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For the Better Protection
of Wildlife in Hawaii

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SHORT-EARED OWL (Asio flammeus)
takes up residence on Johnston Atoll
By Ralph W. Schreiber

Since 1963, the Smithsonian Institution has maintained personnel on Sand Island, Johnston Atoll to survey its avian biology. Because land birds are unusual 625 miles from the main Hawaiian Islands, our observations on a Short-eared Owl's prolonged stay on the atoll are of interest.

ELEPAIO has reported on numerous field trip sightings of owls and MacIntyre reviewed the status of the Short-eared Owl in Hawaii (ELEPAIO, 15(6):32-34,1954). The first known record of a Short-eared Owl at Johnston Atoll was in April 1957, reported by Moynihan (ELEPAIO, 18(6):35,1957). Smithsonian personnel recorded single sightings on Sand Island, Johnston Atoll, 24 November and 10 December 1964.

In 1966, a Short-eared Owl first appeared on the atoll on 19 June and we saw it intermittently on both Sand and Johnston Islands until 25 July. During the next two months we saw no owl, but on 3 November one appeared in the western grassy portion of Sand Island and by 26 November it roosted daily under a Lepturus clump there. From 26 November until 24 February 1967, we saw this bird daily in the same roost. In early January Sooty Terns (Sterna fuscata) began swirling daily over Sand Island and by mid-February they roosted at night on parts of the island. At 0920 hours 24 February the owl entered its "house" with the nearest Sooty Tern 100 feet away. On the 25th, terns remained on the ground all day for the first time around the owl roost. The owl did not return to roost that morning and we never saw it there again. From 25 February until 27 April 1967, military personnel reported seeing an owl on other islets of the atoll and one man reported it roosting regularly on North Island.

During June and July 1966 we found no bird remains or owl pellets. But in November I found owl-eaten carcasses of two Golden Plovers (Pluvialis dominica), four Ruddy Turnstones (Arenaria interpres), and six Brown Noddies (Anous stolidus). In December and January I found nine more noddies and eleven Sooty Terns eaten by the owl along with eight pellets containing bird bones and bones of mice (Mus musculus), which were common on the island. The noddy remains were of fledglings that roosted on the small northeast peninsula and the Sooty Tern remains were of adults, found near the owl's roost. The owl ate the breasts, innards, and neck muscles. Legs, wings, backs, and brains remained intact. The sternum was eaten through on several birds. Four times I found partially eaten remains which were picked clean by the following day. Freshly eaten carcasses were found only in the early mornings, indicating that the owl fed at night. Unless flushed, the owl never flew during the day. I saw it feeding at night several times, and another observer twice reported it following him at night.

Several species reacted characteristically when the owl flew near them. Red-footed Boobies (Sula sula) and Great Frigatebirds (Fregata minor) roosting on the Loran C tower guy wires during the day took flight and circled close together when the owl circled above the wires. Frigates on nests flushed when the owl flew more than 30 feet above them. If under 30 feet, the owl flew too rapidly over the birds and they did not react. Shorebirds flushed, gave alarm calls, and joined into tight flocks whenever the owl was in the air.

Terns, on the other hand, chased and dived at the owl or, more commonly, ignored it. When the owl roosted in Casuarina trees on Johnston Island during July, White Terns (Gygis alba) that usually roosted there avoided the trees.

The circumstances of this owl's arrival on the atoll and its fate after April, 1967, are unknown.

Paper Number 34, Pacific Ocean Biological Survey Program, Smithsonian Institution, Washington, D.C. 20560. (Robert L. Pyle's contribution)

COMMENTS on Game Birds and Mammal Introductions into Hawaii by Dr. Frank Richardson, Chairman, Zoology Division, University of Washington, Seattle, Washington, 19 Oct. 1967.

