big Island projects affecting the natural environment, according to a report published in the Hawaii <u>Tribune Herald</u> (Hilo) on 27 December 1987. Federal programs in the giant appropriations bills with the potential to impact native wildlife habitats for better or for worse on the Big Island include these items:

- \$4 million to buy land at Kilauea Forest Reserve and Keauhou Ranch to protect the habitat of endangered species of forest birds, plants and the Hawaiian Hoary Bat.

- \$250,000 for improvements at Hawaii Volcanoes National Park.

 \$100,000 for research to control brown tree snakes in Guam and to develop methods to keep them out of Hawaii.

 legislation that directs the Department of the Interior to establish a commission to review environmental studies and regulations that would affect proposed seabed mining in the Pacific Ocean near Hawaii.

- legislation that keeps Hawaii eligible for federal money to build an irradiation facility to kill alien fruit flies in papaya.

- \$20 million for a "multi-purpose training range" at the Pohakuloa Military Reservation in the saddle area between Mauna Loa and Mauna Kea.

 \$4.77 million to continue developing a prototype deep water energy cable that would transmit geothermal power from the Big Island to Maui and Oahu.

 \$3.5 million to continue research into Ocean Thermal Energy Conversion (OTEC), the process of generating energy using the temperature of seawater at differing depths. OTEC research is conducted at Keahole Point, North Kona.

- \$2.4 million for research into hydrogen energy, and \$500,000 for biomass research, some of which also is conducted on the Big Island.

MAUNA KEA AND PALILA

Eradication of Mauna Kea mouflon sheep has been a popular topic of Letters-to-the-Editor in Big Island newspapers. Pro-sheep, anti-Palila letters outnumber pro-Palila letters. Ron Walker, DLNR wildlife chief, announced the end of public goat and sheep hunting on Mauna Kea on January 1. Final removal of noxious animals is being done by State employees.* Our attorney, Michael Sherwood, has submitted a brief on appeal to the 9th Circuit Court. Oral argument will be heard in the spring before a 3-judge panel in San Francisco or Honolulu. The US Fish & Wildlife Service has surfaced in the case for the first time, filing a "friend of the court" brief. The US FWS brief "contends that Judge King went too far in ruling that habitat degredation that 'merely' impedes recovery of an endangered species (but does not jeopardize its continued existence) constitutes a prohibited section 9 taking."

MAKALAWENA AND KAPOIKAI (OPAEULA) POND

The county planning commission has been <u>unable</u> to muster a clear majority vote in favor of the Makalawena rezoning to resort use, or in opposition to it. The Office of State Planning and the

*By 20 January, the combined hunter take and state eradication had removed from Mauna Kea more than 1000 mouflon and feral sheep.

Governor have entered the controversy over rapid West Hawaii resort development. Both endorse a West Hawaii Regional Plan and cooperative State-County planning for development. Even if approved by the county, the project faces a hurdle in gaining Land Use Commission approval of Urban-Resort Zoning. Kapoikai (Opaeula) Pond is one of two important nesting sites for Hawaiian Stilt on the Big Island.

WRIGHT ROAD FLOOD PREVENTION PROJECT

This project has been <u>terminated</u> "because of environmental and land rights concerns," according to December letters received from the Soil Conservation Service and Puna Soil and Water Conservation District heads. Soil conservation service <u>disclaims</u> responsibility for the project and says "local sponsors" are the decisionmakers.

Mae E. Mull

GOVERNOR INTERVENES IN 'ALALA PROGRAM

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After receiving letters from concerned citizens, including the Hawaii Audubon Society, Governor John Waihee called for a meeting with Department of Land and Natural Resources (DLNR) staff and Sheila Conant to discuss expediting the establishment of a permanent position for an Aviculturist for the Endangered Species Captive Breeding Program. That program currently houses the majority (8 individuals) of the world population of the 'Alala (Hawaiian Crow). Board of Land and Natural Resources Chairman William Paty and Division of Forestry and Wildlife (DOFAW) Administrator Ronald Walker also attended the meeting. A second topic of discussion was implementation of plans for the construction of breeding pens for Nene and veterinary facilities at the Program's Olinda site. The Governor expressed his concern for the Program by requesting quick action to both fill the new Aviculturalist position and commit funds for construction, which otherwise might lapse in July of 1988. Immediately after the meeting, which took place on 11 January 1988, action on both matters was forthcoming. The Governor and his staff are to be commended on their show of support for endangered Hawaiian birds.

