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FIRST BREEDING RECORD OF LAYSAN ALBATROSS ON KAUAI

by C. Fred Zeillemaker and C. John Ralph

The Laysan Albatross (*Diomedea immutabilis*) is a rather common nesting bird on the Leeward Islands (Rice and Kenyon 1962). However there have been very few records of the bird nesting on or near the main Hawaiian Islands. In subfossil deposits on at least Kauai, albatross bones have been found (S. L. Olson, pers. comm.). If breeding occurred on Kauai, as these deposits indicate, it might have been before the arrival of the early Polynesians, who might well have taken advantage of this tame source of protein. Munro (1944) reported that a few sometimes nested on Niihau, and Fisher (1951) reported that Mr. A. E. Robinson, one of the owners of this little known island, had noted occasional nesting there. More recently, Thomas Telfer (pers. comm.) reported that a few have been seen regularly on Miihau, and from a helicopter the senior author saw four, apparently on territory, on January 14, 1977. A young bird was found on Moku Manu Islet off Oahu in February 1947 (Fisher 1948). The only other report from the main Hawaiian Islands is a note by Moir (1946) that a pair was observed performing the characteristic courtship dance at Makahuena Point, Koloa, Kauai, in March 1945 and in March 1946. No nesting was observed.

During the winter of 1975-76 the senior author observed a few birds about the light-house on Kilauea Point, Kauai. The next year, the first adult bird of the season appeared at the lighthouse, on December 8, 1976. Up to six were seen on nearby Mokuiaee Islet in January, with one actually landing on Kilauea Point on January 27, 1977. Two to three birds remained about the point through the spring, with aerial courtship over the point in March. They were observed on the offshore islet through May.



Fig. 1. Young albatross resting after feeding by adults. One of the pair in the background.

--Photo by Earl Simpson

Meanwhile, in about February, Earl Simpson (pers. comm.) of Kilauea had discovered an active nest with a single egg incubated by an adult. The nest was near Crater Hill to the east of Kilauea Point. Mr. Simpson occasionally visited the area and in April photographed the chick and the two parents (Figs. 1, 2, and 3). On June 4

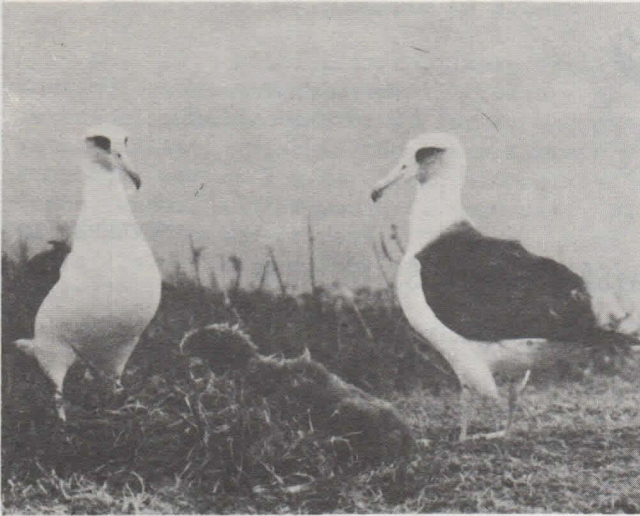


Fig. 2. Both adults standing near the chick, partially hidden by grasses.

--Photo by Earl Simpson

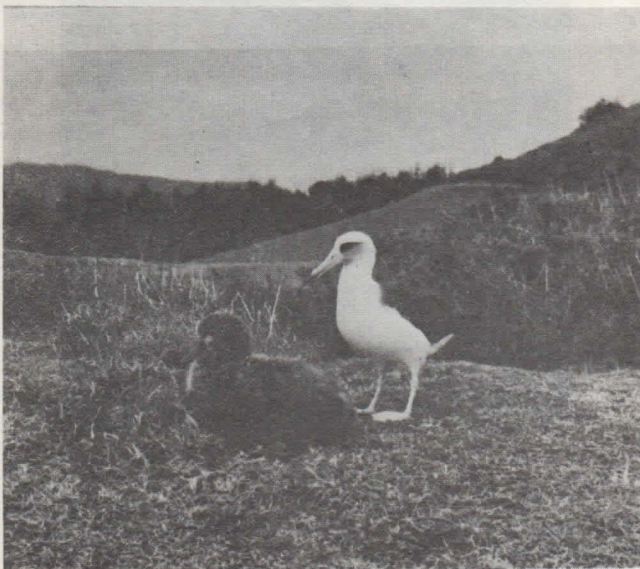


Fig. 3. Adult by chick with hills of part of Crater Hill in background.

--Photo by Earl Simpson

Gary Smith of Kapaa led the senior author to the chick, then approximately 5-months old. Unfortunately, one of the adults was dead at the nest. It had been dead approximately 10-14 days. Knowing that one parent alone could not succeed in fledging the chick, the next day the authors commenced feeding it squid and fish. This was continued on 18 of the next 32 days. We noticed that damage to the chick's beak around the nostril indicated possible attack by some animal, perhaps resulting in the adult's demise, although no wounds could be found on its body. On June 27 David Boynton found an adult in attendance with the chick, verifying that at least one parent had survived.

