

# THE ELEPAIO

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*For the Better Protection  
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The following remarks from the 27 July 1972 CONGRESSIONAL RECORD-- Extensions of Remarks pages E7148 and E7149 on the Hawaii's Endangered Species Act by Representative Patsy T. Mink show her alert concern to improve the quality of our environment:

Mrs. MINK. Mr. Speaker, the adoption in 1969 of Federal legislation to help preserve endangered species of fish and wildlife was a landmark in our struggle to preserve natural resources for future generations.

More recently, the State of Hawaii has acted at the State level by adopting its own endangered species conservation act. This law, Act 49 of the 1972 legislature, is designed to afford even greater protection to the rapidly dwindling ranks of native Hawaiian wildlife.

It is appropriate that the State of Hawaii should be taking a leading role in this environmental cause, since Hawaii has an island ecosystem unique in the world. This wildlife system, developed over millions of years of island isolation, has been severely affected by habitat changes since the islands were populated by man.

In a 1970 report, the Smithsonian Institution said: Hawaii has the most diversified, unique and scientifically significant flora and fauna in the world, and yet the islands' environments are so fragile that in nearly 200 years since the Islands were visited by Captain Cook, more animals and plants have been exterminated or brought to the brink of extermination than in all the rest of the United States.

In the past 150 years, 23 of 68 bird species that occur naturally only in Hawaii have become extinct and 29 of those that remain are endangered, primarily because of increased human use of the land and disturbance to the native ecosystems. Hawaii has more than half of the 52 endangered bird species of the entire United States. Only 16 endemic Hawaiian bird species are not considered endangered--officially. But many of these are just "hanging on."

To illustrate the fragility of these island species, the introduction of rabbits about the turn of the century to tiny Laysan Island is a good example. In the absence of any natural enemies, the rabbit population exploded and soon they consumed all the vegetation. The rabbits then perished--as did thousands of nesting seabirds and their young who were trapped in their burrows by wind-driven sands. Laysan, located in the Pacific between Honolulu and Midway Island, had become a barren waste. Tragically, three species of small birds which were exterminated are found nowhere else in the world. A scientific expedition in 1923 witnessed the extermination of the last three honeycreepers in a sandstorm.

Today, the Hawaiian goose--NENE--Hawaii's official State bird, is among those on the endangered list. An estimated 25,000 inhabited the lava slopes of Hawaii during the late 1800's, but excessive hunting, predation by introduced mammals, and destruction of food and cover by grazing animals reduced the population to less than 50 by 1945. Although careful and costly management has increased the flock



to about 500 birds, the nene's future as a wild bird remains precarious.

Along with birds, Hawaii's only two endemic mammals, the monk seal and the hoary bat, are threatened with extinction. So are all five of the fresh water fish species unique to the State, 500 land mollusks, 1,250 insects, 300 species of flowers and plants, and 25 species of ferns.

The new State Act 49 calls for an inventory of the status of indigenous birds and mammals, including their distribution, habitat, and range. The initial State list will be adopted from the current U.S. list compiled under the Federal endangered species law. It shall be unlawful to take, possess, transport, export, process, or sell any bird or mammal on the list except according to regulations of the State Department of Land and Natural Resources. The Act further provides for the development, regulation, and enforcement of programs, including land acquisition, to maintain or enhance indigenous bird and mammal populations and their associated ecosystems.

I am confident that Act 49 offers a valuable opportunity to the State of Hawaii to protect its unique environment, and I hope that all those responsible for implementing the Act will do so with vigor and full accord with its purposes.

The indigenous species of wildlife are an integral part of Hawaii's native ecosystems and a part of the living heritage of Hawaii. They represent a natural resource of scientific, cultural, educational, environmental, and economic value to future generations of Hawaii's people.

Our wildlife evolved as part of the land itself. With coordinated efforts in education, observation, research, and ecosystem protection, this wildlife will be preserved so that future generations can sense the continuity of the land and feel an identity with the singular life systems it fostered and molded over thousands of years in Hawaii.

This is in keeping with our State motto: "Ua-Mau-Ke-Ea-O-Ka Aina-I-Ka-Pono"--  
"The Life of the Land is Perpetuated in Righteousness."

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#### THE ENDANGERED SPECIES CONSERVATION PROGRAM FOR HAWAII \*

By Harry A. Goodwin  
Office of Endangered Species  
Bureau of Sport Fisheries and Wildlife

Introduction: The national interest in preserving endangered species and their essential habitats was crystallized with the passage of the Endangered Species Act of 1966. With the passage of that act, the Bureau of Sport Fisheries and Wildlife established an Office of Endangered Species at the directorate level to give direction to a comprehensive program that had been developing in the Bureau since the beginning of that decade.

