THE ELEPAIO

Journal of the Hawaii Audubon Society

For the Better Protection of Wildlife in Hawaii

VOLUME 36, NUMBER 2 AUGUST 1975

THE JAVA SPARROW IN HAWAII

By Andrew J. Berger
Professor of Zoology, University of Hawaii

The Java Sparrow (Padda oryzivora) is thought to be endemic to Java and Bali, but it has been introduced to many other areas from the Philippines to Ceylon. Caum (1933) wrote that there is "a rather indefinite record that this species was introduced /to Hawaii/ about 1865 by Dr. William Hillebrand.... In the U.S. Department of Agriculture Technical Bulletin 61 there is a note to the effect that it was brought into Hawaii about 1900. It has, fortunately, failed to survive." Bryan (1958) also noted that this species had not become established.

This species also has been called the Java Ricebird, Gray Java Ricebird, and Paddy Ricebird. Margaret Titcomb (Elepaio, October 1964:25) wrote of seeing one Java Sparrow at the Bishop Museum on July 22, 1964. Laura E. Walther next wrote that she saw two birds near a parking lot at Fort Shafter during the first week of August 1965 (Elepaio, November 1965: 40).

The first report of the nesting of the Java Sparrow in Hawaii is that of Jack Throp, who wrote (Elepaio, March 1969:80): "The latest /exotic species/ to be reported is a breeding group of Java Ricebirds...reported by Mrs. Rae A. Pagel of Diamond Head Road. About two years ago a Java Ricebird came to Mrs. Pagel's bird feeder which was maintained for the benefit of Cardinals, Linnets, and Sparrows. A few days later the single bird was joined by nine or ten more. They have been feeding daily at her home ever since. This year the adults nested, and the colony increased by several young." Java Sparrows (four birds) were first recorded on the Christmas count on December 28, 1969, in the Diamond Head area (Elepaio, February 1970:73). Eleven birds were observed in the Diamond Head and Kapiolani Park area on December 27, 1970 (Elepaio, February 1971:71). I saw a flock of 11 or 12 Java Sparrows (including one family group of two adults and five juvenile birds) near the Diamond Head tennis courts on December 22, 1971, and, on April 27, 1972, I saw two flocks totalling at least 35 birds, many of which were in juvenile plumage. In his summary of the Christmas count held on December 17, 1972, Jack Throp wrote that there were "about 60" Java Sparrows in Kapiolani Park and the adjacent Ewa slope of Diamond Head, although he saw only a few birds on the count day (Elepaio, February 1973:84). H. Eddie Smith added that 23 Java Sparrows were seen in Diamond Head crater on December 17; this apparently is the first report of the birds in the crater.

Java Sparrows apparently were first reported on the Manoa campus of the University of Hawaii on January 7, 1973, when Lawrence T. Hirai saw five birds near Bachman Hall. A flock of 15 birds was seen near Hamilton library on September 12, 1973. Priscilla Harpham reported a flock of at least 15 birds feeding on the ground at St. Francis High School in Manoa Valley during March 1974 (Elepaio, April 1974:122), and Adele M. Christian watched five Java Sparrows at a feeding tray in upper Manoa Valley (Loulu near Huelani Drive) during November 1974 (Elepaio, January 1975:80). Two Java Sparrows came to a feeder at Mary M. Roberts' house on lower Makiki Street on September 24, 1974 (Elepaio, November 1974:55), and Erika Wilson saw one bird in the cemetery at the corner of Wilder Avenue and Pensacola Street on November 5, 1974 (Elepaio, December 1974:66). Virginia and Warren Cone saw one Java Sparrow on Harding Avenue (near KAIM radio station) on December 21, 1974. Forty-two Java Sparrows were reported on the Christmas count held on December 22, 1974 (Elepaio,

February 1975:84).

It seems probable that a well-meaning citizen released Java Sparrows intentionally on the slopes of Diamond Head during the mid-1960s. The population had increased to 60 or more birds by December 1972. By that time, the range had been extended to include the Manoa campus of the University of Hawaii, and before the end of 1974 the birds had reached upper Manoa Valley. The members of the Hawaii Audubon Society can perform a valuable service by reporting their observations on the further extension of the range of this introduced seed eater.

The Java Sparrow is a very attractive bird (see Plate 59 in Hawaiian Birdlife). It also is a prolific species. Moreover, the birds subsist largely on seeds. It seems reasonable to assume, therefore, that a Java Sparrow population as large as those of the House Finch (Carpodacus mexicanus) and the Ricebird (Lonchura punctulata) would pose a serious threat to any diversified agricultural program that included grain crops. The Chairman of the State Board of Agriculture reported to the Senate in 1972 that a study of "the bird problem in sorghum fields at Kilauea reveals that Metcalf Farms, Inc., is experiencing 30% to 50% losses due to feeding by large flocks of ricebirds and linnets. Kohala Corporation similarly reports that, because of bird predation, they were able to harvest only 10 tons of sorghum from a 30-acre planting, which was supposed to produce at least 60 tons of grains." Subsequently, the Legislature appropriated $25,000 for the establishment of a system of protection and control of "pestiferous wildlife in the State." I know of no published report on the results of that program, but one doubts that much was accomplished with the $25,000.

More than a dozen species of seed-eating birds have been released on the slopes of Diamond Head since 1965 (Berger, 1972a:250). It is suspected that most, if not all, of these species were deliberately liberated in order to have more birds in the neighborhood. It also is of historical interest to note that the 1965 Legislature passed Act 203 that provided funds to hire a nongame bird biologist in the State Division of Fish and Game as well as funds to introduce another nongame bird to Hawaii. Raymond J. Kramer, the first State nongame bird biologist, sent a memorandum to "Interested Ornithologists of the State" on May 11, 1966. He wrote: "Whether you personally agree or not with the fact that my position has been charged with introducing a suitable, beneficial bird to the State, I think you will agree that it is ridiculous for the State to appropriate some $12,000 for a careful study and appropriation of one species, when any misguided citizen can purchase any colorful species that he can find in a pet store for (usually) less than $7.00 a pair and release as many as he desires, according to the thickness of his pocketbook.

"There is also a certain disparity in the fact that any new gallinaceous bird, or member of the Anatidae, must by Federal law be quarantined, with no medication, for no less than 21 days before release into the wild, with the proviso that should any disease show up, all members of that species in that particular shipment shall be destroyed and incinerated (no medication allowed). On the other hand, any bird of any other family, even though it may have ridden into Hawaii in the same shipping compartment, can be taken immediately to pet stores or other outlets and sold the same day to the public. At the present time, the State has no provision for quarantining these birds.

"We are quite concerned about the birds that are flying around loose; unfortunately, and as I am sure you recognize, it is not a simple, one-day--or even one-month--matter to go out in the field and exterminate them; we could kill many but not all." (See, also, Berger, 1972b.)

