THE ELEPAIO

Journal of the Hawaii Audubon Society

For the Better Protection of Wildlife in Hawaii

VOLUME 31, NUMBER 10 APRIL 1971

CONCERNED

Letter to Chairman Sunao Kido, Board of Land and Natural Resources from Robert J. Shallenberger, UCLA graduate student in zoology, who has been making field studies on Manana for the last two years on seabirds, principally concerned with the breeding biology of the wedge-tailed shearwater:

In view of the fact that my numerous conversations with Fish and Game personnel have produced no significant results, I think it is time to communicate with you. The subject of this letter is the future of Oahu's offshore bird refuges.

I have spent spring and summer of 1969 and 1970 conducting research on these islands, principally Manana. During this time, I have worked out of the Oceanic Institute at Makapuu, so I have been able to observe Manana almost every day, either from on the island or from shore. I have made over 50 visits to these islands and have learned a great deal about the past and present effects of both authorized and unauthorized activity on the islands.

As the law stands, only Manana and Moku Manu are "completely protected." Permits to visit the Mokulua (with agreement to remain on the beach area) are easily obtainable. Anyone can visit Flat island or Black Rock, without permit. In theory, this is a convenient arrangement: it allows the average citizen to use offshore islands for camping and fishing enjoyment, yet protects the wildlife on the islands having the most dense breeding bird colonies. However, in practice, this arrangement doesn't work at all, and I am afraid that no one will be happy with the results.

At least ten, and possibly thirteen, species of seabirds breed on these islets. None of these is on the endangered species list; however, the future breeding success of at least five of these on Oahu's offshore islets is questionable. Of the others, we can attribute their apparent resistance primarily to their large numbers and to the relative difficulty of landing on Moku Manu, which holds more species than the others put together. However, none of the species is immune to the mistakes of man, as witnessed by repeated destruction of bird colonies in the northwest part of our island chain over the last century.

Purely from an economic standpoint, the value of boobies and terns for locating fish schools is well known. Also, the possible use of seabirds for food in the future is a very real consideration. Seabirds make up a large portion of local diets in several areas of the world. As a source of animals for scientific study, our offshore colonies provide a rare opportunity. They are located close to a highly talented scientific community, with an immense variety of research equipment available. As complete ecosystems in themselves, each of the islets should be studied extensively. The opportunity to examine the interrelationships and evolutionary adjustments of complex animal and plant communities is right off our shoreline. From a medical standpoint, the importance of seabirds in disease

transmittance needs further investigation. Also, as mentioned by a previous investigator, the rabbit population on Manana may provide an accessible animal population suitable for medical research. In addition to these, there are the very real but unpredictable affects of tampering with ecosystems we don't fully understand.

From an aesthetic standpoint, there is no question about the need to preserve our local seabirds. There are no comparable colonies within 250 miles of Honolulu. Unfortunately, one need not shoot every bird to eliminate seabirds from our islets: misuse of the islets themselves will do the job much quicker.

Before discussing recommendations involving the future protection of the islets, I think a short description of our past and present influence will be informative.

Moku Manu: All of the seabirds found on the other islets either breed on or frequent this island. This diversity has apparently remained relatively stable over the last 30 years, for which we have recorded information. This is due, in part, to the diversity in nesting habitat making it possible for each species to select its own distinct nesting conditions. Also, the difficulty involved in landing prevents all but the most daring individuals from visiting the island. Apparently no prolonged occupation by man has taken place. This may also have contributed to the success of the birds.

Unfortunately, however, all is not rosy for Moku Manu. Anyone determined enough can, and will, land on the island. The rapid increase in number of power boats on the island of Oahu means that more and more poeple will take the short trip from Kailua harbor or Kaneohe Bay. The fishing and diving are tremendous near the island and this attracts people rapidly. The island is not easily observable from shore, making it necessary for wardens to actually visit the island to catch unauthorized visitors. This is totally impractical to even consider with the present staff and its other obligations. The presence of litter and well walked pathways on the island substantiate the claim that at least a few undesirable visitors land at the island. Iam not prepared to claim that current military shelling of the island is definitely taking place, but the presence of scattered unexploded ammunition on the island makes this possibility worth investigating.

