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New Records of Birds for Kwajalein Atoll, Marshall Islands

Roger B. Clapp and William L. Schipper

Kwajalein Atoll is a large, crescent-shaped coral atoll in the western (Ralik) chain of the Marshall Islands that lies between 09°25′ and 08°40′ N and 166°50′ and 167°45′ E (Amerson 1969). Schipper (1985) reported observations made during his residence on the atoll from February 1978 to April 1983. He returned to Kwajalein in January 1987 and continued to make observations of the birds, primarily on Roi-Namur, the northeasternmost island of the atoll. During March 1988, Clapp visited 10 of Kwajalein's more than 90 islands as part of an environmental survey requested by the U.S. Army Corps of Engineers. We document below eight species previously unrecorded from the atoll. Six species, indicated by asterisks preceding the common name, are previously unreported from the Marshall Islands.

*MOTTLED PETREL (Pterodroma inexpectata)

Schipper saw a Mottled Petrel ca. 100 ft. off the edge of the reef at the southeast corner of Roi-Namur on 11 June 1987. The overall gray coloration, striking black markings on the underwing, and dark gray belly patch identified this distinctive petrel.

This species, a regular migrant through the tropical Pacific, breeds in New Zealand and nearby islands and winters in the northern Pacific from Japan to the Gulf of Alaska and waters off California (American Ornithologists' Union [A.O.U.] 1983). The northward migration occurs primarily from mid-March to May (King 1970, Nakamura and Tanaka 1977, Ainley and Manolis 1979); most birds evidently follow a course through the western Pacific, but fair numbers pass through the Hawaiian area. The bird seen off Kwajalein was presumably a late migrant. This is the only record for Micronesia, but the species may occur more commonly.

RED-TAILED TROPICBIRD (Phaeton rubricauda)

Clapp saw an adult tropicbird flying over Omelek Island at 0929 hrs on 17 March 1988. Although lacking the elongated central tail feathers, it was easily identified as a Red-tailed Tropicbird by the unmarked back and wings. The bill was salmon-colored rather than the bright reddish orange usually found in central Pacific representatives of this species. Although previously unrecorded from Kwajalein Atoll, this tropicbird breeds widely in the tropi-

cal Pacific (A.O.U. 1983) and nests on at least four atolls in the Marshall Islands (Amerson 1969).

*GARGANEY (Anas querquedula)

Schipper saw a male in winter plumage on Roi-Namur on 2 November 1988. The small, tame duck foraged for grass seeds in company with several female-plumaged Northern Pintails (Anas acuta). A leisurely examination was made at distances of 50 to 200 ft. with binoculars and a 15–60x spotting scope. The bird was identified by its small size, gray legs and feet, gray shoulders, green speculum bordered by a white stripe above and below, and two brownish stripes against the paler head, one running through the eye and the other below it.

This species breeds throughout the northern Palearctic, wintering south to southern Africa, India, eastern China, New Guinea, and Australia (A.O.U. 1983); it has been recorded relatively infrequently in the tropical Pacific. Garganeys are fairly regular migrants in the Marianas (Glass et al. 1989). They have been recorded in Palau (Pratt et al. 1987) and have been found more than a dozen times in the Hawaiian Islands (Spear et al. 1988) where the species is now considered rare but regular (Pratt in litt.). The only other published record from the tropical Pacific is from Wake Island, where Johnston and MacFarlane (1967:158) noted only that "Adverse weather frequently accompanied the arrival of uncommon species such as . . . Garganey's Teal . . ." MacFarlane collected two males (USNM 493453-454) on 23 December 1983. Both have winter plumage similar to the Garganey on Kwajalein.

*LESSER YELLOWLEGS (Tringa flavipes)

A Lesser Yellowlegs was photographed (Fig. 1) by Schipper at Roi-Namur on 27 September 1987 as it foraged in a temporary rain pond with a Sharp-tailed Sandpiper (Calidris acuminata). The bird allowed close approach but was not seen the following day. Schipper saw a second Lesser Yellowlegs on 8 October 1988 on Kwajalein Island as it foraged along the edge of the northernmost catchment basin between the runway and the taxiway. Slightly taller than a nearby Lesser Golden-Plover (Pluvialis dominica), it was identified by its relative size and shape, yellow legs, and straight bill, which was short compared to the length



Figure 1. Lesser Yellowlegs foraging with Sharp-tailed Sandpiper, Roi-Namur Island, 27 September 1987. Photo by W.L. Schipper

of the head.

