



DISCOVERY OF THE YELLOW-FRONTED CANARY ON MAUNA KEA, HAWAII

by Charles van Riper III

The Yellow-fronted Canary (*Serinus mozambicus*), a native of Africa, is approximately 10 cm long, has a canary-like beak, bright yellow rump, and a prominent yellow eye-brow band which connects across the forehead (Bates and Bussenbark 1970). Within the pet trade this is one of the most frequently encountered members of the Serin group. Very little is known about this feral species in Hawaii. The first published sighting of the bird in Hawaii was made at Koko Head, Oahu (Ord 1964). Hawaii Audubon Christmas counts have recorded it in all years since 1965, principally in the Diamond Head area of Oahu. The first nesting of the species was reported by Berger (1977). The Yellow-fronted Canary has not been reported from any Hawaiian island other than Oahu.

On 29 December 1977, while working at 2130 m elevation in the mamane (*Sophora chrysophylla*) and naio (*Myoporum sandwicense*) forest on the southwestern slope of Mauna Kea, Island of Hawaii, I observed a flock of 11 Yellow-fronted Canaries. They moved through the area in a loose feeding flock, eating primarily orchard grass (*Dactylis glomerata* L.) seed heads. Traveling in leap-frog fashion, some stayed in trees while others fed; birds on the ground would then fly to a perch and those in the trees would drop down to forage. The birds continually vocalized, using short high-pitched chirps which seemed to act as location calls. At 0730 hrs the following day I found two more Yellow-fronted Canaries at 2280 m elevation in the same forest. These birds were taking grit, and possibly wind-blown seeds on the road just below Puu Laau cabin.

One Yellow-fronted Canary specimen was found on 29 December 1977. It was an adult female weighing 12.6 g with the following measurements: total length 114.0 mm, wing chord 66.8 mm, tail 42.5 mm, tarsus 16.3 mm, beak length 8.6 mm, and bill depth 5.9 mm. The skull was completely ossified, indicating the bird was over six months of age, and large fat deposits were present. The gizzard contained only grit and grass seeds. No internal helminth parasites were found, and blood smears were negative for hematozoa. A regressed ovary (2.0 X 1.3 mm) and molt in its final stages on the head indicated the bird was probably in a postbreeding condition. The plumage of this bird was brightly colored; however, I did observe a number of less brightly colored individuals. The description of this species in *Hawaii's Birds* (p. 48) notes that sexes are alike; however, Bates and Bussenbark (1970) found the female generally duller and less distinct in all colors and patterns. Mackworth-Praed and Grant (1960:1061) reported the female is usually slightly browner on the head and mantle, while young birds were duller than females, having less yellow on the forehead.

In addition to the birds observed at Puu Laau in December a number have been seen subsequently in other areas of Mauna Kea: on 7 February 1978 near Halepohaku, E. Kosaka recorded Yellow-fronted Canaries at 2440 m; M. Nakahara saw three at 2680 m; and J. M. Scott noted a flock of 17 at 2800 m. The following day N. Santos saw two flocks of 37 and 18 birds each between Puu Kole and Puu Kaupakuhale at an elevation

of 2740 m. On 9 February C. Kepler recorded 46 Yellow-fronted Canaries at 2620 m elevation above Puu Kahinahina. Despite intensive surveys over the last three years (e.g. van Riper, et al. *in press*), these are the first observations of the species on the mountain. These large numbers of birds, and the fact that the individual I found was an adult which had apparently recently bred, indicate this species is well established on Hawaii, and probably reflects an astounding population explosion.

During the past seven years I have spent over 750 days in the mamane-naio forest on Mauna Kea and have never before observed Yellow-fronted Canaries. It would seem that because the population on Oahu is small and these birds have not been observed on Maui, this population originated by release on Hawaii. The probable site of release was Puu Waawaa Ranch, Hualalai, where a number of exotic species have been recorded (Lewin 1971, van Riper 1973).

Other introduced passerine species have undergone similar range expansions in the recent past on Hawaii. I found the Saffron Finch (*Sicalis flaveola*) extremely abundant on the Puuwaawaa Ranch in 1969-1970 and by 1971 found that it had extended its range to the base of Kohala Mountain at Kamuela. The expansion of Cordon-bleus (*Uraeginthus* spp.) from Puu Waawaa was not as extensive. I found them only 15 km away at the Puuana-hulu Game Management Area. Shallenberger (1974) and Berger (1975) noted the spread of the Warbling Silverbill (*Lonchura malabarica*), which they thought was released from Puu Waawaa Ranch, to Pohakuloa and Kawaihae, Hawaii respectively. I have found this species abundant at 2000 m elevation on Mauna Kea in the fall of 1974, but have since only infrequently encountered it in that mamane-naio forest. Perhaps because of the recent drought on Hawaii, the Yellow-fronted Canary has been forced into new feeding areas, and thus their presence on Mauna Kea. It will be informative to record future sightings of this species and to see if it will continue to expand its range.

ACKNOWLEDGEMENTS

These field observations were made while the author was supported by National Park Service contract CX 8000 7 0009 to the National Park Cooperative Resources Studies Unit at the University of Hawaii. I am grateful to C. Kepler, E. Kosaka, M. Nakahara, N. Santos, and especially J. M.

Scott for their sightings of Yellow-fronted Canaries on Mauna Kea. S. G. van Riper, T. Burr, D. Woodside, C. J. and C. P. Ralph read and commented on the manuscript.