It would be impossible to exterminate in Hawaii such species as the House Finch, Ricebird, and Japanese White-eye (Zosterops japonica). It would be economically unfeasible to eliminate most of the exotic species that have become established during the past 15 years. The Plant Quarantine Branch of the Department of Agriculture held meetings on April 19 and July 26, 1973, in order to discuss the control of exotic birds in Hawaii. Representative of the Hawaii Audubon Society and of the Hawaiian Humane Society attended the meetings and gave their support to the plans drawn up to attempt to eliminate certain selected species on Oahu. Newspaper publicity was designed to explain the reasons for the program so that there would not arise too much of a public outcry (Honolulu Advertiser, June 28, 1973, page 1; Honolulu Star-Bulletin, July 6, 1973, editorial). All plans failed because of a lack of funds, manpower, and expertise. I am not aware that a single bird was killed.

Java Sparrows could be imported legally for the pet-store trade (without any quaran-

tine) until July 1, 1968, on which date their importation from foreign countries was banned by the U.S. Fish and Wildlife Service. The passage of the "Endangered Species Act of 1973" (Public Law 93-205, 87 Stat. 884) on December 28, 1973, imposes even tighter controls on the importation of foreign birds. These controls are designed not only to protect American bird species but also to protect birds of other countries. For example, McClure and Chalyaphun (1971) reported that "more than 300,000 birds of at least 350 species were sold each year during 1967-68-69 at the 'Sunday Market' in Bangkok. This represents a drain on the environment from the whole country and is an index of the sales going on in all cities. ... Nineteen species of doves, parrots, bulbuls, wagtails, buntings, and weaver finches made up 78% of the sales." More than 2 million birds were imported into the United States during the three-year period of 1968-1970 (Clapp and Banks, 1973). Approximately 24,800 birds were imported into Hawaii during 1971 (data provided by William C. Look, April 7, 1972). Moreover, a large percentage of birds die during shipment.

The discovery of Newcastle disease in poultry flocks in California in 1972 resulted in a Federal ban on the importation into the United States of all birds except under the most stringent conditions. The drastic effect that this action had on the cage-bird trade in Hawaii was described in the August 29, 1973, edition of the Honolulu Advertiser (section C). Such restraints are very irritating to pet-store dealers and to pet lovers. The alternative to strict controls, however, is less desirable. For example, "a federal agriculture expert says that it will cost the federal government an estimated $4 million to reimburse Southern California poultry owners for about 2 million birds that have to be destroyed to stem an epidemic of Newcastle disease" (Honolulu Star-Bulletin, April 4, 1972, A-15). As of September 29, 1972 (San Francisco Examiner), federal inspectors had "already killed more than 3 million chickens and turkeys, to howls of protest from the area's poultry farmers, and 3 million more chickens are scheduled to be exterminated soon." The reporter added that "the ailment was not a problem in the United States until it was brought in by exotic birds from abroad." The general public also paid a price--their tax dollars and the increased cost of eggs and poultry--as a result of the destruction of these birds.

There are several other good reasons for not releasing more exotic birds in Hawaii, especially without insuring that the birds are free of all parasites and diseases (Berger, 1975). The evidence suggests that the State Department of Agriculture has never had a quarantine program that was effective in preventing the introduction into Hawaii of worm, blood, and other parasites of birds.

Literature Cited

Berger, A.J. 1972a. Hawaiian Birdlife. University Press of Hawaii, Honolulu.
Berger, A.J. 1972b. Hawaiian birds 1972. Wilson Bulletin, 84:212-222.
Berger, A.J. 1975. History of exotic birds in Hawaii, Elepaio, 35:72-80
Bryan, E.H.,Jr. 1958. Check list and summary of Hawaiian birds. Books about Hawaii, Hon.
Caum, E.L. 1933. The exotic birds of Hawaii. Bernice P. Bishop Museum Occ. Papers,10,55pp.
Clapp, R.B., and R.C. Banks. 1973. Birds imported into the United States in 1970. Special Scientific Report--Wildlife No. 164, U.S. Fish and Wildlife Service, Washington.
McClure, H.E., and S. Chalyaphun. 1971. The sale of birds at the Bangkok "Sunday Market" Thailand. Nat. Hist. Bull. of the Siam Society, 24:41-78.

*****

RED-WHISKERED AND RED-VENTED BULBULS ON OAHU

By Andrew J. Berger

The Red-whiskered Bulbul (Pycnonotus jocosus) and the Red-vented Bulbul (P. cafer) are now well established on Oahu, but very little has been published about these exotic species. I have written this summary of our knowledge of them in the hope that it will stimulate Audubon Society members to report their observations of these species in the Elepaio so that their range extension over the years can be documented.

Both species now appear to be found primarily in residential areas so that extensive field work is not necessary in order to make observations. All that is required is an accurate reporting of dates, numbers of birds seen, and their location. Of special interest would be specific information on nests, their location, and contents. The male and female of these species are alike in plumage pattern; both species are illustrated in color in Hawaiian Birdlife (University Press of Hawaii, 1972).

The report of the White-cheeked Bulbul (Elepaio, August 1968:16-17) certainly is an error. I agree with Mike Ord (Elepaio, September 1968:27) that the bird seen undoubtedly was a Red-whiskered Bulbul.

Red-whiskered Bulbul: This species also is called the Red-eared Bulbul in the pet-store trade. The first notation of its presence in the wild on Oahu is in 1967 (Elepaio, September 1967:24): "John Kjargaard, 2080 Mauna Place, Makiki Heights, Oahu, reported on July 9, 1967 that a Red-eared Bulbul, Pycnonotus jocosus, has been seen frequently around his home for the last few months." However, Kjargaard later wrote (Elepaio, October 1968:35): "At our home in lower Makiki Heights our first sighting of a Red-eared Bulbul was in the fall of 1965. At that time we saw a pair flitting in and out of a mock orange hedge. In 1966 we saw a number of birds, and in the fall of 1967 we counted as many as 24 at one time."

Mary Roberts wrote that a pair of Red-whiskered Bulbuls visited her garden at 1711 Makiki Street on December 4, 1969, and that "a cousin on Oahu Avenue has also seen them in his garden, and a friend on Coelho Way reported frequent visits and feeding on the fruits of a date palm last year" (Elepaio, January 1970:66). I saw my first Red-whiskered Bulbul at the corner of Wilder and Poki Streets on January 30, 1972.

Two Red-whiskered Bulbuls were seen on Pacific Heights during the Christmas count on December 31, 1967. Four birds had been seen in this same area "during the past few months"; Robert L. Pyle noted that "although undoubtedly escapees, or descendents of escapees, two seem to be immatures, apparently raised successfully this year" (Elepaio, February 1968:70). Seven birds were seen in the same area on Pacific Heights on December 29, 1968 (Elepaio, February 1969:69).

