

THE ELEPAIO

Journal of the
Hawaii Audubon Society



For the Better Protection
of Wildlife in Hawaii

VOLUME 20, NUMBER 8

FEBRUARY 1960

HONOLULU CHRISTMAS COUNT December 27, 1959

	AREAS												TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	
Black-footed Albatross	2	.	.	.	.	.	.	.	2
Blue-faced Booby	1	.	.	.	.	.	.	.	.	.	.	.	1
Brown Booby	50	.	.	.	.	.	.	.	.	.	.	.	50
Red-footed Booby	400	613	.	.	.	.	.	.	.	.	.	.	1013
Great Frigate Bird	110	10	.	.	.	.	.	.	.	.	.	.	120
Black-cr Night Heron	.	.	.	2	.	.	.	.	.	.	.	.	2
Pintail	.	.	16	3	.	129	.	.	.	.	.	.	148
Am Widgeon (Baldpate)	.	.	.	5	.	12	.	.	.	.	.	.	17
Shoveler	.	.	33	.	.	10	.	.	.	.	.	.	43
Common Gallinule	.	.	1	.	.	.	.	.	.	.	.	.	1
American Coot	.	.	327	.	.	806	.	.	.	.	.	.	1133
American Golden Plover	.	60	.	9	2	.	.	.	38	.	2	7	118
Ruddy Turnstone	.	2	.	.	.	.	.	.	.	.	.	.	2
Wandering Tattler	.	.	.	10	3	.	.	.	1	.	.	.	14
Sanderling	.	.	.	16	.	.	.	.	.	.	.	.	16
Hawaiian Stilt	.	13	43	68	.	.	.	.	.	.	.	.	124
Pomarine Jaeger	2	.	.	.	.	.	.	.	2
Spotted Dove	.	16	.	.	.	.	2	1	4	12	66	5	106
Barred Dove	.	63	.	.	.	.	.	5	22	4	.	82	176
Red-billed Leiothrix	24	14	.	38	.	.	76
Mockingbird	1	.	.	.	1
Chinese Thrush	1	.	.	1	.	.	2
Shama Thrush	3	.	.	.	.	.	3
Elepaio	6	17	.	23	.	.	46
Mynah	.	40	.	5	.	.	1	1	22	.	33	289	391
White-eye	.	11	.	.	.	.	24	22	.	32	.	.	89
Amakihi	1	4	.	51	.	.	56
Hawaiian Creeper	1	.	.	1
Apapane	4	6	.	13	.	.	23
Ricebird	.	99	.	.	.	.	2	.	59	19	.	.	179
House Sparrow	.	11	.	.	.	.	.	.	57	.	.	.	68
Cardinal (North Amer)	3	1	1	26	1	.	32
Brazilian Cardinal	.	9	.	.	.	.	.	.	5	.	1	3	18
House Finch	.	1	.	.	.	.	.	.	.	2	.	.	3
No. of Individual Birds:	561	948	420	118	9	957	71	71	210	222	103	386	4076
No. of Species:	4	13	5	8	4	4	11	9	10	12	5	5	34
Hours on foot:	.	1'50"	25"	50"	.	.	2'	3'	1'	5'	.	.	14'05"
Hours by car:	.	25"	50"	25"	50"	50"	.	.	.	.	.	.	3'20"
Miles on foot:	.	.25	.25	.25	.	.	1.2	2	.	2.5	.	.	6.45
Miles by car:	.	3	3	2	.	.	.	.	2	.	.	.	10.00

Honolulu Christmas Count, December 27, 1959 - Continued

The following areas (as listed on page 52) were covered in this year's count:

- Group A: Areas: 1) Moku Manu (Through telescope from Ulupau Head)
 2) Ulupau Head, Kaneohe Peninsula and Ponds
 3) Kaelepulu Pond and Kailua
 4) Kuliouou and Kuapa Pond
 5) Sand Island
 6) Salt Lake (Through telescope)
- B: 7) Manoa Falls
 8) Tantalus Trail
 9) Punchbowl Memorial Cemetery
- C: 10) Aiea Trail
- D: 11) Honolulu Residential Areas
 12) Honolulu Parks

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THE 1959 CHRISTMAS COUNT

The following is a report of our 1959 Christmas count taken on December 27.

