

# 'ELEPAIO

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For the Protection of  
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FEBRUARY 1977

## HONOLULU CHRISTMAS COUNT 19 December 1976

### SECTORS

	1	2	3	4	5	6	7	8	9	10	TOTAL
Blue-faced Booby	.	.	.	.	.	.	.	.	7	.	7
Brown Booby	.	3	.	.	3	.	.	.	23	.	29
Red-footed Booby	.	.	.	.	.	.	.	.	1935	5	1940
Great Frigatebird	.	.	.	1	.	.	13	11	697	1	723
* Cattle Egret	.	.	.	.	.	.	(100)	(71)	1032	(45)	1032
Black-crowned Night Heron	.	1	.	.	.	.	10	5	105	.	121
Hawaiian Duck (Koloa)	.	.	.	.	.	.	10	.	2	.	12
Northern Shoveler	.	.	.	.	.	.	6	.	2	.	8
Lesser Scaup	.	.	.	.	.	.	2	.	.	.	2
Bufflehead	.	.	.	.	.	.	1	.	.	.	1
Hooded Merganser	.	.	.	.	.	.	.	.	6	.	6
Peregrine Falcon	1	.	.	.	.	.	.	.	.	.	1
Hawaiian (Common) Gallinule	.	.	.	.	.	.	3	7	.	.	10
Hawaiian (American) Coot	.	19	.	.	.	.	11	3	3	.	36
Semipalmated Plover	.	1	.	.	.	.	.	.	.	.	1
Golden Plover	1	86	51	31	40	16	50	47	301	162	785
Wandering Tattler	.	2	.	.	.	.	4	1	29	.	36
Ruddy Turnstone	.	48	.	.	.	5	6	13	50	2	124
Sanderling	.	9	.	.	.	6	.	.	24	.	39
Hawaiian (Blk-necked) Stilt	.	11	.	.	.	7	2	13	124	.	157
Pomarine Jaeger	.	8	.	.	.	.	.	.	.	.	8
Glaucous-winged Gull	.	1	.	.	.	.	.	.	.	.	1
Herring Gull	.	1	.	.	.	.	.	.	.	.	1
California Gull	.	1	.	.	.	.	.	.	.	.	1
gull (sp?)	.	2	.	.	.	.	.	.	.	.	2
noddy (sp?)	.	.	.	.	.	.	.	.	37	.	37
Rock Dove	.	23	5	22	.	.	2	4	22	.	78
Spotted Dove	53	109	68	135	170	40	20	185	161	204	1145
Barred Dove	23	207	161	360	360	26	55	299	244	356	2091
Barn Owl	.	.	.	.	.	.	.	.	.	2	2
Melodious Laughing-thrush	.	.	.	.	.	.	.	.	.	10	10
Red-whiskered Bulbul	.	9	13	55	.	.	.	.	.	.	77
Red-vented Bulbul	11	26	6	18	12	2	66	148	63	101	453
Mockingbird	2	.	.	.	3	.	6	.	.	.	11
Shama	116	4	66	48	1	10	12	5	1	40	303
Japanese Bush Warbler	37	.	36	15	.	.	.	.	.	25	113
O'ahu 'Elepaio	13	.	1	13	.	.	.	.	.	.	27
Japanese White-eye	518	71	448	523	45	54	54	93	70	84	1960
Common Myna	8	143	90	357	390	.	93	453	334	61	1929
Hill Myna	.	.	.	4	.	.	.	.	.	.	4
O'ahu 'Amakihi	80	.	24	67	.	.	.	.	.	.	171

	1	2	3	4	5	6	7	8	9	10	TOTAL
O'ahu Creeper	1	.	.	.	.	.	.	.	.	.	1
'Apapane	64	.	3	36	.	.	.	.	.	.	103
Red-cheeked Cordon-bleu	.	.	.	.	9	.	.	.	.	.	9
Lavender Firefinch	.	.	.	.	11	.	.	.	.	.	11
Orange-cheeked Waxbill	.	.	.	.	22	.	.	.	.	.	22
Red-eared Waxbill	.	.	.	.	18	.	.	.	.	.	18
Spotted Munia	14	5	.	60	7	.	47	36	97	88	354
Java Sparrow	.	4	23	108	96	.	.	.	.	.	231
Pintailed Whydah	.	.	.	.	5	.	.	.	.	.	5
House Sparrow	2	91	106	300	175	.	32	64	190	108	1068
Saffron Finch	.	.	.	.	7	.	.	.	.	.	7
Red-crested Cardinal	4	33	13	39	42	1	12	26	19	22	211
Northern Cardinal	70	12	58	89	8	22	20	26	24	35	364
Yellow-fronted Canary	.	.	.	.	8	.	.	.	.	.	8
House Finch	11	48	56	156	43	30	12	17	70	44	487
No. of Individual Birds:	1029	978	1228	2437	1475	219	549	1456	5672	1350	16,393
No. of Species:	19	27*	18	21	22	12	25	20	28	18	55*

\*Excluded unidentified gull

\*Cattle Egrets observed in Sectors 7, 8, and 10 (shown in parentheses) are not included in the totals for those sectors, since they may well have been among the egrets counted returning to the roost in Sector 9.

#### Sectors Covered

- 1A 'Aiea Trail: Frank & Nancy Howarth, Omer Bussen  
 B North Hālawā Valley Trail: Robert & Annarie Shallenberger, Robert Pyle  
 C Moanalua Valley Trail: Harry & Ruth Whitten, David Bremer, David Hattan  
 D Tripler Ridge Trail: George-Ann & Stephen Maxson, Alan Hart
- 2 Sand Island, Nu'u-anu, 'Ālewa, Fort Shafter, Salt Lake, Moanalua Gardens: Jack & Alice Mitchell, Rey Larsen, Aline Singrey
- 3A Mānoa Cliffs Trail, Makiki, Punchbowl: William Burke, Christine Jones, John Rybczyk  
 B Wai'oli Mānoa, Pu'u 'Ōhi'a-Pauoa Flats Trail: John Walters, Richard Spencer
- 4A Lyon Arboretum, Mānoa Falls Trail: Patrick Conant, Lawrence Hirai  
 B Woodlawn Trail, Mānoa, UH Campus: Sheila Conant, John Good, Peter Warner  
 C Wa'ahila Ridge Trail: Maile Stemmermann, Joyce & Richard Davis
- 5 Kapiolani Park, Na La'au Arboretum: Michael Ord
- 6A Haha'ione Valley, Ka'ala-kei Valley: Jack Wilmoth  
 B Paiko Lagoon: Maria Tseu
- 7 Bellows Field, Mauna-wili, Wai-nui, Ka-wai-loa, Enchanted Lakes: David & Ulalea Woodside, C.J. & Carol Ralph
- 8A Lanikai: William & Peggy Hodge, Mary Grantham  
 B Ka-wai-nui Dyke, Kai-lua: Don & Doris Huddleston
- 9A Kāne'ohe Bay Drive, Kāne'ohe MCAS, Moku Manu: Ronald Walker, Alvin & Brenda Katekaru, George Campbell, Thurlow & Michael DeCrow, D'armand Cook  
 B Ka-wai-nui Ponds, Quarry Road: Palmer Sekora