Shirley Tuthill called me on December 18, 1971, and described two birds that she had seen in the 2600 block of Manoa Road for about a year; these could have been only Red-whiskered Bulbuls. Unoyo Kojima saw one bulbul in Manoa Valley (Loulu and Huelani) on October 18, 1974 (Elepaio, January 1975:80). I saw a pair of birds on Huelani Drive during August 1974. Unoyo Kojima also saw one Red-whiskered Bulbul at 725-A 8th Avenue (Kaimuki) on October 9, 1974.

We need more information on the nesting activities of the Red-whiskered Bulbul on Oahu. Mary Roberts wrote on March 29, 1971, that "a pair of bulbuls has claimed my yard (Makiki Street above Wilder Avenue) for nesting. Both male and female brought material to a croton close to my garage.... I wrote you a few days after they started building, and their single baby left the nest on the 20th /April?/. It landed in a hibiscus bush by my living room window where it stayed all day and was fed by the parents, affording me an excellent view"; the nest was built 6 feet above the ground (Elepaio, July 1971:9). Ms. Roberts later wrote that the birds "have built another nest in the identical spot in the croton near my garage from which I had removed their first nest. It was built without my being aware of it, and by the time I discovered it, July 14th, the female was already occupying it.... Two baby bulbuls left their nest on August 14th" (Elepaio, October 1971:38).

On April 27, 1975, a pair of Red-whiskered Bulbuls with a fledgling (tail about one-half grown) flew into a plumeria tree outside my window on Huelani Drive.

Red-vented Bulbul: The first report of this species is found in the Elepaio for December 1966 (page 55) in a report on birds observed on an Audubon Society field trip of October 10, 1966. On that date, the group visited the Oahu Plantation manager's home in Waipahu, where at least six Red-vented Bulbuls were seen; these were "new escapees that had been reported by the manager's wife, Mrs.John Humme, two months ago." One bird also was sighted near Fort Shafter during 1966 (Elepaio, September 1967:23). One bird was seen at Kailua on March 7, 1967, and another bird at Bellows Field Air Force Station on June 3, 1967 (Elepaio, September 1967:23). These sightings at such widely separated areas surely mean that birds escaped or were intentionally released in these different regions.

J. Richard Gauthey saw one Red-vented Bulbul "on a telephone line along Kam Highway at the Navy-Marine Golf Course on February 11, 1968 (Elepaio, April 1968:93). Dory Smith wrote that this species "seems to be increasing in the Makalapa area—we see them daily now; also at the Navy-Marine Golf Course, and I have seen one on the Submarine Base as well" (Elepaio, December 1971:55).

In a summary of observations for the Christmas count on December 29, 1968, the unidentified writer reported that the Red-vented Bulbul "has been observed recently in the Moanalua-Fort Shafter area, and on the windward coast from Waimanalo to Lanikai and southern Kailua" (Elepaio, February 1969:69; February 1971:76, 78). A pair was seen on Middaugh Street (Ulupau Head) on January 15, 1970 (Elepaio, March 1970:88).

Walter R. Donaghho wrote that he saw "a flock of ten or twelve Red-vented Bulbuls" on Keealau Avenue in Kokokahi on October 27, 1969 (Elepaio, January 1970:65); he saw one bird

at Red Hill on January 6, 1970 (Elepaio, March 1970:88). Red-vented Bulbuls were seen along the Makiki Round Top Drive in 1969 (Elepaio, December 1970:59-60). I saw one bulbul at the corner of Kahala Avenue and Hunakai Street on April 2, 1971.

Twenty-six Red-vented Bulbuls were reported on the Christmas count taken on December 26, 1971, 15 of the birds being seen between Bellows Field Air Force Station and Kalaheo Avenue in Kailua (Elepaio, February 1972:77). Two birds were seen at 614 Kaha Street, Kailua, on March 27, 1972 (Elepaio, June 1972:120-121). Fifty-six birds were reported on the Christmas count held on December 17, 1972; 25 birds were seen in the Moanalua Gardens area and 31 birds were seen at Bellows Field Air Force Station (Elepaio, February 1973:82). Ronald L. Walker wrote that Red-vented Bulbuls were first reported in Kaneohe on the Christmas count held on December 22, 1974; a total of 50 birds were seen in six different areas that day (Elepaio, February 1975:88).

Diana Berger saw eight Red-vented Bulbuls on Puaena Place (near University Avenue and Dole Street) during early February 1975, and Erika Wilson saw two birds in Kapiolani Park on February 17, 1975 (Elepaio, April 1975:122).

Published information on the nesting of the Red-vented Bulbul on Oahu consists largely of general statements: for example, "The Red-vented Bulbul has been established and breeding for several years near Waipahu" (Elepaio, February 1969:69, 74). The birds were reported nesting on Ferdinand Avenue in Manoa Valley during June 1971, but no details were given (Elepaio, September 1971:28). Mae E. Mull wrote that "a friend had a pair nest successfully in her backyard mango tree last year /1971/ on the Manoa Road side of Manoa Valley," but no dates were included (Elepaio, September 1972:30). Charles and Hilde Kaigler reported "two young red-vented bulbuls in the eucalyptus tree outside our Anoai Place house" on August 28, 1972 (Elepaio, October 1972:38). Peggy Hicock Hodge wrote of fledgling Red-vented Bulbuls being fed by adults at a bird feeder in Lanikai on January 21, 1975 (Elepaio, March 1975:107).

Red-vented Bulbuls apparently were first observed on the Manoa Campus of the University of Hawaii on November 1, 1971. On May 12, 1972, Sandra Guest, H.Eddie Smith, and I watched a pair with three fledglings in a monkeypod tree on the Mall near Varney Circle on campus; one of these young birds was found dead under the tree on May 27.

I found a nest, presumably of the same pair, in the same monkeypod tree on May 19,1972. The nest looked nearly complete on May 23, but a bird was sitting in the nest, shaping the cup. Sandra Guest continued to observe this nest during my absence from Honolulu. On June 17 she found two dead young on the ground under the nest; two other young were clinging to the nest, which had been dislodged from its supports. These two young were taken to the Zoology Department to be hand-raised; after they became independent, the two young bulbuls were very belligerant, attacking other birds in the aviary; we released the two bulbuls on campus on July 28.

H. Eddie Smith found a third nest in the same tree on July 10, 1972. This nest was deserted, after which the pair built a fourth nest in the same tree. Two or three young fledged from this nest between August 10 and 14. The adults were still feeding the young on August 25.

I photographed a Red-vented Bulbul nest with three eggs on May 2, 1973; this nest was built in the same monkeypod tree on the University campus that held the four nests in 1972.

I found an inaccessible nest in the crown of a monkeypod tree along Dole Street on April 4, 1974; the adults were then feeding small young, but the nest had been deserted by April 12, presumably because of predation of the young birds. I found a nest in the same area, again in a monkeypod tree, on March 21, 1975. Both adults were feeding young in this nest on April 8, after which I left Honolulu; when I returned on April 12, the nest was empty.