The weather was exceptionally fair with an average temperature of 73°. There was a mild trade wind blowing with an average speed of 10 m.p.h.

Again we took a drop from our total of the previous year with 34 species instead of 35. Notably missing from our count were the Hawaiian Terns, Japanese Tit, California Quail and Ring-necked Pheasant. Other species seen fairly regularly but not seen this year are the Hawaiian Owl and Skylark. Since the Cattle Egret has been introduced in the last year we had hoped to add that to our list but it was not seen.

The Marines are building a radar station on Ulupau Head and this could account for the low count of Boobys there.

Of course most of you are well acquainted with the situation at Kaelepulu, and because of the drainage of land there the count was low in that area.

Possibly lack of blossoms and fair weather account for the low count of Apapane especially on the Aiea trail, although at the same time it was interesting to note the exceptionally high count of Amakihi.

An interesting note is the sighting of a Wandering Tattler in Punchbowl.

As was noted last year our activity is very limited because of the number of observers on our count. It is hoped that another year this number can be increased. Those taking part in the count were Ruth Rockafellow and Unoyo Kojima on the Aiea trail; Frank and Elizabeth Stephenson on Honolulu Parks and residential; Priscilla, Anne and Douglas Harpham, John Bowles, Paul Schaefer and Blanche Pedley in Manoa, Tantalus and Punchbowl; and Hal Horning and Chuck Hanson at Ulupau Head, Moku Manu, Kailua, Kaelepulu, Kuapa Pond, Kuliouou, Salt Lake and Sand Island.

Charles Hanson

HONOLULU CHRISTMAS COUNTS
1950 - 1959

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Black-footed Albatross	.	.	.	.	.	.	2	2	2	2
Laysan Albatross	.	.	.	.	.	1	3	.	.	.
White-tailed Tropic-bird	.	.	.	.	2	.	.	.	.	.
Blue-faced Booby	.	.	.	.	.	.	.	.	1	1
Brown Booby	7	.	.	5	9	33	6	66	20	50
Red-footed Booby	811	628	215	450	880	1150	1000	1230	1560	1013
Great Frigate Bird	1	2	32	14	21	86	35	241	728	120
Black-crowned Night Heron	3	2	.	.	3	4	2	4	4	2
Pintail	278	336	296	58	795	256	329	81	438	148
American Widgeon (Baldpate)	.	.	.	.	2	.	2	11	9	17
European Widgeon	.	.	.	.	.	.	.	4	.	.
Shoveler	.	.	2	.	200	.	87	60	42	43
California Quail	.	.	.	.	10	.	.	.	.	.
Ring-necked Pheasant	.	1	.	.	2	7	3	2	.	.
Common Gallinule	.	.	5	3	4	4	3	4	.	1
American Coot	652	17	153	30	449	224	245	1138	2202	1133
American Golden Plover	219	125	82	67	396	366	228	177	260	118
Black-bellied Plover	.	.	.	1	1	.	.	4	.	.
Ruddy Turnstone	141	9	47	66	196	208	115	110	86	2
Wanderling Tattler	25	1	8	9	17	24	15	8	11	14
Sanderling	.	3	3	26	30	36	41	26	4	16
Hawaiian Stilt	31	66	69	28	12	24	211	24	124	124
Pomarine Jaeger	.	.	.	.	.	.	7	17	10	2
Bonaparte Gull	.	.	.	.	.	.	.	1	.	.
Least Tern	.	.	.	1	.	.	.	.	.	.
Noddy Tern	.	.	.	.	1	.	.	12	.	.
Hawaiian Noddy Tern	.	2	6	1	.	16	4	.	.	.
Greater Yellow-legs	.	.	.	.	.	.	.	1	.	.
Rock Dove	.	.	.	.	.	.	.	.	3	.
Spotted Dove	272	46	73	32	352	195	141	59	81	106
Barred Dove	201	236	166	136	1033	614	216	218	276	176
Hawaiian Short-eared Owl	.	.	1	.	1	1	.	.	.	.
Skylark	.	2	.	.	.	6	.	.	.	.
Japanese Varied Tit	.	.	.	.	.	4	2	1	3	.
Red-billed Leiothrix	20	.	20	2	83	462	150	72	163	76
Chinese Thrush	5	.	.	.	.	5	.	.	.	2
Mockingbird	.	7	.	.	.	.	.	2	2	1
Shama Thrush	.	.	.	.	6	10	4	6	9	3
Elepaio	9	.	12	.	27	74	25	10	63	46
Mynah	520	241	150	114	1587	640	331	245	311	391
White-eye	39	6	37	7	209	402	221	102	130	89
Amakihi	.	.	.	.	27	102	77	24	88	56
Hawaiian Creeper	.	.	.	.	.	3	2	1	1	1
Apapane	2	.	.	.	33	159	506	241	66	23
Ricebird	233	260	279	119	281	421	176	178	306	179
House Sparrow	293	119	79	140	564	381	109	96	311	68
Cardinal (North American)	93	53	71	35	115	212	72	22	71	32
Brazilian Cardinal	16	19	13	11	51	94	29	8	9	18
House Finch	10	13	3	11	86	91	101	57	61	3
No. of Species	23#	23#	24#	24#	34	34	35	39	34	34
Individuals	4032*	2194	2728*	1366	7485	6315	4500	4565	7457*	4076
Observers	13	15	8	9	21	22	18	12	14	12