10 Kahalu'u, 'Āhui-manu, Ha'i-kū, Kāne'ohe, Old Pali Road: Timothy & Jonathan Burr, Allan & Shirley Samuelson, with additional observations by Maile Stemmermann

Habitat Coverage: High forests 45%; parks & residential 30%; marshes, ponds, beach, & ocean 15%; scrubland 10%. Date: 19 December 1976 from 0615 to 1830 hours. Weather: Mostly clear; temperature--62° to 81°F (16.7° to 27°C); wind--NE 0-10 mph.

Fifty-four observers in 19 parties. Total party-hours, 122 (98 on foot, 20 by car, 4 by bicycle). Total party-miles, 290 (86 on foot, 189 by car, 15 by bicycle).

#### 1976 Honolulu Christmas Bird Count

By Robert L. Pyle, Compiler

The Honolulu Christmas Bird Count, conducted this year on Sunday December 19, recorded 16,393 birds of 55 species, one more species than the previous high of 54 found last year. Fifty-four observers (well above last year's record high of 43 participants), working in 19 parties (also a new high), spent 122 party-hours in the field, nearly 50% greater than last year's 84 party-hours. The weather again this year was nearly ideal: virtually

clear, warm and with very light trade winds.

The fine weather and record number of party-hours afield contributed to the high count. The 16,393 birds recorded has been exceeded only once in the 33-year series of counts. That was in 1967 when 6000 Sooty Terns and over 6000 Common Mynas helped boost the count total to more than 22,000 individuals.

The additional field parties this year worked on several forest trails that had not been covered on prior counts: North Hālawā Valley, Moanalua Valley, Tripler Ridge, Ka'ala-kei Valley and Haha'ione Valley. With this extra forest coverage, record high counts were obtained for most of the forest species. Frank Howarth and Omer Bussen found the O'ahu Creeper again in the same area of 'Aiea Ridge trail where it has been found on prior counts. Also, they had a good observation of a Peregrine Falcon higher on this same trail, a most unlikely locale for this accidental straggler from North America.

Bulbuls continue to increase dramatically. The Red-vented Bulbul count was more than double last year's record high, while the 77 Red-whiskered Bulbuls found this year compare to a previous high count of 7 in 1968. The latter species now occurs from 'Ālewa Heights to St. Louis Heights, with a center of abundance in Mānoa Valley. Java Sparrows also increased to more than five times last year's high count.

Along Kāne'ohe Bay Drive Ron Walker's party counted more than 1000 Cattle Egrets flying in to the roost at the end of the day, and still they felt they had not counted them all. Egrets seen during the day in the other windward sectors were probably included in this late afternoon flight, and therefore were not counted again for those sectors. Ron's party also found six mergansers at Kaluapuhi Pond on the Kāne'ohe Marine Station. These were identified as Hooded Merganser when seen closer and in better light a few days later. The Woodside-Ralph party found a female Bufflehead and two Lesser Scaup at Enchanted Lake. The Huddlestons found seven of the Endangered Hawaiian Gallinules in the drainage from Ka-wai-nui Marsh below Kai-lua Road.

Finally, it should be noted that five species and subspecies officially classified as Endangered were found on the Honolulu Count this year. These were the Hawaiian Gallinule, Hawaiian Coot, Hawaiian Stilt (all subspecies of North American species), Peregrine Falcon, and O'ahu Creeper.

#### Notes on Less Common Species

Hawaiian Duck: Eight at Wai-nui and 2 at Enchanted Lake settling basin (D.Woodside party) and 2 at Nuupia Pond, Mokapu Peninsula (R.Walker party). These are released birds, or descendents from them. Woodside and Walker are state Fish & Game biologists very familiar with the species and with the state's restocking program.

Hooded Merganser: Six together at Kaluapuhi Pond, Mokapu Peninsula (R.Walker party). First found December 4th, and seen frequently since the Count by several observers. All in female or eclipse plumage, including brown head with fan-shaped crest on back (not top) of head; dingy gray underparts; no throat markings; small, slender bills with some yellowish; white wing patch. Two prior sight records for the state, both single birds, in January 1966 and January 1967.

Peregrine Falcon: On 'Aiea Ridge trail, two thirds of the way from the Loop Trail to Ko'olau crest (F.Howarth, O.Bussen). Bird flew over trail 200 yards distant, disappeared behind ridge, reappeared moments later and perched on top of 'Ōhi'a tree for 10 seconds, then flew off again. Identification based on size, falcon shape, falcon flight, dark color, and black facial marks. Additional details to be published in 'ELEPAIO. Next day, a Count participant unaware of this sighting, independently identified a Peregrine as he watched it for 10 minutes working over the brush at the base of high coastal cliffs near Makapu'u Point, about 15 miles southeast of the 'Aiea sighting, and a much more suitable locale for a Peregrine. Two Peregrines were recorded in the state last winter: one seen several times over a period of weeks around Kīlauea, Kauai, and one sighting on Maui.

Semipalmated Plover: Seen well through scope in good light from Sand Island, on exposed mud spit in Ke'ehi Lagoon (R.Larsen party). Not safely separable in the field from Ringed Plover of Asia, but all specimens collected in the state have been Semipalmated.

Gulls: Five gulls seen well close together, at 500 yards distance, with 30x and 100x scopes, in flight and standing on exposed mud spit in Ke'ehi Lagoon (R.Larsen party). The five were first seen day before count by RL, and seven (including these 5) have been seen together there frequently in the ensuing three weeks. The largest of the 5 was identified as first year Glaucous-winged, based on medium brown color, pale wing tips concolor with wings, and black bill. One of the new gulls seen after the Count was clearly a first year

Glaucous, seen side-by-side with the Glaucous-winged for excellent comparison. The Glaucous was clearly larger, with more massive head and bill, inner third of bill pale, wing tips whiter than wings. -----The second largest of the 5 on Count day was slightly smaller than the Glaucous-winged, had very dark wing tips, flesh-colored legs and dark bill, and was identified as a first year Herring Gull.----a third bird on Count day was noticeably smaller than the Herring Gull. It was almost fully adult, but the outer quarter of the bill was black with a small yellow tip (black too broad for an adult Ring-billed Gull). Bill seemed a little heavy for a Ring-billed. Legs were yellow-green, tail pure white. In flight, dark under the wing tips seemed sharply cut off. This one was identified as a near-adult California Gull.---The fourth and fifth gulls were immatures, slightly smaller than the California, with considerable brown in the plumage, a dark tail band, pale bill with dark outer half, and dull flesh-colored legs. These were thought to be Ring-bills or possibly Californias.

noddy (sp?): Birds seen at great distance over Moku Manu and Mō-kōlea Rock, could have been either Black Noddies or Brown Noddies (R.Walker party).