This North American species is rarely encountered in the tropical Pacific except for the Hawaiian Islands where it is seen regularly, (Berger 1981, Pratt et al. 1987). The only other records for the tropical Pacific are a specimen from Johnston Atoll (Amerson and Shelton 1976), a recent sight record from the Tuamotu Archipelago (Intes 1988), and those listed here. In the southwest Pacific there are ten sight records from New Zealand (Ornithological Society of New Zealand 1970, 1980; Falla et al. 1981, Booth 1984) and one for Australia (Smith 1983). At least two records exist for the Asiatic coast, one from Sumatra (Ollington and Parish 1989) and one from Hong Kong (Kennerly 1987); there may also be a record from Japan (Wild Bird Society of Japan 1982), but we have been unable to find any substantiating details.

*MARSH SANDPIPER (Tringa stagnatilis)

Late on the afternoon of 26 September 1987, Schipper saw a tringine sandpiper at the same rain pond on Roi-Namur where the Lesser Yellowlegs was seen. The bird stood a little taller than a Lesser Golden-Plover, had a long, thin black bill and olive green legs, and displayed a white lower back, rump, and upper tail coverts in flight. Photographs taken at the time are poor and merely show its tringine stance and shape. John Engbring (pers. comm., Honolulu), who has seen Marsh Sandpipers in the western Pacific, examined the photographs and Schipper's more detailed field notes and concurs that the bird was a Marsh Sandpiper.

The Marsh Sandpiper could be approached as closely as 50 ft. It was not found the following day despite a careful search. This Palearctic sandpiper breeds east to Siberia (A.O.U. 1983) and winters south to Australia (Lane 1987). It is a regular winter visitor to western Micronesia (Pratt et al. 1987), but the Kwajalein record is the only one for eastern Micronesia or anywhere else in the central Pacific.

*HUDSONIAN GODWIT (Limosa haemastica)

Clapp first saw a Hudsonian Godwit on southwestern Kwajalein Island at dusk on 11 March 1988. It foraged alone on a lawn southwest of the western taxiway. Only the size, moderate to small for a godwit, the white rump, and the nearly straight, slightly upturned bill were seen. On subsequent occasions other field marks including the conspicuous wing stripe and diagnostic sooty underwing (Fig. 2) were noted. Schipper concurred with this identification when he saw the godwit on 19 March.

The godwit was seen eight times from 11 to 29 March but became wary and was seen less often toward the end of the period. It was usually seen near where it was first encountered. It often roosted on the raised area beyond the west end of the runway where it frequently associated with Whimbrels (Numenius phaeopus) and a much larger Bartailed Godwit (Limosa tapponica). when the Hudsonian Godwit sometimes flew with Whimbrels, but when both Whimbrels and the Bar-tailed Godwit were present, it invariably flew with the latter. The godwit usually foraged alone but occasionally associated loosely with Ruddy Turnstones (Arenaria interpres) and Lesser Golden-Plovers.

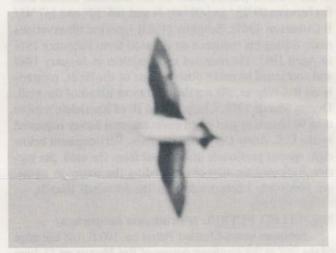


Figure 2. Hudsonian Godwit in flight, Kwajalein Island, 19 March 1988. Photo by R.B. Clapp

Schipper saw another, or possibly the same, Hudsonian Godwit on Kwajalein Island on 8 October 1988. The godwit was feeding with a Lesser Yellowlegs and Lesser Golden-Plovers in a water catchment basin between the runways. When it flew, the dark underwing, distinguishing this bird from the similar Black-tailed Godwit (Limosa limosa), was clearly seen.

The only previous records of this Nearctic breeder in the tropical Pacific are two sight records from Fiji and one from Oahu, Hawaiian Islands. The birds in Fiji were seen from 2 May (Skinner and Langham 1981) to 29 August 1981 and on 17 and 24 April. 1982 (Skinner 1983). The one on Oahu was seen 21–29 July 1987 (Pyle 1987a). There is also a single record in 1982–83 for New South Wales, Australia (Lindsey 1984, 1985; Lane 1987), but the species strays almost regularly to New Zealand (Ornithological Society of New Zealand 1970).