Those species and subspecies of our native fauna that were urgently in need of help had been identified with the aid of the scientific community, Federal and State biologists, and private conservation organizations. The first edition of Rare and Endangered Fish and Wildlife of the United States showed Hawaii with more than half of all the birds of the United States threatened with extinction.

The vulnerability of wild birds in Hawaii to changes in their environments is manifest in the extinction of some 25 kinds of endemic birds--species and races found nowhere else in the world. There is no doubt that alteration and destruction of habitat, along with the introduction of exotic forms, played leading roles in this disaster. The same unchecked forces increasingly threaten the existence of an equal number of species today.

Our Hawaiian Islands possess one of the most unusual and unique biotas known. The islands' isolated evolution gave rise to many unusually adapted terrestrial forms through natural selection with limited competition, scarcity of natural enemies, climatic and topographic variety, and opportunity for reproductive isolation. These spectacular forms are threatened by loss of habitat to the growing human population and their inability to adapt and adjust to the rapid onslaught of a great number of

\* Colloquium on the Endangered Species of Hawaii, Museum of Natural History, Washington, D.C., 7 May 1970



introduced plants and animals.

The Endangered Species Program for Hawaii is a cooperative effort to learn the habitat requirements of the endangered species and availability of such habitats, as well as the factors which are limiting or decimating present populations. It includes studies of the life history and ecology of these species, habitat delineation and acquisition, and protection and management of those habitats and their occupants. The program is coordinated through a local Endangered Species Committee.

Research: Field research is the foundation for the other program components. It is accumulating life history data and population and distribution information to build the essential knowledge of each species' ecological requirements.

Research projects are supervised by Dr. Ray Erickson, Assistant Director, Patuxent Wildlife Research Center, Laurel, Maryland. Characteristic research projects for Hawaiian endangered species include:

1. Information Search and Organization - Winston Banko
2. Reconnaissance Surveys - Winston Banko
3. Life History and Management of the Nihoa Millerbird - John Sincock and Eugene Kridler
4. Life History and Management of the Nihoa Finchbill - ditto
5. Life History and Management of the Laysan Finchbill - ditto
6. Diseases of Threatened Wildlife in the Leeward Islands of Hawaii - ditto
7. Life History and Management of the Laysan Duck - ditto
8. Life History and Management of the Hawaiian Monk Seal - John Sincock, Eugene Kridler & Karl Kenyon
9. Life History and Management of the Green Turtle

The scope and progress of these studies were described at the Rare and Endangered Wildlife Meeting in Honolulu on December 11, 1969. The meeting was sponsored by the local Endangered Species Committee to review progress on individual projects and coordinate the efforts of the Bureau, State, University of Hawaii, and IBP programs.

The results of these studies, and many others, will be published as the projects are completed. But in the meantime they spearhead action programs in other areas as rapidly as the facts uncovered can be put to practical test.

Habitat Protection: Destruction of the habitats of endangered species is occurring at an accelerated pace along the coasts and lowland areas of Hawaii. Key areas, especially for stilt, coot, and gallinule, are threatened, and it has become imperative that some be set aside to insure the survival of these species. Time is of the essence.

A substantial amount of information has been compiled by personnel of the Bureau of Sport Fisheries and Wildlife and the Hawaii Division of Fish and Game. Winston Banko of the Bureau has compiled detailed information on 20 different areas considered to be valuable or to have good potential as waterbird habitat. Another 23 areas not studied in detail have been identified as having actual or potential value. Many of these need further investigation.

A program whose goal will be the preservation of all essential habitat possible by various means is being developed by a special task force. Constant reassessment will be necessary as acquisition proceeds to determine if certain areas should be eliminated from consideration. Conversely, new areas may be found that can be preserved, restored, or developed as suitable habitat. Once an area is destroyed, there is little likelihood that it can be restored.

The ownership status of the 43 areas listed has been broken down into four categories considered to be the most logical. They are:

1. Federal lands -- almost all military.
2. State, county, and municipal lands.
3. Private lands -- long-time leases for wildlife desirable.
4. Private lands -- for acquisition if desirable and feasible.

Preservation of lands under governmental ownership, especially Federal, will have priority, and efforts will be directed primarily towards this end. However, preservation of vital areas under other ownership should be considered if a great danger



occurs which would result in their loss before the first phase of the program is completed, and opportunities which may arise in this regard to save them should be taken.