I was interested to read the details of bird and mammal introductions in Hawaii in Mr. Walker's recent article, but shocked to have our society apparently condoning numerous past and future introductions of foreign species. Surely the fundamental philosophy of all Audubon societies and other conservation groups must be to protect our native species especially when they are unique and endangered as are many of the Hawaiian species. In spite of the care a qualified and well-meaning, but necessarily introduction-committed committee in admitting introducing new species we never begin to know enough about the ecology of species in their native habitats much less how they may drastically upset infinitely complex native communities into which they are introduced. I would make some exceptions where species are being introduced into habitats already greatly changed by man, as extensive agricultural areas, but this has not always been the case in Hawaii nor does it appear to be the plan for many future introductions. To plan introductions into the native rain forest just because they lack a game bird is really frightening to me, and for Mr. Walker to say (p.32) that the rain forest---"supports many species of endemic songbirds which would not suffer from the introduction of a ground dwelling species." is doubly disturbing to me for it indicates a great lack of appreciation of innumerable sorts of effects between the floral and faunal communities. Picking one other item in the article, how can the introduction of Black-tailed Deer into the native forests of Kauai possibly be justified by saying that if the deer should become too abundant they can be adequately controlled by hunting? I know these deer well in their native habitat and know that it would be quite impossible to control them adequately by hunting, especially lacking any natural predator control, if they become too abundant on Kauai. The domestic goat, an animal much easier to hunt, has done and is doing inestimable damage to native habitats in Hawaii, but it has not been controlled or eliminated even after decades of hunting and even intensive campaigns to get rid of it.

I sympathize with all of you in the Islands, my Islands, who are trying to see that proper introductions are made if they must be made, but I think our society should take a firm stand to keep importations to an absolute minimum and to concentrate on the never-ending great problems already resulting from introductions of foreign species. Hawaii is already all too famous throughout the world for the destruction of its native habitats and the extinction of so many of its native species of unique birds!

Editor's Note: This is a very important subject, so please share your ideas with other members by writing to Kojima, 725-A 8th Avenue, Honolulu, Hawaii 96816.

READERS' NOTES from Margaret Titcomb.

Soper, M.F. Some portraits of Kermadec seabirds (*Notornis*, 14(3):114-121, 1967)
 The Journal of the Ornithological Society of New Zealand has the title *Notornis*.
 In 1966-67, the Society had an expedition to the Kermadec Islands 600 miles north
 of Auckland. Especially fine black and white photos reproduced: Black-winged petrel
 (*Pterodroma nigripennis*), Kermadec petrel (*Pterodroma neglecta*), Wedge-tailed
 shearwater (*Puffinus pacificus*), Blue-faced booby (*Sula dactylatra*), Red-tailed
 tropicbird (*Phaethon rubricauda*), Sooty tern (*Sterna fuscata*), Grey ternlet
 (*Procelsterna albivitta*), White-capped noddy (*Anous minutus*).

 Jenkins, John Sightings of Kermadec petrels at sea (*Notornis*, 14:113, 1967)
 During about 30 passages, Fiji to Auckland, the writer noted frequency of birds
 near the Kermadecs and throughout the area. "...very sparsely populated...as has
 been noted by numbers of observers...The low population of this area though it is
 surrounded by islands with large petrel populations, would seem to indicate that the
 area is poor feeding ground and is avoided. This in turn could account for the very
 few records in N.Z. of seabirds from the islands to the north of this country,
 though the distances to these islands are not great."

 In *Notornis*, 14(2) four fine pictures of the Black Stilt are included, taken
 by Dr. M.F. Soper. One is a hybrid, or so-called hybrid. Birds like it "appear
 in northern New Zealand almost every winter, but 'pure blacks' are seldom reported."

 Gibson, J.D. The Wandering Albatross (*Diomedea exulans*): Results of banding
 and observations in New South Wales coastal waters and the Tasmanian Sea
 (*Notornis*, Vol. 14(2):47-57, 1967)

This paper was presented at the Eleventh Pacific Science Congress in Tokyo, 1966.
 In the author's summary he states that the albatrosses in Australian Seas are
 briefly enumerated, noting predominance of different species in different regions;
 development of method of catching (over 1700 have been banded); most of the 61
 recoveries have been from South Georgia, a few from Kerguelen, and the Auckland
 Islands; the high rate to retraps at the place of banding indicates a facility for
 precise navigation and suggests an ordered migration pattern, a field method for
 recording plumage patterns is described and the sequence of plumage change discussed.

 The Ornithological Society of New Zealand has published a book entitled "A
 Biology of Birds with particular reference to New Zealand Birds" by Barrie Heather.
 A review of it appears in *Notornis* 94(2):85, 1967, by Jill Hamel.