*CURLEW SANDPIPER (Calidris ferruginea)

Clapp discovered a Curlew Sandpiper 23 March 1988 when it called in flight. It was with a flock of Ruddy Turnstones over the field by the battle monument on the western

portion of Kwajalein Island. The bird's white rump, black legs, long, thin drooping bill, and the reddish feathers on breast and head were the identifying characteristics. The Curlew Sandpiper was seen again on 25 March as it foraged with turnstones in a grassy area beyond the west end of the runway. Found there feeding among the turnstones again on 29 March, it was collected on the taxiway after it flushed and flew to roost with a flock of Lesser Golden-Plovers.

The specimen (USNM 596229) was a male with small gonads The bird was extremely fat (82 g, compared with a mean of 63 g for males on the breeding round [Cramp et al. 1983]). This suggests the sandpiper was healthy and would have eventually migrated north.

Curlew Sandpipers breed primarily in northern Siberia (A.O.U. 1983) and winter commonly south to Australia (Condon 1975), but they are uncommon migrants in western Micronesia (Pratt et al. 1987). The only other records for the tropical Pacific are from Oahu in the Hawaiian Islands, where one was seen and photographed 31 October 1979 (Pyle and Ralph 1980). Another was present on Oahu 6–23 September 1986 (Pyle 1987b).

FRANKLIN'S GULL (Larus pipixcan)

Jay Kilborn (pers. comm.) found a "gull" on the Roi-Namur golf course on 24 June 1988. Two days later Schipper identified the bird as a Franklin's Gull in first summer plumage (Figs. 3, 4). The pronounced eye ring, gray central and white outer tail feathers, white-tipped primaries, short-legged appearance, and extensive white on the underwing all distinguished this bird from the Laughing Gull (Larus atricilla) in similar plumage. The gull was present



Figure 3. Franklin's Gull on golf course at Roi-Namur Island, 26 June 1988. Photo by W.L. Schipper



Figure 4. Franklin's Gull in flight, Roi-Namur Island, 26 June 1988.

Photo by W.L. Schipper

through 3 July, foraging for grasshoppers on the golf course and frequenting the water catchment basins.

In recent years this North American species has strayed fairly regularly to the Hawaiian Islands, with scattered records farther south in the tropical Pacific (Clapp et al. 1983, Pratt et al. 1987), a few reports from Australia (Serventy and Whittell 1976, Eades and Debus 1982, Blakers et al. 1984), and one extraordinary sighting at Marion Island in the Indian Ocean (Sinclair 1978). The previous record for the Marshall Islands was a bird in breeding plumage seen on Majuro Atoll 10 June 1975 (Anderson 1978).

ACKNOWLEDGMENTS

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National Ecology Research Center U.S. Fish & Wildlife Service National Museum of Natural History Washington, D.C. 20560

> PO Box 997 APO San Francisco, CA 96557

HAS ACCEPTING APPLICATIONS FOR GRANTS AND SCHOLARSHIPS

The Hawaii Audubon Society annually awards grants for research in Hawaiian or Pacific natural history. Awards are oriented toward small scale projects in Hawaii and generally do not exceed \$500. The Society also awards an undergraduate tuition scholarship to deserving undergraduate students majoring in a field relating to Hawaiian or Pacific natural history. This \$1,000 scholarship is to be applied toward tuition at a credited university. The deadline for grant applications is 1 April and 1 May for scholarships. For application forms contact John Engbring, Chair, Scholarship and Grants Committee, P.O. Box 4443, Honolulu, HI 96812, (808) 541-2749 (days).

DON CHAPMAN NAMED HONORARY CHAIRMAN OF SATURDAY, 31 MARCH BIRDATHON

Honolulu Advertiser columnist Don Chapman has been named honorary chairman of the 31 March Birdathon. Writer of the Three Dot Column, Chapman has long considered himself an amateur Auduboner. Other Birdathon developments include:

T-shirts: Birders will receive official Birdathon T-shirts designed by Hawai'i wildlife artist Patrick Ching to wear during the Birdathon. These collectors' item T-shirts will only be available to actual Birdathon team members. Those signing up by 1 March are guaranteed to receive the size they request (small, medium, large, or extra large).