Work on category 1 has been in progress since 1966. Agreements have been consummated with the U.S. Marine Corps and the U.S. Army which have enabled wildlife programs to be developed for areas under their jurisdiction. Recognition of essential endangered waterbird areas has been given--Nuupia and Kaluapuhi Ponds as stilt habitat on the Kaneohe Marine Corps Air Station. Fort Kamehameha Military Reservation, under the jurisdiction of the Fort Shafter command of the U.S. Army, contains good stilt habitat just west of Keehi Lagoon. Wildlife plans for these two areas have been completed. Cooperative agreements have been completed with the U.S. Navy at Pearl Harbor. Preservation of stilt habitat at Bellows Field near Waimanalo is stressed in a cooperative agreement with the U.S. Air Force for a wildlife program for lands in Hawaii under the administration of that service. The GSA regional office in San Francisco is regularly submitting to the Bureau a list of any Federal lands which are declared excess in Hawaii.

Thirteen of the total areas listed in category 2 are owned by the State or the city and county of Honolulu. Where possible, they will be set aside and preserved or enhanced for endangered wildlife. Some are proposed for urban development or for public parks. In the latter case, provisions for wildlife use should be incorporated in early planning stages, and close communication should be maintained between personnel of conservation agencies and public planners to help achieve this. Personnel of the Bureau and the Hawaii Division of Fish and Game have conferred with planners of the Parks Department of the city and county of Honolulu a number of times regarding proposed parks at Kawainui Swamp near Kailua and several small areas such as Ukoa Pond near Haleiwa and the mangrove area near Molii Ponds at the north end of Kaneohe Bay. Good progress has been made toward having needs of endangered species incorporated in basic planning.

Even while progress is being made to preserve lands in categories 1 and 2, avenues are being explored to implement preservation of lands in category 3. Habitat in this category is rapidly disappearing. The possibility of providing planning assistance for private lands containing valuable waterbird areas is being explored through contact with landowners. It is hoped that, if owners are approached properly and a convincing justification made, such contacts will be fruitful. Opaepa Pond on Hawaii is a typical area.

Acquisition of category 4 land is likely to be least acceptable to many people in the State. It is likely, however, that some such action may be necessary to round out the program. More information is being compiled on the areas not completely explored in 1966. Most of these are listed on the following pages as "Other Waterbird Areas." These areas, as well as acquisition needs or areas needing protection to save endangered forest-dwelling forms, will be more completely described in a forthcoming report.

The following listings of areas show categories and ownership. Detailed reports are available for the first 20 listed. Key areas are indicated with an asterisk. More investigations may reveal others to be very important, also. Species involved are coded: D for duck, S for stilt, C for coot, and G for gallinule.

Investigators included the following: Bureau of Sport Fisheries and Wildlife - Winston Banko, Eugene Kridler, David Marshall, and Ray Erickson.

Assistance was given investigators about areas needing study, wildlife uses, ownership, etc., by the following: Hawaii Division of Fish and Game - Ernest Kosaka, Gerald Swedberg, Ronald Walker, and David Woodside.

Waterbird Areas  
Reported by Banko

Ownership  
Category

- |   |  |
|---|--|
| 3 | *1. Honokohau Fishpond - Hawaii (S, C)       |
| 3 | *2. Opaepa Pond (Makalawena) - Hawaii (S, C) |
| 2 | *3. Kanaha Pond - Maui (S, C, D)             |



## Waterbird Areas (Cont'd)

Ownership  
Category

4	*4.	Kealia Pond - Maui (S, C)
1 & 2	*5.	West Loch (Pearl Harbor) (Waikale) - Oahu (S, C)
2	6.	Keehi Lagoon (Sand Island) - Oahu (S)
1	*7.	Kaneohe Marine Corps Air Station - Oahu (S)
2	*8.	Kuapa Pond and Paiko Lagoon - Oahu (S)
3 or 4	*9.	Kaelepulu Pond - Oahu (S, C, D)
2	*10.	Kawainui Swamp - Oahu (C, G)
2	11.	Nuuanu Valley Reservoirs - Oahu (G, C)
2	12.	Hanapepe Salt Pond - Kauai (S)
3	13.	Koloa (Waita) Reservoir (West Bay) - Kauai (D)
2 & 4	14.	Opaekaa Stream (Wailua Pasture) - Kauai (C, D, G)
4	*15.	Hanalei Taro Patches - Kauai (S, C, D, G)
3	16.	Ahukini (Lihue Airport) - Kauai (D)
3	*17.	Lihue Plantation Settling Basin - Kauai (G, D, S)
3	18.	Grove Farm Cave Trash Dump - Kauai (D)
2	19.	Hana Cane Field - Kauai (S, G, D)
3	20.	Poipu wetland habitat - Kauai (S, D)