Discussion: Cage birds (except possibly parrots) imported into Hawaii apparently never have been subjected to any quarantine. However, the State Department of Agriculture has had for many years a list of species that are prohibited entry into the State; this list includes all species of bulbuls. The ineffectiveness of the quarantine procedures is obvious. Bulbuls eat fruits and flowers, and the Red-vented Bulbul has proven to be a nuisance in some areas where it has been introduced (see, for example, Elepaio, October 1962:20). The birds now are attractive additions in residential areas.

Although Red-vented Bulbuls may have escaped during transhipment at the Honolulu International Airport, it does not seem likely that such an accident can account for the wide distri bution of this species during 1966 and 1967. During those years, the birds were reported from such widely separated places as Waipahu, Fort Shafter, and Bellows Field Air

Force Station. It seems likely that birds were intentionally released in some areas. Inasmuch as bulbuls are not supposed to be imported into Hawaii, it would be of interest to know the source of these birds.

The little information available suggests that a single escape or intentional release of the Red-whiskered Bulbul could account for its present known distribution. The birds could have spread from the Makiki area to both Manoa Valley and to Pacific Heights. Unless additional information becomes available, however, we can only speculate.

*****

THE JAPANESE BUSH WARBLER ON OAHU

By Andrew J. Berger

The Japanese Bush Warbler or Uguisu (Horeites c. cantans) was first released on Oahu in 1929 by the Territorial Board of Agriculture and Forestry, presumably because it is "a voracious feeder on insects of many kinds" (Caum, 1933). Bush Warblers also were released by the Hui Manu on at least five dates between January 6, 1931, and December 26, 1941 (unpublished minutes of the Hui Manu). The incomplete minutes available to me show that about 116 Uguisu were released on Oahu, but there is no reference to the release sites. During June of 1940, the Mejiro Club of Honolulu "made a gift of Uguisu to the Hui Manu for distribution on Oahu," and the Mejiro Club also released 15 female and 7 male Bush Warblers on February 1, 1941. Again, however, there is no mention of the areas where the birds were released. Because of the present widespread distribution of the Japanese Bush Warbler on Oahu, it would be of great interest to know just where the birds were released. I hope, therefore, that readers of The Elepaio who have access to early records will send more precise information to me or to the Editor of The Elepaio.

There seem to be only two general statements on the distribution of the Japanese Bush Warbler. Gossard (1956) wrote: "In George C. Munro's 'Hawaiian Bird Survey, 1937-1938,' he writes that the Japanese Bush Warbler seems to be doing fairly well but is not well established. He mentioned hearing it in 1935 in the Waianae mountains, and on the Niu trail, indicating that it seemed to be at home in these drier forests.

"The concensus now is that it is slowly extending its range and has found suitable habitat in wetter areas in the Koolaus, such as Poamoho, Kawailoa, Kipapa, Waiawa, Pupukea, and Kaunala. But it is still probably more common in the Waianae Mountains and particularly in the upper Pa Lehua section where it can usually be heard calling from the end of the road to the top of the ridge."

Ord (1967) remarked that "Poamoho and Pa Lehua trails are the best localities...to find the species."

There is no doubt that the Japanese Bush Warbler has increased greatly in numbers during the past 20 years. It undoubtedly has increased its range, but we cannot document the dates for the range extension. A primary reason is the paucity of information in The Elepaio. During the early years of the journal, the notes on the field trips of the Society often did not even list the birds that were seen! Secondly, for many years the Society continued to visit the same areas year after year (e.g., Poamoho and Pa Lehua trails). Even today there are many valleys and ridges on Oahu for which we have no information on the birds present.

I hope that the following summary of our incomplete knowledge of the distribution of the Japanese Bush Warbler will stimulate others to obtain more information. The nest apparently has never been found on Oahu, and nothing has been written about the biology of this interesting exotic species in Hawaii.

The Waianae Range: The Japanese Bush Warbler has been reported from Peacock Flats in the north to the Palikea-Pa Lehua area in the south. The following statement about the Japanese Bush Warbler is found in volume 1 of The Elepaio (1941:69): "Seldom seen but often heard. Extending range yearly in the Waianaes." Apparently the first reference to a definite location of the Bush Warblers is found in volume 6 (June 1946:83). In writing about a field trip to Palikea, the reporter noted that it had been decided "by a process of elimination" that a bird heard "could be none other than the Japanese Bush Warbler." Two warblers were seen in the same area on April 13, 1947, and they "were quite concerned over their babies in a nearby nest" (Elepaio, June 1947:72). The article does not say that a nest was actually found, and it is highly doubtful that one was found; the statement probably was based on the behavior of the adult birds. Hinkley (1965) said that 30 Bush Warblers were identified during the Audubon Society field trip on the Palikea trail on March 14, 1965 (Elepaio, May 1965:91).

Donaghho (1967) wrote that he found "a small group of bush warblers in the patch of rain forest crowning the summit" of Mt. Kaua on June 10, 1967. There apparently is but one report of Bush Warblers along the Kalena trail (Waianae Ridge; Elepaio, July 1948:3), but the birds have been heard or seen on the Peacock Flats trail on several occasions (e.g., Elepaio, September 1968:28; September 1972:29; August 1973:17). There is one report for the Maunauna trail (south of Schofield Barracks; Elepaio, March 1959:59).

The Hawaii Audubon Society field trip on April 13, 1975, included a climb into the Waianae Kai Forest Reserve, where the Japanese Bush Warbler was very conspicuous because of its loud and distinctive song; I estimated it to be the second most common bird in the introduced vegetation of the area.

The Koolau Range: Gossard (1956) thought that the Japanese Bush Warbler was then "probably more common in the Waianae Mountains" than in the Koolau Range. This appears not to be true today. I have records of the Bush Warbler extending from the Kawailoa Ridge area in the north to Waialae Iki Ridge in the south.

The earliest reports for the Koolau Range concern Kawailoa (Elepaio, August 1948:9; August 1955:11), and Kipapa trail (Elepaio, May 1948:65), where the Bush Warbler "was also frequently heard" (see, also, Elepaio, September 1965:23).

The warbler was next reported along the Waiawa (ditch?) trail in 1953 (Elepaio, August 1953:16; also Elepaio, July 1957:7), and on the Poamoho trail in 1953 (Elepaio, June 1953:87, when three birds were reported; later sightings are reported in The Elepaio (June 1959:81; June 1964:60; July 1968:8; September 1972:29; September 1974:31).

The warbler apparently was first reported in two new areas in 1959: Opaeula trail (Elepaio, May 1959:74) and Wahiawa trail (Elepaio, July 1959:4) although on the latter trail the observers merely "thought" that they heard one bird.