LITERATURE CITED

- Bates, H. and R. Bussenbark. 1970. Finches and soft-billed birds. Jersey City, N.J.: T.F.H. Publications.
- Berger, A.J. 1975. The Warbling Silverbill, a new nesting bird in Hawaii. *Pac. Sci.* 19: 51-54.
- Berger, A.J. 1977. Nesting of the Yellow-fronted Canary on O'ahu. *'Elepaio* 37:128.
- Lewin, V. 1971. Exotic game birds of the Puu Waawaa Ranch, Hawaii. *J. Wildl. Mngmt.* 35: 141-155.
- Mackworth-Praed, C.W. and C.H.B. Grant. 1960. African handbook of birds, Series I: Birds of eastern and northeastern Africa. Vol. 2, 2nd Edition. London: Longmans, Green & Co.
- Ord, W.M. 1964. Fairy Terns return to Koko Head, June 7, 1964. *'Elepaio* 25: 3-4.
- Shallenberger, R.J. 1974. African Silverbill. *'Elepaio* 35:55.
- van Riper, C., III. 1973. Island of Hawaii land bird distribution and abundance. *'Elepaio* 34:1-3.
- van Riper, C., III, J.M. Scott, and D.H. Woodside. *in press*. Distribution and abundance patterns of the Palila on Mauna Kea, Hawaii. *The Auk*.

P.O. Box 54
Hawaii Volcanoes National Park
Hawaii 96718

ALOHA TO NEW MEMBERS

The Society welcomes the following new members and hopes that they join with us in protecting Hawaii's native wildlife: D'Arcy Bailey, Honolulu; Catherine Becker, Kailua; Dr. Cameron B. Kepler, Kula; Noel Loo, Hilo (Junior), E. H. Middleton, Koloa; Christine Muldoon, Grand Rapids, Michigan; Celia Podorean, Honolulu; Mrs. Robin C. A. Rice, Honolulu; and Ray Williams, Victoria, British Columbia.

A special mahalo to Lawrence M. Bartlett of Amherst, Massachusetts, who has joined the ranks of our Life Members.

Contributions were received from Erika Wilson, Ulster, Pennsylvania and from C. J. Ralph in payment for a talk given to the Golden Gate Audubon Society during its field trip to the islands.

NATURAL HISTORY SCHOLARSHIP

The Hawaii Audubon Society is accepting applications for the Rose Shuster Taylor Scholarship, a year undergraduate tuition scholarship at the University of Hawaii. It will lend assistance to an undergraduate in natural science, especially one interested in Hawaiian natural history. For information write: Dr. Sheila Conant, Dept. of Gen. Sci., 2450 Campus Rd., Honolulu, HI 96822. Deadline for applications: April 1.

A BIRD SUES THE STATE

As reported in the last 'Elepaio, Hawaii Audubon Society joined other groups in a lawsuit over the Palila, an endemic Hawaiian bird living only on the slopes of Mauna Kea. An interesting aspect of this suit is that the Palila is a co-plaintiff in suing the Hawaii Department of Land and Natural Resources (DLNR), and William Y. Thompson, chairman of its Board. The Sierra Club, National Audubon Society, and Dr. Alan Ziegler are also co-plaintiffs in the suit filed on January 27, 1978 in Honolulu federal court.

The Palila, a member of the Hawaiian honeycreeper family, is an endangered species whose population of about 1,000 birds exists only between 7,000 and 10,000 feet on Mauna Kea. These are largely on state-owned public lands administered by DLNR.

The bird and its co-plaintiffs allege that the Department is purposefully maintaining populations of non-native feral goats and sheep for sport hunting purposes within the Palila's critical habitat. These game mammals are apparently destroying the remaining mamane-naio forest and associated native vegetation that the Palila depends upon. The suit alleges that DLNR's refusal to remove goats and sheep from the Palila's critical habitat violates the federal Endangered Species Act. The Palila and its co-plaintiffs are asking the court to order DLNR to "initiate steps that will result in the complete and permanent removal of said feral goats and sheep from the Palila's critical habitat by January 1980 at the latest."

After more than a year and a half of correspondence with the Governor, the chairman of the Board of DLNR, and the State Attorney-General, it became clear to the plaintiffs that the state has become intransigent and intended to maintain the goats and sheep unless ordered otherwise by a court.

Never before in U.S. law has a bird been a plaintiff in a law suit. It will be interesting to see if our Honolulu federal judges accord the Palila full legal standing in its fight for its life.

C. J. Ralph

RECENT OBSERVATIONS OF BIRDS
AUGUST TO NOVEMBER

by Robert L. Pyle

All observations not otherwise identified are from Oahu Island.

Pied-billed Grebe--One was found at Lihue Plantation Settling Basin Nov 8(TT).

Albatross--Black-footed Albatrosses arrived back at Midway Atoll during the week of October 16, and Laysan Albatrosses had returned by October 30(NB-C). By Nov 19, the majority of Black-foots had laid eggs, and the Laysans were beginning to lay. A Short-tailed Albatross was seen the first week of November on Sand Island, Midway Atoll(NB-C), possibly the same individual that has returned there in several recent winters.

Wedge-tailed Shearwater--At Midway Atoll on Aug 15, about half the Wedge-tails had downy chicks and half were still incubating. All eggs had hatched by mid-Sept, and by Nov 19 all juvenals were of adult size and fully feathered(NB-C). On Oahu, 200 were counted from shore between Sea Life Park and Manana I. on the late afternoon of Sept 7(RE). Fledging of young on Kauai I. peaked in mid-Nov and was 99% complete by Nov 30 (GVB).

Newell Shearwater(Th)--These shearwaters fledged on Kauai during Oct and Nov. Each fall, on their nocturnal flights from nesting burrows in the mountains to feeding and wintering areas at sea, many come down on lawns and highways near the coast, apparently blinded by street lights and automobile headlights. An estimated several hundred were found this fall. Many were salvaged by residents and returned to the wild, but probably as many as 100 were killed by automobiles(GVB,TT).

Bonin Petrel--At Midway Atoll in Sept, these birds were becoming quite obvious after dusk, with a few excavations noted on Sand I., but none on Eastern I. Burrow-digging became more active in Oct(NB-C).

