

THE ELEPAIO

Journal of the
Hawaii Audubon Society



For the Better Protection
of Wildlife in Hawaii

VOLUME 30, NUMBER 9

MARCH 1970

BIRD BANDING RECORDS PLACED IN BISHOP MUSEUM By E. H. Bryan, Jr.

During the past summer (1969) the bird banding records of the late George C. Munro, together with those of the Hawaii Audubon Society, were placed in Bernice P. Bishop Museum for safekeeping and ready reference. They are kept in the office of the Pacific Scientific Information Center, of which the writer is manager.

Prior to their transfer, these voluminous records were being studied by Dr. Robert L. Pyle, up to the time of his departure for Washington, D.C. His tabulation, which indicates that 28,589 bands had been placed on twenty species of birds, between 1937 and 1951 by Mr. Munro, his associates, and members of the Hawaii Audubon Society, is reproduced at the end of this article. The localities given in this tabulation are: Oahu (including its offshore islets), Midway Islands, Wake Island, Palmyra Island, Jarvis Island, Howland Island, Enderbury Island and Canton Island, the last five being small, low islands near the equator, between Hawaii and Samoa. Dr. Pyle also made other tabulations, by species of birds and years for 17 banding stations; and had commenced bird longevity studies of the Laysan Albatross and Red-footed Booby, from records of banding and later recoveries. Further reference will be made to these in a later article.

In all, 35 different banding stations were recorded by Mr. Munro and his associates, although not all of them were used. These were identified by letters under six regions as follows:

HAWAII (abbreviated to "Haw"), actually only Oahu and its outlying islets.

- | | |
|---------------------------|---|
| A. Moku Manu (west) | G. Manana ("Rabbit") Island |
| B. Moku Manu (east) | H. Kaohikaipu |
| C. Mokolea Rock | I. Mokolii ("Chinaman's Hat") |
| D. Popoia ("Flat") Island | J. Kapapa |
| E. Mokulua (north) | K. Kekepa |
| F. Mokulua (south) | L. Ulupau (the end of the Mokapu Peninsula) |

HAWAIIAN ISLANDS (BIRD) RESERVATION The Northwestern Hawaiian Islands

- | | |
|--------------------------|----------------------------------|
| A. Laysan | D. Nihoa (or Bird) Island |
| B. Lisianski | E. Pearl and Hermes Reef (atoll) |
| C. French Frigate Shoals | |

MIDWAY ISLANDS

- A. Sand Island
- B. Eastern Island

WAKE ISLAND

PHOENIX ISLANDS

- | | |
|---------------------|-------------------|
| A. Hull Island | E. Phoenix Island |
| B. Birnie Island | F. McKean Island |
| C. Canton Island | G. Gardner Island |
| D. Enderbury Island | H. Sydney Island |

LINE or EQUATORIAL ISLANDS

- | | |
|---------------------|----------------------|
| A. Howland Island | E. Jarvis Island |
| B. Baker Island | F. Palmyra Island |
| C. Christmas Island | G. Washington Island |
| D. Fanning Island | |

These bird banding records arrived in various containers and can be summarized as follows: (1) 41 linear inches of 5 by 8 inch cards, in one wooden and two metal drawer files, together with a plastic file box containing a supply of numbered, but unused, record cards. Each card is ruled for the following information: band number (inserted with a numbering stamper), species of bird, age (adult or immature), sex, color phase, mated to --, locality, date and name of bander. Below this on the card is further space for: date recaptured, mated to --, locality, recorder, date received. All the cards, including those not used, have been stamped with a band number. (2) Accompanying this basic record were 13 "composition books" containing lists of species of birds banded at the various localities, with band number, symbols for adult or immature bird, name of bander, date banded, and date when taken again and by whom. These give ready reference to and summarize the banding records and recoveries for specific stations.

All of these records, including the thousands of cards, were prepared by a hard-working committee of the Hawaii Audubon Society, including Mrs. Blanche Pedley, Miss Grenville Hatch, Mrs. Ruth Rockafellow, Miss Unoyo Kojima and others.

In addition to all this there is a cardboard box of correspondence regarding bird banding: instructions, supplies, a manual for bird banders, summaries of records by areas and years, and other data. Also a fascinating, large bound journal compiled by George C. Munro, containing information of many kinds concerning birds and their observers in Hawaii, all carefully indexed.