Poamoho totals not included.

* Unidentified waterfowl included: 1950 - 151, 1952 - 906, 1958 - 2.

BRIEF NOTES ON SOME BIRDS OF MIDWAY ISLANDS¹
 By Hubert and Mable Frings
 (Pennsylvania State Univ., University Park, Pa.)

Second and Final Installment

NODDY TERN (Anous stolidus). This species is not too common, but a number of nesting pairs were found near the runways on Sand Island. As noted by Kenyon and Rice, they are rare on Eastern Island. Since they also avoid the populated areas of Sand Island, one might be led to wonder what determines their distribution. They make their nests on the ground at places favored also by Laysan Albatrosses. It is possible, therefore, that they cannot compete with the Albatrosses for space. On Sand Island, there were colonies of 20-50 Noddies near the airstrips where the Albatrosses had been driven away. It seems possible that these birds might increase in numbers if the Albatrosses decrease near the runways, and may thus become a hazard to aircraft. So far they are not present in sufficient numbers to be a threat.

There were eggs and young all during our stay, with no clear-cut breeding peak. Newly laid eggs were found in the colonies on November 2, 11, and 17. A group of about 25-50 pairs near one runway was just getting ready to lay eggs about the end of November. We photographed the development of one young bird. The baby hatched about November 2, and by November 10 was almost half grown. On November 20, its definitive plumage was coming in, and by December 7, it was about ready to leave the nest.

These birds were quite sassy when disturbed from the eggs or young and flew at our heads with sharp, rasping cries. It was impossible to pick them up from the nests, and, for tests with injected salt solutions we managed to get only two that were injured accidentally. They had excellent nasal glands and dripped actively from their beaks after the injections.

WHITE-CAPPED NODDY or HAWAIIAN TERN (Anous tenuirostris). These active little terns, walking about on the ground on their short legs like avian dachshunds, are among the most common birds near man on Sand Island. They nest in ironwood trees near the houses and have definitely been aided by man's presence on Midway. The trees often seem to be festooned with twigs and dried ironwood "needles." At night, the coarse, rough calls of these birds in the trees blend with slurs of the Petrels and the whinnies of the Albatrosses to form a never-to-be-forgotten chorus. This species is not at all common away from the housing area on Sand Island and rare on Eastern Island.