Bulwer Petrel--Bird parts picked up at Puu Pehe Pt., Lanai I., March 26, 1977, were identified in October by State Fish and Game personnel as Bulwer Petrel remains (PJC).

Red-tailed Tropicbird--On Aug 15 at Midway Atoll, 13 were incubating eggs and 52 chicks were found in nests, the majority fully feathered(NB-C). Two adults were seen flying over Lanai I. on Aug 24(PJC),

and 4 were seen over Manana I., off Oahu, on Sep 8(RE).

White-tailed Tropicbird--On Lanai I., one bird was found dead by the Maunalei water line near the mouth of an irrigation tunnel on Sep 26, and the dead remains of two more were found on the Maunalei switchback trail Nov 9(PJC).

Blue-faced Booby--Eight birds were found on Eastern I., Midway Atoll, in mid-Aug, with one pair incubating eggs. The eggs were found abandoned on Sept 19(NB-C).

Great Frigatebird--Several reports have been received this summer and fall of groups of frigatebirds swooping and dipping over open water in Kawainui Marsh and nearby Nuupia Pond, KMCAS. These birds roost in good numbers on Moku Manu islet, just off KMCAS.

Little Blue Heron--On Sept 21, a bird in full plumage with brownish purple head and neck and slate-blue body was found in a small waterway at the nw corner of the former Big Pond area at Waipio(DS). The bird was observed in flight and standing at 25 and 60 yards distance. One was seen in the same place almost exactly one year before ('Elepaio, July 77: 2).

Cattle Egret--A high count of over 200 was in the resting flock at Basin #4, Waipio, Aug 28 (RLP). One on Laysan I. in mid-July and one on Tern I., French Frigate Shoals, Oct 20(BG) are the first reports of these birds in the northwest Hawaiian Islands.



Cattle Egret Photo by: Rob Shallenberger, Ahuimanu Productions

Black-crowned Night Heron--Ten to twelve birds were found at Salt Lake Sept 27(JSW).

White-faced or Glossy Ibis--The bird at Honouliuli Unit, PHNWR, was seen commonly through Aug and Sept and last recorded Sept 22(GB).

Brant--A Black Brant at Kealia Pond, Maui I., Nov 9 was observed well with scope and binoculars at 150-200 ft distance (RAC,GVB).

Mallard--One to three birds, found with larger groups of wintering Pintails and N. Shovelers and thus more likely to be wild migrants, were reported this year from Waipio(Nov 20,WMO) and Kii Pond,JCNWR (Oct & Nov, RAC) on Oahu; Kealia Pond (Sept 20,RAC) and Kanaha Pond(Nov 9,RAC, GVB) on Maui I., and at Aimakapa Pond (Sept 20,RAC) on Hawaii I. Thirteen were at Kealia Pond Nov 9(RAC,GVB).

Hawaiian Duck(Koloa) (En)--These have been seen more regularly at Waipio this fall, with a high count of 15 on Sept 24(CJR). One to four birds were reported occasionally during the fall at KMCAS, Kawainui Marsh, and Kaelepulu Canal, all near Kailua (JFW,RLP).

Gadwall--A female was first found at Waipio Nov 6, and a pair seen Nov 13 were still there Nov 27(WMO).

Green-winged Teal--At Waipio, the species increased from one bird Oct 9(WMO) to 15 on Nov 13 (WMO) and to an unprecedented high count of 33 on Nov 27 (WMO,RLP). Two to five were reported during Nov at Kii Pond, JCNWR, at Kanaha Pond on Maui I., and Aimakapa Pond on Hawaii I.(all RAC).

Blue-winged Teal--Two were at Waipio Nov 13 (WMO), and one on Nov 27(WMO,RLP). One was found at Hanalei NWR, Kauai I. Oct 26, and 2 on Nov 14(GVB).

Am. Wigeon--One to three were seen regularly at Kii Pond in late Oct and Nov(RAC), and 4 were there Oct 22(RTL). One was found at Waipio Nov 27(WMO,RLP), and 6 at Kakahaia NWR on Molokai I. Nov 8(RAC).

Scaup--One female Greater Scaup, identified by wing stripe in flight, was found at Kealia Pond, Maui I., Nov 9(RAC,GVB). Four scaup, probably including both species, judged by wingstripe, were seen at Waipio first on Nov 13, and had increased to 6 birds on Nov 27(WMO).

Hawaiian Hawk (En)--One bird was seen on Oahu Sept 28 ('Elepaio, Dec 1977:67).

Osprey--An Osprey seen carrying a fish off Kailua Beach, flying toward Nuupia Pond, KMCAS, 1½ miles away on Aug 20(PP), and one seen at Nuupia Pond Oct 1(BB), might have been the same bird photographed there last May. If so, it is one of the rare instances of an Osprey overwintering in Hawaii. Another bird was found at Kanaha Pond, Maui I., Nov 28(CK), where one was seen regularly last winter.

Erckel Francolin--Six birds in 2 groups were seen along Waimea Canyon Rd., Kauai I., Sep 16(RE).

Ring-necked Pheasant--Single birds were seen at Waipio Aug 28 and Sept 4(RLP).

Turkey--Two were found near Puu Laau, Hawaii I., Sept 12 (RE).

Hawaiian Gallinule(En)--One found in the old Big Pond area at Waipio Sept 19(CJR,CPR) is the first reported there in years. Two adults, each with 2 chicks, were watched at leisure along Kaelepulu Canal on Sept 22 (JFW).

Hawaiian Coot(En)--Coots have increased dramatically at Kakahaia Pond, Molokai I., since the area was acquired as a NWR last year. Sixty-two counted Dec 7 was the highest number ever recorded there and included 7 with red frontal shields. Five newly constructed nest platforms were seen, three of which had birds apparently incubating(RAC).