## Other Waterbird Areas

3 or 4	*1.	Punahoolapa Pond Kahuku Point - Oahu (S, C)
3 or 4	*2.	Punamano Pond Kahuku Point - Oahu (S, C)
3 or 4	3.	Kii Pond, Kahuku Point - Oahu (S, C)
2	*4.	Kuloa Point Fishpond - Oahu (S)
3 or 4	5.	Heeia Fishpond - Oahu
3	6.	Heeia Mangrove - Oahu (G, C)
4	7.	Lumahai Taro - Kauai (G, D)
4	8.	Wainiha Taro - Kauai (G, D)
2	9.	Wailua River - Kauai (G, D, C)
4	10.	Pololu Stream - Hawaii (G, C)
4	11.	Waimanu Stream - Hawaii (G, C)
4	12.	Kaupulehu Pond - Hawaii (S)
3	13.	Halulu Lake - Niihau (S)
3	14.	Halalii Lagoon - Niihau (S)
?	15.	Kamahuehue Pond (Kamalo) - Molokai (C, D)
?	16.	Keawanui Ponds - Molokai (C, D)
3 or 4	*17.	Kakahaia Pond - Molokai (C, D)
4	18.	Waipio Valley - Hawaii (C, G, S, D)
2	19.	Lokoaka Pond (Hilo) - Hawaii (C, G)
4	20.	Kalihiwai River - Kauai (D, C)
4	*21.	Ukoa Marsh - Oahu (G, C)
2	22.	Kahana Valley - Oahu (G, C)
1	*23.	Bellows Air Force Base - Oahu (S, G)

C - Coot; D - Hawaiian duck (Koloa); G - Gallinule; S - Stilt

\* Known important areas

The State of Hawaii is making a concerted effort to preserve the remaining critical habitat of its endangered species. Four areas, totaling more than 44,000 acres, have been designed as nene goose sanctuaries by cooperative agreement. Two ponds on Maui have been classified as sanctuaries for the Hawaiian stilt, duck, gallinule, and coot. On Kauai, nearly 10,000 acres of the Alaka'i Swamp have been designated as a wilderness preserve, primarily for the protection of its rare and endangered native forest birds.

These efforts, while commendable, are barely a beginning for the total needed, and the preservation of forest forms may well rest on whether their requirements are given consideration in the management and utilization of Hawaii's forest resources.



Habitat Management: Managing habitats for endangered species will involve both positive actions to favor those species needing special attention and restraint from actions that would work against them.

Major areas that are available for the preservation of endangered native species include the Hawaii Volcanoes National Park on the island of Hawaii, the Haleakala National Park on Maui, the Alaka'i Swamp Preserve on Kauai, and the Hawaiian Islands National Wildlife Refuge.

The Hawaiian Islands National Wildlife Refuge includes all the Leeward Islands except Midway and Kure Atolls. The Leeward group is a chain of small islands extending for nearly 1,300 miles northwest of the main islands containing the remnants of nine former high islands and some eighteen banks and shoals. These areas are significant as preserves for the Hawaiian monk seal, the green sea turtle, and a variety of unique endemic birds.

In most instances, managing these habitats to favor endangered species, as well as managing or developing newly acquired areas, will depend on information gained from research. As yet, only fragmentary information is available on either the ecology of the species or the ecology of their habitats. These details are needed as a basis for habitat management.

The solution of these problems is critical and calls for continued basic studies of the biology of both endemic and introduced species and the interrelationships between them. Such studies have both scientific and conservation values. They deserve the support of the scientific community, universities, and all levels of government. The Hawaiian Islands can be a rallying place to solve some of the problems of economic development with rational use of resources.

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THE WASHINGTON POST, 27 February 1972, page G7 (Ethel H. Matheson's contribution)

The Protection of Endangered Species by Irston R. Barnes

The most final and regrettable of all deaths is the death of a species. Each species is the end product of an immensely long evolutionary process, with recurring crises and decisive changes that cannot even be imagined. Each species is unique; none can ever be recreated. And each species is important to scientists seeking to unravel the mysteries of life and the life processes.

