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SOUTH HALAWA VALLEY, OAHU, BIRD SURVEY By Robert J. Shallenberger

During June 1976 I was contracted to perform a brief avifaunal survey of South Halawa Valley for Parsons, Brinckerhoff, Quade & Douglas. This valley is being considered as a possible alternate H-3 route. Dr. Derral Herbst performed a botanical survey at the same time. My survey involved four separate trips into the valley, for a total of $3\frac{1}{2}$ days. I had previously hiked the Aiea Loop on several occasions, the Halawa trail and parts of Moanalua Valley, so I was enthusiastic about an opportunity to enter this narrow but interesting valley.

Access to the valley entrance is through the Halawa Quarry. A road continues beyond the quarry to a large HECO substation. Just makai of the entrance to the substation, a dirt road takes off to the right. A clearing just makai of the second stream crossing provided a convenient place to park. A pig hunter's trail takes off from the stream bed and leads up the entire valley floor. The walls of the valley are quite steep, but it is possible to leave the trail and work your way towards the south ridge at several locations. The valley floor as expected is largely covered with exotic trees, particularly Christmas berry, guava and hau. Yet, scattered 'ōhi'a and koa trees begin to appear less than half way up the valley floor, and in the upper reaches of the valley, these trees dominate the forest canopy.

Ornithologically, the valley yielded few surprises. I had hoped to see the O'ahu creeper, but my efforts were unrewarded. Because of the thick canopy and steep valley walls, observation of birds in the upper valley was difficult and I was most successful when I climbed to the tops of large koa trees. I recorded 15 species in the valley during this survey. The exotic birds included: spotted dove, barred dove, red-vented bulbul, common myna, Japanese white-eye, spotted munia, house sparrow, cardinal, red-crested cardinal, house finch, Japanese bush warbler, and shama. Of the exotics, the bush warbler was of greatest interest to me as it was more abundant than on any trail I had walked on O'ahu. In the middle portions of the valley, 1-3 individuals were calling almost incessantly. But, as usual, it was extremely difficult to observe. Shama and cardinal were also calling loudly below the upper reaches of the valley.

Three native bird species were observed: 'elepaio, 'amakihi and 'apapane. The first 'elepaio was observed at an elevation of less than 450' on the valley floor, and numerous additional sightings were made along the stream bed from this elevation on up. As always, they were generally quite curious and approached closely. The first 'amakihi sighting was made at 650' in the first patch of 'ōhi'a trees in the valley. 'Ōhi'a were heavily in flower, and the few 'amakihi at this location shared the abundant food with numerous white-eyes. 'Amakihi were more common in the upper reaches of the valley, but were observed repeatedly from distances less than 15-20' only in the first 'ōhi'a trees. 'Apapane were scarce throughout the valley although their calls could be heard almost any time of the day at the extreme mauka end of the valley.

It appeared obvious in this survey that the valley population of these native species, particularly 'elepaio and 'amakihi, would be seriously effected by highway construction on the valley floor. In my conclusions, I suggested that "the impact of urbanization of one area must be considered in the context of the cumulative effect of urbanization throughout the Island." I also pointed out the very real potential of this pig hunter's trail as a

public nature trail in the future. I found the experience every bit as interesting as a hike on the Aiea Loop trail, and I am anxious to return to tape and photograph the birds of South Halawa Valley.

AVIFAUNAL SURVEY OF NORTH HALAWA VALLEY by Robert J. Shallenberger

As a result of recent legal action involving the H-3 trans-Koolau highway, the State has been evaluating alternative routes. Part of the evaluation has included brief floral and faunal surveys. In June, I conducted an avifaunal survey of South Halawa Valley. I was asked again to do a similar survey of North Halawa Valley during late August.

H. Douglas Pratt and I entered the Valley on September 2, 1976, planning to camp for two nights at the upper end. However, the density of hau in the mid-portion of the Valley made it too difficult to negotiate the trail with packframes, so we camped along the stream bed, where the 600' contour crosses the Valley trail. With day packs, we easily made the trip to the head of the Valley on September 3. The stream was dry except in the upper third of the Valley.

In striking contrast to the South Halawa survey in June, avian activity was much reduced. Sixteen bird species were recorded, but total numbers observed and amount of singing was very low by comparison. No bush warblers were heard or seen in North Halawa at this time of year. Even shama were relatively scarce, although we were treated to an extended dawn song by several birds around our camp. 'Elepaio were with us from the 300' contour on the Valley floor to the end of the Valley. 'Apapane and 'amakihi were heard but not in large numbers. We had hoped to see the O'ahu creeper, but we were only able to cover a small portion of the large, amphitheater-like upper end of the Valley, where flowering 'Ōhi'a and tall koa trees covered the steep slopes. I'm sure a more thorough spring survey of the upper Valley would be more rewarding for native birds.

We did, however, make some interesting exotic bird observations lower in the Valley. One melodious laughing-thrush was spotted along the trail at the 330' level. We listened to the song of a single red-billed leiothrix at about 650' in the Valley. This bird stimulated several shama into song but no other leiothrix were verified. Red-vented bulbuls were observed as high as 700' on the Valley floor, at a point nearly 2/3 of the distance into the Valley. Particularly surprising at this location was the sighting of a single black-crowned night heron along the stream bed. I suspect that frogs in the stream pools provided ample prey.

At a large eucalyptus grove along the trail (approximately 375'), we were surprised and pleased to get our first look in Hawaii at the edible-nest swiftlet. It was the first sighting of the species for me, although Doug was familiar with the bird after his recent Micronesia trip. At least two birds were circling in the air above the stream bed, passing closely over kukui, guava and Christmas berry trees. Often they passed within 10-15 yards of us on the ewa side of the stream. We watched the birds for 20 minutes (1530-1550), speculating at the time that a vertical cliff face, 75 yards above the site, may be their nesting area in season. During the next two days in the Valley, we made 5 more sightings of individual birds, away from the eucalyptus grove. One was sighted at 900' on the Valley floor. On our return trip, we passed the eucalyptus grove at about 1100 on September 4. Again, at least two birds were circling. It was noted that these two birds had darker breast feathers than the earlier pair at this site. There was no way to estimate population size in the Valley with any degree of accuracy.

