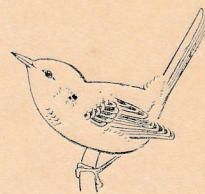


# *The Elepaio*

Official Organ of THE HONOLULU AUDUBON SOCIETY  
Honolulu, Hawaii, U.S.A.



"Elepaio"

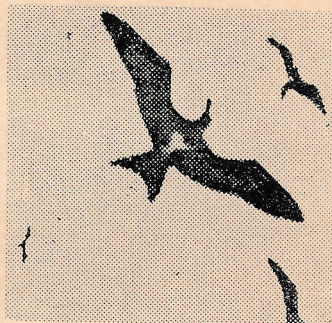
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## Iwa or Frigate Bird



Here is a picture of the Iwa or Frigate bird, a grand bird that may be seen almost any day around the coast of Oahu, particularly on the windward side. Bands of as many as thirty may sometimes be seen sailing along the coast, even going inland for some distance over the cane fields.

It is a master of the sailing type of flight and can soar or travel for hours without a flap of the wings. It is not often seen near enough to

appreciate its size, the wingspread is about seven feet.

Although it is well able to catch fish by snatching them from the surface of the ocean or taking the flying fish in the air it finds it easier to victimize other birds, generally boobies. With its superior power of flight it chases them, following each twist and turn until the victim is forced to disgorge its load of fish, which the iwa swoops down and catches, usually before it reaches the water. We have seen this performance off Wai-kiki, though the victim in that case was another iwa. A pair may often be seen travelling in the late afternoon over Wai-kiki towards Diamond Head.

The male bird is all black, but in the breeding season it has a large red pouch on the throat which can be blown up with air, giving the bird a very curious appearance. The female is black with a white breast and the young are white on the head, neck and underparts. The bird pictured is evidently a female. The tail is deeply forked and no doubt this helps the bird in its sudden twists, for other birds which turn suddenly in flight, such as swallows, have deeply forked tails.

They breed in colonies on our ocean islands. The nests are large structures of sticks usually placed on trees or bushes or, when these are absent, on the ground. One bird of the pair is always present at the nest, for if it is left unguarded other frigate birds will steal the material. When the single white egg is hatched the parents' vigilance is even more necessary, as the chick is liable to be snatched away for a meal.



2. The period of extensive collection.

By E. H. Bryan , Jr.

(continued from Vol. 1, No. 5.)

Up to the middle of the 19th century, although the interesting land birds of Hawaii had been introduced to science, little detailed information was known about them.

The first extensive list of Hawaiian birds was compiled by Sanford B. Dole, who later became the distinguished president of the Republic of Hawaii and its first governor as a Territory of the United States. This list first was published in the Proceedings of the Boston Society of Natural History, in 1869. A later edition, with additions and corrections, appeared in the Hawaiian Annual for 1879. It listed 53 species, of which 4 were described as new.

The visit of H.M.S. Challenger, July 27 to August 19, 1875, made known to science the Hawaiian duck, named by P.L. Sclater as Anas wyvilliana.

Considerable credit for the extensive study of Hawaiian birds made toward the end of the 19th century should go to Professor Alfred Newton, of Cambridge University. Because of his enthusiasm, two young Cambridge naturalists undertook collecting which led to magnificent contributions to Hawaiian ornithology. The first of these was Scott B. Wilson who went to Hawaii to collect birds at Professor Newton's request. After making a brief visit at Washington, D.C. with Dr. Leonhard Stejneger, who had done some little work on collections of Hawaiian birds, sent him by Valdamar Knudsen of Kauai, Wilson arrived in Honolulu April 8, 1887. Wilson collected throughout the islands until the close of 1888, taking back with him to England a large and valuable collection of bird specimens, rich in new species.

This collection formed the basis for the beautifully illustrated



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"Aves Hawaiienses", issued in sections from 1890 to 1899. Wilson again visited Hawaii in 1896, without adding much to scientific knowledge. Besides collecting skins he carefully preserved whole specimens of birds in alcohol. Upon these specimens Dr. Hans Gadow based anatomical studies which led to some new and startling conclusions as to the relationship of many Hawaiian species.

Meanwhile, the Hon. Walter Rothschild, the other naturalist interested by Professor Newton at Cambridge, sent his collector, Henry Palmer, to Hawaii to procure specimens and data. Arriving in December, 1890, Palmer collected on nearly all of the main islands of the group, in company with George C. Munro, and also making a trip to Laysan and other northwest islets. By August, 1893, when he left Honolulu, Palmer had collected 1832 bird specimens, including all but seven of the species previously known, and in addition fifteen which Rothschild described as new to science.

Rothschild produced the elaborate "Avifauna of Laysan and the neighboring islands ....of the Hawaiian possessions", published in London in three parts, 1893-1900. This work enumerates 116 species, with numerous colored plates, and gives valuable notes on food, habits, eggs, nests, and distribution, as well as descriptions.

In 1892, R. C. L. Perkins came to Hawaii under the joint auspices of the Royal Society of London and the British Association for the Advancement of Science. For a decade he made extensive collections of all forms of land animal life. These formed the basis for the extensive publication, "Fauna Hawaiiensis". The section of birds was published in November, 1903. It gives a valuable summary of their distribution and relationships.