There are some 29 articles which contain information concerning the banding of birds in the Central Pacific by George C. Munro, his associates, and members of the Hawaii Audubon Society, scattered through THE ELEPAIO from volume 1 to 27. There is also material on this subject in the Annual Reports of the Director of Bernice P. Bishop Museum, 1938 to 1951. George C. Munro was appointed Assistant in Ornithology on the staff of the Museum in 1919, and the following year was given the title of Associate in Ornithology, a relationship which continued until his death, December 4, 1963. Such honorary associates receive no regular salary, but often are given grants for special projects. Each year they prepare a report, extracts from which were printed in the Annual Report of the Director. It is appropriate that the bird banding records should be deposited in the Museum.

It is the plan of the writer to piece together a story of these bird banding activities, using all these scattered sources, for publication in THE ELEPAIO. This will include tabulations of data, enlarging upon the following:

SUMMARY OF TOTAL BANDINGS BY SPECIES AND ISLANDS
Compiled by Robert L. Pyle

SPECIES	Oahu	Mid- way	Wake	Pal- myra	Jar- vis	How- land	Ender- bury	Can- ton	TOTAL
---------	------	-------------	------	--------------	-------------	--------------	----------------	-------------	-------

SPECIES	Oahu	Mid- way	Wake	Pal- myra	Jar- vis	How- land	Ender- bury	Can- ton	TOTAL
Laysan Albatross	.	1561	.	.	.	.	.	.	1561
Black-footed Albatross	.	893	.	.	.	.	.	.	893
Albino Albatross	.	5	.	.	.	.	.	.	5
Hybrid Albatross	.	8	.	.	.	.	.	.	8
Wedge-tailed Shearwater	6266	701	.	.	53	.	.	.	7020
Christmas Shearwater	3	111	.	.	.	.	100	.	214
Audubon Shearwater	.	.	.	.	.	.	74	.	74
Phoenix Petrel	.	.	.	.	.	.	127	.	127
Bonin Petrel	.	500	.	.	.	.	.	.	500
Bulwer Petrel	177	53	.	.	.	.	.	.	230
Red-tailed Tropicbird	.	137	.	.	1650	399	250	56	2492
Blue-faced Booby	.	.	.	.	413	660	150	.	1223
Brown Booby	3	.	.	.	536	170	50	.	759
Red-footed Booby	1424	1	.	100	550	365	199	.	2639
Great Frigatebird	.	.	.	.	511	359	200	.	1070
Sooty Tern	7	2117	61	18	3099	429	849	.	6580
Gray-backed Tern	.	2	.	.	.	251	200	.	453
Brown (Common) Noddy	2334	25	.	.	25	.	200	.	2584
Blue-gray Noddy	.	.	.	.	.	.	1	.	1
White Tern	.	53	.	1	.	.	100	2	156
TOTAL	10,214	6167	61	119	6837	2633	2500	58	28,589

REPORT OF THE "BIRD" EXHIBIT AT ECOLOGY CIRCUS

Sponsored by the University of Hawaii

Effort shared by all conservation minded organizations

January 8,9,10, 1970

The Conservation Council, through Mrs. James W. Cherry, asked the writer to be in charge of the bird exhibit. This was done under the auspices of Bishop Museum and the Hawaii Audubon Society (HAS).

The resulting exhibit consisted of four (17x25") enlargements in color of the four chief "feather" birds (loaned through the kindness of the Bishop Museum/Kamehameha Schools museum-on-wheels; Don Mitchell) at the top of the panel, which made a very striking and beautiful feature to catch the eye. Beneath them a set of maps of the Hawaiian Islands was spread out in its natural order. These were prepared and donated by Edwin H. Bryan, Jr. With the maps as a core, many of the pages from HAWAII'S BIRDS were grouped. These had been mounted by Hilde Kaigler, after being chosen by Charles Kaigler (HAS). For the endangered species, small labels of violent pink were attached: ENDANGERED. Some of the most desirable habitats for birds were noted by stretching cords to labels outside the maps, as KAHUKU, KANAHA POND, etc. At the base of the panel was a sign, made by Lloyd Soehren: BISHOP MUSEUM and HAWAII AUDUBON SOCIETY.