Miss Hamel says that the book briefly but carefully covers a great deal of
 ground, and is very readable. It is "slanted towards a practical study of birds
 in New Zealand": taxonomic relationships, theories of evolution, dispersal popula-
 tion, etc. It is modestly presented as a preliminary work, and asks for comments
 and stimulating arguments. No price given.

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 DAVID FLEAY'S NATURE NOTES, February 7, 1967, from Queensland, Australia
 (Thomas R.L. McGuire's contribution)

Last Monday week, holiday-makers, watching monstrous combers smashing on the Gold
 Coast, pitied a derelict seabird pounded endlessly in the brown boiling surf.

Eventually one courageous soul took a chance and raced in far enough to snatch
 the storm orphan from the angry turmoil which was threatening to finish it. The
 rescue produced an emaciated bird of more than usual interest, for, in 15 years of
 attending sick and sorry ocean wanderers that pass this way, not until now had we
 received a Red-footed Gannet.

It seemed certain that raging Dinah, the cyclone, had swept this immature and
 inexperienced fisher well south of its range, prevented it from hunting, and cost
 it vital energy in the strength-sapping effort to remain in the air...Red-footed
 species belongs to the Indian Ocean and the tropical western and central Pacific,

with some breeding colonies known on Raine Island, off the Queensland Coast.

Being a youngster our visitor was dressed in a puzzling plumage phase, generally slately--brown above, with blue face and a dirty white head, neck, and underside. Its pink, black-tipped beak lacked the firm spear point seen in the Australian Gannet, and possessed an incipient hook--ruling out those vertical plunges in which the Australian bird specialises....

Happy to relate, following four days of painful "stoking" with fish, each of which was initially rejected with startling hollow squawks, vigorous stabs, and tears from the serrated inside of the beak, our patient was sufficiently better to be dangerous.

Last Friday he or she, bearing band 120-48604 took off, with a final ramming of fish for lunch, on a due northerly course with engines running perfectly....

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THE NEW YORK TIMES, July 7, 1967: Testy Hummingbirds Win a Bit of Privacy in Philadelphia Zoo. (Sue W. Thomas's contribution)

The Philadelphia Zoo has decided to build a \$200,000 air-conditioned house of glass for 150 belligerent hummingbirds who "don't like to look at each other.... The 75-by 150-foot structure would be "like a tropical rain forest with a waterfall, pond, palm trees and flowering plants and shrubs. The public will be able to wander about inside.

The tiny birds can move their wings about 75 times a second, reaching speeds of 40 miles an hour. They can hover, or fly upside down or backwards. They'll each have their own territory and will defend it. They're very belligerent.

Special glass, designed to resemble bamboo, will be used on the walls to discourage the birds from making fatal crashes. The house will also have a device to create mists, similar to the jungle rains that are typical of the habitat of the South American varieties....The water will run over rocks and through heavy vegetation. It will be climate-controlled, because hummingbirds can't tolerate temperatures above 75 and be happy.

About 30 varieties of hummers will be imported from Brazil, and...they'll feed on a special honey nectar and fruit flies....

 Margaret Titcomb's comments: After reading this article, we sanctuary-starved people in these islands, where evolution made great efforts to pass a miracle, read with envy of the lot of some hummingbirds.

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OPERA NEWS, Volume 31, Number 8, December 17, 1966, pages 6 & 7: OPERA FOR THE BIRDS by Elliott S. Allison (Mr. Allison, a bird-watching opera fan, lives in Dublin, New Hampshire.) Reprinted by permission from The Metropolitan Opera Guild, Inc., 1865 Broadway, New York, New York 10023.

...Birds play an important role in Wagner's RING, especially with Siegfried, whose fortunes are closely associated with them. In Siegfried the hero has no sooner killed Fafner and accidentally tasted some of the dragon's blood than he is able to understand the language of birds. From the tree above, the Forest Bird tells him of the magic of the Tarnhelm and the power of the Ring. It also saves Siegfried's life by warning him that Mime plans to kill him, and finally it tells him of Brunnhilde, leading him to the mountain where she lies asleep. In GOTTERDAMMERUNG, however, it is while bird-watching that Siegfried meets his death. As he notes Wotan's two ravens flying toward the Rhine. Hagen finds the opportunity he has been seeking to thrust his spear into Siegfried's back....