Endangered species are thus subjects of world-wide concern. Specialists in various biological disciplines have sought new approaches to ensure their survival and have, quite naturally, generated some differences of opinion. Some would place all hope in the protection and management of the residual wild populations. Others, e.g., aviculturists and professional zoo directors, believe that some species can be preserved only by propagation of captive populations. The anti-propagationists assert, and most of us would agree, that we have failed in our responsibilities when a species fails to survive in the wild.

Both schools of thought can point to successes. The recovery of the trumpeter swan to safe numbers was accomplished solely by traditional wildlife management techniques--habitat preservation, complete protection, population dispersion to expand the range of the species.

The Wildfowl Trust founded by Peter Scott at Slimbridge, in Gloucestershire, England, has been conspicuously successful with propagation. Starting with a few nene geese from Hawaii, The Trust has built up a breeding population which, with the 1971 crop, constituted half the world's population, and in 1971, The Trust made a second shipment of approximately 90 nene to be released on Hawaii.

The whole grim story of the extinction of species, with an assessment of the causal factors, will never be known. We do know, however, that since 1600, 95 full species of birds have become extinct, 24 of them in the 20 years ending in 1908. We also know that by a conservative count some 400 species are on the Endangered Species list around the world.

In many instances, wild populations cannot be protected adequately, sometimes for economic reasons, sometimes because effective protection measures are either unknown or cannot be applied. In such circumstances captive populations, hopefully with



eventual return of a breeding stock to the wild, may offer the only means of perpetuating the species.

In 1965, our government launched a new, scientifically oriented effort to preserve endangered species. In that year the Bureau of Sport Fisheries and Wildlife established the Endangered Wildlife Research Program at the Patuxent Center, near Laurel, Maryland. It was given two responsibilities--to study the biological, ecological, pathological and behavioral characteristics of endangered species in order to evaluate the limiting factors, and to maintain captive populations for study and for propagation in order to restore and strengthen the wild population.

I recently visited the Endangered Wildlife Research Station and talked with Dr. Ray C. Erickson, who is in charge of the Program. As he explained, propagation does not reduce the necessity for traditional management procedures--protection and restoration of habitat, protection, ecological and behavioral research in the field. In his thinking, propagation of captive populations is warranted only when wild populations have been unable to build up to safe numbers or to maintain safe numbers with traditional management techniques.

A successful restoration program with captive reared stock requires several elements: a thorough knowledge of the species in the wild; securing quality breeding stock; inducing them to reproduce successfully in captivity and retain their "wild" characteristics; "conditioning" or hardening them before their release; and devising techniques for establishing the propagated individuals in the wild.

Where an endangered species has declined to critically low numbers--as is the situation with the whooping crane, the black-footed ferret, and the California condor--it is clearly inadvisable to begin experimenting with the target species. The target species is studied intensively in the field, but in order to reduce risks to a minimum, a captive population of a closely related or stand-in species is used in a pilot propagation program.

The pilot program includes the design of pens and houses and the working out of handling techniques, the development of diets for young and adults, devising breeding procedures, the study of relevant diseases as well as the matters noted above. It is slow but exciting work that yields many new insights into wild species.

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Field Notes from Hildegard Kaigler: Fairy Tern

Another Fairy Tern chick in Ft. DeRussy!

After two unsuccessful attempts earlier in the year, the pair of Fairy Terns that have been nesting in the monkeypod tree near the MP traffic control booth in the Ft. DeRussy beach area have produced their second chick.

The first successful hatching was two years ago in October. Last year was totally unsuccessful although the pair made three attempts.

The initial sighting of the new arrival was on July 24. We had checked on July 21 and no chick was apparent, only the adult in the normal nesting position on the branch. But when we checked on the 24th, the parent was off the branch and the precocial chick was in full view. One adult returned to the branch from the sea about 20 minutes after our sighting and fed the chick with a single small fish which it plucked from the bill of the adult. The adult rested and preened for some 15 minutes and then flew out to sea again. Since that date we have witnessed a number of feedings, usually with just one small fish, once with two. Both adults are in evidence but not often at the same time except in the evening. One is banded on the right leg with an aluminum band as was one of the adults of two years ago. One can only conclude that this is probably the same pair.