Flat Island: This island is so close to shore that visitors can easily swim or possibly even walk to it during low tide. There is almost always at least one camping group on the island. What has been the result? Only shearwaters (and possibly a few petrels) nest on the island. Their limited success may be attributed to the nesting sites they choose: the holes and tunnels in the coral structure. Yet even this is not enough protection. Last year, over 70 birds were found dead on one occasion, the result of senseless slaughter. I'm sure far more than this have met the same fate. The high stands of vegetation on the island could possibly support booby nests; however, the constant visitation would undoubtedly prevent this.

Mokulua: These islands are also easily accessible from Kailua and Lanikai beaches. Boats frequent the area every day of the week. North island has a beach area on which several people (with and without permit) land each week. A fence, designed to keep visitors on the beach area, works about as well as a sign to keep people off Manana. Shearwaters burrow over most of the island, but numerous man-made trails in the area demonstrate that they don't have it all to themselves. Unfortunately, the ground is loose soil or sand and a person walking through the colony invariably destroys burrows and possibly young or adults within.

Black Rock: The geology and vegetation on this island are unlike the other islets off Oahu. For this reason alone it deserves serious study. Shearwaters and petrels nest on the island, but their future success is highly questionable.

Diving and fishing in the vicinity are again exceptional, and the island is visited invariably each weekend and often during the week. Most visitors restrict their movements to the shoreline for fishing purposes. However, the entire island is littered with all kinds of garbage. Pathways cover the island, and only those birds which utilize deep crevices and rock burrows are relatively safe from humans. Crushed burrows are evident in several locations. Also, overturned rocks in the numerous lava piles indicate that several birds have been evicted from their nests.

On a recent trip (late August) I found the remains of over 50 Bulwer petrels (a bird which nests in very low numbers on both Manana and Black Rock) near the area of most human activity on the island. Unfortunately, the birds were decomposed to the point that it was difficult to tell the cause of death. From my experience, I would consider humans, rats or owls as possible causes. However, the relatively intact condition of the skeletal material and the presence of large amounts of dried meat on some specimens, would seem to rule out the last of these possibilities. The similarity of conditions to the aforementioned slaughter on Flat Island was evident. Rats have been observed on Black Rock in recent years. They may also prevent the nesting of large numbers of terns on the flatter areas of island. Manana's sooty tern colony is relatively recent in origin, and I am hard pressed to explain why Black Rock has not been colonized as well, on the basis of characteristics of the nesting habitat. I attribute the lack of terns and the petrel destruction to the presence of man and to rats, or both. In either case, man is probably at fault. The continuous movement of men and equipment onto the island was most likely the source of the original colonizing rats.

Manana: Most of my observations have been made on this island and it is here that I have the best idea of our influence on the wildlife. Prior to the war, all indications are that visitors were primarily fishermen and divers, who restricted their activity to the shoreline areas. Few boaters were at sea for pleasure. During the war, the military began to exert its damaging effects. Artillery practice from the shore and bombing from the air affected the island to an extent we will never fully comprehend. Most of this activity was prior to the rapid colonization and expansion of the sooty tern colony, which is now the largest in the islands. The island is littered with remains of shells and bombs left over from this activity. I make an effort to leave everything untouched to avoid injury, but it is impossible to determine what still may be dangerous. Much of the material looks intact. Every heavy rain uncovers more and more junk. It is not only a hazard, but an eyesore as well.

Since the war, boating activity in these waters has increased manyfold. Fortunately, our terriotrial government saw fit early enough to enact legislation to "protect" this island. I hate to think what it would be like if these laws were never passed. However, a law which is not enforced adequately is next to useless and this is a fine example.