Wagner's most effective use of birds occurs at the close of his last opera, PARSIFAL. As the title hero stands in the hall of the temple, the Grail in his hands, pure in mind and body, a white dove descends from above and hovers over him. The dove has long been regarded as an emblem of peace and purity. The appropriateness of its choice is admirably illustrated by John James Audubon, the famous painter of birds, who wrote in his ORNITHOLOGICAL BIOGRAPHY, "The cooing of the

Zenaida Dove is a peculiar sound. A man who had been a pirate once assured me, in the Florida Keys, that the soft, melancholy cry awoke feelings of repentance in his heart. He lingered near the wells where he heard it, and each time that he left the spot his fears for the future increased; for he was one of a band of the most desperate villains that ever harassed navigation off the Florida coasts. So deeply moved was he by the notes of any bird, especially those of a Dove--the only soothing sounds he ever heard during his career of horrors--that he finally decided to escape from his vessel, to abandon his rough companions and return to his family."

When DIE FRAU OHNE SCHATTEN received its world premiere at Vienna in 1919, Hugo von Hofmannsthal and Richard Strauss brought still another bird into the opera house--the Peregrine Falcon. The choice was admirable. For two thousand years before Christianity, falconry was practiced in Central Asia, the bird then providing meat for man's table. From this beginning, falconry developed into the sport of kings, Frederick II of Hohenstaufen built whole castles for his birds in the thirteenth century. Queens, tsars and popes also flew them, while knights were as proud of the falcons on their wrists as of their swords. Bishops carried the birds down the aisles of their churches, releasing them only as they approached the altar.

Found throughout most of the world, the species in America was unfortunately called the Duck Hawk by Alexander Wilson, the father of American ornithology. Wilson believed the American bird to be non-migratory and therefore objected to the name Peregrine, which means "traveler." The mistake has now been rectified, the last edition of the CHECK LIST OF NORTH AMERICAN BIRDS giving Peregrine Falcon as its official name.

As both conservationist and birdwatcher, I should like to take this opportunity to condemn publicly that archvillain of the operatic bird world, the birdcatcher Papageno. Regardless of the high idealism attributed to the work, in my opinion THE MAGIC FLUTE would prove anything but the ideal opera to give for the benefit of the National Audubon Society.

Birds play their part in opera, but does opera play a part in the life of birds? The answer is a decided yes, according to F. Schuyler Mathews. Eminent as a naturalist, author and artist, Mathews was also an ardent opera buff, as anyone who glances through his FIELD BOOK OF WILD BIRDS AND THEIR MUSIC will discover.

Though most writers have felt that bird song cannot be expressed by means of musical notation, Mathews did not share their point of view. As a result his book contains numerous musical examples. Many of these were taken from birds he heard singing opera...."

If you have any information on the opera singing birds or any other interesting experiences with birds, please write to Kojima, 725-A 8th Ave, Honolulu, Hawaii 96816.

FIELD TRIP to Waipio and Kahuku for Shore Birds, November 12, 1967:

Seventeen members and guests joined the Society's Field Trip November 12 to visit the shore bird concentration areas at Waipio and Kahuku. From the dykes at the Waipio settling areas (9:00 to 10:30), one Semi-palmated Plover and one Black-bellied Plover were seen well among the roughly estimated 500 Ruddy Turnstones, 100 Golden Plovers, 25 Sanderlings and 50 Black-necked Stilts. Highlight of the day was watching the flocks totaling some 600 Turnstones, Plovers and Sanderlings flying back and forth across the blue sky, tilting to show first the light undersides, then the dark uppersides, in a stunning display of aerial maneuvering. Also seen at Waipio were about 75 Cattle Egrets, a flock of 16 Pintail ducks flying past, one Short-eared Owl, and one Skylark which was watched for 20 minutes or more as it foraged leisurely on the bare mud near the edge of the small pond. A few Strawberry Finches were seen, but virtually no Mannikins.

At Kahuku (11:30 to 1:00) the large pond mauka of the airstrip approach road had roughly 100 ducks, primarily Pintails with a few Shovelers, 2 American Widgeon, a probable Green-winged Teal, and several Coots. The airstrip and adjacent ponds

were barren of birds except for a small flock of Golden Plovers and a few Ruddy Turnstones and Sanderlings on the paving. A number of automobiles driving out on the runway at frequent intervals, and gathering at the Kahuku end, was probably responsible for the scarcity of birds. One small flock of Ricebirds included some adults feeding young birds.