Field Notes from David L. Olsen: Fairy Tern

On July 26, 1972 while observing AM-Track operations on Kaneohe Marine Corps Air Station, I noted a medium sized white bird flying along the beach between Nuupia pond and Kailua Bay. The bird was first noted while it was about 200 yards away and it flew directly toward us. It was entirely white except for the black bill and its flight was typically that of a tern. The bird flew within 15 ft. of us and it showed little fear of vehicles parked in the area. It continued flying along the coastline



and it was last seen flying toward the horse stables on the base. In over three years of birdwatching on the Windward side of Oahu this was my first observation of a fairy tern in this area.

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Field Trip by William P. Hull, June 11, 1972: Poamoho Trail

Undaunted by threatening clouds, 20 members and guests set out on Poamoho trail at 9:00 a.m. for a look at nature in the northern Koolau Range. With the expert insights provided by Pete Holt, John Obata and Wayne Gagne, members of our group were given detailed views of plant, land mollusk and bird ecology on Oahu. The weather held, and all were treated to a dry trail--with the last hardy hikers leaving the area after 6:00 p.m.

The trip turned out to be a realistic exercise of science in action. Wayne Gagne found three more individuals (two adults and one nymph) of a true-bug species that he previously had discovered in the area (a new sub-family for Hawaii), and John Obata succeeded in capturing a Drosophila (fruit fly) species not previously collected in the area.

Of native forest birds, 'apapane were heard or seen the length of the trail in small numbers, 'amakihi were heard on several occasions and an 'elepaio was heard once. Although much native vegetation remains in the area, it does not seem to support the number of native forest birds it should. Certainly their numbers have declined markedly, according to reports of 10-15 years ago.

Exotics, on the other hand, were much in evidence--with Japanese bush warblers and Japanese white-eyes abundant and house finches and ricebirds common in appropriate habitat.

Ears and eyes of the old hands were cocked for signs of the native 'i'iwi and Oahu creeper, neither of which has been reliably reported on Oahu for several years and both of which were found in the Poamoho area a few years back. John Obata glimpsed a bird that could have been a female creeper, and a possible 'i'iwi sighting was reported there the week before--but despite these tantalizing indicators, we need firm, multiple sightings to establish with certainty that these species still exist on Oahu.

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Field Trips by Charles G. Kaigler, 9 July 1972: Peacock Flat

The field trip to Peacock Flat on 9 July 1972 was a rewarding day for all of the members and visitors who attended. The weather was fine, the hike pleasant, the view from the summit spectacular and the birds cooperative.

We observed 'elepaio, adults and immature, from as close as three feet and saw a good number of 'amakihi and 'apapane feeding in the 'ohi'a lehua which was in glorious bloom. The call of the Japanese bush warbler was also rather prominent, but the bird was seen only once. Naturally there were doves, cardinals, and house finches to be found as well as the abundant white-eye.

The excursion was well led by Alex MacGregor while Pete Holt commented on the botany of the area for interested listeners. However, the star of the day was not a bird at all. We were quite fortunate to have as our guest Dr. R.A. Falla, director of the New Zealand Nature Conservation Council, with us for the day. Dr. Falla is enroute home from participation in the Stockholm Conference and his informal discussion of the conduct of the conference, the problems involved and the results achieved was enlightening, to say the least. Dr. Falla is a keen observer and an excellent reporter and his comments were of great value to all of us. As a bonus for each, Dr. Falla and Pete Holt renewed an old acquaintance that reached back more than 20 years.

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13 August 1972: Manana Island

The annual excursion to Manana Island to study the nesting seabirds turned out to be a real thriller--and a wet one.

Those who met at the library were greeted by what must be one of the first golden plovers returning from Alaska. Note: We had seen ruddy turnstones ten days earlier on 3 August at Kahuku and had reports of plover on the same day.

The group totaling 25 met at the Makai Range dock and were boated over to Manana



Island by Bill Madden of Sea Life Park. We always promise that participants will get wet up to their knees. This time everyone was wet to the neck or better, and a few were necessarily manhandled out of, and later, into the boat. The beach had been washed away the preceding night. We all did get ashore, however, and then Bill Brown and his charming wife Heg took over the group. Bill is a graduate student studying the terns nesting on the island.

The sooty tern chicks are already flying, and quite a number, perhaps two-thirds, have already left the island for a year at sea. The common noddy lays and hatches later and the chicks are, of course, not yet flying or at least are not as advanced as the sooties. We made our way carefully along a path through the wedge-tailed shearwater colony and observed a number of nesting birds. We also had the opportunity to observe a Bulwer petrel chick just beginning to fledge. Great frigatebird sailed overhead among the thousands of terns and an occasional red-footed booby glided past the island.