Barn Owl: Two in upper 'Āhūi-manu Valley where one or two have been heard virtually every night, and sometimes seen, over past 15 months (A.Samuelson).

Hill Myna: In Lyon Arboretum, upper Mānoa Valley, where several of this species were seen regularly in the later 1960's and early 1970's.

O'ahu Creeper: On 'Aiea Ridge trail, by F.Howarth and O.Bussen, in same general area where FH found it on last year's Count. Observed coming to a slime flux (oozing sap) on a large koa limb, at least 10 times during a two-hour period. Had yellow wash on chest, paler throat, pale line over the eye, distinct wingbars, and bill seemed less strongly curved than is typical of 'Amakihi. This bird probed deliberately at the flux, in contrast to 'Apapane and White-eyes which pecked quickly and lifted head immediately. No 'Amakihi were present for comparison. Next day, three observers including OB watched the bird come to the flux 8 to 10 times in 3 hours. Also seen at the same spot two weeks later.

New high counts this year (with previous high and year in parentheses): Black-crowned Night Heron 121 (97, 1944); Spotted Dove 1145 (1072, 1975); Barn Owl 2 (1, 1974 & 1975); Red-whiskered Bulbul 77 (7, 1968); Red-vented Bulbul 453 (212, 1975); Shama 303 (161, 1975); Japanese Bush Warbler 113 (63, 1975); Japanese White-eye 1960 (1099, 1975); 'Amakihi 171 (103, 1975); Java Sparrow 231 (45, 1975); Northern Cardinal 364 (216, 1975); and House Finch 487 (242, 1974).

North Halawa Valley: North Halawa Valley was included in the Christmas Count for the first time this year, primarily to pickup Edible-nest Swiftlets observed in the valley during October 1976. Unfortunately, no swiftlets were seen on this count. We spent two hours at the eucalyptus grove on the valley trail where swiftlets had been seen earlier this year. Conditions were similar to the earlier sighting, so it is difficult to explain the absence of swiftlets. However, we did record one 'Amakihi by call note at this site, approximately 600' elevation on the valley trail. Shama and Northern Cardinal were very vocal on our trip into the valley, whereas our midday walk out of the valley produced less than  $\frac{1}{4}$  of the birds recorded on the way in. Bush Warblers were recorded on this count by only call notes, although none were recorded in October 1976.

Robert Shallenberger

Moanalua Valley: This was the first time I had counted birds in Moanalua Valley, so have no comparison with past years.

We found many birds in the morning as we started the count. When we got to the head of the valley, we heard the sounds of noisy quarreling among some Shama; perhaps a dispute over territoriality. This continued for several minutes, before quieting down.

By 11:00 a.m. we were finding very few birds, so after a brief exploration up the valley on the left, we started to return.

Harry Whitten

Sand Island, Nu'u-anu, 'Ālewa, Fort Shafter, Salt Lake, Moanalua Gardens: The gulls were seen on a spit of land extending to the south of an island  $\frac{1}{2}$  mile (approx) off the north-western end of Sand Island. They were sighted at two separate times about 7:00 and 8:00 a.m. by Rey Larsen, Alline Singrey, and myself. We had two scopes. The day was clear and visibility excellent. The tide was out (or receding). Four gulls 2 adults and 2 immature were grouped together (4 or 5 ft. apart) on the ground (debris). Rey took photographs of

them through the scope, and if the pictures turn out, they will verify sightings.

Fort Shafter on A Street to the west of Palm Circle (parade grounds) a hose was spraying some shrubs and grass. The birds were having a delightful time in the spray. Besides some common birds (doves, etc.), some Red-vented Bulbuls and a Shama were "enjoying" themselves.

Because of unpleasantness on a previous trip to Salt Lake, we drove to the far side (northwest) and walked over some recently bulldozed earth, and from this high bank were able to use the glasses and scope to bring in the stilts and coots in the mud flats at the northeast side of that much diminished lake.

John Mitchell

Mānoa Cliffs Trail, Makiki, Punchbowl: The count for the Tantalus/Punchbowl area was in some respects disappointing compared to last year's count. The total number of species observed dropped from 15 to 13. Four species seen last year were not recorded in this count--Spotted Munia, Java Sparrow, House Finch, and Mockingbird. However, 'Amakihi and Red-whiskered Bulbuls, not seen last year, appeared this time. The total number of individuals declined from approximately 1,000 to 689. I really have no theory as to why this occurred. The weather was certainly excellent--fair and sunny.

In one respect, at least, the count was more rewarding. While no endemic birds were recorded last year, we did observe 9 'Amakihi in this year's count.

Chris Jones, John Rybczyk, and I began the count at 6:40 a.m. on the Pu'u 'Ōhi'a Trail which leads to the Mānoa Cliffs Trail. We followed the Mānoa Cliffs Trail for some time before returning to the car. We then drove to another access to the Mānoa Cliffs Trail and followed this portion of the trail. In all, we spent the bulk of our time and effort, approximately  $3\frac{1}{2}$  - 4 hours, on the Mānoa Cliffs Trail and it was here that we made our 'Amakihi count.

Although we had intended to cover the Makiki Valley Trail, we failed to do so because, in all honesty, we failed to find it. Although I've been on the trail several times in the past, I could not locate the access this year. Note to future birders--research the count area prior to the day of the count.

Since the Mānoa Cliffs Trail seemed the most likely prospect for an interesting count, this was done first. The Makiki Pumping Station and Nursery were left for late morning. This is contrary to what was done last year, but I think it's a better approach. Punchbowl Cemetery was left for last as usual.

As mentioned, we dropped 4 species from last year's count, but added 2 new ones. Of the 11 species in common in the 2 counts, 8 showed a decline in individuals. This decline was as much as 40-50% for some species such as Spotted Doves (47 to 20), Shamans (48 to 25), Common Mynas (84 to 44), and Northern Cardinals (58 to 32). Japanese White-eyes declined from 434 to 293. Slight increases were observed in Japanese Bush Warblers (24 to 29) and Red-crested Cardinals (3 to 9). The Golden Plovers seem to hold their own at 51.