A long table had been furnished for the space, back of which we attendants could sit or stand. The Outdoor Circle and the Garden Club exhibits were our neighbors. Mrs. Woolaway (Garden Club) loaned us green covers for our table, and a bridge table for our illuminated exhibit of the Nene and the Stilt at Opa'e'ula Pond (prepared by Lloyd Soehren and loaned by Bishop Museum). This lighted exhibit was also an eye-catcher.

On the table we had a few more pictures from our bird book, and brochures concerning the exhibit and the value of birds. (Hawaii's Birds, Can We Save Them? /Reproduction follows this report/ Three hundred copies were mimeographed, at least two hundred more could have been supplied and distributed.) Sixty-nine copies of HAWAII'S BIRDS were sold and names of several prospective members were signed up.

Eugene Kridler, of U.S. Fish and Game Division, sent many copies of the recent brochure, HAWAII'S ENDANGERED WILDLIFE, for distribution, as well as copies of two other folders about birds in Hawaii, one of the HAWAIIAN ISLANDS NATIONAL WILDLIFE REFUGE.

Two movies had been loaned by the State Library but could not be used because no projector was available. The light was too bright to show them effectively in any case. But Henry Yuen, Audubon member, had come to Bishop Museum and worked carefully with the writer in selecting birds for the carousel (loaned by Department of Anthropology, Bishop Museum). This set of kodachromes, some loaned by Yuen, some by Rex Elliott, some from Bishop Museum collection, was especially useful, for we could show it, keep attention, talk about the pictures and hold them for discussion. We ran it almost constantly.

Everyone appealed to for help responded gladly. HAS members, Charles Kaigler (president), Hilde Kaigler, spent a great deal of time before and during the sessions. Mr. and Mrs. William P. Mull also spent considerable time as attendants, and Unoyo Kojima and the writer completed the list, except for Tonnie Casey, a young University student, who assisted at her own suggestion.

We feel that the exhibit was a great success in awakening interest in birds of Hawaii and the continuance of their existence here. A great many of the visitors were astonished to see how many kinds of birds are here now and have been formerly. We hope that this interest will continue and that we can be known more widely as proponents of conservation of birds and knowledge of them.

The general feeling among all exhibitors was elation at the high attendance and interest. Most of the exhibits stressed the ugliness of careless waste. But birds did not lend themselves to that facet of exhibition. We had to rely on our words and to the brochure telling of conditions and hope for improvement. The exhibit itself was colorful and beautiful.

Margaret Titcomb

HAWAIIAN BIRDS
Can We Save Them?

Birds came to Hawaii on their own centuries ago. They found little to eat, but the survivors managed to live on what was here: a few insects, a little honey in the heart of flowers, scarce as they were, and small creatures in ponds, streams and reefs. Throughout time this adaptation to new foods and a new land changed the birds in some ways, notably as to shape of bills. These changes made the birds unique. Nowhere in the world are there birds just like our native Hawaiian. Scientists come from far places to see and study them.

When Polynesians got to Hawaii, and when haoles got here about a thousand years later, there were 70 different kinds of birds. Without thinking of the needs of birds MAN made so many changes to suit himself in the bird habitats that many birds could not endure such disturbance, so that now we have only 46 kinds of birds. The rest perished. Of these 46, there are 27 kinds that are endangered. That is, there are so few of them and their habitat is so insecure that we shall lose them IF WE DO NOT ACT QUICKLY TO SAVE THEM.

Causes for disaster:

1. Habitat destroyed. Birds cannot live "anywhere". They develop habits and have to abide by them.
2. Introduced animals compete successfully for food and living space. They destroy the old harmony. Some birds have brought bird diseases.
3. The old Hawaiians were instinctively conservationists. They killed some birds for food, some for feathers, but took care not to reduce the numbers to the danger point. Modern man has killed too many for food and for sport, and has thoughtlessly filled ponds and marshes needed by birds. Without their normal food and shelter, birds perished.