All during our stay, there were some individuals gathering nesting materials on the ground, and many were brooding eggs and raising young. They seemed fairly oblivious of man's activities, but never ceased scolding the dogs on the island, in spite of the fact that the dogs paid little attention to them.

These Terns have an interesting method of bathing in the rain. During storms they flew in large flocks above the trees, shaking as they flew. A tern would fly with the group, then vigorously shake the ruffled feathers of the body and wings and finally flick the tail back and forth, all the while losing altitude. With the tail-flick, the bird flew rapidly back to the flock, then in a short time repeated the shaking. Cleaning in the rain may be quite wide-spread among sea-birds. We found, with captive Albatrosses from Midway, that they cleaned and preened during rain-storms, and so we produced artificial rain for them with a lawn sprinkler. When this was done, the birds eagerly came each day to the sprinkler for wing-shaking, screaming and cleaning. On Midway, we saw the Albatrosses behave exactly the same way in the rain. The Fairy Terns, instead of flying during a rain-storm, sat in the trees, where they spread the wings, fluffed the feathers and preened. The Plovers and Turnstones stayed on the ground, running about as usual in the rain, but stopping every now and then to fluff and shake.

1. See page 57

The Hawaiian Terns, in spite of their seeming lack of fear of man, could not be approached too closely and were so wary on the ground that they were seldom struck by cars. Two that had been injured were brought to us, and we used them for injections with salt solutions. They proved to have very active nasal glands.

WHITE TERN, FAIRY TERN, or LOVE BIRD (Gygis alba). These beautiful, glossy white Terns, with their sharp black eyes and handsome blue-black beaks, seems also to have gained from man's presence on Midway. They are most common near the houses, perching in the ironwood trees, and less common in the wilder parts of both islands. There were few eggs during our stay, only one or two that we found. At the time of our arrival, there were a number of almost fully grown young in the trees. When we left, there were very few of these also. The habit of these birds of hovering above the head of a person standing near their roosts and their seeming complete trust in man makes them the favorite bird of the residents of Sand Island. Their voices, rasping and raucous, and their active nasal glands when injected with saline solutions, however, link them clearly with the other Terns.

PIGEON (Columba livia). These all-too-familiar introduced birds are not common. There are probably a few hundred on Sand Island. As always, they stay near man and use buildings for roosting. Interestingly enough, almost all the pigeons on Sand Island are white, matching the dazzlingly white coral sand. Could this be protective coloration, comparable in reverse color, with industrial melanism of Lepidoptera studied in England by Kettlewell (Nature, 183:918-921, 1959)? If so, what are the predators to give survival value to whiteness in the pigeons? The pigeons on Midway seem to make out quite well finding their own food. Since fresh water is limited, it would be interesting to know whether these get enough from human friends, or whether their nasal glands have developed so that they can drink salty water. This isolated, relatively inbred group of birds should be interesting to study as a sample of evolutionary processes in a small population of a species facing a difficult environment.

HAWAIIAN SHORTEARED OWL (Asio flammeus). We list the owl that we saw as this, although we could not be certain. This species has been found on Sand Island twice before, according to Bailey -- in 1907 and 1949. We flushed an owl from beneath low shrubs growing in the triangular area between the runways on Sand Island on four occasions -- November 9, 10, 11, and 12. The wary bird shifted its resting place from day to day and thus thwarted our efforts to approach it for capture or photography. This area was one that we censused every day, so the owl apparently deserted it for some other resting spot after we continued to molest it. The area had been denuded fairly completely in 1957 and had only low herbs and shrubs. All of our party had an opportunity to get the bird in the binoculars, and there is no doubt that it was an owl. Midway now has a fairly high population of mice, and it might be expected that owls will make their home there, if they are not disturbed.

CANARY (Serinus serinus). In January, 1958, we had seen a number of these in the housing area on Sand Island, but during our stay in the latter part of the year, we saw very few. Almost all of these were in the wooded parts near the runways. Whether this means that they are becoming less common or more wary, we do not know. Certainly, as with the pigeons, they are much whiter than the usual Canaries, indeed most of them are almost completely white. This species too could probably be studied with profit by workers interested in isolated populations.