The most common visitors continue to be fishermen and divers. Local people who have thrown nets in Manana tidepools for several years, continue to do so with surprising lack of concern over the change in laws. When asked what they are doing on the island, they invariably say that they thought the sign applied only to the bird colonies, not the beach. Whether this is an excuse or not is irrelevant: in actuality, many of the visitors are unaware of the extent of the laws. However, it is obvious that many others see no real threat involved. As far as I can discern from Fish and Game officials, only one prosecution has been carried through since I have been in Hawaii. And what good is this if no one knows about it? I have made a practice of informing unauthorized visitors of the law. Most leave willingly. Others have given me a great deal of trouble. In the one such case where I was able to reach the Fish and Game wardens by walkie talkie, the people in question were let off with a warning. In fact, the only other time I have seen a warden on the scene when an unauthorized visitor was present, he too was only warned. I have been asked by the wardens to radio in when I find people on the island, but unfortunately their other duties make it too difficult for them to make it to the scene quickly enough. In one case, when I informed the head warden of a party of marines which had spent an entire Sunday on the island, he was unable to meet their boat at shore soon after, although it was less than two miles from his house.

A large number of tourist visitors to Manana come out on surfboards, canoes, kayaks and rafts from inshore Kumu cove. Many of them honestly did not know the island was protected until they were within reading distance of the sign. After a long paddle like that, I would want to land and rest also. Unfortunately, they don't always restrict their activity to the beach.

Many of the small boats I see offshore are not numbered making it difficult to report for later arrest. Many people leave when they see me coming. Most easily outrun me in my 4 hp rubber raft, even if I wanted to chase them. Fortunately, now I have a power boat at my disposal and can get to the island much quicker if unauthorized visitors are seen from shore. Surfers make regular runs out to the island and I have seen as many as ten surfing in the break on the island. I have never seen any of these people leave the beach area, but I am there only a fraction of the time and they are difficult to see from shore. Weekends, of course, are the worst; especially, holiday weekends.

I really do not mean to criticize the Fish and Game department for its limited effort. I understand their shortage of manpower and boats, as well as their inability to "be everywhere at once." I also know they are genuinely concerned over the protection of the colonies. I only hope that I can make some suggestions that will work for the better.

So, what has been the influence of visitors to the islands? This will have to include both authorized and unauthorized visitors, as the former are often more destructive in the long run.

1. Disturbance in the tern colonies:

These densely packed birds appear at first glance very resistant to visitors, as they return quickly to their nests after a person walks through the colony. Unfortunately, mortality can run high and go unnoticed to the casual observer. Eggs are often inadvertently stepped on (or intentionally ruined by thoughtless persons). Younger chicks are also stepped on. In addition, they succumb rapidly to the heat when their parents are forced to abandon the nests. Older chicks may flee their nest site when disturbed and be unable to find it again, dying of starvation as a result. Nests may be destroyed as well. In the tern colonies of the more rocky slopes, eggs roll down the slope as startled adults leave their nests. Running chicks roll down or even jump off the cliffs in great numbers. Again, camouflaged eggs and chicks are often stepped on. Rocks broken loose by careless steps or fleeing birds, crush eggs, chicks and even adults as they roll down the slopes. In addition to these more obvious effects, repeated disturbance within the colonies undoubtedly reduces breeding success in more subtle ways.

2. Destruction of shearwater burrows:

Most of the soil covered areas of Manana and the other islets are heavily burrowed by shearwaters. The soil is very loose and it is almost impossible to avoid crushing burrows if one passes through the colony. Depending on the time of year, this activity could kill adults, eggs or young, or just destroy nests, reducing the breeding success of the colony as a whole. Fortunately, this destruction can be almost eliminated by avoiding the burrowed area altogether or by constructing necessary pathways during times of the year when burrows are unoccupied. Knowledge of right places to step within the colony and how to recognize the softest spots, also avoids this destruction. I witnessed Fish and Game wardens leading visiting photographers right through a nesting area last week (Sunday, October 11). One warden stepped through several burrows as he walked through the crater, and some of these burrows were within my study plots. This could easily have been avoided, although it continued even after my warning.