Unfortunately, the story was not to have a happy ending. On June 22, the bird's left leg was injured during a feeding session. No break could be found. We assumed it was a sprain and feeding continued. On June 29, the chick was observed exercising its wings. By July 1, it began moving away from the nest site, toward the sea cliffs, apparently in attempts to fledge. Due to the injured leg, the bird's condition declined and it was unable to take flight. By July 8, it was evident that the bird would not fledge without the use of both legs. The authors consulted and decided to fly the bird to Sea Life Park on Oahu for treatment by a veterinarian. He found the left leg had actually been broken very near the body, and the right very severely strained due to the additional burden. Despite an operation, casts, and a pin in the leg, as well as the excellent care by Cindy Cookinham and other personnel at Sea Life Park, the bird succumbed in late July.

We hope that in spite of this setback a permanent colony will be established in the same area in future breeding seasons. This area may soon be acquired by the Nature Conservancy and then could be given the protection that the species requires.

Acknowledgements

We thank Melly Zeillemaker for various help and C. P. Ralph, P. G. Scowcroft and R. L. Pyle for suggestions on the manuscript.

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WHAT KIND OF A PARK ON KAENA POINT?

By Francis G. Howarth

Between June 22 and August 3, 1977, the Division of State Parks conducted four public "workshops" to gather input on the proposed development of a state park at Kaena Point, a relatively wild sand dune area at the extreme northwestern tip of Oahu. It is hoped the park eventually would encompass 10 miles of coastline from Makua Beach to Mokuleia Beach, and 15,700 acres, including beach strand, talus slopes, ridges, valleys, and upland dry and mesic forest. Three nearly mutually exclusive development schemes, from very little facilities development to high intensity recreational use, were proposed and discussed. I, as the Hawaii Audubon Society Conservation Chairman, supported the minimum use concept, reiterated the urgency of protection for the unique native biota of the region, and presented the following testimony on August 3, 1977. Please watch for future proposals for this area and support the area's protection.

"The Hawaii Audubon Society has long had an interest in this area for its natural values and has recommended that portions of it be included in the Natural Area Reserves System. We are in favor of many of the uses reported in this preliminary plan. We do, how-

ever, have some reservations and some additional suggestions.

"The most critical threat to the area now concerns the sand dunes at Kaena Point. This rich example of a unique Hawaiian ecosystem, with its bizarre endemic strand plants and insects, is being inexorably destroyed by off-road vehicle use. A portion of this area must be protected as soon as possible in order that the extant sand dunes and vegetation be stabilized. This protection, preferably by establishing a State natural area, should be given the highest priority, before these dunes are irretrievably lost.

"The natural area would, by necessity, require limited access to only those persons with a valid purpose. A small natural area such as Kaena Point will not long survive if incompatible land uses are neighbors on either side. Thus, a buffer zone should be established. The ideal buffer zone would be an educational interpretive state park in which the public could enjoy a natural area's resources without the need to enter the core or primary area of the reserve. The buffer zone should be large enough to protect the reserve and, in itself, be able to withstand recreational use.

"A small potential natural area was omitted from the map on p. 11. This is a rectangular area on the windward talus slope between Puu Pueo and the proposed highway. This talus slope has been free of many of the perturbations acting within the area because of its ruggedness, and much of its native flora survives. Many of its plants are the same as those growing in the Kaena Point Natural Area, and the two natural areas could be contiguous.

"A highway leading to Kaena Point may be incompatible with the Natural Area Reserve System. Certainly we must insure the protection of the natural areas and the planned route of a circumisland road should be made only after a viable natural area has been established.

"We are pleased with the other proposed natural area reserves, and again reiterate the need for buffer zones for these upland natural areas. Interpretive recreational parks would be ideal. The outstanding native floral habitats on the ridges behind Makua Valley within the restricted military area should eventually be included in the natural area. In the meantime the military should be enjoined to contain its fires and look for alternative training methods.

"Thank you very much for the second chance to present this testimony on behalf of the Hawaii Audubon Society."

FERAL SHEEP VS THE MAMANE ECOSYSTEM IN THE MAUNA KEA PLAN

by Mae E. Mull

Significant changes were made in the public hearing draft of the Mauna Kea Plan ('Elepaio, Nov 1976:50-52) by the Board of Land and Natural Resources before the plan was finally adopted in written form on June 9, 1977. The plan was three years in the making. Its origin was in response to an appeal from the Hawaii Audubon Society. On May 16, 1974 Acting Governor Ariyoshi wrote to us:

"I appreciate your concern for the future of Mauna Kea which is certainly one of Hawaii's most precious natural resources. Regarding the need for an integrated, long-term Mauna Kea Master Plan, I wholeheartedly support the development of such a plan...."

When planners and representatives of a broad spectrum of interests finally got down to work in 1975, the major issues were controls on observatory construction at the summit, along with support facilities downslope, and the destruction of the māmane forest by feral mammals. Standards are set in the final plan that will reduce the growth rate of technological facilities. On-site generators are given priority over power lines to the summit. The access road from Hale Pohaku to the summit will remain unpaved and limited to four-wheel-drive vehicles. But the sound recommendations by the Department of Land and Natural Resources staff in the draft plan for the elimination of feral sheep and goats on Mauna Kea over a three-year period were reversed.