HYBRID ALBATROSS (Diomedea immutabilis x D. nigripes). While this report deals with birds other than Albatrosses, we would like to mention this beautiful bird which appeared on November 11 among the Laysan Albatrosses in the center of the housing area on Sand Island. It had a bird-band, and so was not a new discovery. It was a female, with colors exactly intermediate between those of the probable parents, as Blackman (Birds of the Central Pacific Ocean, Honolulu, 1944, pp. 17-19) reported for the hybrids he saw. The voice was also intermediate in pitch, and the general behavior intermediate between the two species. It was thus almost certainly a hybrid. The bird

was extremely shy and difficult to approach. She was badly chased by the Laysans among which she had come. Blackman also noted in the hybrids he observed, the shyness of these birds and their "rejection" by other Albatrosses. A male Laysan Albatross attempted to mate with her, but she apparently failed to find a mate, for we found her wandering around unaccompanied on December 10, by which time almost all the Albatrosses that were nesting had laid eggs.

1. These studies were aided by a contract between the Office of Naval Research, Department of the Navy, and Pennsylvania State University (NRLCO-454). Reproduction in whole or in part for any purpose of the United States Government is permitted.

STATE PARKS

The Hawaii Audubon Society received from Mr. Gunter R. Seckel, Chairman of the Conservation Committee of the Hawaiian Trail and Mountain Club, a copy of a plea for State Parks, with the note that copies have been sent to the Governor, members of the State Legislature, and other interested groups. He says:

"I hope that members of the Audubon Society give the needs for a State Park system some thought and their support when the matter comes before the Legislature."

Copies of the full outline may be procured from Dr. Wallace C. Mitchell, 1673 Paula Drive, Honolulu 16. To relieve the Trail and Mountain Club of excessive demands for this outline, the main points of it are given here.

THE NEED FOR A STATE PARK SYSTEM IN HAWAII

Population is increasing at a tremendous rate. Some estimate a population of one million in 1975 in Hawaii, with two million tourists visiting annually.

Less than a generation ago young and old could explore the fields and forests, the freedom of open spaces, by simply stepping out of their back doors. Now housing developments, industrial areas, highway projects are "at the back door." On Oahu freedom of movement to less populated areas is restricted, access to fields and forests less free.

There is therefore a growing need for more POPULATION DISPERSAL AREAS where people can hike, camp, or just relax and escape from crowds, noise, smoke, and the rush of modern life. Forgotten, too, are the educational values of land. Besides historic documents and monuments, it behooves us to save examples of original natural environment: beaches, forested valleys, mountains. We should have NATURAL MUSEUMS, where we could save plants in their natural setting.

We are fortunate to have in Hawaii the whole spectrum of geologic history from recent formations at Kilauea to those thousands of years old. Remarkable too is the variety of climatic conditions. This geologic and climatic variety gives opportunity for study of plant and animal associations. There is therefore a need to save undisturbed samples of land as NATURAL LABORATORIES.

OBJECTIVES FOR A STATE PARK SYSTEM IN HAWAII

The needs above outlined are traditionally met by park systems. On Federal lands they are taken care of by certain functions of the National Forest Service (in the Department of Agriculture), and the National Park system (in the Department of the Interior).

On the local and state level, the responsibility is with the City-County Parks and the State Parks. The former cater to the needs of mass-recreation in areas such as Kapiolani Park, and mass-education in such institutions as the Honolulu Zoo and the

Aquariu, Na Laau Hawaii and other botanical gardens.