Sheila Conant

DECEMBER MEETING: LAYSAN WILDLIFE

Allen Allison introduced the speaker, Marie Morin. She is from California, obtained her bachelor's degree in wildlife management from the University of California at Davis, her master's degree in the same subject area from the University of Washington, and is working on her Ph. D. in Zoology at the University of Hawaii. Her presentation, accompanied by slides, covered the wildife, especially birds, of Laysan Island.

Access to Laysan, allowed only by special permit, requires a boat trip. The trip normally takes about 6 days but can be extended by rough seas and the number of stops along the way. All supplies, including food and water, must be brought in. Marie's particular study has been on the Laysan Finch, an endangered species; she has been studying under Sheila Conant, who has also made several trips to Laysan.

Laysan Island was discovered in the 1820's. Although guano mining was an important industry in the late 1800's, there have been no permanent residents since the turn of the century. Unfortunately, the introduction of rabbits to Laysan resulted in destruction of nearly all vegetation and the subsequent extinction of three native birds. In 1909, Theodore Roosevelt declared the island part of a National Wildlife Refuge. Marie discussed and showed slides of the topography of Laysan, which is flat, with 30-35 feet as its highest elevation. A large inland lake is 4 times as salty as the ocean.

The wildlife on Laysan is abundant and varied: Laysan Ducks (with a population of only 500); male Great Frigatebirds in brilliant courting display; Black Noddies roosting in the only ironwood tree; Laysan Finches abundant and getting into everything. Marie's intriguing slides showed the lovely Fairy or White Tern, which lays a single egg precariously balanced on the conjunction of tree limb and trunk. Monk Seals, an endangered species, haul up on the beach but are easily disturbed by people. The seals often like to lie next to objects such as posts, sides of tents, small boats, or whatever. Brown Noddies as well as Masked Boobies nest on the ground. There are also burrowing birds such as shearwaters and petrels. The slides showed the distinctive courtship display of the Laysan Albatross, which lays only 1 egg per clutch. Plastic debris is so common that it is frequently regurgitated by birds which have mistaken it for food.

Marie is studying the breeding biology of the Laysan Finch. The study includes measuring eggs, banding and weighing the adult and nestling finches, and keeping track of nest success. The finches nest in the densest bunch grass, and the nests are often difficult to see. The typical clutch is 3 to 4 eggs. Nestlings start feathering out in 7 days, complete fledging in 26 days, but remain dependent on adults for much longer. Rainy weather is usually over by April, followed by a hot and dry period during the summer. Rainy, flooding weather can destroy eggs and nestlings. During the hot, dry season, when little water is available, finches drink fresh water from plant leaves or eat the leaves themselves for moisture. Climate is a strong factor controlling the finch population.

Marie's presentation included an introductory slide of maps of the northwest Hawaiian Islands and humorous ones of the activities of the biologists who study the birds and other wildlife.

Members offered a special mahalo to Peter Luscomb who has supplied the monthly meetings with punch and cookies.

Betty Johnson

JOB ANNOUNCEMENT

The Natural Resources Defence Council (NRDC) is seeking a full-time consultant to assist a new project that will aim to protect and preserve Hawaii's rich natural heritage. NRDC is a non-profit environmental organization with a staff of lawyers, scientists, and resource specialists. The individual will work in Honolulu under the supervision of NRDC staff in San Francisco and Washington, D.C.

The focus of the new project will be on forest and land management with an emphasis on endemic plants and wildlife. Together with NRDC's legal and scientific staff, the consultant will devise and implement a strategy for improving the management of important native habitats and resources. The consultant will be responsible for working closely with state and federal administrative agencies, the state legislature, and other conservation groups and concerned individuals.

For further information, please write David Edelson, Senior Attorney, NRDC, 90 New Montgomery St., San Francisco, CA 94105.

ART EXHIBIT TO OPEN AT BISHOP MUSEUM

A new exhibition, Art and Natural History: Scientific Illustrations by George Venable, will open in Bishop Museum's Jabulka Pavilion on 22 January.

Mr. Venable is the Senior Scientific Illustrator for the Museum of Natural History at the Smithsonian Institution and a preeminent natural science illustrator whose work has been published in numerous medical and scientific journals, texts and monographs.