Prizes: Among the prizes donated to date are 20 pounds of frozen lobster tails; \$100 gift certificate toward printing of personal stationery, donated by Valenti Brothers Graphics; books, donated by Honolulu Book Shops; four passes to Sea Life Park, donated by Sea Life Park; and a Paradise Cove Luau for Two, donated by Paradise Cove Luau Park.

Teams: Groups are forming on O'ahu, Hawai'i, Kaua'i, Maui, and Moloka'i. We will not be birding on Lana'i because of the hunting season. To join a team, or start one, call Lynne Matusow on O'ahu at 531-4260 or one of the team leaders below.

Hawai'i--Reggie David, 329-9141 Kaua'i--Bruce Eilerts, on O'ahu, 599-4795 Maui--Fern Duvall, 572-1584 Moloka'i--Thane Pratt, on Hawai'i, 967-7146 O'ahu, Lynne Matusow, 531-4260

We are still seeking participants. The Birdathon operates much like walkathons. Birdathon participants obtain pledges from sponsors who agree to contribute a certain amount of money for each species seen in a 24 hour period.

How can you help? Join us as a birder. All are welcome, novices and experts alike. Sponsor a participant,

1989 Birdathoners hard at work.

Photo by Beverly McGaha

and get your friends to do the same. Solicit local merchants for prizes. All contributions are tax deductible to the extent allowed by law.

If you can help or need more information, call Lynne Matusow on O'ahu, 531-4260, or send the form below to Birdathon, Hawaii Audubon Society, 212 Merchant Street, Suite 320, Honolulu, HI 96813.

I will be a birder on March 31	
My T-shirt size is	
I will be a celebrity birder on March 31	
I will sign up celebrity birders	
I will be a sponsor	
I will sign up sponsors	
I will solicit prizes	
I will donate prizes	
I will donate \$	
Make checks payable to the Hawaii Audubon Soc	iety.
Name	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Address	
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Office telephone	EAR

SALES OF HAWAII'S BIRDS CONTINUE AT RECORD PACE

Published in September 1989, the fourth edition of *Hawaii's Birds* is bigger and better than ever. It has 16 more pages than its predecessor, plus over 150 color photographs and illustrations. Cost is \$10.20 per copy (\$8.95 plus \$1.25 postage).

Please make checks payable to the Hawaii Audubon Society. Send your order to Hawaii Audubon Society, 212 Merchant Street, Suite 320, Honolulu, HI 96813.

SPECIAL FAMILY ACTIVITIES SET FOR SATURDAY, 21 APRIL

Puppets on the Path, Hawai`i's environmental education and entertainment troupe that mixes music and puppetry with messages of universal conservation concerns, will be performing for "kids" of all ages (but especially the keikis) on Saturday, 21 April. Hawaii Audubon Society is sponsoring this event, which will be staged as part of the Keiki Arts Festival at McCoy Pavillion in Ala Moana Park. The Festival runs from 10:00 A.M. to 2:00 P.M. Puppets on the Path will perform at noon. Prior to the performance, the City and County of Honolulu Department of Parks and Recreation is sponsoring a workshop on puppetry, where the keiki can learn firsthand how puppets are made and how to make them work.

Puppets on the Path will present its "Pacific Treasures" show. We will meet Moana, a young Hawaiian Green Sea Turtle, Maka, a Hawaiian Monk Seal, Baby Melody Humpback Whale, and Flotsam and Jetsam, trash of the sea.

There will be arts and crafts activities and games for the children throughout the free Festival. Hawaii Audubon Society urges its members to save this date, bring their children, their neighbor's children, and their friends to see Puppets on the Path, and to join us afterward for a picnic lunch (bring your own) and games.

This special family activity day is in lieu of April's general meeting.

MAHALO DONORS!

HAS would like to thank the following members and friends for their generous contributions. This list reflects donations received from 14 December, 1989 through 13 January, 1990.