The pond at the west end of the Kahuku Plantation area had dried and shrunk considerably since September, but still contained at least 20 Coots, a Cattle Egret, several Wandering Tattlers, many Ruddy Turnstones and Golden Plovers, and a few Stilts.

Robert L. Pyle

FOR JUNIOR MEMBERS:

1967 WILDLIFE CONSERVATION STAMP ALBUM, published by National Wildlife Federation, back cover: THE WATCHER IN THE WOODS

Charles Darwin was a bird-watcher. By watching the small dark finches in the Galapagos Islands he got an important clue that led to his world-shaking idea--the theory of evolution--the rise of new species. Since then, man's view of his own place in the world of nature has not been the same. Man and his destiny were put into perspective. Just as Newton finally removed the Earth from its imagined central position in the solar system, Darwin removed man from his imagined central position in the world of life. Ever since, ornithologists have been in the forefront of those who are unravelling the puzzles surrounding the origins of species.

Darwin was not the only bird-watcher to come up with a revolutionary idea. Ornithologists were the first behaviorists in the modern sense, developing such fundamental concepts as "territory" and "imprinting." Elliott Howard, Konrad Lorenz and Nikko Tinbergen, bird-watchers all, are three of the greatest names in animal behavior, the science that attempts to find out what makes creatures tick.

In systematics--the science of cataloging and giving order to life on earth, the ornithologists are out in front. They have their house in better order than the mammalogists, entomologists, herpetologists, botanists or any of the other specialists.

The relatively new science of ecology, the relationship of animals and plants to their environments and to each other, would not be where it is were it not for insight gained by watching birds.

Rachel Carson, the gentle and scholarly lady who spoke out against the dangerous use of pesticides in her best-selling book SILENT SPRING, was a bird-watcher. She alerted the world to the danger of persistent chemicals in food chains, which not only destroy birds and other wildlife but might conceivably affect man himself.

And we must not forget William Vogt, who in ROAD TO SURVIVAL warned of disaster ahead if the world's population explosion is not checked. His insights into the human condition were an outgrowth of his earlier studies of bird populations.

Birds, with their high rate of metabolism and furious pace of living, demonstrate life forces perhaps better than any other animals.

And that is why the "bird-watcher" or "birder," call him what you will, is likely to be more "with it" than his more unobservant neighbors.

On no part of the earth, except near the South Pole, can a bird-watcher be bored, as James Fisher, the noted British ornithologist points out. "Bird-watchers," he says "have many different drives and directions. Some like to work alone, discuss things with few. Some have lost count of the clubs they belong to. To be quite clubless is to be on the bank, with the streams of warm companionship, benign freemasonry, scientific criticism and encouragement, flowing ever more deeply by...The brotherhood of the bird club has contributed more than a little to the cause of international understanding and friendship. Our hobby knows no more political boundaries than the birds. Its devotees exploit nobody, compete only in excellence and thoroughness, take little, give much."

Please share your experiences as a bird watcher with other members by writing to Kojima, 725-A 8th Avenue, Honolulu, Hawaii 96816.

Excerpts from the minutes, Hawaii Audubon Society, General Meeting, Sept. 18, 1967:

...The meeting was called to order by Vice President Jack Throp. He asked President Michael Ord who had just returned from two months on Guam, to tell us about his trip and the birds he saw there....

Carl Frings gave us more details on the nesting pair of Red-tailed Tropicbirds discovered on Manana Island on our field trip of August 13, 1967. Mike Ord added that last year a pair of Red-tailed Tropicbirds were seen flying around, near the Island.

Richard Gauthey gave a report on the field trip of Sept. 10, for shore birds to Waipio and Kahuku. There were many of the regularly migrating shore birds to be seen. One bird of note was a black-bellied Plover at Waipio.

Jack Throp told us about the hatching of 9 Galapagos Island Tortoises at the Honolulu Zoo, a really noteworthy occasion as only 4 hatchings of the tortoises have occurred previously in zoos (and one of those was in the Honolulu Zoo) and a record number of survivals in a single clutch of this species nearing extinction in its native habitat.

The program for the evening was given by member Pete Holt, who showed his colored slides entitled "Watching Bird Watchers Watch Birds." It was a very entertaining and enlightening study of the unusual behavior and favored habitats of the species known as "Birdwatcher."