Types of birds:

Sea birds are protected in Hawaii. Most of them live on islets around the shores of the large islands, or on the small islands that make up the Hawaiian Chain. See map on wall. No one is allowed to land without permission. We are afraid that some citizens break this law. Sea birds have been useful to fishermen for centuries, for they see schools of fish quickly whenever they surface. The fishermen hurry to reach the spot!

Shore birds are now in deepest trouble because man wants all the land, including marshes and ponds. Shore birds need some of them too. Our managers of parks are now trying to plan some of the future parks with birds in mind: let part of the parks be areas receptive to birds, the rest for recreation of other kind. Then the beautiful shore birds will increase in number for our delight and pride. Visitors now ask, "Where are your birds?" We are ashamed to have so few, to have lost so many.

Forest birds were safe for a long time among the great native forests. But neglect of the forests took away much of their habitat. Without homes and food of their choice, with the introduction of the mongoose and additional rat species to contend with, with freedom given to hunters to kill all they pleased, many forest birds disappeared forever.

Migratory birds. These are famous the world over. They travel back and forth seasonally, from very cold to warm regions, non-stop. Hawaii is in one of their lines of travel, some stopping here for several months, some flying on to southeast Polynesia. Fewer stop here each year! Our hospitality is not what it was and our hunting too free.

Introduced birds. Most of these remain in urban areas. Tourists as well as residents observe them. They are not endangered, though the lovely Japanese hill robin used to be plentiful and now is not. What happened?

Value of birds. Birds have been closely associated with man for centuries, probably always. Myths reveal this close association and regard. Unfortunately we have lost part of this closeness to the natural world. Can we regain some of our nearness and perception?

At sea, the Polynesians probably never missed the chance to note direction of bird flight, and benefit by it. This historic value has been taken over by the compass, but fishermen still watch for flights at sea that feed on schools of fish. Birds consume a vast amount of insects and other small creatures in ponds, streams, and soil, including rodents in fields and woods, much of this life being in over-abundance. They spread seeds widely. Birds are therefore one of the components of balance in nature. In cities, birds do much to keep our streets clean of carelessly dropped food by LITTERBUGS. Little escapes their notice. We may differ as to the value of beauty, but most of us would mourn deeply if we had no birds to delight our eyes with their form and flight, our ears to listen to their chatter and their song. Their value is a big subject still under study.

What is to be done?

It would be ideal if all of us knew the birds better. Then we could serve them better and understand what those charged with their care are doing for them.

There was a society, the Hui Manu, that worked for years at the task of supplying Hawaii with new birds to take the place of those lost. It was a kindly group for their object was to make the land beautiful with lovely birds and their songs. But the problem was too big and not enough was known of the introduced birds. Many difficulties were unseen and some of the very birds introduced caused further harm. But their experience increased our knowledge.

Another society, the Hawaii Audubon Society, has existed since 1939. Its purpose is to record birds still here, provide a meeting ground monthly for all who know or don't know birds. The society publishes a little paper, THE ELEPAIO, monthly, with articles by scientists and amateurs on some phase of knowledge of our birds.

One meeting outdoors on a trail each month, one meeting indoors for talks and pictures. JOIN US. (P.O. Box 5032, Honolulu, 96822. \$3.00 per year. There are several books on birds. Start to learn them by buying HAWAII'S BIRDS, for sale here and elsewhere, at \$2.00 per copy.)

You can see that ECOLOGY CIRCUS is designed to help people think of and know the land of Hawaii and the problems involved in keeping it as healthy, beautiful and useful as possible. You can see, we hope, that in nature one creature depends on another and all depend on the land itself. Don't forget that MAN is one of those creatures. He depends on a knowledge of the land, the water in and around it, the air above, and all the creatures and plants in every part of it. Solutions to his present problems as to care of the environment must be reached thoughtfully, and soon!

BISHOP MUSEUM
HAWAII AUDUBON SOCIETY

+++++

REPORT FROM THE PRESIDENT

The Hawaii Audubon Society in cooperation with the Bishop Museum participated in "Hawaii Shibai", the ecological circus sponsored by the University of Hawaii at the Honolulu International Center January 8-10, 1970.