Crucial to a potential court test are these provisions for the "Mamane/Naio Forest Ecosystem Management Area" in the language of the Mauna Kea Plan (pp. 2-4):

"Construct, as animal free as possible, fencing around two or more areas, comprising an approximate total of 25% of the existing and/or historic range of the mamane forest. These areas, or preserves, shall be situated to include the most critical and essential habitat deemed necessary for the long-range preservation of the whole spectrum of Mauna Kea's native Hawaiian ecosystems, with special consideration given to endangered species."

"Boundaries will be coincident with existing Mamane/Naio Forest above the Saddle Road and within the conservation district. Specific boundaries

for these preserves shall be determined and designated by the Board on recommendation of an Ad Hoc Committee working in Hawaii who are knowledgeable in various fields of natural history pertinent to Mauna Kea's native biota. The members of the committee shall be appointed by the Board of Land and Natural Resources...."

"An intensive management and research program related to the preservation of native ecosystems shall be conducted. The restoration of flora and fauna in the preserves shall be monitored. It should be determined if there are other introduced limiting factors operating on endangered species; and when one is identified, feasible programs to reduce its effect on the species shall be initiated...."

"Until the fencing is completed around the Mamane forest areas, the preserves shall be made free of any unapproved species of animals through a liberal but controlled public hunting program. The preserves and fencing, when it is completed, shall be inspected on a regular and periodic basis to insure against any unpermitted animals being in the area. Game bird and pig hunting shall be permitted under normal regulations."

"In the fenced areas hunting seasons will be designated as year round for feral sheep and goats which have been deemed desirable [sic; undesirable?] due to their destruction of the Mamane/Naio forest."

"Each species of permitted game animals will be managed for public hunting.

The public hunting areas will include the entire mountain, exclusive of the Science Reserve Management Area and safety zones around facilities."

"If studies show to the satisfaction of the Board or it becomes legally necessary to eliminate any species of game animals on this mountain to assure ecosystem viability, then the elimination of such species will immediately follow through the practice [sic] as set in the fenced off preserved areas with staff help when necessary."

The last paragraph provides the loophole allowing the Board to retain feral sheep and goats on Mauna Kea until the Sierra Club Legal Defense Fund or others win a court de-

cision mandating the elimination of those exotics from Palila critical habitat. Research findings have already demonstrated the incompatibility of feral mammals with native ecosystem components on Mauna Kea, but it is questionable whether *any* study could show that "to the satisfaction of the Board" -- since their decision was a political compromise.

In the Society's statement to the U.S. Fish and Wildlife Service on April 9, 1977 supporting the critical habitat determination for the Palila, we pointed out "the inherent conflict in maintaining feral sheep in endangered species habitat." The Division of Fish and Game had earlier identified that conflict in its final report (funded under the federal Pittman-Robertson Act), "Ecology of the Feral Sheep on Mauna Kea, 1972-1975" (p. 81):

"Habitat protection for the palila is most critical since this species is known to occur only in the mamane forest on Mauna Kea. It is thought that there are less than 1,000 of these birds in existence. Data documented during the feral sheep study provide unquestionable evidence that the present management program is not viable because the natural environment continues to deteriorate. The current policy of maintaining a minimum of 1,500 feral sheep is inconsistent with the stated goal of preserving the native ecosystem."

Nevertheless, this contradiction is perpetuated in 1977 in the Mauna Kea Plan. The first sentence under the heading, "Mamane/Naio Forest Ecosystem Management Area," says (p.2):

"In accordance with the rules and regulations established in the Federal Endangered Species Act of 1973, and pursuant to Act 65 of the 1975 State Legislature [on endangered species], this area will be managed primarily to maintain and improve the native Hawaiian Ecosystem and the threatened and endangered species found therein."

The Division of Forestry is given primary responsibility for management of the area. Then two pages later the plan requires (p. 4) the Division of Fish and Game in the same ecosystem to:

"Conduct a hunting recreation program to provide the highest annual harvest practicable....Focus management efforts towards a long-range program which will arrest game animal habitat deterioration and thereby prevent a further decline in the carrying capacity of the range. Achieve a sustainable mammal population by manipulating hunting pressure unit by unit. Place management emphasis on maintaining a hunting population of permitted animals."

There have been no public announcements yet on implementing the plan in these opposing directions. Meanwhile, the usual feral sheep hunting season on Mauna Kea was opened this August and September on weekends as in the two previous years, with an estimated "take" projected at about 500 rams, followed by a brief mouflon-hybrid sheep season on the first two weekends in October. Funds for fencing off one-fourth of the forest are unlikely to be available since the whole māmane forest in a broad belt around the mountain has been officially designated by the U.S. Fish and Wildlife Service as Palila critical habitat ('Elepaio, Oct 1977:46). With federal money apparently precluded, will the State Legislature appropriate ¼-1 million dollars for the fences?

What happens next? It is expected that the Palila Recovery Plan will be released by the Fish and Wildlife Service before the end of the year. The Palila Recovery Team, headed by Dr. Andrew J. Berger, will specify in the plan the needs, actions, agency responsibilities and time frames for restoration of the Palila in its Mauna Kea habitat.

Legally, it looks as though federal Pittman-Robertson Wildlife Restoration funds can no longer be used to support sustained-yield sheep and goat hunting on Mauna Kea. This is because section 7 of the federal endangered species act of 1973 stipulates that all federal agencies insure that their actions do not jeopardize the existence of endangered species. But it may take a court challenge to establish that ruling.