It is particularly interesting to note that this eucalyptus grove is the exact location where Walter Donaghho observed the species in 1969 ('ELEPAIO, Vol.30, No.7, Jan 1970, p.64-65). This was the first reported sighting of the species since its release in Niu Valley (1962) and Waimea Falls (1965). David Woodside released a total of 375 birds for the Hui Manu Society. Our sighting at this site seven years after Donaghho's, and the observations of swiftlets throughout the Valley, appear to confirm suspicions that a breeding population has successfully established itself in North Halawa. It would be valuable to revisit the site in early summer so that the nearby cliff face could be examined for possible nesting.

The hike to this eucalyptus grove would make an easy picnic trip for interested birders. The easiest road, to the Board of Water Supply station in the Valley, is usually locked, so I recommend passing through the Plant Development Center on the Halawa Quarantine Station road. Park as far into the Valley as possible and then walk up to the Water Supply dirt road on the ewa side of the Valley entrance. Where the road to the

pumping station turns downhill, take the left fork up the Valley. Within 200 yards, a trail will begin at the stream bed and enter the dense Christmas berry grove. After an easy hike of 1-2 hours (depending on your pace and the number of 'elepaio and shama you watch), you'll reach the eucalyptus grove. Watch for swiftlets over the stream bed to the south, or walk 50 yards farther to the point where the trail crosses the stream. Good Luck! It's worth the trip!

Progress report on the Hawaiian Endangered Waterbird and Forestbird Programs from Director Michio Takata, Hawaii Division of Fish and Game and Regional Director R. Kahler Martinson, U.S. Fish and Wildlife Service, to President Wayne Gagne, 15 July 1975:

During the past few years two conferences dealing with Hawaii's rare and endangered wildlife were held in Honolulu. The first on December 11, 1969, at the East-West Center on the University of Hawaii Manoa Campus, the second on April 6, 1971, at the Pagoda Hotel. These conferences were sponsored by the Hawaii Division of Fish and Game and the U.S. Fish and Wildlife Service. The 1971 meeting addressed itself to establishing an endangered bird restoration program in the Islands.

Since these meetings, which you may have attended, we believe we have made considerable progress in the Hawaiian Endangered Waterbird and Forestbird Programs. We would like to report our accomplishments to you, as well as to outline what we believe needs to be done to assure the preservation of remnant populations of the Hawaiian gallinule, Hawaiian stilt, Koloa duck and the Hawaiian coot. This summary of waterbird conservation and land acquisition efforts by the State and Federal Fish and Wildlife Service is quite unique and demonstrates fine State-Federal resource cooperation.

The Hanalei National Wildlife Refuge was established on November 30, 1972, the date the deed conveying the property to the United States was executed. This approximately 900 acre area was purchased from the Eagle County Development Corporation (now Princeville Corporation) and has proved to be a very beneficial acquisition. Those who are familiar with the Hanalei River Valley and the much photographed view it provides from the overlook along the highway on the bluff above the valley can appreciate the knowledge that this excellent example of rural Hawaii will not succumb to the developer.

The Huleia National Wildlife Refuge was established on April 24, 1973, upon conveyance of an approximately 200 acre parcel of land to the United States by Grove Farm Company. This is a more isolated and lesser known area than Hanalei but is adjacent to and upstream from the historic Menehune Fish Pond (Alakoko) which is also within the proposed refuge. As you are probably aware, the Menehune Fish Pond is visible from landing aircraft and is on the tourist scenic tour.

While establishment of these two above refuges are important steps in the over-all protection and preservation of several endangered waterbirds, they fall considerably short of assuring maintenance of these species. Of very high priority are Kii and Punamano Ponds in the Kahuku area of Oahu. Kii Pond supported substantial numbers of endangered waterbirds but after closure of the sugar mill at Kahuku the pond dried up and during the past two years has provided almost no habitat whatsoever. Much smaller Punamano Pond, which is fed by springs, has provided limited habitat. The Campbell Estate owners are still working with the court to obtain approval for the Estate to transfer jurisdiction of this important area to this Service under a long term agreement. Should this not be successful, we would plan to purchase the area and restore its habitat when funds become available.

Kealia Pond on Maui also has a very high acquisition priority and its potential can be developed into habitat comparable to Kanaha Pond at Kahului. Over the past few years there have been a number of encroachments on Kealia not entirely favorable to good management and this type of activity is expected to continue.

Other high priority waterbird areas which deserve immediate acquisition attention are Opaepa Pond and Honokohau Pond on the Big Island and Kakahaia Pond on Molokai. These are relatively small habitats, but, when added to the areas listed above, those habitats owned by the State of Hawaii, and those on military installations, they should provide sufficient habitat to maintain optimum numbers of endangered waterbirds. The so-called "Brown Book"* which was jointly prepared by the Hawaii Division of Fish and Game and the U.S. Fish and Wildlife Service and was distributed at the April 6th meeting describes all the areas under consideration for waterbird acquisition. */HAWAII'S ENDANGERED WATERBIRDS/

As a mitigation measure to replace waterbird habitat destroyed by the construction of

the much publicized reef-runway project off Oahu, the U.S. Navy designated two areas under its jurisdiction as wildlife refuge areas, and authorized their development as bird habitat areas. The work was accomplished by airport project funds and the areas, which will prove valuable to the preservation of stilts and other birds, will soon be turned/over to the Fish and Wildlife Service for management.