The Bishop Museum exhibition will include 24 of the best examples, in various media, of Mr. Venable's scientific wildlife illustrations, the best of the many illustrations that have made him preeminent in his field. The exhibition will continue from 22 January to 6 March.

On Monday, 29 February at 7:30 PM in the Museum's Atherton Halau, Mr. Venable will present a lecture illustrated with slides of his drawings. This lecture is part of the Museum's Distinguished Lecturers' Series and is free to BMA members and \$5.00 at the door for non-members.

FEBRUARY PROGRAM: HAWAIIAN MONK SEAL RECOVERY PROGRAM: IT'S WORKING

At the general meeting of HAS on Monday, 15 February, Mr. Bill Gilmartin from the National Marine Fisheries Service will present a slide program on the Hawaiian monk seal recovery program.

The Hawaiian monk seal, an endangered species, is now restricted to the Northwestern Hawaiian Island chain with an estimated beach population of 600 animals. Mr. Gilmartin will give a brief historical perspective on this endangered species. He will be discribing the research and recovery activities that have taken place since 1980.

The monk seal population has shown increases at certain islands, but there are two island populations that still have problems that need to be resolved. The meeting place will be the Atherton Halau at the B. P. Bishop Museum, and the time will be 7:30 PM. Refreshments will be served.

FEBRUARY 21st FIELD TRIP TO IHIIHILAUAKEA

The February 21st HAS field trip will be an easy half-day hike to Ihiihilauakea at Koko Head above Hanauma Bay. Marie Bruegmann, a botanist with The Nature Conservancy, will lead the group to the home of the four-leaf clover fern *Marsilea villosa*. *Marsilea* is a rare fern found only at one other place on Oahu. It is a unique plant that survives only in vernal pools. This trip is especially exciting because the area was flooded from the 11 December and the New Years Eve rains, something which has not happened in at least 10 years. Because of this flooding, the fern has started reproducing, and hopefully the population will increase. Koko Head is also a good site for seeing whales and seabirds, so don't forget your binoculars. Meet in front of the State Library on Punchbowl St. at 7:30 AM or at the entrance to Hanauma Bay at 8:00 AM. For more information call Marie Bruegmann at 942-8520 or Robin Eilerts at 941-5974.

FREE ICE CREAM!

Ice cream will again be served to those volunteering for paste up of the '*Elepaio* at Thane Pratt's house on Saturday, 20 February, beginning at 1:00 PM. Thanks to Sheila Conant, Donna De Hann, Rob Fleistcher, Jaan Lepsen, and Joel Simasko for helping with the paste up of the current issue! For more information, call me at 524-8464.

TKP

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1988 ELECTION RESULTS

Ballots were sent by mail this year instead of being enclosed in the 'Elepaio. Response to the new system was very good and over 200 votes were received for each candidate. This was in spite of the fact that there was no response to the call for nominations in the October 'Elepaio and therefore only one candidate for each office was on the slate.

Thanks to the voters for voicing their support for the 1988 board members who are generously giving their time and energy to the Society.

IF NOT A MEMBER, PLEASE JOIN US

JOINT MEMBERSHIP -- National and Hawaii Audubon Societies

Individividual	\$30.00
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installments)	150.00
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All local memberships and subscriptions are for the calendar year.

WELCOME TO NEW LOCAL MEMBERS

We welcome the following new local members and encourage them to participate in the Society's activities:

Leona Bennett, Lahaina, HI; Michael Brown, Honolulu, HI; Dorothy Crumb, Jamesville, NY; Naomi Delventhal, Hilo, HI; Linda Dunn, Wahiawa, HI; Douglas K. Garrison, Honolulu, HI; Nelson Ho, Mountain View, HI; Greg R. Homel, Honolulu, HI; R. T. Kinchloe, Canoga Park, CA; Bertil Larson, Honolulu, HI; Donna LeClair, Honolulu, HI; John J. Mahoney, Mountain View, CA; Pat McKowan, Kailua-Kona, HI; Arthur Medieros, Kaneohe, HI; James H. Meyerhoff, Kailua, HI; Janet Moshkorski, Overland Park, KS; Robert Moyer, San Francisco, CA; Dennis Oliver, Somerville, MA; Jennifer Saville, Honolulu, HI; Pat Staffelbach, Kailua, HI; Eric VanderWerf, Rochester, NY; Anthony White, Bethesda, MD; James Wolfe, Honolulu, HI.