Semipalmated Plover--The first one at Waipio was found Aug 28, increasing to 3 to 5 regularly through Nov, with a high count of 8 on Oct 15(WMO,CJR,RLP,DS,CPR).

Killdeer--The Waipio bird remained throughout the fall.

Black-bellied Plover--One to three were found regularly at Waipio from Dec 4 through November, and 4 were there Nov 20(RLP,WMO,CJR,CPR). One was seen Sept 11 at Honouliuli Unit, PHNWR(HAS), and 2 at Kaluapuhi Pond, KMCAS Oct 2(RLP).

Am. Golden Plover--Six overwintered on the beach between Maunalei and Hauola, Lanai I. Newly arrived migrants swelled the count to 24 on Aug 27(PJC).

Common Snipe--One flushed out of a flooded fallow cane field at Waipio Nov 27 (WMO, RLP).

Bristle-thighed Curlew--This was a good year for curlews. They were seen from Sept through the end of Nov just inland of the dunes near Kii Pond, JCNWR, where in recent years they have been regular in fall. High counts were 9 on Sept 9(RE) and 7 on Oct 2 (RLP, WMO). On all of these, the rump and upper tail were much paler than the back (some pale tan, others more tawny), which were excellent field marks in flight. Several gave the characteristic 3-noted call. Single Bristle-thighs were also found at Hauola, Lanai I., Sept 10(PJC), and at Honouliuli Unit, PHNWR Sept 11, where one was seen and photographed closely at leisure (HAS,RLP,MS). On Midway Atoll, Bristle-thighs were seen often during the fall, with as many as 2 seen together on the abandoned runway(NB-C).

Whimbrel--On Sept 25, 2 birds with rump and tail concolor with the back, found with the Bristle-thighed Curlews, were identified as Whimbrels (CJR, WMO, CPR, DS, et al.). A bird collected at this same spot within the past 2 years and now in the collection at BYU Hawaii campus, Laie, was identified as the American Museum of Natural History as a Whimbrel(PB). The only prior records of Whimbrel for the state are sight observations at Midway in 1940 and 1957.

Lesser Yellowlegs--Two were found at Waipio in close association with other shorebirds on Sept 4(WMO,RLP,DS), and 3 were there Sept 18(CJR,CPR). Single birds were at Kealia Pond, Maui I., Aug 24 and Oct 19, and 4 on Nov 9(RAC). One was at Kanaha Pond, Maui I., Nov 9 and 10(RAC). On Hawaii I., one was at Aimakapa Pond Aug 24, and another at Opaepa Pond the same day(RAC).

Ruddy Turnstone--This species seems to have returned in greater numbers this fall. At Waipio, 120 were counted on Basin #4 alone on Sept 20(RLP). Flocks numbering more than 50 have been seen at Waipio and at KMCAS.

Red Knot--One bird was studied at leisure on Basin #4 at Waipio Nov 20, 24 and 27(WMO, RLP) and Dec 1(DS). Four prior records are known for Hawaii, the last in 1968.

Sharp-tailed Sandpiper--Sharp-tails had a good flight this fall. At Waipio, counts by numerous observers built up from 2, found first on Sept 18, to an unprecedented 33 on Oct 15(CJR,CPR, with 6 still present on Nov 27. At Kealia Pond, Maui I., 23 were found Oct 19(RAC,RLP), 17 on Nov 7 (CK), and 10 on Nov 9(RAC,GVB). Smaller numbers were seen at Kii Pond JCNWR, Pearl City Unit PHNWR, Hanalei NWR on Kauai I., Kanaha Pond on Maui I., and Opaepa Pond on Hawaii I. (RAC,GVB,RLP).

Pectoral Sandpiper--Pectorals were seen regularly with the Sharp-tails at Waipio from Sept 11 (2-RLP,HAS) through Oct 23(1-CJR, CPR), with none found there Nov 6(WMO). High counts were 6 on Oct 16(WMO) and 5 on Sept 18 and Oct 8(CJR,CPR). Two were at Hanalei NWR, Kauai I., Oct 26(GVB). One to four were seen regularly at Kii Pond, JCNWR through the fall(RAC) on Maui I., one was at Kealia Pond and 4 at Kanaha Pond on Nov 9(RAC,GVB).

Least Sandpiper--One was seen regularly at Basin #4, Waipio, from Sept 24 through Nov 27(CJR,WMO,RLP,CPR). One was at Kii Pond, JCNWR Oct 20(RAC).

Dunlin--One, first seen at Waipio Oct 15 (CPR,CJR), had increased to 5 by Nov 20 (WMO).

Western Sandpiper--One found at Waipio Nov 24 (WMO).

Sanderling--Five oversummered at the beach between Maunalei and Hauola, Lanai I. (PJC). Thirty-five in the Waipio area Sept 25 (WMO) and 60 at the basin near the fountain pond Oct 8 (WMO) were good counts.

Dowitcher sp?--One bird was seen regularly at Kii Pond, JCNWR from Oct 2 through November (RAC). One was seen infrequently during November at Pearl City Unit, PHNWR (RAC). Three were found at Waipio Nov 20 (WMO).

Ruff--A bird discovered at Basin #4, Waipio, on Sept 18 by C.J. and Carol Ralph was an exciting find. It was seen there again Sept 20 (RLP), Sept 24 (CJR, et al.) and Sept 25 (WMO,OB), when good photos were obtained. It was not seen thereafter, despite numerous visits to the area. This Old World species has been recorded only twice before in Hawaii: one bird collected at Kure Atoll in Dec 1963, and one or two seen on Maui I. in Sept and Oct 1971. The Waipio bird could be studied at leisure in generally good light, at 40 to 80 yards distance, on open mud, in close comparison with many other shorebirds. RLP noted that the bird was "about the size of a Golden Plover; bill longer than plover's and thicker at the base, giving an impression of a very slight downturn. Back of the head and nape were pale tan, considerably darker on the crown with an indistinct narrow dark mark through the eye. A noticeably buffy wash on the face; much paler buffy tinges in indistinct splotches on the breast in front of the wings, discernible only in very good light. Underparts uniform white, somewhat dingy on throat and upper breast, brighter on belly, with no streaking or spotting. Back was scaly patterned, similar to an early fall Golden Plover. It was observed in flight 3 times, showing white sides to the tail not extending to the tip."