After several hours of observation, lunching, swimming and drying out it was time to load up and get back to the dock. So we all got soaking wet again. Nevertheless it was one of the best trips of the year.

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For Junior Members:

Lance Uchida, a junior member, sends in the following inquiry:

If you remember approximately one year ago I had reported a flock of nanday conures near Moanalua Park. But for a few months I have been observing a bird which I am unable to identify.

I have enclosed the description and food of this unknown bird.

Description: Size - approximately 7 inches

Male (?) - black body, white rump and outer tail feathers, and red underparts near tail

Female (?) - similar except red is replaced with white

This bird is not to be confused with shama thrush.

Food - consists of insects, fruits (papaya, mango) berries (mulberries) and insect larva (also observed taking mushrooms). One accepted an apple at my feeder.

Habits - frequents large trees. Rarely seen on ground. May be seen on sides of tree trunks and branches in search of insects and grubs.

Nesting habits - unknown

Numbers have reduced after construction of the H-3 interchange started.

Voice - a loud repeated "krueu"

If you are able to identify this bird please inform me of its name.

Also, I heard and saw several pairs of shama thrushes along Manaiki stream.

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Mrs. Hae E. Hull's answer: From your thorough observations and descriptions, the species must be the RED-VENTED BULBUL. It was first reported in our journal, THE ELEPAIO, when six were observed on the grounds of the Oahu Sugar Company manager's home in Waipahu, near the sugar mill on October 10, 1966. It has been reported each year beginning in 1968 on the Society's annual Christmas Count from both Honolulu and Kailua. In the 1971 count, seven red-vented bulbuls were sighted in Moanalua Gardens and nineteen additional from different locations on the Windward side, including Kailua. A friend had a pair nest successfully in her backyard mango tree last year on the Manoa Road side of Manoa Valley...The red-vented bulbul is imported from Southeast Asia, and is an escaped cagebird that is flourishing on Oahu. Introduced also into New Zealand where it has been a serious pest in fruit orchards. A related released cagebird, the red-whiskered bulbul, is also becoming established on Oahu...

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Have you seen any returning plover? My first was on 13 August at 0730. Ah, that wonderful call!

If you have any interesting information or experiences, please share them with other members by writing to Kojima, 725-A 8th Avenue, Honolulu, Hawaii 96816.



Report by Mae E. Mull: Great Hawaiian Jubilee sponsored by the City & County of Honolulu at Kapiolani Park, 25-26 March 1972

Able and willing members and friends set up the Society's exhibit under the shower tree at Kapiolani Park Saturday morning, with the theme "Enjoy and Protect Hawaii's Birds." Visitors gathered around the posters and tables in steady numbers all day Saturday and Sunday until nearly midnight asking questions about birds and wildlife, habitats and the Axis deer issue. The variety of posters, David Olsen's bird carvings, the 25 bird-wing mobiles hanging from the tree, and the balloons with messages attracted interest after sunset with the aid of two Coleman lanterns. Wayne Gagne and Bill Mull rolled out sleeping bags and spent the night there under the stars. They were also custodians for the two feral goats that the Hawaii Wildlife Federation displayed at their adjacent exhibit. Rob Shallenberger of the Federation demonstrated well the omnivorous and close grass-cropping feeding habitats of the feral goats that threaten native habitats in many areas.

Dr. Alan C. Ziegler tirelessly spread the message on the potential damage of Axis deer to the Big Island. During the Jubilee over 700 people signed petitions requesting that Axis deer not be brought to the Big Island as a game mammal for the benefit of a few hunters.

Bill Mull put up a new series of posters that stressed the threat to Hawaii's endangered waterbirds with the theme: Destruction of Hawaii's wetlands...Threatens Hawaii's Native Waterbirds...Let's Protect Our Coastal Wetlands...For the Birds, For the Fish, and For the People. A series of three permanent posters gave enlarged photographs from the Society's book, HAWAII'S BIRDS, in three categories: (1) NATIVE BIRDS--HAWAII ONLY (with Endangered Species outlined in red tape), (2) NATIVE BIRDS--HAWAII AND ELSEWHERE, and (3) FOREIGN BIRDS--BROUGHT TO HAWAII BY MAN. Another poster has the message: "Like to Root for Underdogs? Go All Out for Hawaii's Underbirds!! Scorecard for Hawaii's Kamaaina Birds: Extinct: 23; Endangered: 29, Hanging On: 16." Under this was a cemetery poster, "Extinct Hawaiian Birds," with a graveyard monument for each of Hawaii's extinct twenty-three bird species. Two bulletin boards carried recent newspaper clippings and illustrations on happenings in Hawaii's natural environmental scene, including the introduction of nine species of African game mammals to a new hunting preserve on Molokai, the inadequate official bird survey of Salt Lake made in 1966 and the present plan to fill in the Lake to make a golf course, and the killing of the Axis deer herd in holding pens on Lanai awaiting shipment to the Big Island by wild dogs.