Noreen Bautista, Keoni Bird, Lillian Bloomfield, Mr. and Mrs. David Boak, Mildred Bowers, Frank Brandt, Edwin Coffin, Mark Collins, Connie Cozens, John Engbring, Michael Fischer, Christopher Ganshaw, Jon Giffin, Dr. Henning Grossmann, Hawaiian Service, Lawrence Hirai, Bruce Irvine, Mrs. Hai Kamakau, Conni Kellogg, Mr. and Mrs. Harvey C. King, Fletcher Knebel, Ardell Kuchenbecker, Ken Kupchak, Rodney Lau, and Robert Lupton.

Also, George-Ann Maxon, Beverly McGaha, Carl McIntosh, S.E. "Dusty" Miller, Mina Morita, Audrey Newman, Nancy Okamura, Michele Peters, J. Scott B. Pratt III, Burton Roberts, Carolyn Ruszkiewicz, Kirk Smith, Kurt Schwarz, Michael Street, James P. D. Thropp, Jr., Nancy Thurston, Steven Tom, Phyllis Turnbull, Suzanna Valerie, Genie Wery, David Wilbur, and Richard Williams.



'O`u (Psittirostra psittacea) on Kaua`i. Illustration by Norman Nagai

ART EXPOSITION, AUCTION AND SALE SET FOR 16 JUNE

The Hawaii Audubon Society Annual Wildlife Art Exposition, hosted by Pacific Island Arts Gallery, celebrates 51 years of caring for Hawai'i's environment. The opening reception and auction will be on Saturday, 16 June, from 5:00 P.M. to 9:00 P.M. at Pacific Island Arts Gallery, North Shore Marketplace, 66-250 Kamehameha Highway, Hale'iwa, HI. The Hawaii Audubon Society will retain a portion of the auction proceeds.

Norman Nagai, the overall winning artist in last year's show with his "Last Flight of the Akialoa" (depicting the now extinct O'ahu 'Akialoa in flight from koa trees, its preferred native habitat, toward the barren trunks of introduced species) has been commissioned to do a commemorative limited edition for the show.

Nagai finds the art of painting endemic Hawaiian birds challenging. "What makes painting Hawaiian birds so difficult," he says, "is that most birds developed differently from island to island. They also inhabited different elevations in the mountains, creating a difficult task for any artist to illustrate. The 'ohi'a tree, for instance, adapted to different areas. In one area it can exist as a shrub, while in another area a 100-foot tree."

Nagai extensively researches his paintings. He goes on location, makes video tapes and photographs, and has experienced firsthand the Bishop Museum's bird collection, viewing specimens of extinct birds, some with collecting tags dating back to 1892. "It's difficult to imagine that these birds, extinct for almost one century, used to fly about the forests. One could almost see and hear these birds in action, hopping from flower to flower, sucking nectar and searching for insects," he says.

The Exposition and sale is open to the public.

Members and their friends are invited to attend the opening night festivities and view firsthand the art of the 90s. For information on participating in the show, see the accompanying call for entries below.

ATTENTION ARTISTS AND PHOTOGRAPHERS...CALL FOR ENTRIES

Plans are underway for Hawaii Audubon Society's Annual Wildlife Art Exposition, contest, and sale. Once again, the event will be hosted by Pacific Island Arts Gallery in Hale'iwa in June 1990. The opening night festivities, auction, and awards ceremony will be Saturday, 16 June. Subject matter is limited to any species of mammal, bird, fish, invertebrate, or plant residing in the Pacific region, extending from northernmost Hawai'i, east to the Galapagos, and all of Polynesia and Micronesia. To receive an entry form, send a self-addressed, stamped envelope to Wildlife Art Exposition, c/o Hawaii Audubon Society, 212 Merchant Street, Suite 320, Honolulu, HI 96813.

CONSERVATION NEWS

Wilkesia hobdyi listing: The U.S. Fish and Wildlife Service has scheduled a public hearing for the proposed listing of Wilkesia hobdyi (dwarf iliau) as an endangered species for Friday, 23 February 1990, 7:00 P.M. to 9:00 P.M. at the Lihu'e Library. The public is encouraged to provide relevant information in writing or orally at the hearing. The dwarf iliau is endemic to Kaua'i and occurs on the Na Pali Coast. Goats and invasion by alien species of plants are identified as threats to the iliau.