William Burke

Lyon Arboretum, Mānoa Falls Trail: During the morning of the count, the sky was very clear, unusual for upper Mānoa. Wind speed was close to zero. Our first unusual species was encountered near Lyon Arboretum greenhouse. In the tall Albizia sp. trees, we heard four Hill Mynas. At the end of the service road, we were both sure, we heard a Japanese Bush Warbler, but couldn't see this cryptic forest bird. We also heard a single 'Apapane singing at the same location.

On the Mānoa Falls Trail, 'Amakihi were well distributed, as they were at the Arboretum. Two other native birds were recorded here. We heard a single 'Apapane sing and also saw it fly. We were disappointed to hear only one 'Elepaio, near the end of the trail.

Patrick Conant & Lawrence Hirai

Wa'ahila Ridge Trail: For the second year in a row, fine weather on the day of the count made for excellent birding. It was clear most of the morning, becoming partly cloudy by early afternoon. Trades were light.

Coverage this year was limited to St. Louis Heights, Wa'ahila Ridge, and the State park. As usual, there were a large number of exotic birds in the residential areas and the lower part of the ridge; absent on this occasion, however, were the Bulbuls (Red-vented and Red-whiskered) and the Red-crested Cardinal. We were also on the lookout for

the Red-billed Leiothrix, but none was detected this year.

Native species were present as low as the park area, although they were not particularly abundant until shortly before we reached the Woodlawn cutoff. Despite the few numbers of blooming 'Ōhi'a Lehua, we had fairly high counts of 'Amakihi and 'Apapane. We had good views of several O'ahu 'Amakihi, a number of which were males in bright plumage. Except for a small number of birds (notably a group of five individuals seen shortly after we passed the Woodlawn cutoff), most of our 'Apapane were heard either singing or calling from either side of the ridge. A female Frigatebird was seen soaring over the summit from the windward side of the island.

Other native species of note (although not of official relevance for the count) were three Kamehameha Butterflies, Vanessa tamehameha; and a beautiful Trematolobelia in full bloom at the summit.

Maile Stemmermann

Lanikai: This year the Red-vented Bulbuls tallied even with the Common Myna in gardens of Lanikai and were outnumbered only slightly by the Barred Dove. Very noticeable decline in Northern Cardinals--only 9, also no sparrow of note. Shama have nested in upper hills of Lanikai and come here for the "winter."

No seabirds, usually high in number in fall, were noted. However, it is heartening to see Golden Plover on school rooftops and lawns.

Fear of the vast flocks of pigeons (200+) fed by residents, which can spread bird and human diseases. The birds increase each year and are intermediary hosts of serious diseases from infected African Snails.

The bulbuls are already pests and eat fruits--Natal plum (Carissa grandiflora), papaya, strawberry guava, and mango!

Peggy and William C. Hodge

Kāne'ohe Bay Drive, Kāne'ohe MCAS, Moku Manu: Field conditions were excellent, with sunny skies and virtually no wind. However, very hot conditions at mid-day depressed bird activity. With seven spotters and no necessity to survey the quarry road and Ka-wai-nui, coverage of the assigned areas was very complete. The crew was able to "beat out" the Nupia pond areas by walking through the Batis flats and covered all sides of the ponds. A high count of 124 Hawaiian stilts resulted. At Ulupau, "only" 850 red-footed boobies were seen at the colony at 16:15, but at 17:30 the group estimated 1185 birds as a result of the influx from the sea. A fast check of the egret rookery just off Kāne'ohe Bay Drive on the Air Station at mid-morning revealed a few hundred. But at 17:45 after estimating 300 on the kiawe trees, by actual count an additional 708 flew in from all over the windward side! They were still arriving when we secured the count at 18:10. The only unusual sighting was of six mergansers seen on Kaluapuhi pond, KMCAS, in the afternoon.

Details as follows: Time: 13:45 to 14:05. Location: on protruding logs just west of the two peninsulas which project out into the pond. Activity: resting, preening, occasionally swimming. Description: all six exhibited the rearward projecting crest feathers, short legs and long sharp bill. The over-all color was grey, darker above, lighter below, with a white belly sharply separated from the grey in a line on the breast. Three of the birds showed a tinge of red or rufous on the head overlaid on the grey. The throat was dark grey, with no white showing. Bill and feet were dull, dark grey. A white patch was visible on the folded wings. Three were smaller than the others in size.

Although we attempted to make them fly to see if the white patch on the wing or other diagnostic characteristics could be seen, they refused to do so despite rock throwing and yelling. Although obviously mergansers, species identification was impossible as they were apparently in juvenile plumage. Although possibly the common or red-breasted merganser, given the description, we could only list them as "merganser sp.". Viewing conditions were excellent with good lighting and all seven observers confirmed identification by comparison with Peterson. We saw them from three separate vantage points through binoculars, and spotting scopes (25 and 60 power) from as far away as 500 yards and as close as 80 yards.

Ronald L. Walker

Note: Subsequently identified as hooded merganser, when seen at closer distance in better light (see page 82). \*\*\*\*\*

Schweitzer Legacy--The deeper we look into nature the more profoundly we know that we are united with all life. Man can no longer live for himself alone.