Excerpts from the minutes, Hawaii Audubon Society, General Meeting, October 16, 1967:

...Richard Gauthey gave a report on the field trip of October 8, 1967, for shore birds to Waipio and Kahuku. Again there were many of the regularly migrating shore birds to be seen. At Waipio there were 4 black-bellied plovers, 5 pectoral sandpipers and 1 sharptailed sandpiper and 1 semi-palmated plover. The usual finches were in good numbers. Migrating ducks were observed at Kahuku.

Mike Ord introduced L.E. Richdale, a well-known ornithologist from New Zealand, who told us about some of his studies with petrels, penguins and albatrosses. Eugene Kridler told us about his recent trip to the Leeward Islands to study rare and endangered species. One project, a transplanting of Laysan Island Finches to Pearl and Hermes Reef appears to be successful. Sample transects came up with an estimated 80 birds of this species with about half of them being young of the year. They were still nesting into September. An interesting field note was the sighting of a mockingbird on Necker Island....

Eugene Kridler reported that a Black Brant was seen at Kanaha Pond, Maui, on Friday, October 6.

Our program for the evening was an excellent presentation of colored slides of birds taken and shown by Michael Ord...

HAWAII'S BIRDS

New field guide now available for \$2.00

The advance-airmailed 500 copies of the new field guide, HAWAII'S BIRDS, were received on 10 November.

HAWAII'S BIRDS "discusses and illustrates 74 species; the use of colored photographs (or photographs of the excellent plates in the works of Wilson and Evans and Rothschild) should make field identification much easier and more certain."

Also, it includes the following: 41 migratory or accidental species, 33 species of gamebirds, 14 other introduced species, and maps of Kauai, Oahu, Maui, and Hawaii indicating the best birding areas and listing the species seen under normal circumstances.

In all, HAWAII'S BIRDS contains 162 species which can be seen in the Hawaiian Islands.

HAWAII'S BIRDS will be sold in most retail outlets in the islands and by the Society at all general meetings for \$2.00 a copy with envelope. It is pocket size, 5"x7" and will make an excellent gift for mailing to friends, so send in your orders now to: Book Order Committee, Hawaii Audubon Society, P.O. Box 5032, Honolulu, Haw. 96814.

ALOHA to our new members:

- Junior - Warren Cone, 1673-B Paula Drive, Honolulu, Hawaii 96816.
 Regular - Mrs. Diane Birdindelli, 308 Westwood Plaza, Box 243, LA, Calif. 90024.
 F. H. Clayson, Nani Hala Apts A-9, 1099 Green St., Honolulu, Haw. 96822.
 Orville Crowder, Harper's Ferry, W. Virginia 25425.
 Mr. & Mrs. Virgil L. Griner, 35533 Minton Court, Livonia, Mich. 48150.
 E. W. Mudge, Jr., 2931 Republic Bank Bldg, Dallas, Texas 75201.

1967 CHRISTMAS BIRD COUNT

The Christmas bird count will be held on Sunday, December 31. The count area will cover the same areas as have been counted in the past years. The breakdown of areas and leaders for the respective areas is as follows:

- Group A: Koko Head side of Diamond Head to Paiko Lagoon and Kuapa Pond, including the residential area. -- Dr. Robert L. Pyle, 265-379.
 Group B: (1) Ewa side of Diamond Head including the Zoo. -- Jack Throp, 935-819.
 (2) Manoa Valley, Manoa Falls Trail, and downtown Honolulu. -- Carl Frings, 986-483.
 Group C: Punchbowl and Tantalus. -- Ronald L. Walker, 512-859.
 Group D: Aiea Trail. -- Unoyo Kojima, 749-985.
 Group E: Kaelepulu Pond, Kawainui Swamp, Kailua residential area, and the Marine Base. -- Eugene Kridler, 268-977.
 Group F: Keehi Lagoon, Salt Lake and Nuuanu Valley. -- Lt Comdr J. Richard Gauthey, 430-27218.

Those members wishing to participate, please call the leader of the area of your choice and make your own arrangements as to meeting place etc. So that you may be given recognition for participating, please give 50¢ to your leader with your full name and address. The money will be forwarded to the National Audubon Society along with our consolidated count figures for recording in the Audubon Field Notes.