3. Accumulation of garbage:

I have tried to pick up garbage as I see it on Manana and take it back to land periodically. It still accumulates, however, and I have not been able to stay ahead of it. Besides the hazard of broken bottles, its an unnecessary eyesore.

4. Interference with research:

During my two seasons of study, I have had gear stolen at all stages. This year, I have a locked shed in the crater and so far nothing has been disturbed here. Outside the crater, food has been eaten or stolen, water has been drunk, and some equipment (Coleman lantern, tarp, flashlight, etc.) has been stolen. However, even more damaging, in one study plot where I had marked shearwater burrows for continuous observation, many of my burrow stakes were removed. This ruined a good portion of my work. The obvious necessity of moving my study plots

into the crater to avoid this, has made my work much more difficult and time consuming. Also the need to carry all expensive gear to the island each trip has been a real inconvenience.

5. Damaging effects of authorized visitors:

The aforementioned example of Fish and Game personnel in the shearwater colonies is a good example. I have learned much of the information mentioned directly from my own mistakes. I have also relied heavily on the work of others in other colonies and thereby avoided some damage I might have done. Some of the birds I have examined have consequently deserted their nests, but I have learned enough about my effects to reduce this damage considerably. In addition, I know where I should and should not walk and also at what times of the year I should be especially careful. Much of this information is known by Fish and Game personnel, but it should be common knowledge for everyone that visits the island. I would be happy to help out in this respect.

I have tried to avoid any permanent influence on the island. I am still cleaning up rusted chicken wire and stakes left by an investigator before me. When I am through, I intend to remove all my gear.

Up to this point, I have discussed the very real threat that hangs over the fate of our offshore refuges. Now I would like to offer some suggestions for future conservation. I feel that all of them would serve to preserve our seabird colonies, but that any of the steps taken would be in the right direction. Unfortunately, I don't think we have time left to take one step at a time.

1. Immediate effort to make better known the protected status of our refuges and the purposes for protection. This should include newspaper and newscast coverage as well as inclusion of this information in tourist oriented publications. Information regarding penalties involved should also be included.

2. Increase in penalties for unauthorized visitors on protected islands. This means less warnings and more convictions, followed by public notice of the proceedings.

3. Avoid changes in the status of the present laws that would permit use of the Manana beach area. This would just be asking for trouble. We can't even watch over it efficiently as the law stands.

4. Increase in size of the present Mokulua fence for better protection of the colony. If not this, I would suggest at least temporary exclusion of all people from these islands. Possibly seasonal (November-March) permits would lessen the damaging influence on the birds, although shearwater burrows can be destroyed any time of the year.

5. Placement of additional signs regarding the "No landing" status of protected islands at effective locations (i.e. Makapuu beach park, Kumu Cove, Waimanalo beach park, Lanikai, Kailua Beach, Kaneohe).

6. Temporary (at least for one year) exclusion of all persons from Black Rock during the nesting season.

7. Rewards offered for "information leading to the arrest of unauthorized visitors on the protected islands." This would increase the size of the protective force manifold and more quickly make new efforts at protection effective.

8. Cooperation with the military should be sought after to prevent artillery firing at Moku Manu, as well as unauthorized military personnel visiting the refuges.

9. A detailed plan for future conservation and research use of the offshore refuges should be drawn up. Suitable criteria for the authorization of visitors should be determined and enforced. Complete restoration of the natural condition should be required of all visitors.

10. Investigators should submit detailed summaries of information learned about the effects of man and other disturbances on the refuges so that plans for future conservation can be geared accordingly.

11. All vessels visiting the islands should be thoroughly checked to avoid the accidental introduction of rats, mongooses or cats. Any observations of such animals on refuges should be quickly checked out and extermination be attempted. The relatively stable association of rabbits on Manana is not recommended for

disturbance.