Also indicative of the fine cooperation of the U.S. Navy and the U.S. Marine Corps in ensuring the preservation of important habitat under their jurisdiction is the establishment of an area at the Lualualei Naval Magazine and an area at the Kaneohe Marine Corps Air Station totaling over 500 acres, as wildlife refuges. These areas offer habitat for stilts, coots and gallinules. The State Fish and Game Division has released captive-reared Koloa in these areas.

As you may be aware, the source of money for Federal acquisition of endangered species areas comes from the Land and Water Conservation Fund Act, pursuant to the authority in the Endangered Species Act of 1973. Our most recent information indicates that there will be some funds forthcoming for Hawaiian endangered species acquisitions in Fiscal Year 1976 (July 1, 1975 through June 30, 1976), and we have every indication that Hawaiian endangered waterbird species acquisitions stand very high on the national priority scale. We are also well aware that the fragile coastal habitats are few in number and are under heavy pressure for commercial, recreation, and residential development. For these economic reasons, as well as for biological, the situation regarding waterbird habitat acquisition is considered critical in Hawaii.

The State Department of Land and Natural Resources has completed the initial development phases at Kanaha Pond on Maui and at Paiko Lagoon on Oahu. These projects were designed to prevent further degradation of the habitat used by endangered birds. Planning is progressing on further improvements. Paiko Lagoon has been officially established as a State Wildlife Sanctuary.

The State has also established the Kipuka Ainahou Nene Sanctuary on Hawaii. This 38,400-acre state-owned portion of the nene range is used throughout the year by the birds as it contains good nesting habitat as well as summer range.

On May 16, 1972, Governor Burns signed into law Act 49 which provided for a program for protecting and conserving Hawaii's indigenous birds and mammals with special emphasis on endangered species. Pursuant to this Act the Department of Land and Natural Resources adopted a Regulation which, among other things provides protection to a list of indigenous species, includes 99 birds and two mammals. Twenty-three of the birds listed are believed to be extinct while 30 are considered to be endangered.

The majority of the endangered species are forest birds which present a much more difficult problem in conservation. The recent "Green Book" HAWAII'S ENDANGERED FOREST BIRDS prepared by the Fish and Wildlife Service and the Division of Fish and Game tells their story and suggests a program for their preservation. Most of you have received a copy of this brochure in recent months.

The Federal Endangered Species Act of 1973 has provided the opportunity for continued and expanded Federal-State cooperation in this program and Hawaii is working diligently to qualify at an early date for needed Federal assistance.

In furthering the endangered species program in Hawaii, eight recovery teams or work groups have been recently appointed by the Director of the Fish and Wildlife Service with concurrence of the State. These teams contain the expertise of State, Federal, and academic personnel needed to formulate an objective plan for the restoration of the species or group of like species of birds. The Service looks to the recommendations of the recovery teams for guidance toward restoration of each species and/or its habitat to a life sustaining level.

We hope this progress report has brought you up to date on the happenings during the past five years; has outlined where we hope to go in completing the waterbird program; and has presented some of the major problems being encountered. ...

Field Trip to Poamoho Trail, 11 July 1976 by Omer Bussen

It was raining at the State Library when our group of eight met at 7 a.m., and it appeared to be raining in both the Koolau and the Waianae, as we approached Wahiawa. Nevertheless, we drove up into the Forest Reserve, and as we got out of our cars, the rain stopped. It remained overcast all day, but the Koolau crest and Kaala summit eventually became visible.

We saw white-eyes, spotted doves, and house finches; many spotted munias were along the grassy road and trail margins. Northern cardinals were common; even at our lunch stop, two-thirds of the way to the summit, one could be heard in the valley below. Japanese bush warblers were heard regularly, and shamas were heard in the valleys; neither species was singing with much enthusiasm. Only one 'amakihi was seen. About five 'elepaio and about ten 'apapane were seen well. An equal number of each can be considered probables.

As we got up to return at about 1:45, we were excited to see an 'i'iwi fly into a koa tree, about 10m directly overhead, where it remained for several seconds.

Field Notes from Omer Bussen, 16 August 1976: Poamoho Trail

John Luther, a visiting California ornithologist, and I hiked the entire trail on a hot and sunny day.

Shama and Japanese bush warbler songs were even less apparent than on the July 11 trip, although one of the latter was seen flitting between bushes at the bottom of a steep slope below the trail. A number of house finches were seen. White-eyes were conspicuous, of course, even at the summit. Again only one 'amakihi was seen; no 'elepaio was seen or heard. We saw perhaps thirty to forty 'apapane, many of them just beginning to acquire some red feathers. They were all foraging in koa trees, even though 'Ōhi'a lehua was flowering profusely.

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From Peter J. Connally, 23 August 1976: Lanai Birds

It was like seeing old friends today, as I jogged across the Lanai Golf Course at Iwiolo Gulch. There I sighted about 30 plovers; the first sighting of plovers since they left for the summer. Their coloration was nondescript brown and I couldn't have made positive identification except for their calls and flight patterns.

Numerous seabird sightings all summer off the West Coast of Lanai, including red-tailed tropics, white-tailed tropics, brown boobies, shearwaters, noddies, two frigatebirds and suspected white-capped noddies. Two separate nests in the cliffs have been spotted where two red-tailed tropicbirds appear to live together. One shearwater nest spotted.

A cattle egret was sighted in late July feeding along the rocky shoreline at Kaunapali Harbor. The bird looked very clumsy as its long legs slid about on the slippery rocks. It would use its wings to assist as it followed the ground swell up and down in search of food. I couldn't see what it was eating. The harbor master told me that he had seen them in the pastures in Lanai City frequently but never at the Harbor.

There were two brush fires this summer in the Palawai Basin area that separates the Basin from the "bench fields." It was in this area that I have sighted many Hawaiian owls in the past. The only sighting this summer have been three in the "bench field" directly behind Lanai City.

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Postmarked 30 August 1976: Plover

Have seen plovers all over the island since my first sighting. Saw one feeding during low tide on exposed coral rock. Must have been eating seaweed or shellfish.