Hawaiian Stilt (En)--The population at Waipio through summer and early fall was generally 100 to 120 birds, mostly at Basin #4, along the banks of the concrete-lined filtration pond, and at the Basin nearby. This compares with counts of 499 and 550 last year at the adjacent Big Pond area, which then afforded a much larger expanse of open mud and water, but now is dried and densely overgrown. Newly created habitat at Pearl City and Honouliuli Units of PHNWR may help



Hawaiian
Stilt

Photo by:
Rob Shal-
lenberger,
Ahuimanu
Produc-
tions

to maintain a larger stilt population in this area. Encouragingly, 15 to 20 stilts were sighted in the remnant of Salt Lake, between Honolulu and Pearl Harbor, on Sept 27 (JSW). In the new water habitat now being created at Kii Pond JCNWR, 32 stilts were counted Oct 2 (WMO,RLP). Twenty-eight were found at Punamano Pond, JCNWR, and 53 at KMCAS, both on Oct 22 (RTL). Also on Oct 22, 4 were in the wet pasture along Kaelepulu Canal (JFW).

Wilson Phalarope--One bird in winter plumage was found at the Basin near the filtration pond, Waipio, Aug 30 by OB, who obtained excellent photographs of the bird in characteristic postures, showing its pattern well. Two birds were there together Sept 4 (WMO,RLP,DS).

Jaeger (probably Pomarine)--One was seen from SEAFILITE between Kauai I. and Oahu I. Sept 17 (RE). Counts at Sand I. during October were 5, 9 and 52++ on the 15th, 22nd, and 29th (RTL).

Bonaparte Gull--One in winter plumage was found at Kealia Pond, Maui I., Nov 28 (CK).

Least Tern--The HAS group had a study of an immature foraging at Honouliuli Unit, PHNWR, Sept 11. Some participants reported seeing a second individual just as the group was leaving. One or two individuals were seen here regularly last fall. One was seen at Kealia Pond, Maui I., Oct 18 and 19 (RAC,RLP)

Brown Noddy--Counts of 800 and 500 birds around Manana I. were obtained from shore near Sea Life Park, Oahu, in late afternoon of Sept 7 and during the day on Sept 8, respectively (RE).

Black Noddy--Birds from the population resident at Mokolea Rock are seen foraging at Kaluapuhi Pond, KMCAS, at any time of year. Thirty were counted there Sept 4 and 10 on Oct 2 (RLP).

White Tern--Two were seen Aug 4 (GGC) circling overhead and finally alighting in the top of a large keawe tree at Beretania and Victoria Sts, only 5 blocks from where a pair had successfully nested this year in May and again in Sept ('Elepaio, Dec '77: 63-64). At the regular location in Kapiolani Park, high counts of 5 on Aug 28 (RLP, OB) and at least 8 on Sept 23 (CPR, CJR) were recorded. Two were seen from SEAFILITE between Kauai I. and Oahu I. Sept 17 (RE). At Eastern I., Midway Atoll, White Terns were more numerous in September than in prior months (NB-C).

Parrots--The single Red-crowned Parrot and the Nanday Conure which frequent the area around the Aquarium in Kapiolani Park were seen there together Oct 15 (JFW). Three long-tailed birds, possibly the Rose-ringed Parakeets seen occasionally in Kapiolani Park, were found the same day in the gully back of the Paki Street tennis courts (JFW).

Barn Owl--One was reported at Kokee, Kauai I., Sept 15 (RE), and one was seen flying over a yard in the Haiku Plantation area in Kaneohe Nov 24 (MS).

Red-billed Leiothrix--Two were observed at Puu Laau, Hawaii I., Sept 12 (RE).

Red-whiskered Bulbul--A bird seen Nov 29 (TAB) on Dowsett Avenue in Nuuanu, and reported there earlier by residents of the area, is a westward range extension for this introduced species, which has been steadily increasing in eastern Honolulu.

Red-vented Bulbul--Reports near the fringe of its range at this time include 1 in the Big Pond area of Waipio Sept 11 (HAS), and 3 heard well up Manana Ridge trail back of Pacific Palisades Oct 29 (JFW). A very young, nonflying juvenal remained in a Kai lua yard from Sept 15 to 18. It was fed constantly accompanied by 2 adults, who showed agitation when someone entered the yard (RLP).

Hawaiian Thrush--Five were found in a half hour along the upper Stainback Highway, Hawaii I., on Sept 13 (RE). One of the Kauai form, Kāma'o (En), was reported on the Alakai loop trail near Kokee, Kauai I., Oct 7 (NHM).

Drepanids--On the Alakai loop trail, Kauai I., four 'Ākepa were seen on Sept 15 and 3 Hawaiian Creepers the next day (RE).

Twenty Palila (En) and 1 'Akiapola'au (En) were found at Puu Laau, Hawaii I., on Sept 12 (RE). Five 'Akiapola'au were found Oct 1 at about 4800 ft elevation in the Olaa Tract, Hawaii I., just off Stainback Highway (CPR, CJR). This is one of the lowest altitude records for the species and is also in an area easily accessible to birders and the public. A Crested Honeycreeper (En) was found in mid-August on the Hosmer Grove side of Koolau Gap, Maui I. (PaC).

Red-cheeked Cordon-bleu--Two were found on the Na Laau trail Oct 15, but the nest found there in late May showed no further sign of activity through the summer (JFW).