On the other hand, a State Park system would cater to the needs of population dispersal types of recreation and education by people visiting, without disturbing, the natural habitat of plants and animals. The following objectives are foreseeable:

1. To develop, maintain, and supervise recreational facilities for population dispersal such as trails, campgrounds and shelters. Large areas of land must become available. This is possible since, under the multiple-use concept of land management, dispersal types of recreation can be combined with most other uses. For example, maintenance trails for irrigation ditches can also be used for hiking, and can be combined with camping sites or shelters. Camp sites and trails can be provided in areas used for commercial timber production, grazing, water-shed or educational purposes. Care must be taken, however, not to let commercial concessions defeat the recreational use.
2. To protect and administer lands used for education purposes, such as Natural Museums, Natural Classrooms, and Natural Laboratories. Land use as Museums would include historic sites, and areas where endemic plants and animals are permitted to grow continually, such as Kalalau Valley, the rest of the Na Pali Coast, and Halawa Valley on Molokai. In these areas there are still remains of heiau, ancient stone walls and taro fields and irrigation ditches. An example of a Natural Classroom is the Lava Tree Park on Hawaii where the formation of the unique lava tree molds is explained by an exhibit. Although the various aspects of educational land use are mentioned separately, they are often to be found in a single area. A good example is Hawaii National Park, one big Museum. The Park also serves as a Natural Classroom, where geological features are interpreted by exhibits and pamphlets. It is also well known as a Natural Laboratory, through the Volcano Observatory.
3. To conduct a program of conservation education in cooperation with scientific and educational organizations and the various divisions of the State Government charged with the use and management of Hawaii's natural resources. To achieve this objective, the park system would by exhibit and publication, explain the functions and points of interest of various land uses, as water-shed and irrigation areas for hydrology; forests for forest management and botanical knowledge of trees; exhibits and pamphlets would be used in places of historic and scientific interest.

A DIVISION OF STATE PARKS WITHIN THE DEPARTMENT OF NATURAL RESOURCES

The increasingly varied uses of land, especially in view of the population pressure, demand careful planning for well coordinated use. Under the multiple-use concept of land management recreational needs are recognized and commercial use maintained. It will take wise judgment to decide what the best use is to be. Cultural and educational values cannot be measured by commercial standards, but must not be subordinated through more easily measured use. This can be achieved only through some such agency as a Department of Natural Resources with a Division of State Parks operating on an equal basis with other divisions within the Department.

IMMEDIATE PROGRAMS FOR A DIVISION OF STATE PARKS

- The first thought should be to plan, the second should be to lose no time.
1. The dispersal-type recreational needs must be assessed. These needs will increase with population growth. Planning should therefore be based on a probable maximum population density. Hawaii's maximum population under present standards of living may be three times its present figure.
 2. Lands of historic, educational and scientific value must be selected as soon as possible since it is almost too late in Hawaii. Here the Conservation Council for Hawaii, the Bishop Museum, the National Park Service, and other scientific and interested groups must be called upon for help. It may be of interest to note that Federal lands of scenic, historic or scientific value began to receive adequate protection only through Congressional action such

as the National Parks Act. Similarly, lands selected for cultural and educational use in Hawaii may need legislative action to protect them from commercial erosion.

Establishment of a Division of State Parks with objectives as outlined above would be an act of foresight. It would help to save and pass on to future generations some values of Hawaii other than cement boulevards and hotel developments. It would provide for the people who live and work in Hawaii the type of recreation and education that cannot be bought with money. It would also cater to those visitors who want to learn about the true Hawaii, its heritage and natural environment.

Gunter R. Seckel
November, 1959

(Abstracted by M. Titcomb)

FEBRUARY ACTIVITIES:

FIELD TRIPS: FRANK STEPHENSON WILL LEAD BOTH TRIPS.

February 14 - {Trails unassigned, depending upon weather conditions
February 28 - { and transportation available.

Meet at the Library of Hawaii at 7:00 a.m. for each trip.

MEETING: Board - February 8, at the Hawaiian Mission Academy, 1415 Makiki St.,
at 7:30 p.m. Members are always welcome.

General - February 15, at the Honolulu Aquarium Auditorium at 7:30 p.m.
Our president, Charles Hanson, will tell us
about his recent trip to Midway.

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