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From Maile Stemmermann and Sheila Conant: Poamoho

On August 29, hoping to see the elusive O'ahu creeper, we hiked part way to the Ko'olau summit on the Poamoho Trail. We left Honolulu while it was still dark, so we were able to start up the trail at 0630, just after sunrise. The weather was poor most of the day, with a heavy overcast and frequent downpours in the morning.

As expected, exotic species were common all along the trail. White-eyes, house finches, and spotted munias were especially common on the dirt road leading to the trail head. The spotted munias were also obvious at the edge of the trail throughout its length, feeding on the grasses which were growing there. At least three cardinals were singing, and one spotted dove was calling. Japanese bush warblers, usually obvious on this trail because of their frequent calls, were neither seen nor heard all day. However, we heard two melodious laughing-thrushes, Garrulax canorus, one from the dirt road and one about a third of the way along the trail.

Even though we never found any creeper, native birds were present in encouraging numbers. We started seeing 'apapane almost as soon as we left the car (about a mile and a half from the start of the trail itself). This species was numerous along the ridge; we saw and heard about 50 individuals. Of these, many were immatures, and we saw young birds

in completely brown plumage and somewhat older ones with varying amounts of red. The high numbers of this species may have been attracted to the large numbers of blooming 'Ōhi'a which were present throughout the area. The 'amakihi was far less common. We detected only five individuals, and the birds were not common on the trail itself; all but one were noticed either from the dirt road, or at the beginning of the trail. 'Elepaio were also uncommon. We heard two birds, apparently moving about together in a stand of mixed 'Ōhi'a and koa trees. One bird was singing, and the other answering it with call notes.

The most exciting sighting of the day came as we were sitting on the side of the trail overlooking a fairly large gulch. We had been there for nearly a half an hour when we saw first one 'i'iwi, and then a second, in one of the koa trees below us. They stayed for about five minutes, and we watched them as they gleaned insects from koa, naupaka, and other shrubs. One bird was in very faded plumage; the other in very bright feather, as though it had just molted. Curiously, they were never seen to take nectar from any of the heavily flowering 'Ōhi'a nearby, even though they had ample opportunity to do so. Judging from the reports of other people who have seen the 'i'iwi on this trail, our two birds were probably seen in the same place, or at least fairly close to where the others were. Possibly we have all seen the same individuals. Although we sat for long periods of time on other portions of the trail, we never saw nor heard any other 'i'iwi. It would be interesting to find out whether this pair is a pair of a larger population inhabiting Poamoho and adjacent ridges, or if it is an isolated pair.

After seeing the pair of 'i'iwi, we continued on up the trail to within about a half mile of the summit, alternately birding and searching for tree snails before we finally turned back, reaching the car at about 1530. We noted the presence of two Japanese wrinkle-back frogs on our way back.

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From Mrs. E.C. Cluff, Jr.: Kauai Birds

Monday, August 30, 1976, on two of McBryde Sugar Company's settling ponds at Mahaulepu, Kauai, Winona Sears and I spotted 24 ruddy turnstones, 17 plover and 5 stilt. Of the 5 stilt, we think three were almost full-grown "keiki". We also saw four koloea fly overhead. They were seen on one of the ponds the previous day by a company supervisor.

Letter from William P. (Pat) Dunbar, USNS Navasota, 15 August 1976

...I agree with you; /see 'ELEPAIO, August 1976, Vol.37, No.2, p.22/ the bird I inquired about is a Pratincole. While in Singapore I was able to get a book on birds of S.E. Asia, which includes many Philippine species. Of the two listed Oriental Pratincole (Glareola maldivarum) is the one shown as being in the Philippines. The book states that the Oriental Pratincole is often considered as being conspecific with the Collared Pratincole (Glareola pratincola) of W. Eurasia and Africa.

Our stay in Singapore was enjoyable. One very interesting place I visited, but unable to spend nearly enough time there, was the Bird Park, fifty acres, with exhibits scattered throughout. Five acres are enclosed to form a walk-in cage in which the birds are free flying. At one end is a man-made waterfall almost ninety feet high. Enclosed are four pictures taken inside the cage. The fifth picture is a little visitor we had some time ago, and with the aid of my new book I've tentatively identified it as a yellow wagtail. Another tentative identification is, the bright yellow bird with the dark wings I mentioned in my previous letter, black-naped oriole.

While in the Indian Ocean I saw numerous birds that were to be expected: sooty terns, great frigatebirds, red-footed boobies, red-tailed tropicbirds; the unexpected was a skua at Latitude 3'00" S., Longitude 66'00" E. I've seen them before in the S. Pacific and N. Atlantic. ...They are a dark gull-like bird with white wing patches, are predatory, are notorious in the Antarctic for their attacks on young penguins and other seabirds.

We are scheduled for a visit to Australia in October, a chance for more new birds. ...

The pictures will be displayed at the general meetings.

Review by E.H. Bryan, Jr., 1 July 1976: A new periodical publication of the South Pacific Commission, Noumea, New Caledonia, is called "Environment Newsletter." A copy of Volume 2, dated December 1975, has just been received at the Pacific Scientific Information Center, at Bishop Museum, where it is available for consultation. It could be of interest to

everyone interested in conservation in the Pacific area. The following is a list of the titles of the articles it contains: 1.Environmental impact analysis in the Pacific Islands, 2.Proposed training course on Environmental impact analysis, 3.Cook Islands create world marine park, 4.Ten points for Environmental administration, 5.Poaching by Oriental fishing boats, 6.Analytical service available, 7.Bibliographic retrieval service available, 8.Coral reef surveys, 9.Maurice Strong of UNEP calls for Pacific Environmental Conference, 10.IUCN proposes international convention, 11.Second regional symposium on conservation of nature, 12.Hazards from imported birds, 13.Guidelines for fish collecting, 14.International foundation for science, 15.Marine turtle utilization, 16.Recommendations from recent meetings.