Warren King wrote (Elepaio, August 1966:15-16) that "on two occasions in 1965 I heard and got a good look at bush warblers in Palolo Valley, especially in Kaau Crater, where there must be a population of 10 or more pairs." Unoyo Kojima wrote that she had heard the Bush Warblers on June 5, 1966, while hiking along the Lanipo trail in Palolo Valley.

Paul Scheffer heard at least six Bush Warblers singing along the Aiea Loop trail on April 23, 1966 (Elepaio, June 1966:113); no birds were heard here on July 10, 1966, when the members of the Audubon Society visited the area (Elepaio, September 1966:27). The birds have been reported on many other field trips to the Aiea Loop trail, however (e.g., Elepaio, August 1971:19; August 1972:20; February 1973:83; February 1974:84, 85).

On May 1, 1966, Unoyo Kojima heard the birds in the valleys behind Alewa Heights; she wrote: "Is the bush warbler occupying every valley in the Koolau?" (Elepaio,June 1966:113).

The Audubon Society apparently scheduled its first field trip to Moanalua Valley on February 14, 1971. Hilde Kaigler wrote: "The surprise of the morning, however, was the number of Japanese Bush Warblers that were calling" (Elepaio, May 1971:108). Donaghho (1965) did not mention the Bush Warbler during his visit to Moanalua Valley on October 11, 1965, when the birds apparently were not singing. I made several field trips to Moanalua Valley between August 20 and September 8, 1971; I did not hear any singing but I did see several birds at elevations between 700 and 960 feet. Virginia B. Cleary and I heard a minimum of 24 singing Bush Warblers in the valley on April 14, 1974.

One Japanese Bush Warbler was reported for the Moanalua Gardens and Nuuanu Valley route for the Christmas count on December 16, 1973, but the location of the bird was not mentioned (Elepaio, February 1974:84, 86, 90). Such reporting makes it impossible to document the location of birds.

The first report of Bush Warblers on the St. Louis Heights trail (Waahila Ridge) apparently was during the monthly field trip of the Audubon Society on June 13, 1971 (Elepaio, August 1971:18). I heard one Bush Warbler singing on Waialae Iki Ridge on June 27, 1971.

During the period between February 11 and March 10, 1974, I found Bush Warblers common at elevations above approximately 400 feet along the Waikeekee, Waikane, and Waiahole streams in the Waiahole-Waikane valley system.

I have hiked the Woodlawn trail in upper Manoa Valley every year since 1966, but I did not find Bush Warblers there until April 29, 1975, on which date I heard four singing birds.

Apparently, Bush Warblers were first reported on the Tantalus trail in 1975 (Elepaio, April 1975:122). I heard four birds singing at the Makiki Nursery on April 1, 1975.

Discussion: It seems certain that the Japanese Bush Warbler now occupies many other valleys and ridges where observations have not been made, or at least have not been

published in The Elepaio. The birds are secretive, and they usually stay concealed in dense vegetation. They often are difficult to locate even when one knows the tree where they are perched; rarely do they select an exposed perch for singing.

The bird has two primary songs plus a high, melodious rattle; all are unique to the Bush Warbler. Hence there is no problem in identifying the birds if one knows the songs. During those times of the year when the birds are quiet, however, it is virtually pure luck to find them. No one has attempted to determine the seasonal song period in Hawaii. I have heard Bush Warblers sing from mid-February to mid-July. I heard 13 birds singing along the Aiea Loop trail on July 2, 1972. William P. Mull wrote about the same area on July 11, 1971, that the Bush Warblers were "singing the whole time we were on the trail" (Elepaio, August 1971:19). Erika Wilson heard one bird sing on the St. Louis Heights trail on January 19, 1975 (Elepaio, March 1975:107). How much singing occurs during December and January remains to be determined. The Bush Warbler was first reported on the Christmas count on December 26, 1971, when five birds were heard on the Aiea Loop trail and three birds were heard presumably on the St. Louis Heights trail (Elepaio, February 1972:74).

Literature Cited

Caum, E.L. 1933. The exotic birds of Hawaii. B.P.Bishop Museum Occ.Papers,vol.10,no.9.
Donaghho, W. 1965. Oahu bird survey. Elepaio, 26:53-54.
Donaghho, W. 1967. Field notes, Mt. Kaua, Oahu. Elepaio, 28:18.
Gossard, G. 1956. The Japanese Bush Warbler in Hawaii. Elepaio, 17:2-3.
Hinkley, L. 1965. Field trip, Palikea trail, March 14, 1965. Elepaio, 25:91.
King, W.B. 1966. Letter about Japanese Bush Warbler, Elepaio, 27:15-16.
Ord, W.M. 1967. Hawaii's Birds. Hawaii Audubon Society, Honolulu.

*****

HONOLULU STAR-BULLETIN, 7 February 1941, page 11: 22 Warblers from Japan Freed Here, by Lawrence Nakatsuka--Thanks to the Honolulu Mejiro Club, bird lovers of Oahu can now enjoy the melodies of 22 more bush warblers, the gift of the Club to the island.

The warblers were imported from Japan and arrived aboard the Kamakura Maru on January 31 and subsequently donated to the Hui Manu for liberation. They were released on the morning of February 1 in the gardens of the F.J. Lowrey residence, Old Pali Road, by Hideo Tanaka, president of the Mejiro Club. The place was suggested by Edward H. Lewis, Spt. of Waikiki bird park. ...Recently the Hui Manu released about 20 warblers in the Nuuanu Valley. First imported about four-years ago, the birds were reported by Spt. Lewis to be thriving successfully here and can be heard especially along the Old Pali Road. Mr. Lewis lauded the two organizations for their interest and work in furthering bird appreciation and conservation.

Another activity of the Honolulu Mejiro Club which is attracting attention of both Americans and Japanese is the "Mejiro" or White-eye bird-singing contests. The point of competition is to see how long each bird can hold a note;the longest-winded one being judged the winner. The judges use stop watches for accuracy. About 70 white-eye birds were entered in a recent contest at the Honolulu YMBA. ...

*****

Field Notes from Erika Wilson: Popoia, Oahu

Late Friday afternoon, May 9, 1975, six of us went out to Popoia, off Kailua, to spend the night among the Wedge-tailed Shearwaters and Bulwer Petrels which nest there. When we landed, about 5:30 p.m., the Wedge-tails were wheeling over the low coral islet without making a sound. But as the evening progressed the Wedge-tails landed, entered their nesting burrows, and began vocalizing. The song of these shearwaters is most unusual, and is often described as moaning. We taped these sounds and played the tape at the May general meeting to the delight of those present.

After dark the much smaller Bulwer Petrels came in to Popoia. They reminded me of large bats as they fluttered past. Their song is quite different--a short, repeated "hoo" emitted in rapid succession for a long period of time. This sound was also played at the May general meeting. Dr. Shallenberger removed an individual from its burrow for us to admire by flashlight and to photograph.