Their exhibit displaying beautiful paintings, photographs, and illuminated panels of Hawaii's extinct and endangered species of birds was well received. The paintings and photographs were positioned about the maps of the islands which also highlighted endangered bird habitats which our society, in cooperation with other organizations, is trying to preserve or save. We also presented a slide show, handed out literature and our publication, HAWAII'S BIRDS, promoted membership in the society, and answered questions on birdlife and ecology to all those interested-- and there were a goodly number.

The circus itself was, in the opinion of many knowledgeable observers, the most striking exhibit of what man is doing to his own habitat as well as to himself that has been presented to date, and its influence is certain to be felt among a majority of the more than 60,000 who attended. We are pleased to have had a part in it.

Charles G. Kaigler

Observations at Waipio Peninsula (Settlement Basin and Walker's Bay)

Observers: Bill and Mae Mull Period: October 9 - November 30, 1969

Trips: 13 during the period (at least one per week)

Optics: 10-power and 20-power binoculars, plus 20x-60x scope

General comments: There was a marked drop-off in both numbers and species of ducks and shorebirds at the Basin following November 15, with no sandpipers, turnstones, sanderlings, stilts or ducks seen there after that date. A lowering of the water level during November doubtless accounted for that drop-off, since it resulted in a considerable reduction in areas of surface water and soggy mud (particularly in the north and central segments), which both reduced profitable feeding areas for those birds and made possible on invasion of formerly inviolable areas by mongooses, dogs and humans (whose tracks were increasingly evident in late November where only bird tracks were seen before). Following is a synopsis of high counts and comments on individual species.

Little Blue Heron: One individual (apparently the same one we saw there on several occasions during the previous two months) was observed carefully for 10 minutes in excellent light through 10x and 20x binoculars at a distance of about 50 yards perched in full view at the Basin on October 25. The bird again showed no "rusty" or "maroon" coloration on the head or upper neck, which appeared generally about the same slatey-blue color as the plumage on the rest of the body--although the head and upper neck feathers did show a slight purplish cast in certain lighting angles as the bird preened and turned its head. As before, it headed in the direction of Waipahu when it took flight.

Cattle Egret: A flight of 121 passed over Walker's Bay on October 25, headed toward the Basin area half a mile to the north, where we counted over 100 a short time later. Consistent counts of 25+ at the Basin during October fell off abruptly to

8 or less throughout November--except for a count of 15 on November 9.

Black-crowned Night Heron: Consistent counts of 3-7 at the Bay throughout the period, with a high count of 11 on October 29. About one out of four individuals observed had immature plumage.

Mallard: Single male observed at the Bay on all but three occasions during the period, by the end of which he had emerged completely from eclipse plumage. He is a loner, normally keeping to himself on the shoreline well to the right of the beached landing-craft hulk--away from the popular assembly area for shovelers and pintails at the mouth of the drainage ditch to the left of the landing craft. During November, we noticed that his right wing appeared deformed or injured; seen through a 20x scope, the primaries on his right wing canted downward at an unnatural angle and several of them appeared to be stripped of their vanes, leaving only the bare whitish shafts. We were reminded that we had never seen him take flight, since we first observed him on September 1--and mistook him for a female in his drab eclipse garb.

Pintail: High counts at the Basin of 72 on October 18 and 60 on November 15--with high counts at the Bay of 40+ on November 1, 50 on November 5 and 33 on November 11. Males emerging well from eclipse plumage by November 15.

Shoveler: High counts at the Basin of 50+ on October 12 and 45+ on November 15--with high counts at the Bay of 87 on October 25, 50+ on November 1 and 45+ on November 15. Males emerging noticeably from eclipse plumage by November 15--but not nearly so advanced as the pintail drakes on that date.

Green-winged Teal: One at the Bay on October 29 and two on November 11--both times looking conspicuously diminutive in the company of dumpy shovelers and statuesque pintails gathered on the mudflat at the mouth of the drainage ditch. On the latter occasion, the masculinity of one of the pair was barely discernible in his non-descript-eclipse state.

Ring-necked Pheasant: At the Basin: 3 on October 11 and 18, 2 on October 15 and 29, and one each on 3 out of 7 visits during November.

Common Gallinule: One at the Basin on October 25 and November 29--caught out in the open flat-footed in the last remaining puddle in the area on the latter occasion. Both times the bird was very shy, hurrying into nearby grass cover at first sight of us. We guess the bird was there throughout the period and managed to spot us and take to cover on other occasions before we could notice it.