October 10, 1977

*H.A.S. Representative
Island of Hawaii*

RECENT OBSERVATIONS OF BIRDS - MARCH TO JULY

by Robert L. Pyle

OAHU

Mottled Petrel--One bird of this species, rarely reported from Hawaiian waters, was observed from a SeaFlite hydrofoil between Oahu and Kauai on March 20 (HDP).

White-faced or Glossy Ibis--The dark ibis seen frequently last fall at Waipio disappeared during the winter. Presumably the same bird was found again April 23 at nearby Honouliuli Unit of the Pearl Harbor National Wildlife Refuge. It was seen here and at Waipio through the spring. In late May, the head and neck were finely streaked with white and there was no white visible on the face. Both of these features are typical of immature or winter adult plumage of either of the two species. However, the iris was observed to be bright red (SC). The red iris is a mark of the White-faced Ibis, in contrast to the rich brown iris of the Glossy Ibis (*fide* HDP). The absence of any white feathering leaves the bird a bit risky to call a White-faced with certainty.

Hawaiian Duck (Koloa)--Two were seen at Waiapuka Shrimp Ponds between Kahuku and Laie May 14 (RLP, RJS, HDP). Several undyed Koloa were found at Punahoolapa Pond between Kahuku and Kuilima in late May (PB).

American Wigeon--One was at Waipio on March 6 (RLP).

Hooded Merganser--The group of six seen through the winter at Kaneohe Marine Base was last reported there March 6 (RTL).

Osprey--One was seen and photographed on May 29 at Nuupia Pond, Kaneohe Marine Base (HDP).

Hawaiian Gallinule--One to several are still being seen regularly along Kaelepulu Canal, Kailua (RLP).

Killdeer--The single bird resident at Waipio since July 1976 remained throughout the summer (RLP).

Black-bellied Plover--One at Kaluapuhi Pond, Kaneohe Marine Base on Feb 27, one at Big Pond area, Waipio on March 6 and one there April 23 with some black splotching coming in on the belly (RLP).

Herring Gull--The dark gull specimen collected near Hauula on Dec 2, 1976 ('Elepaio July 1977:2) and sent to the mainland for identification, turned out to be an immature Herring Gull (PB).

White Tern--One or two were seen in flight near the 1700 block of Ala Wai Blvd. several times from Feb 21 to at least May 7 (GC). This is on a direct route from the

sea to the site at Hotel St., and Kalakaua Ave. in urban Honolulu where a pair had two successful nestings this summer (LM).

Edible-nest Swiftlet--After being rediscovered in N. Halawa Valley last fall ('Elepaio, Oct 1976:40), it was sighted again on June 16 (RJS) in the same location near the eucalyptus grove. No more than five have been seen at once, but RJS estimates the population in this area could be several times that number.

Red-billed Leiothrix--This species is not often seen on this island in recent years, but two were seen together on May 21 in dense brush along a trail less than one mile up the hillside back of Hygenic Store, Kahaluu (MDeC). Four or five were seen in the same area last year.

Mockingbird--One seen at Honolulu Airport parking lot on March 7 (RLP, and one on May 21 (LP). Another heard singing at Honouliuli Shrimp Pond on April 23 (RLP).

Japanese Bush Warbler--One was seen and heard on May 14 near Waiapuka Shrimp Pond, and another heard singing at Punahoolapa Pond, both near Kahuku in the coastal lowlands within a mile of, and unusually close to, the sea.

Japanese White-eye--A nest with three eggs was found 6 ft. above ground in a small sapling along the Na Laau trail May 30 (RLP, JFW, MS).

'Apapane--Five were seen along Kipapa Ridge Trail on May 15 (JD).

'Iiwi--One adult was seen on Kipapa Ridge one half mile from the summit on May 15 (JD). They were also seen at three spots on Poamoho Trail on June 12 (HAS, 'Elepaio, Sept 1977:29).

Black-headed Munia--An extremely large number of these were present on Waipio on March 6 with a total of about 900 individuals present (CJR, CPR). One individual of the white-bellied Tricolored race was observed well in a flock of the regular variety on the same date (RLP).

Indian Hill Myna--Three bright black birds calling vociferously, were seen July 8 in the tops of large albizzia trees at the Lyon Arboretum, upper Manoa Valley, on the trail toward the ridge, 100 yards beyond the headquarters building (LP).

KAUAI

All observations are by C. Fred Zeille-maker, unless otherwise indicated.

Horned Grebe--The bird present on the Wailua River since December attained breeding plumage by early April. CFZ photographed the bird from a Smith's Boats vessel on April 24.

The bird was reported through May 30, but HDP could not locate it on May 31.

Wedge-tailed Shearwater--Kilauea Point birds began moaning March 14, remained in burrows during the day by March 19, began arriving at the colony before dark by March 29, remained ashore above ground in pairs during the day by April 7, and reached the peak pre-egg laying activity by May 19.

Newell's (Manx) Shearwater--A calling individual passed over Kilauea Point at dusk April 29. The first road kill along the highway was reported May 8.

Red-tailed Tropicbird--The Kilauea Point population peaked at ten birds on May 1.

Brown Booby--Thirty-three roosted on Mokuiaee Island off Kilauea Point on May 3.