H. W. Henshaw, from his home in Hilo, and W.A. Bryan and Alvin Seale, of the staff of B.P. Bishop Museum, made extensive collections of birds during the first decade of the present century. In 1901, W.A. Bryan published a "Key to the birds of the Hawaiian Group", followed by several articles giving lists and notes. Henshaw published "A complete list of the birds of the Hawaiian possessions" 1902-03. All of these have helped to complete our knowledge of the native birds.



by Grenville Hatch.

The August field trip of the Honolulu Audubon Society took the form of an overnight trip to Rabbit Island, with eleven members and friends participating in what proved to be one of the most successful and pleasant trips yet made by the Society.

On Saturday, August 17th, the members were ferried across by the Hawaiian fisherman from Waimanalo. Long before they reached the island noddy terns were circling about their heads fearlessly, and as they approached the shore, the terns could be seen in such great numbers upon the rocky headland that areas appeared quite black from their dusky plumage.

Upon reaching the island, all members of the party climbed the slope which leads to the side of the crater. The lower, comparatively level surface is loose earth, covered with a growth of sandbur grass and forms, with the crater itself, the breeding area of the wedge-tailed shearwaters. The birds dig a burrow, at the end of which they deposit their egg. Toward dusk we had a demonstration of how rapidly they can dig, when returning shearwaters sent the earth flying into the air so rapidly and continuously that it looked as though a cloud of smoke were rising. Probably this outlay of energy was necessitated by the party's earlier ascent of the slope, for the burrows are so close together that it is difficult to traverse the area without disturbing them. Many of the burrows contained young shearwaters, and some a single adult with either an egg or immature young, for until the young are fairly well developed one parent remains in the nest during the day. Several young were taken from the burrows and admired, for they are very attractive, with an alertly lifted round head and soft gray down.

The nestlings showed little fear when taken into the hand, but the adults demonstrated upon two members of the party how much damage



their beaks are capable of doing.

The noddy terns, leaving the lower sections to the shearwaters, lay their eggs in slight hollows on the bare rock of the higher slopes. The adults remain with the egg and the immature chick until he is able to shift for himself, staying, not to warm, but to protect it from the intense heat of the sun.. A number of eggs were found, as well as young birds. One egg had a hole in it about the size of a pea, through which the chick could be heard making surprisingly loud remarks about his situation. The next morning some of the members returned, to find him safely out of the shell and very lively. The young terns are more agile than the shearwaters, and took less kindly to capture, disgorging their last meal into the hand of their captor.

At dusk the shearwaters began to return from the day's fishing to feed the young, who early learn to live upon one meal a day, and for the last few weeks of their immature life upon none, for the adults leave them to subsist upon their own fat for several weeks just before the young take to the air.

After dinner the party returned to the crater, where they watched the shearwaters return each to his own burrow - unless some unkind person were sitting upon it - their to sing to his mate or young. "Singing" is a trifle inaccurate, since the sound resembles somewhat that made by a gentle but unhappy pet confined to the kennel. The evening is one that few who were present will forget, with hundreds of birds soaring overhead in the moonlight, and fearlessly alighting nearby. There was a continual chorus; the moaning of the shearwaters, the croaking calls of the noddy terns; a faint whistling sound from the young noddies, while occasionally the call of a sooty tern or of a wandering tattler could be heard.

About dawn the next morning, most of the members of the party rose to watch from the cliff the most impressive sight of the trip, as the shearwaters and noddy terns rose by the hundred, wheeled about



their nests, then flew out to sea, over Kaohikaipu Island, past Makapuu Light, still burning in the gray dawn. At the same time, the red-footed gannets, or boobies, which nest upon Bird Island, flew past in the same direction, sailing majestically by in the higher air. A few frigate birds soared very high in air, but apparently decided that it was too early to start the day's career of robbery, and vanished without coming closer.

While the shearwaters and terns abounded, there were a few nests of Bulwer's petrels in the rocky crevices of the lower cliffs. No adults were seen, but several young were found. A few turnstone were also seen upon the makai side of the island.

Those making the trip were, J. d'Arcy Northwood (leader), Charles Dunn, Ferris F. Laune, P. D. Steele, Mr and Mrs George Krall, and the Misses Katherine Laune, Mary Laune, Patricia Weatherby and Robert Lambert.

oOo

We have received a letter from Walter Donaghho, dated August 10th. He is at the Navy Construction Camp <sup>on Midway</sup> and says, "I am finding out many things about the Sooty Tern. One thing, I believe that the tern chick is fed by more than two birds, as I have seen several arguing (yes, they really quarrel) over a chick; each was trying to get its attention at the same time calling each other down.

The plover arrived on July 27th this year, and the curlew came a little later (I don't know exactly when). The turnstone arrived with the plover. One thing that was noticeable was the late nesting of the wedge-tailed shearwater. The majority are still sitting on their eggs, though some are feeding chicks. And did you know that the albatross young feed through the nose? (Something new, Walter, get more information). All the black-footed albatross have gone, and only a scanty number of young Laysan albatross remain. "