HONOLULU CHRISTMAS COUNTS  
1967 - 1976

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Arctic Loon	.	.	.	.	.	1	.	.	.	.
Black-footed Albatross	4	.	.	.	.	.	.	.	.	.
Wedge-tailed Shearwater	.	.	.	2	.	.	.	1	.	.
Red-tailed Tropicbird	2	.	.	.	.	.	.	.	.	.
White-tailed Tropicbird	.	.	.	.	1	.	.	.	.	.
Blue-faced Booby (Masked)	.	2	13	2	3	.	.	.	6	7
Brown Booby	51	132	60	20	73	33	6	3	24	29
Red-footed Booby	1750	1700	2380	1438	1850	1615	1475	938	549	1940
Great Frigatebird	952	270	377	333	1156	984	297	302	245	723
Cattle Egret	34	87	151	158	1127	1208	868	434	596	1032
Black-cr Night Heron	18	23	49	9	38	29	30	72	50	121
Canada Goose	.	.	1	.	.	.	.	.	.	.
Black Brant	.	.	.	.	.	.	.	.	1	.
Mallard	.	.	.	.	.	.	1	.	.	.
Hawaiian Duck (Koloa)	.	5	15	11	3	2	.	.	7	12
Pintail	77	.	54	111	18	71	7	.	47	.
American Wigeon	4	.	.	.	.	5	.	.	.	.
Northern Shoveler	13	15	18	7	8	89	14	.	8	8
Lesser Scaup	.	.	3	2	12	2	.	.	.	2
scaup (sp?)	1	7	2	.	.	.	2	.	.	.
Bufflehead	.	.	.	.	.	.	.	.	.	1
Hooded Merganser	.	.	.	.	.	.	.	.	.	6
duck (sp?)	.	.	10	.	.	.	1	.	12	.
Peregrine Falcon	.	.	.	.	.	.	.	.	.	1
Ring-necked Pheasant	.	.	.	.	.	.	1	.	.	.
Hawaiian (Com) Gallinule	1	7	2	6	5	6	3	2	6	10
Hawaiian (American) Coot	19	31	151	92	73	116	31	35	47	36
Semipalmated Plover	.	.	1	.	.	.	.	.	.	1
Golden Plover	1093	574	637	599	483	683	407	647	928	785
Common Snipe (Wilson)	.	.	1	.	.	.	.	.	.	.
Wandering Tattler	26	18	23	23	20	18	14	25	21	36
Ruddy Turnstone	347	215	160	125	60	139	39	121	109	124
Willet	.	.	.	.	.	.	.	1	.	.
Sanderling	35	43	39	35	83	33	9	9	23	39
Bar-tailed Godwit	1	.	.	.	.	.	.	.	.	.
Hawn (Blk-neck) Stilt	90	25	101	128	177	141	14	99	97	157
Pomarine Jaeger	37	5	.	24	8	10	.	.	6	8
Glaucous Gull	.	.	.	2	.	.	.	.	.	1
Glaucous-winged Gull	2	2	.	.	.	.	.	.	.	.
Herring Gull	.	1	.	.	.	.	.	.	.	1
California Gull	.	.	.	.	.	.	.	.	.	1
Ring-billed Gull	.	.	.	.	4	.	.	.	.	.
Franklin Gull	.	.	.	.	.	.	.	.	2	.
gull (sp?)	.	1	.	.	.	.	2	.	2	2
Sooty Tern	6000	.	2	.	200	.	.	.	.	.
Brown Noddy (Common)	.	6	26	.	.	56	.	1	149	.
Black Noddy (White-cap)	27	5	.	1	.	.	.	.	3	.
noddy (sp?)	.	.	.	.	.	.	.	.	.	37
White Tern (Fairy)	.	.	.	1	.	.	.	.	.	.
Rock Dove	.	.	.	.	.	.	8	25	468	78
Spotted Dove	506	636	678	534	619	627	578	573	1072	1145
Barred Dove	2184	1207	1694	1298	1275	1809	1438	1519	1557	2091
Salmon-crested Cockatoo	.	.	.	.	.	1	.	.	.	.
Red-crowned Parrot	.	.	.	.	4	2	9	3	1	.
Eclectus Parrot	.	.	.	.	.	1	.	.	.	.
Rose-ringed Parakeet	.	.	.	.	.	1	2	3	3	.

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Shell Parakeet	.	.	.	3	.	.	2	.	.	.
Black-hooded Parakeet	.	.	.	.	.	.	3	1	.	.
Barn Owl	.	.	.	.	.	.	.	1	1	2
Hawn (Sh-ear) Owl (Pueo)	3	.	.	.	.	.	.	1	.	.
Melodious Laughing-thrush (Chinese Thrush)	1	.	3	.	.	1	4	.	7	10
Red-billed Leiothrix	130	18	.	.	1	1	.	.	2	.
Red-whiskered Bulbul	2	7	.	.	4	.	.	2	5	77
Red-vented Bulbul	.	9	7	7	26	56	14	50	212	453
Mockingbird	9	12	4	2	7	13	10	7	7	11
Shama	22	18	7	9	55	36	66	63	161	303
Japanese Bush Warbler	.	.	.	.	8	4	10	3	63	113
O'ahu 'Elepaio	36	20	22	4	27	21	12	21	14	27
Japanese White-eye	260	300	227	287	487	561	419	497	1099	1960
Common Myna	6447	4265	4267	2981	2659	2427	2295	2473	2211	1929
Hill Myna	7	2	1	.	.	.	.	.	.	4
O'ahu 'Amakihi	46	40	44	22	98	34	22	32	103	171
O'ahu Creeper	.	2	.	.	.	.	.	.	1	1
'Apapane	26	19	17	9	59	11	24	70	72	103
Red-cheeked Cordon-bleu	4	2	4	6	3	17	1	2	7	9
Blue-headed Cordon-bleu	.	.	12	8	.	.	.	.	1	.
cordon-bleu (sp?)	.	.	.	.	.	.	.	.	5	.
Lavender Firefinch	17	23	6	7	14	40	1	4	34	11
African Firefinch	5	8	4	2	.	.	.	.	.	.
Orange-cheeked Waxbill	23	32	24	27	14	15	5	.	33	22
Red-eared Waxbill	7	29	12	13	13	19	7	.	48	18
Spotted Munia (Ricebird)	647	196	238	451	438	369	172	665	348	354
Java Sparrow	.	.	4	11	4	24	38	42	45	231
Pintailed Whydah	.	.	7	5	1	1	1	18	1	5
House Sparrow	1128	592	1294	1222	1459	2538	778	868	841	1068
Red Bishop	2	.	9	6	4	3	1	.	.	.
Golden Bishop	.	.	2	1	.	1	.	.	.	.
bishop (sp?)	.	2	.	.	.	.	.	.	.	.
Senegal Combassou	.	.	1	.	.	.	.	.	.	.
Saffron Finch	1	1	3	13	5	24	.	7	8	7
Northern Cardinal	79	128	94	74	152	204	108	131	216	364
Red-crested Cardinal	274	122	158	202	186	298	139	246	188	211
Yellow-fronted Canary	2	2	1	5	4	3	2	4	5	8
White-rumped Serin	37	18	6	9	3	.	.	.	.	.
House Finch	152	140	110	107	187	156	184	242	231	487
No. of Individ. Birds	22,641	11,024	13,236	10,454	13,218	14,559	9,574	10,263	12,008	16,393
No. of Species:	51	49*	53#	51	50	52	48#	44	54#	55*

Excluded: Unidentified \*gull; \*scaup and duck; /duck; and #duck, gull, and cordon-bleu.

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#### SEAFLITE CHRISTMAS BIRD COUNT

By Robert L. Pyle

The Christmas Bird Count along the route of the SEAFLITE hydrofoil KAMEHAMEHA from Honolulu to Maui was taken this year on January 1, 1977. The route followed was the same as last year: from Honolulu Harbor across Moloka'i Channel, west and south of Lāna'i, through Kealaikahiki Channel to Ma'alaea on Maui, a distance of about 88 nautical miles. This year, SEAFLITE's continuation leg from Ma'alaea to Kai-lua-Kona on Hawaii Island was scheduled only on Sundays, so it was not possible for the present observers to repeat that part of last year's Count.