The Pacific Science Association also has a copy of Volume 1.

30 July 1976: Pygmy Parrots of Solomon Islands--The South Pacific Bulletin (Vol.26, No.2, pp.41-42 and 48), 1976, contains an article by Heinrich L. Bregulla, which describes and pictures, with field notes, the Pygmy parrot, Micropsitta finschii. The four subspecies found in the Solomon Islands vary by having either a blue spot on the crown, the chin bluish in males and pink in females, or the middle of the abdomen reddish in males. Other species of the genus Microspitta range from New Guinea eastward through the Bismarck Archipelago and the Solomon Islands.

The field notes include the calls, food, nest and breeding. These pygmy parrots are not as rare as have been claimed. They are protected by law.

RECENT OBSERVATIONS OF BIRDS ON OAHU--MAY TO JULY 1976

By Robert L. Pyle

Observations not otherwise credited are by the author (RLP). HAS indicates Hawaii Audubon Society field trip.

Black-footed Albatross--Five sightings of at least two birds, two to three miles off Diamond Head, on April 7 (Rey Larsen). In late May, at least 12 were seen on Moku Manu on the seaward side not visible from Ulupau Head (J.Obata from small boat). No Laysan Albatross were seen.

Christmas Shearwater--At least six sightings in waters close to Moku Manu, late May (J.Obata from small boat).

Newell Shearwater--Seven seen in Kauai Channel, nearer to Oahu than Kauai, from SEAFILITE hydrofoil, May 12 (H.D.Pratt). Only one Wedge-tailed Shearwater was seen with them.

Red-tailed Tropicbird--Three, singly, flying off Ulupau Head, Mokapu Peninsula, on July 10.

Blue-faced Booby--Two on Moku Manu, seen through scope from Ulupau Head, May 9 (RLP, HAS trip). In late May, at least 30 were on Moku Manu, on the seaward side not visible from Ulupau Head (J.Obata from small boat).

Great Frigatebird--Nine, flying high over Waikiki Shell in Kapiolani Park, heading directly mauka, at sunset July 25.

Cattle Egret--A count of 150 at the big pond on Waipio Peninsula July 10.

Black-crowned Night Heron--Fifteen counted at Walker Bay, Waipio Peninsula, at medium tide July 10.

Black Brant--Last reported sighting of the wintering bird at Nuupia Pond, Mokapu Peninsula, was on April 10 (R.Larsen).

Hawaiian Duck--Two observed flying over the big pond at Waipio Peninsula July 18 (F.Zeillemaker). Blue speculum with two white borders was seen.

Northern Shoveler--Six were at the Honouliuli replacement habitat on July 18, an early date.

Hawaiian Coot--At the big pond on Waipio Peninsula, 25 were counted on July 10 and 25 counted again on July 18. At Honouliuli July 18, eleven were on the large pond, and one nearly full grown chick and one adult were on the shrimp pond.

Killdeer--One bird was watched at leisure at the big pond on Waipio Peninsula on July 10 (RLP, R.Cunningham, W.Benning) and again on July 18 (RLP, F.and M.Zeillemaker). Two breast bands were seen clearly. Turnstones and golden plovers were nearby for size comparison. On the 18th it was also observed in flight, when it showed the reddish tail and gave its characteristic call.

Golden Plover--Of 81 birds in one group at Nuupia Pond, Mokapu Peninsula on May 9, about 20% were in full breeding plumage, a few were in transition, and the rest showed no

black at all. Summer records include: 1 at Kailua Beach June 21; 5 at Walker Bay, Waipio Peninsula, July 10; 1 at Paiko Lagoon July 17 (M.Stemmermann); 6 at Waipio Peninsula and 7 at Honouliuli replacement habitat on July 18. One of the Walker Bay birds showed some black on the belly; the other summer birds had none.

Black-bellied Plover--One bird, with some black remaining on the belly, was seen well at Keehi Lagoon, in close comparison with golden plovers, on July 30 (RLP, R.Walker).

Wandering Tattler--One at Paiko Lagoon July 17 and again on July 25 (M.Stemmermann). One at Waipio Peninsula and 5 at Honouliuli replacement habitat July 18.

Ruddy Turnstone--A group of at least 55, mostly in full breeding plumage, were at Kaluapuhi Pond, Mokapu Peninsula, May 9 (RLP, HAS trip). Two were found at Waipio July 10 and 21 were there on July 18. Three were at Honouliuli replacement habitat July 18.

Sanderling--Three at Kaluapuhi Pond, Mokapu Peninsula, May 9. No summer sightings have been reported.

Hawaiian Stilt--After being absent from Paiko Lagoon since early December, stilts were first reported back there on July 5, with 6 to 10 seen there regularly thereafter (M.Tseu). M.Stemmermann reported 4 there on July 17 and 8 on July 25 when the tide was lower. At the big pond on Waipio Peninsula, 55 stilts were counted on July 10, and over 200 on July 18. An additional 41 on the 10th and 26 on the 18th were seen elsewhere in the Waipio area. Also on July 18, 13 were at the Honouliuli replacement habitat where water has recently been pumped into several large ponds designed specifically for stilts.

Gull, probably California or Ring-billed. One bird observed sitting and in flight, at 50 to 100 yards distance, in Keehi Lagoon July 25 (R.Walker, RLP). It was in virtually adult plumage: medium gray mantle; black wing tips with a few white spots; head, underparts and tail pure white except for some very faint mottling on the back of the head. Legs were greenish. Bill was rich yellow with the outer 20% very dark or black. The bill seemed large, and the head seemed large and flat-crowned. In flight, the flight feathers and tail feathers looked ragged. The bird was seen first standing on a sand bar, then it flushed and circled in flight for nearly a minute. Later, we found it standing in a pool at the ewa end of the reef runway, where we watched it through a scope for 15 minutes at 75 yards distance. It was seen again in Keehi Lagoon, at much greater distance, on July 30.