12. A system of organized periodic status check of plants and animals on the refuges should be established. Authorized visitors are on the islands during all months of the year, and a great deal of useful information about the condition of the refuges could be obtained, if each visitor was recording data in a systematic and consistent manner. I have attempted this on Manana over the last two years, and find the information very enlightening.

13. Productive scientific research on the refuges should be encouraged.

14. Present Fish and Game officials should make an effort to patrol the shoreline more frequently and to coordinate efforts with personnel at the site on a more permanent basis (i.e. Oceanic Institute biologists, as well as night and weekend guard service already present at Makapuu).

15. I have made the suggestion that I be deputized during my stay in Hawaii, as I am able to observe the refuges every day (and night). This was not taken very seriously, however, presumably because of the red tape involved. Believe me, I am not looking for a job. But if a little extra effort on my part will help to protect the refuges, I am more than willing to assist.

16. Finally, I think that sufficient funds should be appropriated to implement the necessary increase in protection as suggested. Questions of priority immediately come up. However, I frankly can not understand why thousands of dollars have been spent on projects such as the Nene preservation, while the islands containing our seabirds must get by with a few signs. I think this definitely deserves some attention.

I am sure there are other equally important suggestions to be considered regarding these refuges. There are also two sides to every story. I, too, enjoy diving and fishing and am greatly concerned over the rapid elimination of recreational areas. But I seriously believe that one of Hawaii's greatest resources could be effectively eliminated all too easily...and quickly. Of course, a compromise is necessary. Let's use the knowledge we've gained to determine which areas should be for recreation and which for conservation, and then make sure the laws are enforced. Once this is done, we can use the conservation areas wisely and hold onto one little part of old Hawaii we still have left. I will be in Hawaii for at least one more year and would be willing to participate in a concerted effort towards these goals.

I should mention that the ideas expressed in this letter do not necessarily represent those of the Oceanic Institute, although all of us here are vitally concerned over the protection of the refuges. I appreciate your time in reading this long letter and would like to hear your comments.

RESULTS

On December 7, 1970, a meeting was held at the Oceanic Institute to discuss the future of the offshore refuges. In attendance were the following:

Mr. Michio Takata, Director, Division of Fish and Game

Mr. Paul Breese, Chief, Bureau of Wildlife, Division of Fish and Game

Mr. Gene Burke, Chief, Bureau of Enforcement, Division of Fish and Game

Mr. David Woodside, Non-Game-Bird Biologist, Bureau of Wildlife, Division of Fish and Game

Mr. George Awo, District Fish and Game Warden, Division of Fish and Game

Mr. Ronald L. Walker, District Wildlife Biologist, Division of Fish and Game

Dr. Kenneth Norris, Director, Oceanic Institute

Mr. Wayne Collins, Vice President, Oceanic Foundation

Mr. Robert Shallenberger, Graduate Student, University of California, Los Angeles, Zoology

After a short discussion of the past history of the offshore bird colonies, we were able to concentrate on the specifics of future management. Several ideas were presented and discussed by all in attendance, and a workable plan for action

was developed. A short summary of each of the planned activities is listed:

A. Immediate

1. Construction and placement of signs at designated sites along the windward shoreline. These signs will provide information about the sanctuary status of the offshore refuges and the penalties for trespassing and for damage to wildlife.

2. Initiation of a rodent extermination program for Black Rock (Kaohikaipu) and Flat Island (Popoia). Suggested methods to prevent accidental introduction of rodent pests will be seriously considered.

3. Adjustment of Fish and Game personnel schedule to allow increased surveillance from shore, as well as future cooperation of Institute personnel to transport land based wardens to the offshore refuges when violations are observed.

4. Cooperative development of a detailed "handbook" useful to authorized visitors on our offshore refuges. This will includeinformation regarding preferred areas of travel, breeding information on the birds, preferred methods of observation, sanitation, landing, data recording, etc. Hopefully, this will develop into a periodically revised and expanded source of information with the contribution of all those who visit the islands.