The Audubon message reached thousands of local residents with the help of these workers: Bill Wingfield, Bill and Chipper Cromley, Glenn Spence, Cliff and Clifford, Jr., Viola MacLaughlin, David Olsen, Alan Ziegler, Wayne Gagne, Unoyo Kojima, Rob Shallenberger, and Bill and Mae Mull. Mahalo to you all!

Balloons and reed sticks, cost: \$15.55 (A.C. Lyau Co., Ltd., 807 Ilani wai St.)

Balloons sold, including contributions: \$22.76. Net gain: \$7.21

HAWAII'S BIRDS sold: 9 = \$18.00

HAS yellow leaflets, about 200 distributed at Jubilee. Also, about 100 signatures received on petitions to stop H-3 through Moanalua Valley.

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Honolulu Star-Bulletin, Letters to the Editor, 29 October 1970, page D-24: Mongoose with Wings by Otto Degener

I read October 19 that our small Hawaiian bat, 'ope'ape'a, has been included in the list of rare and endangered species of animals.

In 1927, toward dusk, I frequently saw one or two 'ape'ape'a flying not far from the church at Waiohinu, Kau. They seem not to be there now.

During the past years, I have seen the barn owl variously from Waipio, Kohala to Manuka near the Kona-Kau Districts boundary. These birds during the day were roosting in trees and, in their camouflage, resembled decayed branches.

In a critical article October 11, 1958 to the Editor, we read that "In this morning's newspaper Bob Krauss' column mentions that 'a shipment of barn owls arrived in Honolulu yesterday from San Diego. They're being released in Waipio Valley on the Big Island for rodent control.'"



The critic then writes that "When tenderloin steak soars in price beyond the writer's means he does not gracefully lie down and starve to death. He simply hunts for a substitute, even if less palatable, such as chuk or stew meat. Similarly, after the barn owls have reduced the rats on the Island of Hawaii, they will search for a substitute rather than starve. They will follow in the footsteps of the mongoose and writer. As plants are indigestible to them and most insects too small, they can survive only by feeding on bullfrogs in Waipio; nene goslings; pheasant, chukar and quail chicks; young poultry; and other introduced and native birds. I know of no record of barn owls fishing. In the writer's opinion, the barn owl--practically a mongoose with wings--should be destroyed or donated to the Honolulu Zoo, anything but liberated."

The decline of the native bat and the increase of the introduced barn owl are hardly coincidental.

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Field Guide to the BIRDS OF FRENCH POLYNESIA by Phillip L. Bruner with 15 plates by O.G. Dykes has just been published by the Pacific Scientific Information Center, July 1972, with soft cover, price by mail \$3.00.

Mr. Bruner spent a year in the Society, Tuamotu, and Marquesas Islands, from 1970 to 1971, making a survey of the bird life and its environment, as background for an extensive study of the bird genus *Acrocephalus*, family *Sylviidae* or Old World Warblers.

So little information is available in print concerning the bird life of this portion of the South Pacific, that he was persuaded to put his field observations into print. This book should be of much interest to all who thrill to the wildlife of the South Seas.

This is Mr. Dykes' first attempt to depict live birds. Judging by the results, it is safe to say that it will not be his last.

This book, with 135 pages and 15 plates, is one of a series of accounts of Pacific area natural history being produced by the PACIFIC SCIENTIFIC INFORMATION CENTER Bernice P. Bishop Museum, P.O.Box 6037, Honolulu, Hawaii 96818

E.H. Bryan, Jr.

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

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#### SEPTEMBER ACTIVITIES:

10 September - 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 State Library on Punchbowl Street at 8:00 a.m. Leader: Charles G. Kaigler, telephone 988-3195.

11 September - (PLEASE NOTE DATE) General meeting at the Wakiki Aquarium at 7:30 p.m.

Dr. Daniel S. Lehrman, Director of Institute of Animal Behavior at Rutgers University will talk on his work and experiences.

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#### HAWAII AUDUBON SOCIETY EXECUTIVE BOARD:

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