Least Tern--Four individual birds, scattered 20 to 50 yards apart, sitting with plovers, turnstones and stilts in a dry rocky basin (at high tide) in the reef runway construction area July 23 (R.Walker, RLP). Three were in full adult plumage with brilliant yellow bill and distinct black cap. The fourth, probably immature, had a dingier bill and considerably more dark showing in the folded wing.

Black Noddy (White-capped Noddy)--Fifteen counted at Kaluapuhi Pond, Mokapu Peninsula, May 9, and 14 there on July 10. Good numbers were frequenting the caves on the seaward side of Moku Manu in late May (J.Obata from small boat).

White Tern--Six in view at once, in two groups of three, on June 5 circling over Kapiolani Park, occasionally landing in ironwood trees, and sometimes flying out to sea and returning. Three were seen there July 10.

Red-crowned Parrot--Two, on July 10, in Kapiolani Park across Kalakaua Avenue from Waikiki Aquarium. They were perched on bare limbs, in full view, 20 feet above our heads. They were all green, with a red forehead and crown, big yellow parrot bill, and a short, square-tipped tail.

Red-billed Leiothrix--Two birds watched for ten minutes as close as 10 feet as they scolded almost continuously in a draw leading into a residential area from near the tennis courts on Paki Avenue, Kapiolani Park, June 5. These might have been a fairly recent release rather than a movement from higher forests into this area; the latter would be unexpected at this time of year.

Red-whiskered Bulbul--One was seen perched on a dead snag along the trail a few hundred yards above Wa'ahila Ridge Park June 13 (HAS trip). A group of 4 or 5 seen along the road leading to Manoa Cliffs trail July 2 (J.Walters). Same observer reports this species seems more numerous on the University of Hawaii campus this summer.

Red-vented Bulbul--A pair nested successfully in June in a potted plant hanging under the eaves of a home in Kailua. Another nest, presumably by the same pair, was built in the same place in July. Two young fledged on July 30, and one full grown chick was left dead in the nest. Both nests and the dead young, with additional data, were given to Bishop Museum. A pair, seemingly acting distressed as if guarding a nest or young, were

watched in upper Hahaione Valley back of Hawaii Kai, at 600 ft. elevation, July 31 and August 1 (J.Wilmoth). Three perched on an agave on Manoa Cliffs trail July 2 (J.Walters). Two birds were seen at Ft. Kamehameha on July 20, after one had been seen there earlier in April (R.Walker).

Mockingbird--At least 4 in a group, perhaps a family, on Na La'au trail July 2 (J.Walters).

Magpie-robin (Dyal)--Walter Benning, a Mainland visitor and experienced bird-watcher, reported a long-tailed bird in Wahiawa Botanical Garden July 9 which he concluded was this species. He observed it well for a few moments as it perched on an open bridge railing. He described it as white below (with no orange) and black above with a large white area in the wing. It was the size of a shama, which he also saw in the same area and which he knows well. The only other report of this species on Oahu since 1950 is an unpublished sighting on Tantalus by William and Mae Mull in 1966. Other visitors to Wahiawa Botanical Garden should watch carefully for this species and report any further observations to RLP.

Shama--Numerous in Pu'u 'Ōhi'a (Tantalus)-Manoa Cliffs area June 26, and also seen on Wa'ahila Ridge trail July 3 (both by J.Walters). This species is being reported more and more frequently throughout Oahu including, for example, Waimea Falls Park and Wahiawa Botanical Garden. Eight to 10 were seen or heard on the grounds of the Coast Guard LORAN Station in upper Haiku Valley June 20 (T.Burr, RLP).

Japanese Bush Warbler--At least 20 heard giving one or both of their common songs, and several seen quite well on exposed branches of brush and small trees, at the Coast Guard LORAN Station in upper Haiku Valley June 20 (T.Burr, RLP). Heard regularly during the summer (but not seen) along eastern Oahu trails including Manoa Cliffs trail (June 26) and Wa'ahila Ridge trail July 3 (both by J.Walters), Poamoho (July 11-HAS trip), Kaukonahua trail back of Wahiawa (July 25) and Manana Ridge trail back of Pacific Palisades (Aug 1).

'Amakihi--Several on Wa'ahila Ridge trail July 3 (J.Walters), but only one on Poamoho trail July 11 (HAS trip). Two on Manana Ridge trail back of Pacific Palisades August 1.

'Apapane--At least six, including one immature, were seen on Wa'ahila Ridge trail July 3 (J.Walters). The HAS trip to Poamoho trail July 11 found at least 10, including 2 adults and 2 brown immatures together gleaning insects from leaves in an albizzia tree.

'I'iwi--One bird was seen adequately July 11 on Poamoho trail, somewhat beyond half way to the summit. It flew up from below the trail, into a tree 30 ft. above our heads. It perched there for a moment on a bare branch against a gray sky, and then flew on up into the forest. Its characteristic call was heard once from below, and twice from above after it flew. Several observers had a good glimpse of the large decurved orange beak (HAS trip).

Cordon-bleu (sp?)--These were heard several times on Na La'au trail July 2, and one (without red cheek patch) was seen (J.Walters).

Lavender Fire-finch--Two near the archery range in Kapiolani Park, and 6 beyond the stone wall on the Na La'au trail June 5 (RLP). Twelve to 15 in a loose group beyond the stone wall on Na La'au trail July 2 (J.Walters).

Red-eared Waxbill--One near the archery range, Kapiolani Park, June 5.

Spotted Munia--A few groups of 4 to 5 birds each were seen way up Poamoho trail July 11, and way up Manana Ridge trail August 1. Exact locations not determinable.

Java Sparrow--An estimated 35 together in a tree back of the archery range in Kapiolani Park June 5. Up to 8 in July on Sonoma Street in Manoa, and also seen on Mid-Pacific Institute campus (R.Gardner).