Lavender Fire-finch--This is still the most frequently seen of the exotic finches in the Kapiolani Park-Na Laau area. Six were reported in the Park Sept 23 (CJR, CPR) and 4 on Na Laau trail Oct 15 (JFW).

Red-eared Waxbill--Fifteen were reported in early Nov near Kahuku (RAC), across Oahu from Diamond Head, and very near the Kuli-lima filtration pond, where one or two have been seen in each of the past two winters.

Orange-cheeked Waxbills--Twelve were in a mixed flock of exotic finches feeding with about 30 Spotted Munias in a patch of tall grass at a wet spot makai of the golf driving range in Kapiolani Park (RLP, OB). The patch of grass has since been cut down. This shows the value to an observer of finding patches of grass that have been allowed to go to seed. These become important feeding spots for some of these finches in the Kapiolani Park area.

Red Munia--More than 10, including at least 3 males in excellent plumage and actively singing, were at the overgrown Big Pond area, Waipio, Sept 4 (WMO, RLP). Two males still in excellent plumage were seen there Nov 6 (WMO). This may be a courtship period for this species prior to nesting.

Black-headed Munia--Two were seen on a lawn in Koloa, Kauai I., Sept 19 (AH). This is close to the area where this species was first reported from Kauai I. in 1976 and May 1977 ('Elepaio, Aug 1977: 18).

Java Sparrow--his species continues to expand its range in the Honolulu area, although it may be dependent on feeders to sustain its large numbers (WMO). Two have been visiting a feeder in the 1700 block of Makiki St. (MR), and a flock of more than 100 were noted at a feeder on Prospect St. on the slope of Punchbowl Crater Sept 28 (WMO).

Seven were at the Main Library on King St. Sept 5; six at 22nd St. and Kaimuki Ave. Nov 1, and two at the Archives Bldg. Nov 30(all by GGC).

Red Bishop and Golden Bishop--Three male Red Bishops and 1 male Golden Bishop were in a mixed flock of finches feeding in a patch of grass near the golf driving range in Kapiolani Park Aug 28(RLP,OB). Two male Red Bishops (which might have been from this group) were seen a short while later back of the Paki St. tennis courts. One male Red and one male Golden were in the gully back of the tennis courts on Oct 15 (JFW), and one Red was on the Na Laau trail the same day(JFW).

Yellow-faced Grassquit--A population of this species, numbering at least 40 birds, was discovered by John F. Walters in a recently burned area on Manana Ridge above Pacific Palisades on Oct 29. The birds were "about the same size as a Spotted Munia, but with a thinner beak, more like a House Finch in proportions. There were two color phases, which might represent male and female, or adult and juvenal. The drab one was very nondescript brownish-olive-grayish, darker above and lighter below, with a dark patch on the bend of the wing and a light-colored broken eye ring that made the eye look elliptical. The bright one was about the same ground color with a darker head and breast. The chin and two broad stripes above and below the eye were bright yellow, and the rump and under tail coverts may have been yellowish. I didn't get nearly as good a look at this color phase, so my description may err in detail, but I had a good view of the head of at least one bird and am sure of the pattern of yellow there. These birds had a characteristic call note--a very high-pitched single tssik that I thought for a while was an insect. They were very shy." This introduced species was first reported in 1974 in this same area('Elepaio, Dec 1974: 65), but was not observed again until August 4, 1977, when 2 birds were found on Halawa Ridge, about 6 miles to the southeast(RJS). It is uncertain now just how large an area in the Oahu mountains this species may currently occupy.

Yellow-fronted Canary--Six were feeding with other finches in a patch of tall grass near the golf driving range in Kapiolani Park Aug 28 (RLP, OB). They were seen frequently during Oct in the Park near the tennis courts on Kalakaua Avenue, with a high count of 6 to 8 individuals on Oct 26(JFW). One appeared at a feeder Nov 26 at Kawela

Bay near the Kuilima Hotel at the opposite end of Oahu some 30 miles away from Diamond Head(RAC).

Yellow-billed Cardinal--About 10 birds were seen around Opaepa Pond, Hawaii I., on Oct 19(RAC,RLP), a few miles from the Honokohau location, where they have been seen regularly in the past year or two.

ABBREVIATIONS AND OBSERVERS--Endangered species(En), Threatened species(Th), Brigham Young University(BYU), James Campbell National Wildlife Refuge(JCNWR), Kaneohe Marine Corps Air Station(KMCAS), Pearl Harbor National Wildlife Refuge(PHNWR), Bill Bigler, Gordon Black, Philip Bruner, Timothy A. Burr, Omer Bussen, Nancy Butowski-Casey, G. Vernon Byrd, George G. Campbell, Richard A. Coleman, Patrick Conant(PaC), Peter J. Connally, Richard Erickson, Brent Giezantanner, Annie Henderson, Cameron Kepler, Reynold T. Larsen, Norman H. Mellor, W. Michael Ord, Peter Pyle, C.J.Ralph, Carol P. Ralph, Mary Roberts, Robert J. Shallenberger, Dan Snider, Hawaii Audubon Society(HAS), Maile Stemmermann, Thomas Telford, John F. Walters, Jack S. Wilmoth.

WAIMEA, KAUAI CHRISTMAS COUNT

December 18, 1977

David Boynton, Compiler

Extremely low counts were made because of foggy, rainy conditions in Kokee State Park, and many fewer observers than in previous years, resulting in some areas not being covered. No coverage was made in the lowland, shoreline areas.

White-tailed Tropicbird	5
Red Jungle Fowl	52
American Golden Plover	16
Mockingbird	1
Kauai 'Elepaio	11
Common Myna	26
Japanese White-eye	8
Kauai 'Amakihi	4
'Anianiau	11
Kauai 'Ākepa	2
'Apapane	80
'I'iwi	21
Northern Cardinal	1

Seen in the Kokee area during the Count week, but not on the Count day were: Kauai Creeper, Erckel Francolin, and Ring-necked Pheasant. Participants were: David Boynton; Sandy Westendorf; Dale Wilkins; and Jan Okinishi, all in one party. Two miles on foot and eight miles driving, 7:30 a.m. to 2:30 p.m.