Lentipes concolor listing petition: HAS, along with four other Hawai'i organizations, has submitted a petition to list the freshwater endemic Hawaiian fish, Lentipes concolor (o'opu hi'u kole or 'o'opu 'alamo'o) as a threatened and endangered species. HAS is also petitioning to designate critical habitat for this 'o'opu. In December of 1989, the petition was sent out of the U.S. Fish and Wildlife Service's Honolulu office to the Service's regional office in Portland, Oregon. The petitioners expect to hear from the Service soon regarding the status of the petition.

Ewa sinkholes and fossil bird bones: HAS is supporting a current effort to preserve an 8-acre remnant parcel containing limestone sinkholes in the Barber's Point area of O'ahu. The sinkholes are situated on the edge of the present Campbell Industrial Park to the north side of Malakole Road. Industrial and commercial development, Campbell Estate's Kapolei Business-Industrial Park, is planned for the general area. HAS is submitting comments on the draft environmental impact

statement to the City Department of General Planning encouraging the preservation of this sinkhole area. Similarly, HAS will recommend preservation of the site in the forthcoming zoning and permit procedures.

In Hawai'i, such sinkholes are found only on O'ahu. They are a unique geologic feature containing fossil bird bones, including flightless and extinct species, as well as extinct snails and other invertebrates. The site serves as an outdoor classroom for Hawaiian natural history, paleontology, and archaeology. A number of school groups, hiking clubs, government agency representatives, and elected officials have enjoyed visiting and learning about this unique natural treasure. HAS will be conducting a field trip to these sinkholes on 16 September 1990.

For more information on any of the conservation items above, please contact Marjorie Ziegler, 528-1432, HAS Conservation Committee.

HELP WANTED

Conservation: HAS is looking for volunteers to follow selected state bills and resolutions that are of interest to the Society this legislative session. We are also seeking volunteers who would like to help prepare and/or present testimony on behalf of the Society. The amount of time and involvement required is open; you may choose to select just one important piece of legislation and follow it for the entire session! Those wishing to present testimony would need to attend hearings held during working days. If you have some time and an interest in legislative matters, come downtown and get involved! Testimony from HAS has been well received in the past, and the Society would like to continue its involvement in the decision-making process. We would appreciate your involvement and kokua. Please call Marjorie Ziegler, 528-1432, HAS Conservation Committee, if interested.

Finance: Auditors and accountants are needed to help audit the books for calendar 1989 and prepare the IRS 990 form. If you can share your expertise with us, please call Lynne Matusow at 531-4260. This work can be done during the day, in the evening, and on weekends...whatever suits you best.

Office: HAS needs volunteers to give one day a week (10:00 A.M. to 2:00 P.M.) Monday through Friday. No typing or other machine operation required. If you would like to help out, call George Campbell at 941-1356.

Also, the 'Elepaio production staff is seeking a volunteer or two to type articles and news items into the computer at the HAS office for a few hours each month. Knowledge of Macintosh Plus hardware and Write Now software preferred, and you should be able to work from

the computer manual if necessary. This is a great opportunity to learn a valuable skill. If you have a few hours a month to spare and would like to help with the 'Elepaio, please call Lynne Matusow, 531-4260. We would really appreciate your help!

Wildlife Art Exposition: HAS needs help in publicizing the contest, auction, and show and in making presales, especially to corporations. Please call Lynne Matusow, 531-4260, if interested.

MOLOKA'I CHRISTMAS BIRD COUNT

The first Audubon Christmas Count on the island of Moloka'i was conducted on 23 December 1990. The Count was organized by Torrie Haurez, Field Coordinator for The Nature Conservancy of Hawaii, and 18 birders divided into three teams participated. Dr. Fern Duvall and Tod Lum, Hawai'i Division of Forestry and Wildlife, and Audrey Newman, The Nature Conservancy of Hawaii, lead the teams.

A total of 33 taxa were observed. The introduced Common Myna (Acridotheres tristis) and Zebra (Barred) Dove (Geopelia striata) were most commonly seen, and the Great Frigatebird or 'Iwa (Fregata minor palmerstoni), Fulvous Whistling-Duck (Dendrocygna bicolor), and Bufflehead (Bucephala albeola) were observed only once. Native Hawaiian taxa observed included White-tailed Tropicbird (Phaethon lepturus dorotheae), 'Apapane (Himatione sanguinea), Hawaiian Coot (Fulica americana alai), and Black-necked (Hawaiian) Stilt (Himantopus mexicanus knudseni).