Counting began at 8:10 a.m. off Honolulu Harbor, and continued until arrival off Ma'alaea at 10:40 a.m. Weather was good: scattered cumulus clouds over most of the route, increasing to five-tenths coverage of stratocumulus over Kealaikahiki Channel. Winds were ENE 20 to 25 knots just south of O'ahu, diminishing to 15 knots in Kealaikahiki Channel.



Seas were 6 to 10 feet from Diamond Head to beyond Koko Head, diminishing to 5 feet in Moloka'i Channel, to 2 to 4 feet in the lee of Moloka'i, and to 0 to 2 feet in the lee of Lāna'i.

The SEAFILITE trip was, as usual, smooth, fast (averaging 40 knots) and comfortable. One of the party observed from the rear of the second floor cabin, port side, and the other from the cockpit, starboard side. The observers communicated through the vessel's intercom system, using headsets provided by SEAFILITE. This was a big help in coordinating observations so as to avoid duplication. We are grateful to Mr. Larry Kelly of SEAFILITE Operations Office for making these arrangements, and to the KAMEHAMEHA crew Doug Stahl, Frank Wright and Ken Dietrich for their help and interest during the flight.

The following birds were recorded on the 1975 and 1976 (January 1, 1977) Counts: (see 'ELEPAIO, Vol.36, No.8, February 1976, pp.98-99 for further description of the 1975 Count).

	1976		1975	
	Honolulu- Ma'alaea	Honolulu- Ma'alaea	Honolulu- Ma'alaea	Ma'alaea- Kona
Black-footed Albatross	.	1	.	.
Wedge-tailed Shearwater	.	1	.	.
Red-tailed Tropicbird	2	.	.	1
Blue-faced Booby	.	2	.	.
Brown Booby	3	9	.	.
Red-footed Booby	14	32	.	.
Great Frigatebird	.	.	.	1
Pomarine Jaeger	.	30	.	.
Brown Noddy	1	.	.	65
Black Noddy	1	.	.	.
noddy (sp?)	4	.	.	.
White Tern	.	1	.	.
No. of Individual Birds:	25	76	67	
No. of Species:	5*	7	3	

\*Excluded unidentified noddy

Observers: Robert L. Pyle and Peter Pyle

All the boobies and tropicbirds were seen from Honolulu Harbor to just beyond Koko Head. No birds were seen crossing the Moloka'i Channel. The noddies were seen in the lee of Moloka'i, the last one recorded three minutes after passing Pali Kāholo Cliffs on southwest Lāna'i. No birds were seen on the remainder of the trip. Numbers of species and individuals were well below last year's Count. Most surprising was the failure to see any Pomarine Jaegers, although before and after Count day many were seen from Sand Island foraging offshore.

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NOTES: HONOLULU STAR-BULLETIN, 7 August 1969, page A-19, Sea Scientists Take Time to Study the Booby Birds: ...Scientists at Sea Life Park started a project to find out how far the birds roam from their nesting sites at the park and how individual birds choose nesting sites.

Birds taken as chicks from wild colonies and hand-raised by park staff members have returned as adults to roost where they were raised, some for three years or longer. They have nested and raised their own chicks a few feet from the paths taken by thousands of visitors to the park. ...The red-footed booby has proven to be a commercially valuable bird. Flocks of the birds serve as signposts to fishermen looking for schools of tuna and mackrel.

SEA FRONTIERS, Vol.22, No.3, May-June 1976, pp.130-135, The Red-footed Boobies of O'ahu by G. Causey Whittow: Dr. Whittow is one of the Hawaiian researchers who are beginning to answer the question, "How can Red-footed Boobies survive the intense heat to which they are exposed in their open nests in the tropics?"

His research was conducted at the Sea Life Park, O'ahu, where the birds are not confined, and many of them spend some time out fishing, but they always return to the park.

All photographs were by the author and one of the captions says, "As a first step toward understanding the boobies' heat tolerance one of them was fed a harmless radio

pill and allowed to pursue its normal activities. Meanwhile, the pill transmitted signals relative to the bird's body temperature to a receiver." Another caption under a very beautifully realistic color picture of a booby is, "A SIGN OF HEAT STRESS. Bill agape, this bird flutters its gular, thereby increasing air movement through its mouth and promoting heat loss by evaporation of moisture."

He notes, "Many birds are able to move the floor of their mouth cavities, the gular area, very rapidly when they are exposed to heat. This results in a greatly increased flow of air over the moist tongue and surfaces of the mouth cavity. Evaporation of moisture from the gular area removes a large amount of heat, and the blood leaving the gular region is, in consequence, cooled. ...Gular flutter appeared to start only when the body temperature increased to a definite level (39.3°C.), but it was also related to solar radiation because, when a cloud passed in front of the sun, gular flutter stopped abruptly, only to reappear immediately after the sun emerged. The behavioral mechanisms of regulating its body temperature, combined with gular flutter, were very effective because the body temperature of the bird did not exceed 40°C. ...It was also noticed that the bird would frequently roost in a head-down position. The head was always in the shade of the body when it did this, and the booby seemed to be asleep. ...Whenever it assumed this position, the body temperature diminished. One of the extraordinary things...was that although shade was available...they elected to stay in the sun, relying on their physiological mechanisms to keep them cool. ...Boobies...have salt glands--special structures below the eye--that are able to produce a concentrated salt secretion, which is discharged into the nasal cavity. In this way, they are able to compensate for the loss of water by getting rid of salt from the body fluids, thereby keeping the concentration of salts in their body fluids at normal levels."

For your reference, a copy of the SEA FRONTIER will be displayed at the general meeting. If you have any information on other researches on the booby, please share your experiences by writing to Kojima, 725-A 8th Avenue, Honolulu, Hawaii 96816.

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HONOLULU STAR-BULLETIN, 16 December 1976, page B-8, Danger to Rare Birds--Mongoose is Threat on Kaua'i by Paul Staffel: ...The discovery that the Indian mongoose has become established on Kaua'i has triggered major concern among State and federal wildlife officials.

...Presence of mongoose on Kaua'i was confirmed recently when a female of the species was killed by an auto near the Wahiawa bridge in south Kaua'i. Previously there had been a half-dozen reported sightings of mongooses in the area between Kōloa, Kōke'e and Kekaha, but none had been trapped or killed to confirm their presence.

Tom C. Telfer, Kaua'i biologist with the fish and game division, said today that the first step in a possible campaign against the mongooses is to "learn how many there are, where they are located." Telfer called for public help in the antimongoose campaign by reporting to the wildlife staff any sightings of the small mammals. ...Once the size of the mongoose colony is determined, Telfer said, the State will seek help of the U.S. Fish & Wildlife Service to combat the infestation.