Pin-tailed Whydah--A male in fine plumage chasing two females or immatures in a small park area across Paki Avenue from the golf driving range, Kapiolani Park, July 10. Whydahs were reported earlier by W.Benning in this park area.

Red Bishop and Golden Bishop--One male of each species feeding together in grass between the archery range and tennis courts, Kapiolani Park, July 10.

Saffron Finch--Three, with rich orange on face and head, in a small park area across Paki Avenue from the golf driving range, Kapiolani Park, July 10. Also, one with little if any orange seen on Mid-Pacific Institute campus July 27 and 28 (R.Gardner).

Cardinal--One immature in a blooming 'Ōhi'a tree pecking at a blossom, Kaneohe, July 31 (M.Stemmermann). Cardinals were seen and heard at several places along Poamoho trail July 11 (HAS trip), including one bird heard singing somewhat over half way to the summit.

Observations of Birds on Maui: Wilson Phalarope--One bird seen very well at Kanaha

Pond July 8 by Richard Cunningham, newly appointed Director of Interpretative Services for the Western Region (including Hawaii), National Park Service.

Observations of Birds on Hawaii Island: Golden Plover--Five, in non-breeding plumage, observed at 4000 ft. elevation on Kahuku Ranch, in koa parkland being used for pasture, July 24, by Lani Stemmermann.

Field Notes from Frances Kenyon: Plover and Stilt

Eight plovers were on the first fairway of the Kuilima golf course on August 17, 1976. These were observed in the morning about 8 a.m. As many as 20 plovers were seen the next day about 4 p.m. These were in the area mauka of the Kuilima heliport pad. We believe this area to be one of the plovers established gathering spots. They were there in numbers before they left last spring.

After a heavy rain on August 18 a stilt was on the first fairway of the golf course in a narrow pond made by the rain.

NISKA NEWS, Jan-Feb 1973, page 1: Rare Species Now at Kortright, O.W.R.F. Obtains Nēnē for Display Collection (Dr. & Mrs. Everett Jaquith's contribution through Thelma Hensley)

...The Ontario Waterfowl Research Foundation is proud to accept its trio from the Rare and Endangered Section of the United States Department of the Interior's Patuxent Wildlife Research Center. These birds will form the nucleus of what is hoped will become a large flock of nēnē. Such a flock will further ensure the survival of this magnificent species.

The birds, being tropical, are housed for the winter in the indoor holding facilities of the Niska Waterfowl Research Center. With the advent of the warmer months, the nēnē will be transferred to their own enclosure in the Kortright Waterfowl Park where they will demonstrate to visitors the innate tameness and curiosity that has endeared them to so many.

HONOLULU STAR-BULLETIN, 31 August 1976, page C-7: Nēnē on Its Own as Survival Test by ^{Bob}Barr

The nēnē...is beginning a critical test of its ability to survive. The State plans to release a couple dozen more nēnē from pens here this fall, then suspend the breeding program which has increased the official State bird's population from about 40 in the 1940s to 1,000 or so today.

"At that level, they are obviously still threatened," said Ron Walker, chief of the state's wildlife branch. What number is ideal? That's what the State wants to know. "No one knows," said Walker. "You'd have to have a wild, self-sustaining population which could survive a natural disaster, like a volcano eruption."

The nēnē does not reproduce abundantly in the wild. A domesticated nēnē will lay two or three clutches of eggs in a year, while in the wild it will lay but one clutch of up to four eggs. The nēnē is a relative of the Canada goose, but instead of mucking about in marshes, the nēnē inhabits the arid volcanic highlands of Maui and Hawai'i. "It's not a waterfowl, it's a lava-fowl," Walker said. Like its relatives, the nēnē is easily domesticated--a key to its survival. ...

Although it will stop breeding nēnē, the State will monitor the population closely and will continue to kill pigs, cats, goats and mongooses which prey on the geese. If the population drops, Walker said, the breeding program will be resumed.

HONOLULU STAR-BULLETIN, 9 August 1976, page A-17: Restoring Native Ecosystem by ^{Whitten}Harry

...The National Park Service is trying to restore the native ecosystem in Hawai'i Volcanoes National Park as it was before the arrival of exotic plants and animals.

Superintendent Robert Barbee and his staff are moving in several directions toward this objective. He cited progress made and the plans for further action. A major success so far is the reduction of the feral goat population to tolerable limits. There are an estimated 300 goats in the park now, compared to an estimated 14,000-15,000 four years ago. ...Hawai'i's goats are domestic goats gone wild, the descendants of animals brought to the Islands by Captain George Vancouver in the late 18th century....The park has natural boundaries of sea and lava flows, but the other sides are being fenced to keep goats out. With the goats gone, plants are coming back, Barbee noted, with satisfaction.

"We hope to restore biological integrity to the park. We hope to perpetuate the natural system, as it would have been if man hadn't interfered," he said. Barbee says it take more than eliminating goats, however, to achieve this objective. The next goal will be to reduce the population of feral pigs, descendants of pigs brought here by the Hawaiians but which have mixed with pigs brought by other peoples. Pigs root in the ground and do much damage to plants. They'll pose a more difficult problem than goats, Barbee said, as it's pretty hard to fence them out. Hunters will be deputized to shoot pigs and studies will be made of pig biology in hopes of finding ways to reduce their numbers in the park.

Rats and mongooses also cause problems in that they eat birds and bird eggs. Feral cats are also in the park, although they create a lesser problem, Barbee said.

Nēnē...once inhabited the park. Nēnē are now being released in hopes of restoring a breeding population. The Park also has a nursery with rare and endangered plants that will be set out in selected areas. ...Exotic plants are a problem, Barbee said. Not much can be done with some of them, he admitted, but work can be done to eliminate some others.