HAWAII AUDUBON NEEDS YOUR KOKUA

As the new year begins Hawaii Audubon Society's new President, Bruce Eilerts, is looking for willing workers for the Society's committees. HAS, nearly 50 years old, is an active and respected organization, offering volunteers a chance to serve the community by working in conservation, education, field activities, programs, publicity, publications, and more. Some committees need leaders, others need "worker ants." You can work indoors or out, helping with field trips or by tackling a conservation issue at the legislature. Pasting up and mailing the *Elepaio* or helping with publications sales can mean spending a pleasant afternoon with friendly members. You more outgoing folks may want to help publicize HAS events and activities or organize a membership drive.

Although the Society may be old, it is new people, new ideas and enthusiasm that keep its outlook fresh. If you want to help, please call Bruce Eilerts at 941-5974, or, if he calls you, please kokua.

PUBLICATIONS OF THE SOCIETY

- HAWAII'S BIRDS by H.A.S. (1984, revised 1987). An excellent, pocket-sized fieldguide to all native and well-established introduced birds. \$4.95 plus \$0.85 surface mail or \$1.03 air mail. Hawaii residents add \$0.20 State tax.
- FIELD CHECKLIST OF BIRDS OF HAWAII by R. L. Pyle and A. Engilis, J. (1987). Pocket-sized card listing 125 species, with space for field notes. Post paid. \$0.25 or \$0.10 for 10 or more. (NEW!)
- GUIDE TO HAWAIIAN BIRDING by H.A.S. and C. J. Ralph, ed. (1977). Where to go, what to see. All regularly visited islands. Post paid. \$1.50.
- CHECKLIST TO THE BIRDS OF HAWAII by R. L. Pyle (1983). Our reference for avian nomenclature in Hawaii. All naturally occurring birds, plus introduced species well-established. Post paid. \$2.00.
- CHECKLIST TO THE BIRDS OF MICRONESIA by P. Pyle and J. Engbring (1985). Similar to preceding but covers Micronesia. Post paid. \$2.00.

BACK ISSUES OF 'ELEPAIO and INDICES TO 'ELEPAIO: Vol. 1-40 -- \$1.00 per issue, \$10.00 per volume Vol. 41 to present -- \$0.50 per issue, \$5.00 per volume Complete set (Vols. 1-43) -- \$350

Overseas orders cost more. Contact the Society for added cost.

NOTICE TO AUTHORS

The 'ELEPAIO, Journal of the Hawaii Audubon Society, invites authors to submit scientific articles on natural history of Hawaii and the Pacific. Scientific articles are subject to peer review. The 'ELEPAIO also serves as a newsletter to inform members of conservation issues, Society events, and other subjects of interest to members. Manuscripts of articles and newsletter items may be sent to Thane Pratt at 1022 Prospect St., Apt. 1103, Honolulu, HI 96822. Articles not subject to peer review MUST BE RECEIVED BY THE 15TH OF THE MONTH to be considered for publication in the next month's issue.

SCIENTIFIC ARTICLES should be typewritten and double-spaced scientific, and three copies should be submitted. Any photographs should be submitted as photographic prints, in color or black and white (they will appear in black and white). The prints should be 3.5 X 5 inches, or larger, and should be adequately cropped if cropping is required. Original copies of figures (e.g., maps, graphs) should be clear and clean, with lettering large enough to remain legible upon reduction to fit the newsletter format. Authors are advised to design their illustrations with the '*ELEPAIO's* columnar format and size in mind (please look at a copy of the journal).

CALENDAR OF EVENTS

- Feb. 8 (Mon.) Board Meeting at Bishop Museum at 7:00 PM. Call Allen Allison, 848-4145.
- Feb. 15 (Mon.) General Meeting at Atherton Halau, Bishop Museum at 7:30 PM. Program: Hawaiian Monk Seal Recovery Program, by Bill Gilmartin. Announcement on page 16.
- Feb. 20 (Sat.) '*Elepaio* Paste-up at Thane Pratt's house, 1:00 PM. Call 524-8464.
- Feb. 21 (Sun.) Field trip to Koko Head. Meet at State Library on Punchbowl St. at 7:30 PM. Announcement on page 16.

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