5. Contact by Fish and Game personnel with all organizations on the island that are actually or potentially the source of unauthorized trespassers: i.e. diving clubs, surfing clubs, military bases, outdoor clubs, fishing groups, etc.

B. Long Range

1. Development of a coherent Master Plan for future management of our offshore refuges. This will involve cooperation of Fish and Game, Bureau of Sport Fisheries and Wildlife, and Oceanic Institute personnel, and others interesred in the wise management of our sanctuary islands.

2. Development of an effective public education program. The production of an informative movie, suitable for television use, is planned. In addition, related newspaper articles, television newscasts and brochures will be considered. Possibly, a condensed form of the proposed master plan will be distributed publicly, much like the present BSFW-F&G publications on the Leeward Isles and Hawaii's waterbird habitat.

I left this meeting with a good feeling that much had been accomplished. I am optimistic about the future results, and look forward to cooperating with Fish and Game personnel on these activities. As this problem boils down primarily to one of public education, I hope all interested will do their part to achieve this goal.

Robert J. Shallenberger

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Black Brant Record from French Frigate Shoals

On December 3, 1970, I observed a Black brant (Branta nigricans) sitting on the runway of Tern Island at French Frigate Shoals. This area is part of the Hawaiian Islands National Wildlife Refuge and is located about 500 miles west-northwest of Honolulu. When closely approached, the bird flew off a short distance before landing on the island again. After two such occasions, it was run down and captured by hand. Examination revealed it to be in an emaciated condition. The commanding officer of the Coast Guard contingent at Tern Island, Lt (JG) Kelly Hersch, told me that the bird had been seen on the island about 5-6 days previously.

It was taken back to Oahu and given to the Honolulu Zoo late the afternoon of its capture; however, it died the following day. It was prepared as a study skin by Dr. Alan Zeigler of the Bishop Museum, Honolulu, who reported it to be an adult female whose ovary measured 71 mm. Ectoparasites were collected. The specimen (No. HINWR-1) is now in the collection of the U.S. Bureau of Sport Fisheries and Wildlife office in Kailua.

Although single birds have been reported from the main Hawaiian Islands, usually during the winter months (Maui, Molokai, Oahu, and Hawaii) and have been reported in THE ELEPAIO, to my knowledge this specimen constitutes the first record from the Northwestern Hawaiian Islands (Leewards).

Short-eared Owl Observations from French Frigate Shoals

While engaged in a bird census on Tern Island, French Frigate Shoals, on December 3, 1970, I flushed a short-eared owl near the middle of the island. The bird flew off to the west end of the island, but not before I was able to make identification certain. Coast Guardsmen stationed there informed me they had seen the bird several days previously. This is the second time I have seen the species here.

On December 7, 1967, I flushed one such bird four different times (BSFW unpublished report, December 1967)....

Eugene Kridler, U.S. Bureau of Sport Fisheries and Wildlife, 337 Uluniu Street, Kailua, Hawaii 96734. January 11, 1971.

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RECOVERIES

Banded under G.C. Munro's Permit No. 5738

Band No. 40-721 482
Species: Black-footed albatross (Adult)
Banded Date: 7 December 1940 at Sand Island, Midway, by Walter R. Donaghho
Recaptured: 14 February 1964 at Sand Island, Midway, by C.S. Robbins,Laurel,Md.

Band No. 40-735 589
Species: Red-footed booby (Adult)
Banded Date: 26 March 1949 at Kokapu Point, Oahu, by Ruth Dingus
Recaptured: 12 April 1969 at Moku Manu, Oahu, by U.S. National Museum, Division of Birds, Washington, D.C.

Banded under Grenvillw Hatch's Permit No. 6520

Band No. 40-735 745
Species: Laysan albatross (Adult)
Banded Date: 6 February 1949 at Sand Island, Midway, by Earl & Willadean Sawyer
Recaptured: 10 February 1964 at Sand Island, Midway, by C.S.Robbins, Laurel,Md.