The chorus of shearwater and petrel voices continued all night. Each time I awoke their calls filled the air.

At 5 a.m. we all got up to watch the birds depart in the dawn light. The Wedge-tails would stretch one wing at a time, preen, ruffle their feathers, and then, suddenly, open both wings--instantly airborne.

Field Notes from C. Fred Zeillemaker: Kauai, March-May 1975 (Spring)

Laysan Albatross: After first appearing at Kilauea Point in February, two observed March 20 & 22, five April 6 including two landed on Mokuaeae Island, up to seven on April 8 including five landed on Mokolea Point performing courtship rituals, one to two birds through April 18 and single birds about once a week until last observation May 26.

Black-footed Albatross: Single bird soaring near shore at Poipu Beach Park March 8.

Newell Shearwater: First kills noted along highways April 25. Much calling after dark in Anahola Mountains near Highway 56 (Moloaa) in May (area not checked prior to May 11).

Wedge-tailed Shearwater: First bird observed at Kilauea Point breeding grounds March 13. Population in low hundreds by April 1, above 1000 by late April and at estimated peak level of 4000 by May 3. Many others nesting between Kilauea Point and Mokolea Point.

Red-tailed Tropicbird: First spring bird at Kilauea Point March 6. Up to six daily in April, up to eight through May 28 and 10-11 on May 29-30. Courtship display continuous since March 16.

Brown Booby: Up to seven at Kilauea Point throughout March, up to five in April and up to seven in May. Some roost on Mokuaeae Island, some roost on cliffs adjacent to Kilauea Point (east).

Mallard: Drake at Menehune Fish Pond March 19 and 29.

Cinnamon Teal: Drake first at Hanalei NWR in February observed in company with hen koloa March 17, April 8 and April 21.

Pintail: Main portion of flock at Hanalei NWR departed in late February, last observation of three birds on March 24.

Lesser Scaup: Drake at Lumahai River last recorded March 15.

Golden Plover: Evening migrations ("V" formations) of 20-50 birds over Kilauea Point April 28-29. Flock of seven evening of May 24. Hanalei NWR population decreased significantly (from 30 to 2 birds) between May 2 and May 14. Single bird (non-breeding plumage through end of May.

Wandering Tattler: Main movement from Hanalei NWR (from 14 down to 5 birds) between May 2 and May 14. Single bird at Kilauea Point through end of May.

Common Snipe: Last individual observed at Hanalei NWR March 10.

CORRIGENDUM: Vol 35, No 10, April 1975, page 121 Field Notes: change "white-throated" laughing-thrush to "unidentified" laughing-thrush. Birds being observed on Kauai are of another species. Photographs of a live mounted specimen have been sent to the U.S.National Museum in Washington, D.C. for possible identification. Only thing in common with white-throated laughing-thrush is white on throat. Several additional observations at Menehune Fish Pond and Huleia NWR (March, May), Wailua Houselots (March-May) and Hanalei NWR(March). Proper identification will be published when received.

Oahu, May 10, 1975--Red-crowned Parrot: Two at Kapiolani Park at about 7:30 a.m. Noisily flew inland from ironwood trees along Kalakaua Avenue, spent about 15 minutes in trees boardering golf driving range, then flew back to vicinity of Kalakaua Avenue.

Black-hooded Parakeet: Single bird in company with the two parrots mentioned above.

Pintailed Whydah (10+), Orange-cheeked Waxbill (1), Red-eared or Black-rumped Waxbill (2), Green Singing Finch or Yellow-fronted Canary (1) and Java Sparrow (1): At Kapiolani Park about 7:30 a.m. along fence bordering golf driving range.

Lavender Firefinch (30+), Red-eared or Black-rumped Waxbill (30+): At Diamond Head in arboretum along trail paralleling west boundary about 9:30 a.m.

+++++

Comments dated June 14, 1975—A field note from Baron A. McLean in The Elepaio, V.35,No.12, June 1975:139 stated that he had observed an 'Io (Buteo solitarius) on Kauai along Highway 56 between Wailua and the North Shore. I urge caution in such identifications here. There have been numerous Mainland observers (including this one when newly arrived) that have tried to identify a "hovering hawk" over agricultural or wooded tracts in broad sunlight only to discover during subsequent observations that the bird in question was a Pueo (Asio flammeus sandwichensis)! I don't insist that an 'Io on Kauai is entirely impossible, but the Pueo commonly hovers throughout the day along Highway 56 between Anahola and Moloaa. Erika Wilson has often said "anything is possible in Hawaii" and indeed, until I saw the Golden Eagle (Aquila chrysaetos) myself June 9, I was not very encouraging to those who have occasionally reported it to me in the last ten months! (Three other observers were

with me—Dale DeWan; Lars Norgren, originally saw bird; and Melly Zeillemaker.) I submit this to point out that a Pueo COULD look very much like a "small buteo" or even a marsh hawk (in my case) under certain conditions to a person not well acquainted with our endemic owl. ...

In case of unusual sightings on Kauai, call Fred Zeillemaker at 828-1431 or write to him at P.O. Box 87, Kilauea, HI 96754 as soon as possible.

*****

HONOLULU STAR-BULLETIN, 8 February 1975, page A-11: Bicentennial Projects by Harry Whitten

...A new project was proposed by Ahuimanu Productions and the Hawaii Audubon Society for a documentary film dealing with Hawaii's natural environment and three shorter educational films on specific Hawaiian natural history topics, including flora and fauna.

The project has encountered funding difficulties but it's hoped to complete part of the plan with a slide show, according to Robert Shallenberger of Ahuimanu Productions, which produced the successful slide show on Kawainui Marsh.

The Kaneohe Outdoor Circle has been urging that a proposal for a Kaneohe Bay Park be considered as a Bicentennial project and has obtained endorsements of nine other organizations. ...The proposal, developed by a volunteer citizen's task force, would consider the entire Kaneohe Bay and its watershed as an entity for such matters as recreation, open space, aquatic sports, flood control, research, and the ecological system.

The park proposal would give top priority to the acquisition and planning of the Heeia Fishpond, now a National Historic Site; Matson Point (Lae o Kealohi), which adjoins the pond; and the contiguous Heeia flood hazard area.

It favors restoration and preservation of the Heeia Fishpond as a "living museum", an example of early Hawaiian culture. Another part of the proposal is for a botanical-zoological garden park at the mouth of Heeia Stream. ...

+++++++

Letter to Mr. Thurston Twigg-Smith, Chairman, Hawaii Bicentennial Commission from President Wayne C. Gagne, 11 February 1975

We have just received word of Federal funding for our proposed film project, "Rediscovery of Our Natural Heritage". We committed $500.00 towards this project in March 1974, and will now provide an additional $875.00 in the hope that the effort will accelerate towards the original goal. Together with considerable additional pledges of services-in-kind, we expect this will provide sufficient funding to match the Federal pledge of $2375.00. Hopefully, additional support will be obtained in future Bicentennial fund-raising efforts.