He said three State agencies are concerned for different reasons: the Health Department because the animals could be carriers of disease, the Agriculture Department because of the threat to poultry, and the Fish & Game Division because of its concern for possible harm to the Island's numerous species of rare birds. ...

The frozen body of the dead mongoose was taken to Honolulu for further study by David Woodside, a biologist with the State division. He said the body is a female which has recently given birth to a litter of young. Scientists hope to get clues to what kind of feed the animal had eaten and its physical condition.

The Indian mongooses were first brought to Hawai'i in 1883 to help combat rat infestation in cane fields. The plan did not work out well because the mongooses roamed by day and the rats by night.... They were introduced onto the Big Island, Maui and O'ahu, but were kept off Kaua'i through efforts of conservationists and with the cooperation of Gaylord Wilcox, a plantation owner. Now, however, it appears the mongooses have finally gotten a foothold on Kaua'i. How, no one knows.

Telfer said conservationists are especially concerned because the animals pose a threat to many of Kaua'i's unique bird species, some of which are found nowhere else. Those in special danger are the ones who nest in ground cover. ...

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HONOLULU STAR-BULLETIN, 20 December 1976, page A-1, Waialae Hiker Runs into Monkey Business: Wild monkeys in Hawai'i? Maybe. Or they might be pets belonging to someone who allows them freedom to roam. In either case, two of the long-tailed critters gave Harold Butzine of Kahala the surprise of his life.

Butzine...was hiking about 1½ miles above the uppermost homes on Wai-'alaie Ridge yesterday and had stopped to rest when he was surprised by two of the primates. ...

"I heard a racket and one monkey jumped from a bush. He was some 10 feet from me and jumped about 12 feet," he said. "Then a second monkey followed the first."

Butzine said they were tan or brownish in color and had long tails. He telephoned Jack Throp, curator of the Honolulu Zoo, to report the sighting. Throp referred him to Nicholas Palumbo at the University of Hawaii.

Palumbo confirmed that there are quite a few primates in Hawai'i--including some that are allowed to roam loose and some believed to be living in the wilds. He knows of at least three in the Pacific Heights area and one in Kaha'u'u.

"There are opportunities for them to escape and probably a good many of them are living in the wilds," he said.

Palumbo...said the primates could establish and breed here. There is ample food and areas such as Kāne'one, with lots of bananas, is a natural place for them. They also could eat guava and even seeds from kiawe trees, he said. But the monkeys have a low reproduction potential, having only one baby each year, and pose no problems, he said. "And they could easily be shot if they become a problem," he added. ...

HONOLULU STAR-BULLETIN, 3 January 1977, page A-8, Brown Recluse can be Dangerous—New Spider Species in Isles: The brown recluse spider, a species not known to Hawai'i, has been discovered in Lanikai and it also may be in other areas of the Islands. ...

The bite of the brown recluse spider has been known to take several months or a year to heal. Some people have died from the bite.

The spider, described as a small, drab creature from the South-Central states, is less than an inch long and weaves a web without any definite pattern. Being able to live for quite some time without water, perhaps in shipping crates or boxes, the spider makes a good hitchhiker. Outdoors this secretive spider tends to hide beneath stones and other out-of-the-way places. Indoors it generally conceals itself in dark, dry places in the basement or in undisturbed closets, drawers or under furniture.

...The brown recluse...has a special mark on its back, just behind its head,...a darker patch shaped like a violin. ...The venom of the brown recluse affects only the area around the bite. A few hours after a person has been bitten...the skin begins to swell and turn red. In time the tissue dies and leaves a sore.

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HONOLULU STAR-BULLETIN, 27 August 1976, page A-23, Return of Life by Russ and Peg Apple:

...Scientists study the return of plant life following eruptions in Hawai'i Volcanoes National Park. ...Within the first year parts of the newly formed lava floor of Kilauea Iki began to show plant life. Plants initially grew close to the cooler edges. As the inner lake of molten lava cooled, plants began to move progressively closer to the center. The center was the last place cool enough to support growth.

Prolonged volcanic heating from below delayed return for several years of vegetation to the pumice and spatter cone right above the fountain site. On the pumice-covered area, tree snags added moisture by intercepting wind-driven rains. The pumice proved the best area for quick plant invasion, as long as there were dead snags, crevices and tree molds to collect moisture. Where these were lacking, plant cover is still insignificant.

...Algae appeared first on the surfaces of new flows and fallen pumice, followed by mosses and ferns, then lichens, native woody seed plants, and finally plants introduced to Hawai'i from overseas in historic times. Cheer those native Hawaiian plants. New lava flows are one place they are not threatened by rival species from overseas. Hawai'i's native forms are better adapted to the harsh environment left behind each time Pele erupts.

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HONOLULU STAR-BULLETIN, 20 December 1976, page A-19, Energy Demand by Harry Whitten:

In view of the new boost in oil prices by the OPEC nations, a recent speech by Russell E. Train, EPA administrator, is pertinent. "So far as energy conservation is concerned, I think the evidence is overwhelming that we suffer not from too little supply, but from too much demand," he said. "If we continue to consume our resources at runaway rates, and in wasteful ways, then no matter how fast we run, we must inevitably lose ground in our efforts to keep supply in step with demand." ...Train said that we must practice economy in the use of natural resources, that we should endeavor to get the most, rather than the least, out of the energy and other resources that we consume.

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Field Notes from Margaret Johnson, 229 Paiko Drive, 23 November 1976: Shama

Just saw a Shama, first ever, taking prolonged baths on our lanai bird bath, then feeding on the golden dew drop bushes.

Is this an escapee or has it come down into the residential area because of the disturbance of its forested area by man? If you have any information, please share it with other members by writing to Kojima, 725-A 8th Avenue, Honolulu, Hawaii 96816. MAHALO.

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Field Notes from Mae E. Mull, Volcano, Hawai'i, 22 December 1976: 'Apapane

...Right now as I write, three 'Apapane are vigorously bathing in the puddle of the corrugated roof of the water tank. They've been doing that almost daily for weeks—up to seven at a time. Sometimes one or two Mejiro will join in the splashing and get thoroughly soaked and bedraggled-looking too. The profuse lehua bloom has brought at least one 'I'iwi into the area for several days. We don't often see or hear that delightful clown around the house. 'Apapane are caroling madly as long as there is any light, but the first and last calls of the day are in darkness.

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Information Please: Rhys Walkley from Australia writes, "Perhaps a member of your Society could give me some information on the extent and potency of the NIOI tree especially the medical effects it has during and after consumption by a human. I have but recently found something out about this rare? extinct? tree. Can you add to this information please?"