If there are any questions, please call Dr. Robert L. Pyle, 265-379.

DECEMBER ACTIVITIES:

- December 11 - PLEASE NOTE DATE. Annual meeting at the Waikiki Aquarium Auditorium at 7:30 p.m. Program for the night: (1) Elect officers
 (2) Work out details of the Christmas bird count (3) Eugene Kridler will show ALASKAN CARIBOU, a sound colored movie.
 December 31 - Christmas bird count.

DECEMBER ACTIVITIES:

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|------------------|----------------------|------------------------|
| President: | W. Michael Ord | |
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| | Jack L. Throp | Miss Charlotta Hoskins |
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| | Dr. Robert L. Pyle | |

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

HAWAII AUDUBON SOCIETY MEMBERSHIP LIST

Honorary Life

Grenville Hatch - La Jolla, California
 Thomas R.L. McGuire - Honolulu, Hawaii
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Charlotta Hoskins - Honolulu, Hawaii	HSPA Experiment Station - Honolulu, Hawaii

Junior

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Winifred Cahill - Honolulu, Hawaii	Thane K. Pratt - Honolulu, Hawaii
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Patrick Conant - Honolulu, Hawaii	David Taira - Honolulu, Hawaii
Warren Cone - Honolulu, Hawaii	Michael P. Tomich - Honokaa, Hawaii
Anne-Marie Gagne - Ontario, Canada	Steve West - Loving, New Mexico
Jonathan Hegele - Honolulu, Hawaii	

Regular - Honolulu

Mrs. J.D. Babcock	Dr. W. Todd Furniss	Margaret L. Nott
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Charles Christian	Alphonse Labrecque	Mrs. Margaret F. Roots
Dr. V.G. Clark-Wismer	Dr. Charles Lamoureux	Paul W. Schaefer
F. H. Clayson	Harriet E. Linn	Mrs. Martha R. Scruton
Virginia Cone	Alex L. MacGreger	Miriam Sinclair
Jerry Corn	Mr. & Mrs. Milton Manhoff	Margaret Smith
Mrs. Helen Delaney	Mrs. A. O. Marrack	M. Spicer
Mrs. Helen D. Devereux	Marion Mikaelson	Margaret Titcomb
Walter R. Donaghho	Dr. & Mrs. John C. Milnor	Mrs. Murray Turnbull
Laura A. Draper	Marjorie Morris	Ronald L. Walker
Charles Dunn	Mr. & Mrs. William P. Mull	Vera M. Westcoat
Eric Ecklor	Hector C. Munro	Eleanor Westendorf
Mr. & Mrs. Carl F. Frings	Dr. & Mrs. William A. Myers	Harry Whitten
		Mrs. Maxwell J. Wilcomb

Regular - Rural Oahu

Mrs. Mabel R. Becker - Kailua	Timothy A. Burr - Kaneohe	Helen A. de S. Canavarro - Kaneohe
Delwyn G. Berrett - Laie	Nancy A. Conklin - Kailua	Mrs. Emily Howe - Kaneohe

Regular - Rural Oahu (Continued)

Eugene Kridler - Kailua Manuel S. Pereira - Kaneohe Dr. & Mrs. Robert L. Pyle - Kailua
 Curtin A. Leser - Kailua Mrs. Anne Powlison - Kailua Gerald E. Swedberg - Kaneohe

Regular - Other Islands

Mr. & Mrs. Robert I. Baldwin - Hilo, Hawaii Mrs. Violet Hansen - Volcano, Hawaii
 Winston E. Banko - Haw Nat Park, Hawaii Mrs. Carroll E. Lindley - Kahului, Maui
 Myrna Campbell - Koloa, Kauai George T. Morrison - Haw Nat Park, Hawaii
 Barbara H. Davis - Koloa, Kauai P. Quentin Tomich - Honokaa, Hawaii
 Mrs. Netty N. Hansen - Kalaheo, Kauai