Red-footed Booby--Young began fledging from the Kilauea Point colony on May 15--a full two months earlier than in 1975 and 1976.

Great Frigatebird--Sixty-five were roosting on Mokuiaee Island off Kilauea Point on May 28.

Mallard--A drake at Hanalei National Wildlife Refuge was observed for the last time on April 28.

Hawaiian Duck (Koloa)--The high count during the period at Hanalei was 68 on March 11.

Pintail--The last two birds at Hanalei were not observed after March 18.

Blue-winged Teal--The pair wintering at Hanalei was last observed on March 18, but a single drake remained until May 4.

Northern Shoveler--The final observation of a lone hen at Hanalei was May 17.

Golden Eagle--The bird that has resided on Kauai since 1967 appeared at Hanakapi'ai Beach near Haena May 5. MZ originally spotted the soaring bird. As it stooped, CFZ photographed the bird with a standard lens, obtaining a recognizable outline. The bird was also seen by a helicopter pilot in early May near the cliffs below Mt. Waialeale.

Hawaiian Gallinule--The high count during the period at Hanalei was 65 on April 28.

Common Snipe--A single bird was flushed at Hanalei on April 1. The species has been recorded on the refuge for three consecutive years.

Red-billed Leiothrix--One was carefully studied at Kokee State Park on May 12 (BP). The species is much reduced in numbers on this island.

MOLOKAI

Mottled Petrel--One bird was seen from SeaFlite hydrofoil off Molokai on April 25 (HDP, CJR, CPR).

Pintail--A drake obviously moving through paused briefly at Kakahaia National Wildlife Refuge east of Kaunakakai on April 18 (CFZ).

Long-billed Dowitcher--A single bird was photographed at the Kaunakakai Sewage Pond on April 18 (CFZ).

LANAI

Observations are all by Peter J. Connally, unless otherwise noted.

Red-tailed Tropicbird--Four were seen above the Manele small boat harbor on April 30. The birds flew low just above the masts of sailboats docked in the harbor. Three birds were seen in the same area two days earlier, and single birds were seen at Pohoula graveyard on April 20 and at Hulopoe June 6.

Turkey--Through the spring, increasing numbers have been sighted, especially along Keomoku Beach Road in the keawe. As many as two dozen young have been seen following one hen.

Jaeger sp?--Probably a Pomarine in non-descript plumage was photographed (ES) resting on the water east of Lanai, on March 15.

Hawaiian Owl (Pueo)--Owls are maintaining a good population on Lanai. Numerous sightings were made at widespread locations during April to July.

'Apapane--Two were seen in Kapono Gulch on June 2 feeding in an albizzia tree.

MAUI

Black-crowned Night Heron--An unprecedented 343 were counted at Kealia Pond on March 16 (CFZ, RLP). Young had recently fledged from the nearby rookery.

Nene (Hawaiian Goose)--A group of 4 flew high against the cliffs over Paliku Cabin in Haleakala Crater near sunset on June 16, and 4 were seen flying near the north rim on June 19 (RLP, MS, SC, OB).

Northern Shoveler--80 were at Kanaha Pond on May 15 (PB), an unusually large number so late in the season.

Blue-winged Teal--A drake was at Kealia Pond March 15 and 16 (CFZ, RLP).

Lesser Scaup--The four drakes at Kealia Pond were observed for the last time March 16 (RLP, CFZ).

Osprey--The bird wintering at Kealia Pond was found March 16 (RLP, CFZ), but was not found on April 18 or 19 (CFZ).

Chukar--One above Kapalaoa Cabin, and several others seen inside Haleakala Crater June 16.

Bristle-thighed Curlew--One in good plumage was studied for 20 mins at 75 yards on May 15 at Kealia Pond, in close comparison with other shorebirds (PB). This is one of the

very few spring records in the main islands.

Greater Yellowlegs--The bird wintering at Kealia Pond was found March 16 (RLP, CFZ), but not thereafter.

Least Sandpiper--One was at Kealia Pond March 15 and 16 (RLP, CFZ), two on April 19 (CFZ), and three on April 25 (CJR, CPR).

Dunlin--Four were at Kealia Pond March 15 and 16 (CFZ, RLP).

Western/Semipalmated Sandpiper--A bird with a short beak was at Kealia Pond March 15 and 16 (CFZ, RLP).

Hawaiian Stilt--A total of 276 at Kealia Pond March 15 and 16 (RLP, CFZ).

Ring-billed Gull--The near adult bird wintering at Kealia Pond was seen March 15 and 16 (RLP, CFZ), and again April 18 and 19 (CFZ).

Crested Honeycreeper--At least 15 birds, including numerous full-grown young calling and being fed, were found on June 18 in the Upper Hana Forest Reserve on Haleakala (RLP, MS, SC, OB).

Maui Parrotbill--Two individuals were sighted on June 18 in the Upper Hana Forest (RLP, MS, SC, OB). This species is rarely observed because of its scarcity and the arduous hike into its remote range.

ISLAND OF HAWAII

Newell's (Manx) Shearwater--This species was heard overhead at two locations on the Hamakua coast during July by Fish and Wildlife Service census crews (*vide* JMS). This raises the possibility of the species nesting on this island where it was thought to be exterminated (probably by mongooses) about the turn of the century. At present it is only known to nest on Kauai.