American Coot: Consistently 6-8 at the Bay throughout the period, with 9 counted on November 11 and 15. We have seen no coot at the Basin since September 21.

Semipalmated Plover: A single individual observed for 15 minutes feeding on the mud in the company of an American golden plover at the Basin on November 11. In our concentrated attention to this trim little bird at close range over that length of time we were struck by the small area of mud surface he covered during that period as compared to the amount of area covered by the American golden plover in its wandering feeding behavior. We recalled the similarly-restricted movement of feeding semipalmated plovers we had watched in the Basin area in late September and early October, as contrasted with the active walk-scratch-peck pattern of the turnstones and the frantic run-pirouette-peck antics of the sanderlings who were their feeding companions on those occasions.

American Golden Plover: High counts of 52 at the Bay on October 18 and 50+ at the Basin on October 25.

Black-bellied Plover: Two at the Basin on October 11 and one there on October 25 were the only ones seen during the period. Their habit of occasionally stretching their wings and exposing their black wing-pits while standing on the ground is a most welcome display to squinting birdwatchers who are trying to distinguish them from American golden plovers at great distances or in bad light.

Ruddy Turnstone: High counts of 101 at the Basin on November 5 and 14 at the Bay on October 18.

Wandering Tattler: One or two seen consistently at the Bay throughout the period, with scattered sightings at the Basin of two on October 12 and one each on October 15 and November 1.

Sharp-tailed Sandpiper: Observed at the Basin on each of ten visits from October 11 to November 11, following which none was seen on subsequent visits. Highest count was 25+ on October 12, followed by 15+ on October 15, 11 on October 18 and a progressive decline until the final sighting of 3 on November 11. Frequently observed in company with its close relative the pectoral sandpiper, we were treated to the instructive opportunity to compare the distinguishing field marks between these two species in some depth. To us, their size, proportions, behavior and movements were indistinguishable either on the ground or in flight. In their fall plumage, as we saw them the most conspicuous differentiating field mark (as indicated by Peterson) was the sharp line of demarkation between the dark upper breast and light lower breast of the pectoral, as contrasted with the indistinct gradation between the tawny-buffy upper breast and light lower breast of the sharp-tailed. Viewed from side and back angles in reasonably good light, we noted the pectorals were consistently darker and grayer in appearance than were the sharptails, which invariably had a distinctly brownish cast, a "reddish" crown and more conspicuous white eye-stripe. As we became accustomed to the sharp-tailed, we increasingly looked to the head markings for quick identification--since the breast was often in shadow or not fully in view, whereas the head markings were virtually always in sight except in flight. Under the field conditions of our observations, we were unable to discern any notable difference in back-striping between the two species, as one might infer from Peterson's notation of "striped back" for the pectoral and the absence of such a notation on his illustration of the sharp-tailed next to it. Perhaps the distinction is obvious only in breeding plumage.

Pectoral Sandpiper: Three observed together at the Basin on October 12. One each seen there on October 11, 15 and 18 and on November 9 and 11, following which none observed for remainder of the period.

Dowitcher: Two observed feeding on the mudflat at the Bay on October 29. No other observations during the period.

Sanderling: High counts at the Basin of 50+ on October 11 and 94 on November 5, and at the Bay of 57 on October 25.

Black-necked Stilt: High counts of 50 at the Basin on October 11 and 33 at the Bay on October 15.

House Finch: One seen at the Basin on October 15 and one at the Bay on October 29.

Strawberry Finch: Seen regularly throughout the period both at the Basin and the Bay, with 2-3 normal at the Bay and 10-15 at the Basin.

Black-headed Mannikin: Observed regularly at both places throughout the period, with a high count of 7 at the Bay on October 11 and consistent sightings of 150-300 at the Basin (often including 2-3 tri-colored mannikins in the larger flocks).

Ricebird: Two seen on two occasions at the Basin, once on October 18 and once on November 15.

Supplementary Notes on Waipio:

Both doves, both cardinals, white-eyes and mynahs were observed consistently at both areas throughout the period, but we did not keep complete notes on their numbers; we shall hereafter.