"Abraham Fornander writing before 1880 on Volume Two of his 'An Account of the Polynesian Race' (pages 239-240) mentions that the poison god KALAI PAHOA was made of the wood of the NIOI tree, in which his spirit or essence was supposed to reside. It was an exceedingly poisonous wood, said to have been found only on MOUNALOA /Maunaloa/, Molokai, although Fornander had heard that it had also been found on Lanai but had since become extinct there. He says that the least particle of wood inserted in the food or drink was sure to kill the consumer. Is it, or was it found on Lanai, and is it really this potent, and why?"

"King Kamehameha I in the spring of 1790, while on Molokai, sent a messenger KIKANE to King Kahekili or Oahu with requests for battle and the two idols OLOPUE or OLOLUPE and KALAI PAHOA. Kahekili gave a chip of the Kalai pahoia to Kikane who returned with it to Molokai.

"Fornander mentions that the abuses of NIOI wood were new and fashionable in the latter time of Kaiakea of Molokai and his generation (which I assume to be the 1750's—Am I correct?).

"Was ground NIOI wood used in bird-lime or bird traps of the early nineteenth century? Is it more potent than oleander sap?"

"Where in the entire Hawaiian chain can protected sandalwood and unprotected sandalwood trees/shrubs be seen in bloom? Are they in danger of extinction for use in incense or carving? Did it ever grow on Niihau, Kahoolawe or Lanai?"

If you know anything about the historic NIOI or sandalwood, please share your knowledge by writing to Kojima, 725-A 8th Avenue, Honolulu, Hawaii 96816. MAHALO!

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Request Bird-flock Information: For the next six months a study of bird flocks in Honolulu and throughout O'ahu will be conducted, so please report all sightings of bird flocks, noting 1.Date and time, 2.Location, 3.Name of species, 4.Number of birds, and 5.Whether feeding, flying, or roosting, to C. van Riper III, Dept. of Zoology, University of Hawaii, 2538 The Mall, Honolulu, HI 96822 or Cindy Garder, Hawaii School for Girls at La Pietra, 2933 Poni Moi Road, Honolulu, HI 96815. MAHALO.

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'ELEPAIO Expenses from 1 January through 31 December 1976:

\$322.12	Envelopes and stamps	Mailing list as of 31 December 1976:	117	Mainland
280.90	Paper	170	Honolulu	(30 States & DC)
33.52	Stencil	55	Rural O'ahu	
52.48	Miscellaneous	42	Hawai'i	3
689.02		15	Kaua'i	7
		3	Lana'i	5
		10	Maui	1
		4	Moloka'i	1
		1	Guam	1
		6	APO	1
		2	FPO	3
		1	Majuro, MI	1
				449
				Copies

Is there any volunteers to take over the editorship? Please send in suggestions to improve the quality of the publication to Kojima, 725-A 8th Avenue, Honolulu, Hawaii 96816.

Specialized scientific researches on wildlife are important, but more important is the reality of the harmonious existence of man within his ecosystem. Urgently needed is information on inner security. This security is possible, if man becomes a partner instead of a greedy master of the ecosystem. Why does man feel threatened and selfishly possess or destroy parts of his ecosystem? Is it too much to hope for man to change from exploiter to contributor and live vigorously toward making this a better world for all ecosystems? Hawaii is beautiful and she is easy to get along, so let's vigilantly keep this delicate balance of give and take for the future generations. If you have found ways to make this a better world, please share your experiences with other members. MAHALO NUI LOA!

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ALOHA to New Members:

Claudia Belcher, 1604 Wailuku Drive, Hilo, Hawaii 96720  
 George G. Campbell, 1717 Ala Wai Blvd, #2303, Honolulu, HI 96815  
 Dr. Robert H. Cooper, RR 9, Box 242, Muncie, Indiana 47302 (Reinstated)  
 Justin Costa, Jr., P.O. Box 197, Makawao, Maui 96768  
 Mrs. Winifred C. Gaddis, 307 NW 15th St., Gainesville, Florida 32603  
 W.M. Gilman, 68 Fairbanks Ave., Wellesley Hills, Mass. 02181  
 Mrs. William M. Hammon, 89 Niuiki Circle, Honolulu, HI 96821  
 Mrs. Charles J. Pietsch, Jr., 235 Queen St., Honolulu, HI 96813 (Reinstated)  
 Howard Sakai, P.O. Box 55, Kurtistown, Hawaii 96760  
 Mr. & Mrs. A.C. Stearns, P.O. Box 147, Hawi, HI 96719  
 Mrs. Harry A. Whitten, 1617 Keeaumoku St., Apt 904, Honolulu, HI 96822

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Donations: MAHALO! Life member Thelma Hensley has generously donated \$10.00, and the following members have generously included donations with their membership renewals: A.M. Christian-\$2.00; Dr.&Mrs.William A.Myers-\$4.00; Maile Stemmerman-\$2.00; Mrs.Erika Wilson-\$7.00 noted, "to go into the various projects pursued by HAS...and postage /to England/ as well."; Helen Whorton-\$5.00. MAHALO NUI LOA for your KOKUA!

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HAWAII'S BIRDS, a field guide, is available for \$3.00 + postage & tax. Postage: U.S. 25¢ book rate, 57¢ first class; foreign--variable, weight 5ozs; sales and mailing in Hawaii--add 12¢ sales tax. Send in orders to Book Order Committee, Hawaii Audubon Society, P.O. Box 22832, Honolulu, Hawaii 96822. \*\*\*\*\*

FEBRUARY ACTIVITIES:

13 February - Field trip to Haiku Valley. Meet at the State Library on Punchbowl St. at 7:00 a.m. or at the corner of Haiku Road & Kahekili Hwy at 7:30 a.m. Bring lunch, water and if possible your car. Transportation cost (\$1.00) to be paid to the drivers. Leader: Tim Burr, 235-4036.  
 14 February - Board meeting at Waikiki Aquarium Auditorium, 7:00 p.m. Members welcome.  
 21 February - General meeting at Waikiki Aquarium Auditorium at 7:30 p.m.  
 Program: Migration in North America and How the Honeycreepers Reached Hawaii--Maybe by Dr. C.J. Ralph (color slides)

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HAWAII AUDUBON SOCIETY EXECUTIVE BOARD:

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'ELEPAIO: Editors-Charlotta Hoskins, Unoyo Kojima

MAILING ADDRESS: P.O. Box 22832, Honolulu, Hawaii 96822

DUES FOR 1977 ARE NOW PAYABLE: Regular-\$3.00 per annum, Junior (18 years and under)-\$1.00 per annum, Life-\$100.00 (may be paid in four annual installments). Members whose dues have not been paid by February 28th will be dropped from membership & 'ELEPAIO mailing list.