Regular - Out of State

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 Dr. Alfred M. Bailey - Denver, Colo Eben McMillan - Cholame, Calif
 Edward C. Bennett - Palmer, Mass Mr. & Mrs. Joseph E. McNett - Webster, NY
 Mrs. Diane Birindelli - LA, Calif Dr. Alfred J. Marston - New York, NY
 Donald Brock - Oakland, Calif Mrs. David J. Martin - BC, Canada
 Roger B. Clapp - Washington, D.C. Mrs. Ethel Matheson - Washington, DC
 Dr. Robert H. Cooper - Muncie, Ind Dr. Frank P. Mathews - Kingston, Wash
 Orville Crowder - Harper's Ferry, W. Va E. W. Mudge, Jr. - Dallas, Texas
 Kenneth L. Cuthbert - Oakland, Calif Mr. & Mrs. C. Turner Nearing - Decatur, Ill
 Elizabeth Dyer - Newark, Delaware Dr. Roger T. Peterson - Old Lyme, Conn
 Dr. William H. Elder - Columbia, Mo Mrs. H. Paul Porter - Alexandria, Va
 Dr. Charles A. Ely - Hays, Kansas Hannah T. Richards - Edina, Minn
 Norman Foster - Rome, NY Dr. Frank Richardson - Seattle, Wash
 Dr. & Mrs. Hubert Frings - Norman, Okla Carroll A. Rieck - Olympia, Wash
 Earle R. Greene - Oxnard, Calif Mrs. Martha Rosenquist - Coronado, Calif
 Dr. Irene E. Greenhut - Hawthorne, Calif Mrs. Donald P. Russell - Milford, NH
 Mr. & Mrs. Virgil L. Griner - Livonia, Mich Mr. & Mrs. Paul M. Scheffer - Vancouver, Wash
 Mrs. Edith E. Jarvi - Wyoming, Mich Euphie G.M. Shields - Lafayette, Calif
 Mrs. Joseph A. Jordan - Scarsdale, NY Mrs. Jane Solamillo - Canada
 David L. Kaltvedt - Rhinelander, Wis Mrs. Clyde K. Stoburg - San Diego, Calif
 Mrs. Grace Keith - Manitoba, Canada Laurence J. Taylor - Omaha, Neb
 Karl W. Kenyon - Seattle, Wash Dr. Miklos D.F. Udvardy - Sacramento, Calif
 Joseph E. King - Washington, DC G. Bernard Van Cleve - Pittsburgh, Pa
 Warren B King - Washington, DC Richard E. Warner - Berkeley, Calif
 Mrs. Walter Klabunde - Lewiston, NY Mrs. Ann Elizabeth Wissler - Mentone, Calif
 Dr. Frederick W. Landers - Montclair, NJ

Institutions

Amer Mus of Natural Hist - New York, NY Mass Audubon Society - Boston, Mass
 Atlantic Naturalist - Washington, DC Maui Public Library, Wailuku, Maui
 Bishop Museum - Honolulu, Hawaii Kahului Branch
 Div of Fish & Game - Honolulu, Hawaii Lahaina Branch
 Dominion Museum - Wellington, NZ Migratory Bird Populations Sta - Laurel, Md
 Haleakala National Park - Kahului, Maui Mokulele School - Hickam AFB, Oahu
 Harvard University - Cambridge, Mass National Audubon Society - New York, NY
 Hawaii County Library - Hilo, Hawaii Pacific Vegetation Project - Washington, DC
 Hawaii Natural Hist Assn - Hawaii Palama Settlement - Honolulu, Hawaii
 Hawaii State Library - Honolulu, Hawaii Peabody Museum - New Haven, Conn
 Hawaii State Library, Kaimuki Branch Pennsylvania State Univ - Univ Park, Pa
 Kapahulu Branch Plant Industry Adm - Honolulu, Hawaii
 Hickam Base Library - Hickam AFB, Oahu Simon Fraser Univ Library - Burnaby, Canada
 Honolulu Advertiser - Honolulu, Hawaii Smithsonian Institution - Washington, DC
 HSPA Experiment Station - Honolulu (LIFE) University of California - Berkeley, Calif
 Honolulu Zoo - Honolulu, Hawaii Los Angeles, Calif
 Kamehameha Schools - Honolulu, Hawaii University of Hawaii - Honolulu, Hawaii
 Kauai Public Library Assn, Ltd - Lihue, Kauai University of Kansas - Lawrence, Kansas
 Kauai Public Library, Hanapepe Branch University of Michigan - Ann Arbor, Mich
 Kapaa Branch Waikiki Beach Press - Honolulu, Hawaii
 Waimea Branch