On October 15 at the Bay, we observed a mongoose dragging an unidentified gray bird from the mudflat into the bushes behind it. The bird was about the size of a tattler or a barred dove, both of which are commonly seen on the mudflats in that area.

We did not visit the Waipio area during December, but we did on January 1, 1970. By that time, the Basin was completely drained and grass had grown up considerably in the former wet, open-ground areas that had been favorite feeding spots for ducks and shorebirds. Except for a few egrets and plovers in the adjacent plowed canefields, there were no shorebirds, marshbirds or ducks in evidence. The Basin proper seemed occupied exclusively by mannikins, doves, strawberry finches, cardinals and white-eyes.

Common (or "European") Teal: A male teal, which appears to be a common teal, has been in residence at Walker's Bay, Waipio Peninsula, throughout January. We first observed him on January 1, at which time we took him to be a green-winged teal not fully emerged from eclipse plumage. Our subsequent observations of him on

January 4, 10, 18, 24 and 31--and his almost-complete development of full winter plumage during this period--have convinced us that he is instead the common teal. He lacks any hint of the vertical white line on either side that is diagnostic for the green-winged, but he shows beginnings of the horizontal white lines above the wings that identify the common teal. His white head markings are strong and complete, which characterizes the common, rather than the green-winged. At last sighting, February 8, he appeared to be in prime condition and beautiful plumage--both in flight and in vigorous feeding activity on the mudflat. Records available to us indicate no previous sighting of the common teal in Hawaii.

+++++

Field Notes from Thomas G. Vaughan, Park Archeologist, City of Refuge National Historical Park, Honaunau, Kona, Hawaii, December 11, 1969

In the period from May 30, 1967, to December 1, 1969, a number of uncommon birds have been sighted at City of Refuge National Historical Park. Perhaps this is a good time to summarize these observations.

At 2:40 P.M., on November 9, 1968, a large bird with a long, down-curved beak was observed on bare pahoehoe by the big tide pool in the place of refuge at Honaunau. It was plover-like in coloration, but much larger.

At about 4:30 P.M., I returned to the refuge with 10x50 binoculars and got within 200 feet of the bird. In addition to the features already mentioned, I noted that the bill was pink and the legs look grey. The thighs were fringed. The back plumage was patterns of brown, with darker striping along the top of the head. The breast was tan, except for a darker patch about four inches below the bill. Tentative identification: bristle-thighed curlew.

This bird's behavior was curious. It was feeding (I assume) at a tide-pool in the northeast part of the refuge. It repeatedly threw its head back, then forward and downward. Closer observation showed it was dashing pipipi (Nerita picea) against the rocks, apparently to break the shells. Occasionally it appeared to dash a pipipi a second time. No other account of shell-throwing by curlews has come to my attention.

A coot was seen in the ponds in the refuge during high seas in the winter 1967-68.

Frigatebirds are occasionally seen soaring overhead, especially during the winter.

Black-crowned night herons have been seen in the park on five different days, starting February 24, 1968. Here again, they seem to show up at Honaunau (and at Napoopoo, at the old fish ponds next to Hikiau Heiau) during periods of high seas. They are especially noticeable while feeding at dawn and dusk. On December 18, 1968, and January 5, 1969, two herons were seen together at Honaunau, one in mating plumage and one in immature plumage. Photos are in the park files.

A hawk flew low over the parking lot on October 4, 1969, at 4:45 on a misty afternoon.

A gull, probably an immature glaucous-winged, was seen around Honaunau Bay from November 26-28, 1969. Photos were taken by me for the park, and also by Norman Carlson. A glaucous-winged gull was captured at Keei by Wallace Hing on December 8, 1968. Photos are on file at the park.

Barn owls are resident in the park. I have seen puco near the park, most recently on September 28, 1969, near Napoopoo dump, but none in the park.

Bats are infrequently seen over Honaunau Bay.

+++++

Field Notes from Walter R. Donaghho:

January 6, 1970: One Red-vented bulbul noted on telephone wires on the top of Red Hill, by the new housing.

January 15, 1970: Col. Kaigler, the Joseph Copelands, and I noted a pair of Red-vented bulbuls flying north across Middaugh St., the road going up into Ulupau Head. These were at the makai edge of the marine housing, and flew low across the

road right over the car and landed briefly in a lone kiawe tree about fifty yards to the north.