Blue-winged/Cinnamon Teal--a female plumaged bird was at Opaepa Pond March 16 (RLP, JMS, CFZ).

American Wigeon--Three were at Aimakapa Pond (Honokohau) on the Kona Coast March 16 (CFZ, RLP, JMS).

Canada Goose--The bird that arrived last fall remained throughout the summer (JMS, CJR, CPR).

Semipalmated Plover--A single bird was with other shorebirds at Opaepa Pond on the Kona Coast March 16 (CFZ, JMS, RLP).

Least Sandpiper--One was with other shorebirds at Opaepa Pond April 19 (CFZ).

Western Sandpiper--One was at Opaepa on March 16 (CFZ, RLP, JMS).

Long-billed Dowitcher--Two birds in breeding plumage were at Aimakapa Pond on the Kona Coast April 19 (CFZ).

Dunlin--A single bird in breeding plumage at Aimakapa Pond on April 19 (CFZ).

Northern Phalarope--A male plumaged bird was flushed at Aimakapa Pond April 19 (CFZ). It alighted and fed on the pond in typical phalarope fashion before joining two female plumaged shovellers. As the ducks dabbled along the bottom the phalarope picked up food items stirred to the surface.

'Amakihi--One adult individual of the gray morph of the species was captured and photographed on May 26 at Keauhou Ranch, near Volcano (CJR, CMW, LTH). This form has been reported only about six times in the past century.

'O'u--This endangered honeycreeper, unreported on this island for about six years, was rediscovered by Fish and Wildlife Service census crews on April 21 near Kulani Cone ('Elepaio, Oct 1977:46). During the summer censuses, at least 60 sightings were recorded, scattered over about 35 miles between the National Park and the area above Laupahoehoe (*vide* JMS).

Hawaii Creeper--JMS reported that the census crews observed more than 500 of this endangered species during the summer.

Yellow-billed Cardinal--GC found a nest of this species, the first one reported from Hawaii, on May 3 at Honokohau ('Elepaio, October 1977:37).

MIDWAY ATOLL

All observations are by Nancy Butowski-Casey, unless noted otherwise.

Black-footed and Laysan Albatross--By the end of a 10-day period of thunderstorms and windy weather on July 23, 97% of the healthy Black-footed nestlings and 85% of the Laysan nestlings had departed from Eastern and Sand Islands. Two apparently albinistic albatrosses on Sand Is., and one on Eastern Is., seem to have fledged successfully.

Blue-faced Booby--Two pairs with large downy chicks were found in late May on Sand Island, where they had not been known to nest previously. In late July, one pair was found incubating an egg.

Bristle-thighed Curlew--Three pair on Eastern Is. and several single birds on Sand Is. apparently passed up breeding and spent the summer.

Black-headed Gull--Roger Clapp of the U.S. National Museum has verified that the bird seen and photographed between Nov 10 and 16, 1976, was indeed of this species. This is the first record of the species from Hawaii.

OBSERVERS

Omer Bussen, Phil Brunner, George Campbell, Sheila Conant, Joyce Davis, M. DeCrow, Lawrence T. Hirai, Rey T. Larsen, Linda Murakami, W. Michael Ord, Bob Powell, H. Douglas Pratt, Leilani Pyle, Robert L. Pyle, Carol Pearson Ralph, C. John Ralph, J. Michael Scott, Ed Shallenberger, Robert J. Shallenberger, Maile Stemmerman, Hawaii Audubon Society field trip, John F. Walters, Claire M. Wolfe, C. Fred Zeillemaker, and Melly Zeillemaker.

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SEPTEMBER MEETING REPORT . . .

THE STATUS OF HAWAII'S WATER BIRD HABITAT

At the Sept. 19 General Meeting, Dr. Robert Shallenberger gave us a slide tour of Hawaii's wetlands. He recently completed a survey of 95 such areas on the 5 main islands for the Army Corps of Engineers, which oversees much of the use of wetlands. His gorgeous photographs of the birdlife gave many of us better views of these species than we have ever had in the wild.

This survey was important because four of our native resident water birds are officially declared endangered species or subspecies (Hawaiian Stilt or Ae'o, Hawaiian Coot or 'Alae ke'oke'o, Hawaiian Gallinule or 'Alae 'Ula, and Hawaiian Duck or Koloa Maoli). The wetlands used by these species throughout the year are also crucial in winter for the many migratory ducks and shorebirds that come to Hawaii. Pearl Harbor used to teem with huge flocks of these birds.

Dr. Shallenberger pointed out that although the native Hawaiians took their toll of water birds for food, their vast taro plantings provided widespread habitat. Rice paddies later also filled the birds' needs. Today only about 500 acres in the state remain in such plantings, less than 2% of the figure for 1900. Sugar cane irrigation settling ponds have meanwhile become more common, but not enough to make up the loss. While habitat conversion has damaged water bird populations, they have also suffered from hunting, finally closed in 1939; predation; water hyacinth and grasses choking water bodies; tilapia (an imported fish) preventing submergent plant growth and increasing siltation; flooding during nesting season; pollution; and silting in of wetlands from erosion.

Most of the state's known wetlands are on Oahu, Maui, and Kauai. Tantalizing evidence suggests that Niihau, inaccessible to ornithologists as well as general public, is the breeding site of the many coots and stilts that summer on Kauai. In that season half the state's coots are on Kauai, but very few nests have ever been found there. Most of the coots leave for Niihau after the first winter storms. In winter, Niihau has at least three wetland ponds.