Many thanks to team leaders and birders; see you next Christmas!

Ed Misaki

RESEARCH POSITION OPEN ON MOLOKA'I

The Hawai'i Department of Land and Natural Resources was recently granted funds to undertake a research project involving Black Francolins (Francolinus francolinus) on the island of Moloka'i. The project is funded through the Research Corporation of the University of Hawaii and will be conducted over a 2-year period. A temporary full-time position on Moloka'i is being offered. Applicants should be knowledgeable in wildlife population ecology, and graduate students are encouraged to apply. Contact Tod Lum, 548-8850, on O'ahu or Meyer Ueoka, 244-4352, on Moloka'i if interested.

MAHALO HMSA AND PHONATHON VOLUNTEERS!

Thank you HMSA for helping to make our January phonathon such a great success. HAS members pledged over \$3,600 in two nights of phoning from the HMSA offices. This success could not have been achieved without the HMSA telephone bank.

We also want to thank the following members who worked during the O'ahu phonathon: Ellen Bethell, Phil Bruner, Jane England, Tommy Gambill, Casey Jarman, Pearl Johnson, Dana Kokubun, Tod M. Lum, Peter Luscomb, Lynne Matusow, Beverly McGaha, Glenys Miller, John H. Mitchell, Leila M. Miyamoto, Christi Moore, and Marjorie Ziegler.

Finally, we are most thankful to our members who pledged during the phonathon. The HAS Fundraising committee is working on the accounting. Phonathon donors will be acknowledged in forthcoming issues of 'Elepaio. Mahalo everyone!

FEBRUARY FIELD ACTIVITY

The Hawaii Audubon Society's February field activity will be held on Sunday, 18 February 1990. This activity consists of a 2-mile hike (2-3 hours) on the Makiki Valley Loop Trail. David Hill will lead the hike, which features ancient taro terraces, mixed native and introduced forest, stream life, introduced forest birds, and possibly, the endemic Common (O'ahu) 'Amakihi. Hiking shoes, mosquito repellent, binoculars, and water are recommended/ We will be meeting at the Hawai'i Nature Center in Makiki at 8:00 A.M. THIS OUTING IS A GREAT ONE FOR THE KIDS!

FEBRUARY PROGRAM: HAWAI'I'S HAPPY FACE SPIDERS

Dr. Samuel M. Gon, III of The Nature Conservancy of Hawaii will speak on Hawai'i's happy face spiders at the HAS general meeting on Monday 19 February 1990. The meeting will be held at the Atherton Halau, Bishop Museum and begins at 7:30 P.M. Refreshments will be served.

NOTICE TO AUTHORS

The 'Elepaio, Journal of the Hawaii Audubon Society, invites authors to submit scientific articles on natural history of Hawai'i 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 Editor, 'Elepaio, Hawaii Audubon Society, 212 Merchant St., Suite 320, Honolulu, HI 96813. Articles not subject to peer review normally are published at least two months from the date of receipt by the editor.

Scientific articles should be typewritten and double-spaced. Three copies of text should be submitted. Any photographs should be submitted as photographic prints in color or black and white (they will appear black and white) and should be adequately cropped if cropping is required. Authors are advised to design their illustrations with the 'Elepaio format and column size in mind (please look at a copy of the journal). Original copies of figures, including maps and graphs, should be clear and clean, with lettering large enough to remain legible upon reduction to fit the newsletter format. An original and two good quality "xeroxed" copies of each illustration should be provided with the manuscript.

ELEPAIO

The 'Elepaio is the monthly journal of the Hawaii Audubon Society. It publishes both scientific and popular articles and announcements of interest to members.

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CALENDAR OF EVENTS

Feb. 10 (Sat.) Board Meeting at 7:00 P.M.
Call Bruce Eilerts for details

599-4795 (eves.)

Feb. 18 (Sun.) Makiki Valley Loop hike. Details

inside.

Feb. 19 (Mon.) General Meeting at the Atherton Halau,

Bishop Museum, at 7:30 P.M.

Program: Hawai'i's Happy Face Spiders,

by Dr. Samuel M. Gon, III.

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