Band No. 40-735 842
Species: Laysan albatross (Juvenile) *
Banded Date: 3 July 1949 at Sand Island, Midway, by Earl & Willadean Sawyer
Recaptured: 10 February 1964 at Sand Island, Midway, by C.S.Robbins, Laurel,Md.

Band No. 40-735 844
Species: Laysan albatross (Adult)(Parent of 40-735 842) *
Banded Date: 3 July 1949 at Sand Island, Midway, by Earl & Willadean Sawyer
Recaptured: 28 November 1949 & 2 December 1951 at Sand Island, Midway.

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Field Notes from W. Patrick Dunbar, 9 December 1970:

The /USNS/ Longview arrived in port early this afternoon, having been out since November 20, steaming back and forth in the general area of the northwestern chain, Nihoa to an area south of Laysan Island. The former is the only one we actually saw. Birds were scarce, except near Nihoa where they were fairly plentiful but nothing like this past summer. The only bird I saw daily was the Black-footed albatross. I kept a daily count and by that I mean the greatest number I could actually count at any one time. The lowest was two and the highest twenty-one for a daily average of five and a fraction. During that time I recorded four Laysan albatross.

The highlight of the whole trip was this morning, about fifteen miles west or northwest of Barbers Point. I had seen several darkish birds at a distance that aroused my curiosity. Finally one and two came close enough for me to be reasonably certain they were jaegers. I've seen them many times in Alaska in their breeding plumage, but not in the intermediate or juvenile phase. The outstanding moment was

the attack of a dark fairly stocky bird on a shearwater. Three times it drove the shearwater into the sea and two of those times I'm certain there was direct body contact. I honestly can't say whether the predator was a juvenile Parasitic jaeger or a Skua. The shearwater didn't have a chance as long as the other was interested in chasing it.

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12 January 1971:

Early last week I went down to South Shores in Alameda. I wonder if you have any idea what that part of Alameda looks like--close to a mile of sandy beach with a busy street paralleling it and a large part of one side of the street lined with apartments. It is an ideal spot for shorebirds, with large expanses of sand and mud exposed at low tide. One end is a posted bird sanctuary which has several patches of salt grasses and vegetation sheltering rails. I saw one today. Tide was high when I visited there last week and the birds were loafing. I took pictures at distances ranging from forty to two hundred feet. I counted one hundred and sixty birds in one group, made up of godwits and long-billed curlews. Identified curlews, godwits, snowy egrets, willets, avocets, canvas-backs, widgeons, pintails, ruddy ducks, killdeers, semipalmated /plovers/, golden /plovers/, sandpipers, geese, knots and scoters. The exposed film came back yesterday. I was so pleased with it that I went down again today with the hope of getting more.

A few bird watchers were there, one of whom I'd met before. They invited me to go along with them to see a bird reported in the Palo Alto-Menlo Park area. When they told me what it was, like them, I was a bit skeptical about the report. We drove over there /San Mateo County/, found the place, and there was quite a large gathering of people with scopes spotted on a large bird in a gum tree. Hurry, they said, it's getting ready to fly. We dashed up and looked, and there was a CALIFORNIA CONDOR! It flew away a couple of minutes later but was located again in a large dead tree. There was no mistaking it. We, of course, wondered what on earth a rare bird like that was doing away from its usual rugged fastness. One young man there who seemed to be well acquainted with condors, said, judging by plumage and neck coloring it was about a three-year old. I took movies of it, rather long-range, but it flew again, towards us for a short way, then started circling and I was able to get some better shots of it. A day for me to remember!

I saw the Christmas Count for this area, and one species of birds, starlings: 11,000 plus. Ten years ago the first starlings were sighted around here.