Dr. Shallenberger pointed out that the endangered water birds in Hawaii may seem numerous in certain locations, but the number of locations in which they can live and breed is quite limited. Such populations, with literally all their eggs in few baskets, are especially vulnerable to local disasters. On a more optimistic note, we can see that, unlike Hawaii's native forest birds, these water birds can be quite happy and productive in man-made or altered habitats.

— C. P. Ralph

PUBLICATIONS OF THE SOCIETY

HAWAII'S BIRDS by the Society (1975). This is the best field guide to our birds, and includes colored illustrations of all native and well-established exotic species. (Postpaid, add 27¢ for airmail)..... \$3.30

FIELD CHECK-LIST OF BIRDS OF HAWAII by R. L. Pyle (1976). A pocket-size field card listing the species recorded in Hawaii with space for notes of field trips. (Postpaid).25
(ten or more, 10¢ per copy)

GUIDE TO HAWAIIAN BIRDING by members of Society and edited by C. J. Ralph (1977). Where to go and some idea of what you are likely to see. For the islands of Hawaii, Maui, Molokai, Lanai, Oahu, and Kauai. (Postpaid).50

PRELIMINARY LIST OF THE BIRDS OF HAWAII by R. L. Pyle (1977). An authoritative compilation of all species naturally occurring in Hawaii as well as those introduced by man currently established as viable populations. Gives an excellent summary of each species' status. (Postpaid). \$1.00

HONOLULU CHRISTMAS COUNT

December 18, 1977 (Sunday)

The Honolulu Christmas Count, initiated in 1939, covers a 15-mile diameter circle centered near Nuuanu Pali Overlook. The area extends from Aiea Trail to Paiko Lagoon on the leeward side and from Kahaluu to Waimanalo on the windward side. The long series of counts in this same area provides a good indication of trends in bird populations, particularly for certain introduced species undergoing significant increases or decreases over a period of years. One or two parties are assigned to each of ten sectors within the count circle. All potential participants are welcome for a day of birding.

For further details, contact Robert L. Pyle, Compiler, 741 N. Kalaheo Ave., Kailua, HI 96734; home phone 262-4046.

EWA CHRISTMAS COUNT

December 17, 1977 (Saturday)

This new count will cover much of the Oahu saddle, the central third of both the Waiānae and Koolau Mountains, and the Pearl Harbor area. "Hot spots" for shorebirds and native forest birds are included in the circle. This is the first time these areas will be officially censused for a Christmas count. All interested observers are welcome and needed!

For further information, please contact Maile Stemmerman, Compiler, 46458 Haiku Plantation Dr., Kaneohe, HI 96744. Phone 235-1693.

ALOHA TO NEW MEMBERS —
MAHALO FOR DONATIONS

The Society welcomes the following new members: William E. Evenson, Kaneohe; Christine E. Morgan, Honolulu; and Gustav J. Yaki, Niagra Falls, Ontario. We thank Christine E. Morgan for a donation to the Society for its activities.

VOLCANO CHRISTMAS COUNT

January 2, 1978 (Monday)

The Count Area for the Volcano Christmas Count is on the southeast slopes of Mauna Loa and northern part of Kilauea, centered at Kulani Cone, near the village of Volcano. The Area includes such varied habitats as alpine scrub at 8,000' elevation, recent lava flows at 3,500' elevation, ranch land, logging areas, timber plantations, and koa and 'ohi'a-hapu'u forests in between. Close to a dozen endemic bird species live in the Count Area, and half of them are endangered. For details contact Larry Katahira, Compiler, P.O. Box 100, Hawaii National Park, HI 96718. Home phone 967-7416; office 967-7311.