CHRISTMAS COUNT, KAPAA, KAUAI

by Delano Kawahara, Compiler

Laysan Albatross	3
White-Tailed Tropicbird	21
Brown Booby	1
Red-footed Booby	127
Great Frigatebird	1
Cattle Egret	283
Black-crowned Night Heron	27
Koloa (Hawaiian Duck)	17
Pintail	3
Northern Shoveler	2
Red Jungle Fowl	53
Ring-necked Pheasant	4
Hawaiian (Common) Gallinule	8
Hawaiian (American) Coot	264
American Golden Plover	238
Ruddy Turnstone	4
Wandering Tattler	4
Hawaiian (Black-necked) Stilt	110
Spotted Dove	184
Barred Dove	930
Short-eared Owl	3
Mockingbird	6
Melodious Laughing-Thrush	32
Shama	59
Common Myna	457
Japanese White-eye	157
Spotted Munia	136
House Sparrow	127
Western Meadowlark	28
Red-crested Cardinal	1
Northern Cardinal	111
House Finch	886

Totals: 32 species
about 4,288 individuals.

Participants: George Byrd; Helen Byrd; Valerie Byrd; Vernon Byrd; Diane Duckworth; Gary Hanauer; Delano Kawahara; Dan Moriarty; Linda Moriarty; Sandy Westendorf; Dale Wilkins; William Villanueva; and Grace Yoder.

JANUARY BOARD MEETING

At its meeting January 9, 1978 the HAS Board debated the merits of joining the Sierra Club in suing the State for violations of the Endangered Species Act. One Board member felt that the case is not as strong nor as well-researched as it could be. Other concerns were the financial responsibility involved and the danger in alienating some Big Island groups. But most of the Board felt that our entrance into the suit is necessary. The Board decided, with one dissenting vote, to join the suit as

a co-plaintiff and to commit up to \$1000 toward costs of the suit. Also, a letter would be sent to National Audubon Society urging them to join the suit.

The National Audubon Society has sent formal invitations to Rob Shallenberger, Bill Mull, Jean King, Eugene Kridler, Andrew Berger, C. J. Ralph, James Hudnall and Miklos Udvardy to speak at the NAS Western Region's Asilomar Conference in March. The Board designated Rob Shallenberger as HAS's official delegate to the Conference, with C. J. Ralph and Bill Mull as alternates, and agreed to pay the airplane fares of Rob Shallenberger and Bill Mull. National Audubon Society will pay the living costs of the Hawaii speakers at the Conference.

Rob Shallenberger reported that the estimated cost of a straight reprinting of *Hawaii's Birds* (30,000 copies) by the Honolulu Star-Bulletin is \$21,900, with the cost of changes at \$50 per page. New color plate separations would be \$160 each.

The Board approved the present members of the 'Elepaio Editorial Committee (Bob Pyle, C. J. and Carol Ralph, Maile Stemmermann and John Walters) as the Publications Committee, with Bob Pyle as Chairman and C. J. Ralph as Editor.

C. J. Ralph started the discussion of editorial policy by outlining eight points which he wished to have the Board discuss. The first four points were approved with minor changes. After some discussion on the use of the hamza and macron in the spelling of Hawaiian words, the Board decided that bird, plant and other animal names should be printed with both, but that these marks should be omitted from other words.

The Board approved sending a note to the Mokauea Fisherman's Association, thanking them for hosting the January field trip, and including \$10 to pay for gas used by the shuttle boat. Two copies of *Hawaii's Birds* were also sent. It was decided to try to obtain a used IBM Selectric typewriter for the Society, should should one become available for around \$500 or less.

Maile Stemmermann and J.F. Walters

GALAPAGOS TOUR FOR HAWAIIANS

Dr. Andrew J. Berger will lead a tour to the Galapagos Islands off Ecuador August 5-21. The tour will feature a comparison of Hawaii's natural history with that of the other famous archipelago. Various areas in Ecuador will also be explored. For further information contact Dr. Berger, Department of Zoology, University of Hawaii, Honolulu, HI 96822.

BIRD OBSERVATIONS DUE

Any bird observations of interest for the period 1 December 1977 through 28 February 1978 should be submitted now. Many of these will be included in Bob Pyle's seasonal account in the 'Elepaio (see last season's account in this issue), and some will be included in the Hawaii Region Report in *American Birds* magazine, edited by C. J. Ralph and Bob Pyle.

Please send observations and reports to Robert L. Pyle, 741 N. Kalaheo Ave., Kailua, HI 96734.

GLEANINGS FROM THE TECHNICAL LITERATURE

Plumage sequence and taxonomy of Laysan and Nihoa Finches

by Richard C. Banks and Roxie C. Laybourne

Condor 79: 343-348, 1977

From the beginning the native "finches" on Laysan and Nihoa have presented problems to taxonomists. The Laysan Finch was first described from only an immature specimen and named *Telespyza cantans*. When the more yellow-plumaged adult was described, it was at first thought a different species and named *T. flavissima*. The finch later found on Nihoa was also called a separate species, *T. ultima*. Since then, *T. flavissima* has been eliminated without argument. However, impressed by the great similarities between these two islands' yellow and brown-streaked finches, some taxonomists have accepted a revision that makes *ultima* a subspecies of *cantans* and puts both in the genus *Psittirostra* along with other finch-billed drepanids (Hawaiian honeycreepers) like the Palila and 'O'u.