We hope that the Bicentennial celebration will provide an important vehicle for the wide distribution of our final product. Environmental education has long been the major objective of the Society, as reflected by our motto "For the Better Protection of Wildlife in Hawaii". We are tremendously excited about this project and its potential impact in Hawaii.

═══

HONOLULU STAR-BULLETIN, 22 April 1975, page A-2: Bicentennial Funds for Isle Rail Project

Hawaii has been awarded federal funds for two bicentennial projects—a steam railway and a slide documentary on animal and plant life.

...The Hawaii Audubon Society will receive $2,400 in federal funds to produce an educational slide documentary about the evolution of Hawaii's native plants and animals and man's role in this process.

+++++

Testimony on H.R. No.708, Relating to the Preservation of Kaneohe Bay Shoreline, to Chairman Richard A. Kawakami, Committee on Water, Land Use, Development and Hawaiian Homes from President Wayne C. Gagne, 4 April 1975

The Kaneohe Bay watershed, particularly its lowland marshes, contains some of the last suitable habitat in the islands which has not been converted to housing, landfills, agriculture, or destroyed by siltation. What we set aside now for wildlife on Oahu will be about the last opportunity on this island, if areas such as the Heeia meadowlands are destroyed for intensive human uses.

Our natural heritage is being squeezed practically out of existence. Endangered marsh birds such as the Ae'o (Hawaiian stilt), 'Alae 'ula (Hawaiian gallinule), 'Alae ke'oke'o (Hawaiian coot) and Koloa (Hawaiian duck) desperately need a reprieve. Not so long ago, Salt Lake, Ala Moana, Waikiki, Kuapa Pond (Hawaii Kai), Kaelepulu Pond (Enchanted Lake) and other areas on Oahu supported thriving marshland wildlife. Look at what has happened!

The intent of this resolution offers some hope in stemming the all engulfing urbanization of Oahu. Please pass this resolution and show that we care about Hawaiian wildlife habitat. Thank you.

*****

THE SUNDAY STAR-BULLETIN & ADVERTISER, 15 June 1975, page D-12: Kauai Hunting Limited

The State Division of Fish and Game has announced goat hunting season will be suspended this year in hunting units A and B on Kauai. /These units include the Na Pali Coast, the Kekaha Game Management Area, and portions of the Na Pali Kona Forest Reserve, (including Waimea Canyon and the Alaka'i Wilderness Preserve)—State Division of Fish & Game press release, 4 June 1975/

The suspension of hunting is effective during the normal goat hunting season—Saturdays, Sundays and State holidays July 4 to Sept. 28.

"The season closure is necessary as a conservation measure to permit low goat populations to increase to satisfactory hunting levels," the division said.

A census of the area showed there are an estimated 1,360 goats in the hunting units named, and that if the expected number of hunters this season—700—only got one goat apiece, it would further cut the herds to less than half their present size.

The division indicated that while the number of hunters in the past five years has increased 81 per cent, the number of goats is down 58 per cent.

"The large increase in the number of hunters and the marked decrease in the number of goats makes it necessary to suspend hunting for another year. Otherwise, an overharvest would result and hopes of future goat hunting would become slim," a press release said.

The closed goat season does not affect pig hunting in units A and B. Both goat and pig hunting will be allowed in Unit C, which includes the Wailua, Moloaa and Hanalei areas on the East side of Kauai.

*****

U.S. Fish & Wildlife Service, Portland, Oregon, NEWS release, 23 May 1975: Record Numbers of Americans Hunt and Fish—Despite the double effects of inflation and recession, a record 43 million Americans spent $270 million on State hunting and fishing licenses last year, according to State license sales figures released today by U.S. Fish and Wildlife Service Director Lynn A. Greenwalt.

...The figures represent an increase of $29 million in State sales and 1.7 million in license holders over 1973. Since some States do not require licenses for ocean fishing children under 16, or senior citizens, these figures are considered conservative estimates.

...California led the Nation in number of paid fishing license holders....Pennsylvania led all States in the Nation last year in sales of hunting licenses....Hawaii stood out as the State with the fewest licenses hunters and fishermen in the Nation.

Sea Turtles to be Added to Threatened List—Three more species of sea turtles, that ancient family of reptiles which lived in the days of dinosaurs, have been pushed closer to extinction because of increased development of coastal shorelines and overuse for commercial purposes.

The green (Chelonia mydas), loggerhead (Caretta caretta), and Pacific ridley (Lepidochelys olivacea) sea turtles have been proposed in the Federal Register to be added to the U.S. List of Threatened Wildlife by the U.S. Fish and Wildlife Service, Department of the Interior, and the National Marine Fisheries Service, a unit of the National Oceanic and Atmospheric Administration, U.S. Department of Commerce. The proposal came after a joint status review by both agencies found seriously decreased populations of these species throughout the world. The leatherback, hawksbill, and Atlantic ridley sea turtles are already on the U.S. List of Endangered Wildlife. ...

The green sea turtle is probably the most commercially valuable reptile in the world and one of the most heavily hunted. Its meat, eggs, and calipee (cartilage used in soup) have been eaten for centuries, its skin has been used for leather, its shell has been used for jewelry, and its oil has been used in the cosmetics industry. An international market in turtle products now exists, with the United States being among the largest consumers.

In the last few years there has been a rise in the commercial take of the Pacific ridley, stimulated by the development of a market for turtle leather, partly as a substitute for alligator hides.

Both the green and loggerhead are found around the world with some populations nesting on various shores and coastal islands in the Southeastern United States and its territories and possessions. The green sea turtle is found throughout the Hawaiian archipelago. The

Pacific ridley also nests in many parts of the world, but is not known to nest in the continental United States. ...

If adopted, the new regulations would prohibit the taking, import, and export of the species and would halt the United States involvement in the sale in interstate and foreign commerce of these turtles and products made from them. ...The prohibition on interstate commerce would not take effect until one year after the regulations become effective, thereby allowing owners to distribute inventory lawfully possessed. Permits would also be available for economic hardship. ...

*****

THE WILSON BULLETIN, Vol.87, No.1, March 1975, page 116, has the following conclusion by Dr. William Y. Brown, who in 1971 and 1972 studied the artifactual clutch size in sooty terns and brown noddies on Manana: At most a few percent of the female Sooty Terns and Brown Noddies on Manana lay clutches of two eggs. However, for both species doubt exists that any females lay two eggs. The high percentage of clutches of two eggs in the Sooty Tern that are known to be artifactual suggests that those clutches for which this information is lacking may be artifactual also. The separation in time of hatching of up to two weeks in the Brown Noddy clutches of two eggs indicates that at least some of these clutches were probably laid by more than one female. Lacking a convincing demonstration that the birds sometimes lay two eggs, it may be best to assume females of these two species lay a single egg.