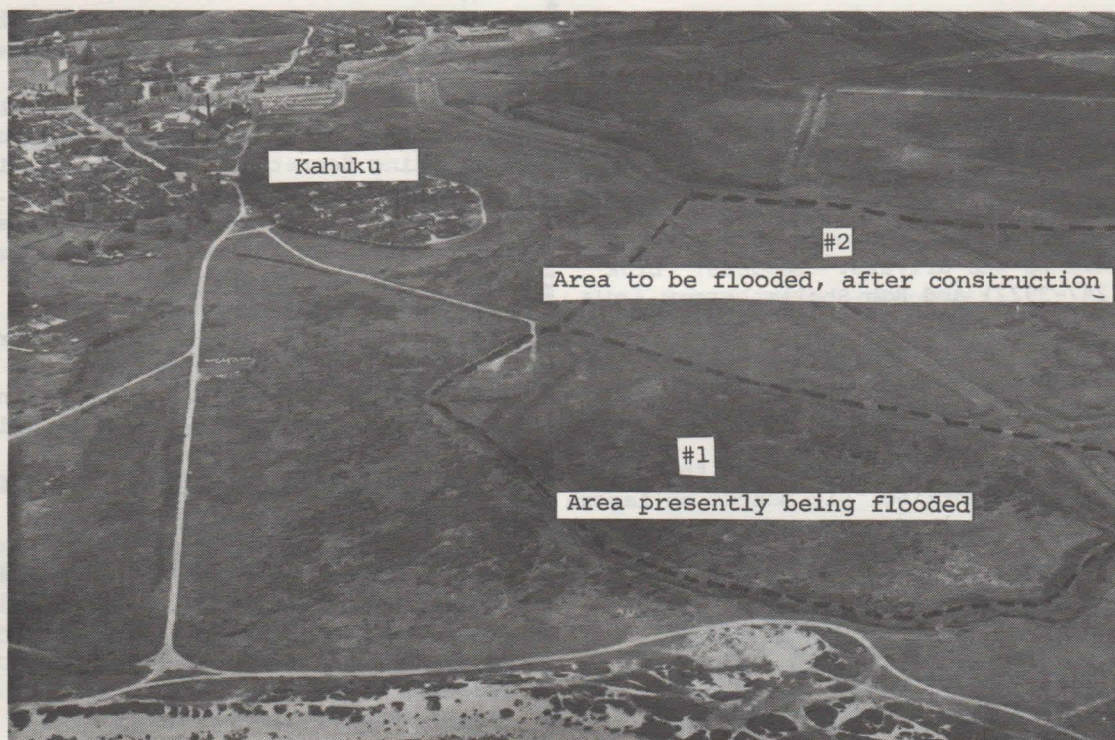
More 4-wheel drive owners and experienced observers are needed to cover the new Fish and Wildlife Service transects from Kulani Honor Camp, Powerline Road, Tree Planting Road, and 'Ola'a Back Road. Plan now for an exciting day of birding where natives outnumber the exotics!

"HAWAII'S BIRDS" TO BE REPRINTED AGAIN

Our sale of "Hawaii's Birds" have far exceeded our expectations, since the book was revised less than two years ago. The supply is now running low, so we are beginning to accumulate ideas for text and photo changes. Revision can include additions of new exotic birds, incorporation of new research data, and correction of errors. If the quality of new photos justifies the extra cost involved in replacing old ones, then the new photos will be used.

Please review the book and submit a list of suggested corrections or additions before November 30, 1977. If you have photos for inclusion, or know of others who do, please let us see what you have. Send all material to Robert Shallenberger, c/o Ahuimanu Productions, P.O. Box 1166, Kailua, Hawaii 96734.

Speak up now. Don't expect your late suggestions to be incorporated into the new revision.



Aerial view of Kii Pond and nearby areas, showing Kahuku town and the two areas of the National Wildlife Refuge.

*Photo by Greg Vaughn
Ahuimanu Productions*

A NEW LEASE ON LIFE FOR AN OLD MILL POND

by Richard A. Coleman

Vital shallow freshwater habitat was restored to Oahu's north shore on July 28, 1977 as a pump began to fill a 20-acre portion (#1 on photograph) of the 105-acre Kii pond unit of James Campbell National Wildlife Refuge. With the summer help of 12 Youth Conservation Corps workers, the surrounding dikes and man-made islands on this area were renovated so that water could be pumped back into the dried-up pond.

Kii pond served as a waste water basin for the Kahuku Sugar Mill during its years of operation. When the mill shut down in November 1971 the pond dried up, removing a vital shallow freshwater habitat for the endangered Hawaiian stilt (*Ae'o*), Hawaiian coot (*Alae ke'oke'o*), and Hawaiian gallinule (*Alae 'ula*), as well as other waterfowl.

The present refuge was established after several years of negotiating with the Campbell Estate. A \$1.00 per year, 55-year lease agreement was made between the U.S.

Fish and Wildlife Service and the Trustees of the Estate of James Campbell. The 38-acre Punamano pond unit, one-half mile north of the Kii unit, was also included in the lease.

Work is continuing on additional shallow-water impoundments in the Kii unit (area #2 on photograph), while the Punamano area will be maintained in its present deep-water condition. In both units, nesting and resting islands will be established to increase the capacity of both areas to carry additional numbers of waterbirds. Visitors are presently excluded from the pond areas; however, several vantage points and a future observation post along the perimeter of the area are planned.

Anyone wishing additional information concerning these refuges should contact the U.S. Fish and Wildlife Service at 300 Ala Moana Blvd., PO Box 50167, Honolulu, Hawaii 96850 or at (808) 546-7507.

*U.S. Fish and Wildlife Service
Honolulu, Hawaii*

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HAWAII AUDUBON SCHEDULE OF EVENTS

Nov. 13. Field trip to Likeke Trail and Kawainui Swamp. This trip will feature an interesting cross section of forest and fresh water habitat. Meet at the State Library on Punchbowl St. at 7 a.m. Bring binoculars, lunch, water, and if you can, your car. \$1 to be paid to the drivers. Leaders: Dick Davis (247-3922) and Rob Shallenberger (261-3741).

Nov. 14. Board meeting at Waikiki Aquarium Auditorium, 7p.m. Members are welcome.

Nov. 21. Membership meeting, 7:30 p.m. at the Waikiki Aquarium Auditorium. Brian and Pattie Johnson will talk about their experiences while working "Six Months on Laysan Island". Their work for the federal government was on the endangered Monk Seal and turtles and will make for a very interesting meeting.

Dec. 17. Ewa Christmas Bird Count

Dec. 18. Honolulu Christmas Bird Count.

Jan. 2. Volcano, Hawaii, Christmas Bird Count.

For details on all these counts see p.60.

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