A Common teal was seen on the mudflats of Walker's Bay on the Waipio Peninsula. The fact that there was no white bar on the wing identified it; the Green-winged teal having one.

We wonder just how many Common teals have been identified as Green-wings in the past?? I, for sure, haven't always been too careful about determining whether the teals flying up before me had bars or no bars.

The Common teal is casual in Alaska and the Pacific Coast however, so I am sure that there haven't been too many mistakes!

ALOHA to new members:

Junior: Stephen Carter, Apt 307B, 1914 University Ave, Honolulu 96822
 Neil Kawasaki, 1010 Lunaai St, Kailua, Oahu 96734
 Derwin Nazarino, 2925 Kalihi St, Honolulu 96819
 Brian Reed, 190 Kuumele Place, Kailua, Oahu 96734

Regular: Dr. Roger E. Baldwin, 300 Lahi St, Hilo, Hawaii 96720
 Mrs. Mark Hastert, 247 Kaalawai Place, Honolulu 96816
 Mr. & Mrs. Don Huddleston, 865 N. Kalaheo Ave, Kailua, Oahu 96734
 Christine Jones, 2501 Coyne St, Honolulu 96814
 Roy Keast, Hualalai Ranch, N. Kona, Hawaii 96725
 Kathy Kiss, Mid-Pacific Institute, 2445 Kaala St, Honolulu 96822
 Mrs. Gordon A. Macdonald, 326 Lanipo Drive, Kailua, Oahu 96734
 Paul Marshall, 907 Lemi St, Wahiawa, Oahu 96786
 Lynn Nakkim, 3140 Huelani Place, Honolulu 96822
 Richard P. Northwood, P.O. Box 803, Hilo, Hawaii 96720
 J. David Raney, 4300 Waiialae Ave, B-1203, Honolulu 96816
 S. Arthur Reed, Zool Dept, Univ of Hawaii, Honolulu 96822
 Mrs. Max M. Rhyne, P.O. Box 4061, Honolulu 96812
 Ernest Richter, 965 Akumu St, Kailua, Oahu 96734
 Mr. & Mrs. George A. Schattauer, S.R. Box 24, Captain Cook, Haw. 96704
 Roxanne Sullivan, 1923 Dudoit Lane, Honolulu 96815
 Jeanne Wharnsby, 2546 Lemon Road, Honolulu 96815

Institution: University of Guam, REK Library, P.O. Box EK, Agana, Guam 96910

HAWAII'S BIRDS, a field guide, available for \$2.00. Send in your orders to: Book Order Committee, Hawaii Audubon Society, P.O. Box 5032, Honolulu, Hawaii 96814.

MARCH ACTIVITIES:

- March 8 - Field trip to study shore birds. Bring lunch, water, and if possible your car. Transportation cost (\$1.00) to be paid to the drivers.
 Meet at the Library of Hawaii at 8:00 a.m.
 Leader: William P. Mull, telephone 988-6798.
- March 9 - Board meeting at the Zoo entrance bldg at 7:30 p.m. Members welcome.
- March 16 - General meeting at the Waikiki Aquarium Auditorium at 7:30 p.m.
 Speaker: Dr. Andrew J. Berger
 Topic: Nesting Habits of Some Hawaiian Birds (color slides)

HAWAII AUDUBON SOCIETY EXECUTIVE BOARD:

President-LtCol Charles G. Kaigler, Vice Pres.-Miss Margaret Titcomb & Jack L. Throp
 Secretary-Mrs. Virginia Cone, Treasurer-William W. Prange, Jr.
 Board Members: William P. Mull & David H. Woodside
 THE ELEPAIO: Editors-Miss Charlotta Hoskins & Miss Unoyo Kojima
 MAILING ADDRESS: P.O. Box 5032, Honolulu, Hawaii 96814

DUES: Regular-\$3.00 per annum, Regular out of State-\$2.00 per annum, Junior (18 years and under)-\$1.00 per annum, Organization-\$2.00 per annum, Life-\$50.00

DUES FOR 1970 ARE NOW PAYABLE

Members whose dues have not been paid by March 31 will be dropped from the membership roll and THE ELEPAIO mailing list.