In the current article Banks and Laybourne provide some new bits of information for taxonomists to work with. They studied museum skins, including some only recently made available. They found evidence that the young Nihoa Finch molts into the adult breeding plumage in its first breeding season and continues with two molts a year, one before, one after breeding. On the other hand, the Laysan birds molt only once a year, after breeding, and young males do not acquire the adult plumage until the third winter. The Laysan bird's appearance changes as breeding season approaches, but

this is due to feather wear rather than feather replacement. In body measurements the Laysan population seems to have males larger than females and adults larger than immatures, although the authors provide no statistical tests of the data. The Nihoa population is more uniform in size. The Laysan birds average larger than those on Nihoa.

The authors argue that the degree of difference between these populations and our lack of knowledge of their relationships warrant calling them separate species, *Telespyza cantans* and *T. ultima*. For similar reasons they prefer retaining the five separate genera of finch-billed drepanids rather than combining them into one.

C. P. Ralph

PUBLICATIONS OF THE SOCIETY

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

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

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

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

POSTER: "We care about Hawaiian Wildlife Habitat". A joint effort of H.A.S. and other conservation groups, this colorful poster illustrates native waterbirds overlaid on a map of the island chain.
(Postpaid).50

HAWAII AUDUBON SOCIETY 1977

INCOME

Dues.....	\$ 1,275.25
Life Memberships.....	550.00
Donations.....	372.46
Interest.....	2,006.01
Scholarship.....	450.00
'Elepaio Back Issues.....	27.50
Publications	
Field Checklist.....	338.61
Guide to Birding.....	60.20
Hawaii's Birds.....	16,314.46
Poster.....	57.00
Preliminary Checklist.....	110.00
	<u>\$ 21,561.49</u>

EXPENSES

Postage	
book.....	\$ 151.84
office.....	299.38
Excise Tax.....	87.15
General Office.....	403.96
'Elepaio Printing.....	1,915.45
'Elepaio Mailing.....	390.50
Contributions.....	250.00
Scholarships.....	450.00
Misc'l.....	19.78
Copying.....	331.90
General Printing.....	340.14
	<u>\$ 4,640.10</u>

Income over Expenses...\$ 16,921.39

'ELEPAIO EXPENSES

	Mimeograph Jan.-March, May-July 6 issues	Offset April 1 issue	Offset Aug.-Dec. 5 issues
Stencils	\$ 11.52	\$ -0-	\$ -0-
Paper	100.77	-0-	-0-
Mimeograph ink	53.77	-0-	-0-
Stamps	126.50	-0-	9.66
Bulk mailing	-0-	31.50	188.30
Envelopes	66.77	-0-	-0-
Twine	4.40	-0-	-0-
Addressograph plates, etc.	31.75	-0-	22.80
Typing	-0-	-0-	101.77
Printing	-0-	391.96	797.63
Collating, folding	-0-	-0-	70.00
Tax	-0-	-0-	36.72
Masthead printing(10M)	-0-	-0-	151.41
Totals	<u>\$ 395.48</u>	<u>\$ 423.46</u>	<u>\$1,378.29</u>

INVENTORY AND ASSETS

	1 January 1977	31 December 1977
Assets:		
Checking Account..\$	428.36	68.27
Savings Accounts		
General.....	9,841.29	10,342.66
Book.....	20,415.59	37,195.70
Totals.....	<u>\$30,685.24</u>	<u>47,606.63</u>
	<u>\$+16,921.39</u>	

Approved by the Auditing Committee, February 5, 1978.

Copies of

Hawaii's Birds.....	14,157	4,768
Field Checklists		
First Printing(heavy)	2,575	850
First Printing(light)	2,100	250
Second Printing(light)	-0-	3,030
Poster.....	1,050	936

C. John Ralph
George Campbell
Robert L. Pyle

HAWAII AUDUBON EXECUTIVE BOARD

President Dr. Robert L. Pyle
Vice-President (Conservation)

Dr. Robert J. Shallenberger
Vice-President (Program) John Ford
Treasurer Lawrence T. Hirai
Recording Secretary Maile Stemmermann
Corresponding Secretary . Dr. John F. Walters
Director (Legislative) George Campbell
Director (Field Activities) . Timothy A. Burr

Representatives

Island of Hawaii Mae E. Mull
Washington, D.C. Dr. Warren B. King

Other Workers

Membership Committee

Linda Murakami, Kami Wong
Book Order Secretary Polly Carlstead

'ELEPAIO EDITORIAL COMMITTEE

Robert L. Pyle, C. John Ralph (Editor),
Carol Pearson Ralph, Maile Stemmermann, and
John F. Walters.

IF NOT A MEMBER, PLEASE JOIN US

Regular Member \$ 3.00
Junior Member (18 and under) 1.00
Life Member 100.00
(Payable in \$25 annual installments)

HAWAII AUDUBON SCHEDULE OF EVENTS

Mar. 6. Board meeting at the Pyles' home, 741 N. Kalaheo Ave., Kailua (262-4046 for directions), 7 p.m. All members welcome.
NOTE: FIRST MONDAY instead of second Monday.

Mar. 12. Field trip to Kapiolani Park and Na Laau Trail, to look especially for recently introduced exotic finches. Meet at 7 a.m. at the Hawaii State Library on Punchbowl St., or at 7:30 at the Waikiki Aquarium parking lot. Leader: Bob Pyle, 262-4046.

Mar. 13. "Natural history of Hawaii's streams" by John Ford; an exciting lecture and slide presentation on Hawaii's most abundant inland waters, their unique biota, and history of disturbance. 7:30 pm. at the Waikiki Aquarium Auditorium.

* * * * *

Reprinting of material in the 'Elepaio is permitted if credited to: "The 'Elepaio, journal of the Hawaii Audubon Society."

HAWAII AUDUBON SOCIETY
P. O. Box 22832
HONOLULU, HAWAII 96822

Non Profit Organization
U. S. POSTAGE
PAID
Honolulu, Hawaii
Permit No. 1156