Any comments? Please write to Kojima, 725-A 8th Avenue, Honolulu, Hawaii 96816.

*****

Excerpts from the minutes of the general meeting, Hawaii Audubon Society, 17 March 1975:

...It was announced that the contract had been signed with Star-Bulletin Printers for the third edition of HAWAII'S BIRDS.

Sightings: 1.Sheila reported on hearing Japanese bush warblers behind Woodlawn Terrace drive. She also has a pair of shama in her yard, so that the songs of the two can easily be compared. She also has 'amakihi. 2.Tropicbirds were sighted from the Mt. Kalena trail on 10 March by a botany class.3.Rob Shallenberger reported on the birdlife of the Kuilima sewage settling basin, Kahuku. He saw 70 shoveler, 12 pintail, 15 coot, 1 bufflehead, 1 scaup, and 6 green-winged teal. 4.Omer Bussen reported that on field trips to Kawainui swamp on 12 and 13 March, he saw 1 gallinule each day, and also 3 yellow-dyed koloa, 4 or 5 coot, black-crowned night herons, pintails, and shama. 5.Erika reported on a pair of nesting house finch where she works. One egg was laid on the 12th and 13th, and two more were seen on the 17th, Monday, having been laid over the weekend. The male was seen feeding the female. 6.House finches were seen in Waikiki regularly.

Rob Shallenberger presented the program on wildlife on and off California and Baja.

═══

21 April 1975: ...It was reported that a peculiar bird had been seen in the Kailua School grounds and no one was able to identify it until a janitor offered the identification. The mysterious bird was a male plover in the breeding plumage.

Erika reported that all of the house finches that she reported on last month had fledged. ...She also reported on hearing Monsignor Kekumanu deliver a Sunday radio program that was sympathetic with the causes of preserving native Hawaiian plant and birdlife.

...Hilde Cherry announced 27 April as Whale Day. ...

Wayne reported on his trip to Pittsburg. He and Steve Montgomery were able to spend sometime speaking to Keith Shriveron about Hawaiian endangered species, and especially on the Mauna Kea and green turtle problems. They were able to speak to an aide to the Asst. Sec. of the Interior on problems with Pittman-Robertson funds in Hawaii where Federal funding is being applied against the best interests of the endangered species. While in Pittsburg they also spoke with Dr. Warren King who is an assistant to Dr. Ripley of the Smithsonian Institution. He volunteered to be the Washington representative of the Hawaii Audubon Society. He has suggested that the Hawaii creeper and po'o uli be added to the endangered species list, and that Newell shearwater be considered as a threatened species.

...Sheila introduced the speaker, Ben Okamoto, who spoke on the Pacific golden plover and its parasites which can be used as indicators for migration.

═══

12 May 1975, combined meeting of the Hawaiian Botanical Society and the Hawaii Audubon Society: ...Sheila...bid farewell to Erika and Jim Wilson in behalf of the Audubon Society. They were presented leis.

Erika spoke of the field trip to Popoia made by six members of the Society on 10 May 1975. Jim Wilson played a recording of the wedge-tailed shearwater and of Bulwer petrel. Erika also described the field trip to Manana on 11 May. The birds seen were common noddy, great frigatebird, red-tailed tropicbird, wandering tattler, shearwater, and golden plover. ...

Sheila introduced the speaker, Bill Mull, who spoke on Hawaiian invertebrates.

*****

Donations: MAHALO!

Howard MacMillan of Liverpool, New York, in his letter of 14 June 1975 requesting a checklist or any other information, generously enclosed $5.00 "to help the cause." The treasurer's 30 June acknowledgment of the donation explained, "The Society's supply of checklists as well as the second edition of HAWAII'S BIRDS recently was exhausted. ... However, enquiry among active members...proved successful in obtaining the enclosed copy of the last edition. We hope it will be helpful to you." MAHALO NUI LOA!

*****

ALOHA to new members:

Junior: Boyan A.T.Z. Onyshkevych, 9 Dogwood Drive, Lawrenceville, New Jersey 08648

Regular: Mrs. Katherine H. Aratani, 46-483 Haiku Plantation Drive, Kaneohe,Oahu 96744
Richard Quint, P.O. Box 37, Summerland, California 93067
Janet Stonington, 565 Ka Awakea Road, Kailua, Oahu 96734
Library, Windward Community College, 45-720 Keaahala Road, Kaneohe, Oahu96744

*****

Editorial policy: Since the public is becoming more conscious of the proper spelling of the Hawaiian words, we'll do our best to use the macron in addition to the 'u'ina. Nene will be spelled nēnē, because nene is a shellfish. Also change the name of our journal to 'ELEPAIO from THE ELEPAIO. Please send in comments to Kojima, 725-A 8th Ave., Honolulu, HI 96816.

*****

REQUEST FOR NESTING INFORMATION: Audubon members can add a great deal to our records of the nesting activities of both introduced and native species if they will call when they find a nest. Dr. Berger has agreed to coordinate the nest-record program. If you find a nest, please call him at the Department of Zoology, University of Hawaii, telephone 948-8655 or 948-8617. MAHALO NUI LOA for your interest and KOKUA.

*****

The poster "We Care About Hawaiian Wildlife Habitat" is available for a suggested donation of $1.50 or more. Despite our frugal existence we are unable to give away this valuable educational poster to the general public. For information call Steve Montgomery, 941-4974.

*****

HAWAII'S BIRDS, a field guide, is out of print. As soon as the new edition is out, we'll let you know. We'll do our best to keep the price as it is now, but no guaranty.

*****

*****

AUGUST ACTIVITIES:

10 August - WEATHER PERMITTING: Boat trip to Manana to study seabirds. Boat fee $3.00 per person. Bring lunch and water. Participants should be prepared to get soaked in landing and should be able to swim. Advance reservations required. For meeting time and place call Amer Bussen, 262-5506.

11 August - Board meeting at Waikiki Aquarium Auditorium, 6:45 p.m. Members welcome.

18 August - No repeat No general meeting.

*****

HAWAII AUDUBON SOCIETY EXECUTIVE BOARD:

President: Wayne C. Gagne

Vice Presidents: Dr. Sheila Conant (program), William F. Burke (education)

Secretaries: Lani Stemmermann (recording), Erika Wilson (corresponding)

Treasurer: Roxanne Sullivan

Board Members: Hilde K. Cherry, Dr. Francis G. Howarth

Representatives: Mae E. Mull, Big Island; James M. Bradley, Midway; Dr. Warren B. King, Washington, D.C.

THE ELEPAIO: Editors--Charlotta Hoskins, Unoyo Kojima

MAILING ADDRESS: P.O. Box 5032, Honolulu, Hawaii 96814

DUES: Regular-$3.00 per annum, Junior (18 years & under)-$1.00 per annum, Life-$100.00.