One plant he is watching with considerable interest is the banana poka, which has become quite a pest on the Hamakua Coast and at Kōke'e, Kaua'i. It has been found on the fringe of the Ola'a Tract, administered by Hawai'i Volcanoes Park.

What can we do to realize the new concept as expressed in the following paragraphs from Susan Flader's article Scientific Resource Management: Part II, Preservation of the System? (AMERICAN FORESTS, August 1976, Vol.82, No.8, pp.49-56):

p.52: ...The 1930s were years of conceptual reorientation for Leopold and other

leaders in the biological sciences and management profession....The new conception, as Leopold (1939) viewed it, had important implications for the management professions. The old approach of economic biology sought to give a competitive advantage to those species deemed useful to man, such as deer or pines or corn, as against those deemed harmful or expendable, such as predators, rodents, or insects. But the new approach, as Leopold put it, "lifted the veil from a biota to complex, so conditioned by interwoven cooperations and competitions, that no man can say where utility begins or ends." ...

p.53: ...In his presidential address to the Wildlife Society in 1940 Leopold... suggested that wildlife men might be helping to write a new definition of the purpose of science. Most definitions dealt almost exclusively with the creation and exercise of power--or the notion of environmental control. "But what about the creation and exercise of wonder, of respect for workmanship in nature?" he asked. He was looking toward the day when the "senseless barrier" between science and art would blow away, and he hoped that ecologist might help do the blowing. ...Among those who did identify with the ecosystem concept, many retained a reductionist stance. Far from adopting an attitude of humility toward man's capacity to understand and control the system, they argued that man, as an exceptionally powerful biotic factor in the ecosystem, had the capacity not only to upset equilibria but also, through science, to create new ones of vastly different character better suited to his own needs and purposes. This biotic arrogance was buttressed by the wartime mobilization of science and the spectacular pace of change in post World War II....

p.54: ...To a greater extent perhaps than at any time since the founding of the nation we are questioning the economic, social and environmental basis of our civilization....One of the most important contributions of ecosystem research to date is the dawning realization that naturally functioning homeostatic mechanisms or "biological controls" in a basically healthy environment are more reliable in the long run than attempts at total control through eradication of "enemies." We have to learn to encourage diversity and accept a degree of risk and uncertainty in biological relationships and also in human affairs. ...

p.55: ...As we continue our search for a better adjusted, more viable economy and society, we must find new avenues to human fulfillment and happiness, new ways to release creative human energy that do not result in continued drain on biotic capital. ...

p.56: As Aldo Leopold suggested as early as 1934: In the long run we shall learn that there is no such thing as forestry, no such thing as game management. The only reality is an intelligent respect for, and adjustment to, the inherent tendency of land to produce life.

Please send in comments to Kojima, 725-A 8th Avenue, Honolulu, Hawaii 96816.

ALOHA to new members:

Life from Regular: Dr. Sheila Conant, 3663 Alani Drive, Honolulu, HI 96822

Junior: John Rybczyk, 1203 Haloa Drive, Honolulu, HI 96818

Regular: David G. Abbott, Co B, 125th Signal Bn, APO San Francisco 96225

Mrs. Roselle F.K. Bailey, P.O. Box 218, Kaunakani, Kauai 96747

Esther King Black, 45-090 Namoku St, Kaneohe, Oahu 96744

Daniel Y.D. Chung, 3324 Wiliana Place, Honolulu, HI 96816

Robert M. Cowan, 281 Portlock Road, Honolulu, HI 96825

Dr. John B. Hall, 5326 Keikilani Circle, Honolulu, HI 96821

Bernice Warner, 45-090 Namoku St, Kaneohe, Oahu 96744

Waialua Library, P.O. Box 684, Waialua, Oahu 96791

In Memoriam: Mrs. John C. Plews, a long-time life member, died 4 September 1976. She generously had sent in field notes from Koke'e, Kaua'i. We'll miss her, and we extend our deepest sympathy to her family.

Donation: MAHALO. Anonymous Pohai Nani resident has generously donated \$1.00. MAHALO!

Effective Immediately: Please change Hawaii Audubon Society's mailing address to P.O. Box 22832, Honolulu, Hawaii 96822.

The Corresponding Secretary Lani Stemmermann has resigned and Mrs. Robert L. Pyle generously consented to takeover the duties. MAHALO NUI LOA!

Please report all bird sightings to field observation recorder, Dr. Robert L. Pyle, 741 N. Kalaheo Ave., Kailua, Oahu 96734, telephone 262-4046.

HAWAII'S BIRDS, a field guide, is now available. Price per copy: \$3.00 + postage & tax
Postage: U.S. 21¢ book rate, 57¢ first class; foreign--variable, weight 5ozs; sales & mailing in Hawaii--add 12¢ sales tax. Send in orders to Book Order Committee, Haw Aud Soc.

OCTOBER ACTIVITIES: *Please note date

* 6 October - Board meeting at Waikiki Aquarium Auditorium, 7:00 p.m. Members welcome.

10 October - Field trip to study waterbirds. Meet at the State Library on Punchbowl Street at 7:00 a.m. Bring lunch, water and if possible your car. Transportation cost (\$1.00) to be paid to the drivers. For information call evenings: Omer Bussen 262-5506 or Dr. Robert Pyle 262-4046.

18 October - General meeting at Waikiki Aquarium Auditorium at 7:30 p.m.
Program: Hawaiian Land Fauna by William F. Burke (color slides)

HAWAII AUDUBON SOCIETY EXECUTIVE BOARD: President-Dr. Sheila Conant; Vice Presidents-Charles van Riper III & William F. Burke; Secretaries-Catherine R.C. Unabia & Leilani Pyle; Treasurer-Timothy A. Burr; Board Members-Drs. F.G. Howarth & R.L. Pyle
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DUES: Regular-\$3.00 per annum, Junior(18 years and under)-\$1.00 per annum, Life-\$100.00