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Field Notes from Gard W. Otis, 31 December 1970: Hosmer Grove and vicinity, Maui

I arrived in Hawaii for the first time on 25 December 1970. My sixth and last field trip in the state was the Maui trip the day before I left for the Mainland. During my other field trips and earlier preparations I had become well acquainted with the Hawaiian birds.

At Hosmer Grove I observed and heard at least fourteen 'apapane, eight 'amakihi and eight 'i'iwi. All three species tended to move in flocks of between four and six birds, as far as I could tell. Some sexual chasing was observed among the 'i'iwi. I also noted one leiothrix, two pheasants and numerous white-eyes. As I left the Grove, four 'apapane flew over my head and one bird (male?) was singing. At the grassy area below the park (elevation ± 6500) a large bird flew up, which by flight, coloration and size was probably a pueo. In the same area I observed a skylark and a mockingbird. I then left the area.

Of interest were five feral goats seen at the lookout next to the silversword enclosure.

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Interested Hawaii residents may receive without charge a new monthly newsletter about Hawaii's environment today and tomorrow: SURVIVAL. Articles cover the spectrum of local ecological issues and activities; distributed with the cooperation of the Hawaii TB and RD Association. To be on the mailing list, write: Editor Mrs. Debbie Coombs, 245 North Kukui Street, Honolulu, Hawaii 96817 or telephone: 537-5966.

Come to THE GREAT HAWAIIAN JUBILEE at Kapiolani Park on April 3-4.

Sponsored by the Department of Parks and Recreation of the City and County of Honolulu; all kinds of community groups will be taking part--Hawaiian culture and music, hula and dance programs, band performances, Hawaiian crafts and arts, live theater and film programs--and food stands, booths, corners and tree areas for organizations to exhibit their wares and publicize their particular areas of interest.

The theme is celebration of MAN AND LIFE--"Healthy, creative, beautiful, concerned and involved and compassionate."

Tentatively, our Society's theme will be "ENJOY YOUR HAWAIIAN BIRDS!" Bird-wing mobiles, balloons and leaflets can spread the message of endangered Hawaiian birds and the needed protection of their habitats. More ideas and materials are welcome! We need members to staff our under-the-tree booth from 8 A.M. - 12 midnight for both days. Please telephone Bill Mull (988-6798) or Hilde Kaigler (988-3195).

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ALOHA to new members:

Junior - Gregory Cone, 1673-B Paula Drive, Honolulu, Hawaii 96816
Jonathan Worth, 1747 Iwi Way, Honolulu, Hawaii 96816

Regular - Francis L.P. Benevides, Jr., 2512 Kapiolani Blvd #201, Honolulu 96814
William Y. Brown, Dept of Zool, UH, 2538 The Mall, Honolulu 96822
Salon D'Andree, 405 Boston Post Road, Weston, Mass. 02193
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Mrs. George Homem, 6911 Armour Drive, Oakland, Calif. 94611
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Mrs. Irma Parker, 321 Costa Mesa St, Costa Mesa, Calif. 92627
Max M. Rhyne, PO Box 4325, Honolulu 96813
Mrs. David R. Sears, RR 1, Box 214D, Kapaa, Kauai 96746
Dr. Janet Turner, 567 Lassen Ave #701, Almond Grove Park, Chico, California 95926

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

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APRIL ACTIVITIES:

12 April - Board meeting at McCully-Moiliili Library, 7:00 p.m. Members welcome.

18 April - PLEASE NOTE DATE. Field trip to Ulupau Head to study the boobies. Bring lunch, water, and if possible, your car. Transportation cost (75¢) to be paid to the drivers. Meet at the State Library on Punchbowl Street at 8:00 a.m. Leader: Charles G. Kaigler, telephone 988-3195.

19 April - General meeting at the Waikiki Aquarium Auditorium at 7:30 p.m.
Speaker: Tom Tagawa, Head of State Division of Forestry (Color)
Topic: Current Practices and Program in Forestry Division (slides)

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HAWAII AUDUBON SOCIETY EXECUTIVE BOARD:

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