



Bishop and Dole on Forest Management

by Anita Manning

Charles Reed Bishop and Sanford Ballard Dole were prominent businessmen of their time, who found forest conservation a sound investment. Bishop's name brings to mind banking and Bishop Museum; Dole's name, law and politics. Less well known is the interest in Hawaiian natural history that each expressed differently. Bishop included Hawaii's plants and animals in his earliest plans for a museum to honor his wife, Princess Bernice Pauahi and tried to see that soil and forest conservation were practiced in his ranching interests. Dole's interest found expression through his work on Hawaiian birds (Amadon 1944).

Both men affirmed their concern for Hawaii's forests while serving on a Committee on Forestry for the Planters' Labor and Supply Company (the forerunner of the Hawaiian Sugar Planters' Association). The Committee was appointed on Dole's suggestion at the October 1882 annual meeting of the Company. The Committee consisted of Bishop, Dole, J.L. Richardson, W.H. Purvis, A. Cropp, E. Bailey and S.T. Alexander (Planters' 1882). Their report was presented to the next annual meeting and published in the *Planters' Monthly* in 1883. The report demonstrates an understanding of the economic importance of maintaining a viable watershed and advocates a variety of means to accomplish this. Some of the Committee's suggestions violate current theories of forestry management and native ecosystem preservation. Other recommendations, such as extermination of feral goats, continue to be sound advice. The full text of the Committee's report is reproduced below.

REPORT OF COMMITTEE ON FORESTRY

Honolulu, October 16th, 1883

To the Planters' Labor and Supply Company:

Several members of the Committee on Forestry, from whom valuable data and suggestions were expected, because of their long and familiar acquaintance with the several islands of the group, are absent, and have sent no report.

So much is already known regarding the great value of forests, not only for furnishing fuel, building material and furniture woods, but in preserving the rainfall, restraining the violence of freshets, perpetuating the springs and rivulets of water, tempering the atmosphere and preventing the waste of soil; and on the other hand, regarding the great damage in many places irreparable, which has in various countries resulted from the denudation of the land, especially the high lands, that it is not necessary to enlarge upon those points; but let us give attention to the condition of our own country, and learn what can be and ought to be done here. No doubt our knowledge of the subject has exceeded our performance in the past. In all new countries, and in some older countries, the hand of man is against the forest, sparing neither old or young, good or bad, until at last he suffers from his wastefulness and folly, and then slowly if at all, sets about repairing damages or abandons the field, and this country is not an exception to that rule.

A century ago, this country was in nearly every district, fairly well wooded; and in some parts now bare, was heavily timbered; but during the last fifty years, it has suffered by the hand of the wood chopper, the ravages of fire, the encroachment of cattle and goats, the attacks of insects and the parching droughts, until many places where formerly the springs and streams never failed in summer or winter, there is now no running water except in rainy weather. The animals eat the young trees, trample upon the roots and in various ways weaken or destroy even the larger trees. The birds, accustomed to the dense shade and quiet of the woods, desert the places opened to the glaring light and drying rays of the sun, and the miriads of insects have it all their own way. Destructive and annoying insects have, like noxious weeds and grasses, been unintentionally introduced in the packing of



Eric Knudsen and companion with wild bull shot at Halemanu, Kokee, Kauai, ca. 1910.

Photo issued by Bishop Museum

merchandise and on plants and seeds, and we have not many insect-destroying birds to help in keeping them down. In those countries where forest culture is most thoroughly and profitably conducted, great care is taken to keep the plantations free from decaying wood, because it harbors insects which attack the living wood.

Many years ago when larger numbers of whale-ships came here to recruit, the firewood required by them led to the stripping of thousands of acres of forest land, the finest trees of which were cut or mutilated in the most wasteful manner, the smaller trunks and the larger limbs only being taken away, the larger trunks and dried branches remaining furnished the kindling wood for far reaching and destructive forest fires.

The early sugar plantations, though not many in number, consumed and wasted large quantities of wood, which the improved machinery and furnaces of the present time would have saved.

The enhanced value of land and cattle with the great advantage of having animals under control, have lately induced some land-holders to fence; and it is by such means that much of the remaining woodland may be protected and improved. To fence off the woodland and hills where it can be done at reasonable cost, and plant suitable trees of native and foreign varieties is, no doubt, nice economy. Those who hold land on short lease or who do not intend to remain long in this country, cannot be expected to take much interest in or spend money for forest protection; but the prosperity resulting from the reciprocity treaty with the United States has already led to greater improvements in the country as well as in town, in building up pleasant homes and well furnished plantations and farms, and will, we hope, and add many to the number of permanent residents who will have regard for the future interests of the country and for those who are to come after them. We are just beginning to realize the great value of some of the trees brought some years ago from foreign lands, such as the Alynook, Samang, Pride of India, Eucalyptus and others, and it is probable that the money appropriated by the legislature will, in the hands of Mr. A. Jaeger, be the means of introducing yet other valuable trees and shrubs, and of practical experiments in their cultivation. Dr. Wm. Hillebrand did much for the flora of these islands and still takes an interest in our forestry and agriculture. Captain James Makee planted more trees than anybody else has up to the present time, and his family and others now enjoy the advantages of his wise forethought and liberality. The Lihue Plantation on Kauai employs a German forester, Mr. Langer, and a number of men exclusively in tree planting. The work commenced in July, 1881, and up to September this year two hundred acres had been planted in Pride of India, Samang, Koa, Locust, Eucalyptus and Iron Wood, at a cost of \$6,600, and the trees are doing well.

Mr. W.H. Purvis, a member of the committee, but not present, has just returned from England via India, and has brought some young trees and seeds of new varieties with him. He is strongly impressed with the importance of protecting the forests of these Islands, and willing to do his part in the work. Writing from Kukuihaele, he says: "The Pacific Sugar Mill Company are fencing in their forest land between this and Waimea with a view to preserving the forest and consequently the stream of Hiilawe, but the source of that stream is by the side of Pukapu plains, and is already almost denuded of forest. I believe that the successful growth of cane in this district is conditional on the preservation of our forests. Are not the droughts from which we suffered in 1881 and 1882 due to the enormous destruction of forests here. In conclusion I can only say that I hope some steps will be taken at this meeting of the association towards getting legislation on this most important subject."

Mr. W.H. Meyer says that on Molokai the forests have been gradually disappearing for many years, from four different causes: first and chiefest, the destruction of the young trees by cattle and goats; second, the reckless burning over of large tracks of land by natives for the purpose of planting deep and upland taro; and third, but second in the work of destruction, injudicious and indiscriminate wood-cutting for gain, and last, the appearance of the brown bark louse, the white aphid, and subsequently or consequently perhaps, the black fungus, which alone destroys several varieties of the smaller trees, such as the Ali, Naio and others. He adds that several severe droughts within the last twenty years have helped to kill out the trees, and also expresses the opinion that if the cattle and goats could be kept out of the forest it would in time restore itself to a great extent.

The decadence of the Hawaiian forests is a well known fact, though it is probable that not many residents realize the extent of the ravages caused by animals, insects, fire and the ax.



Maud L'Orange hunting goats near Halemanu, Kokee, Kauai, early 1900s.

Photo issued by Bishop Museum

As no Hawaiian forest tree is protected by thorns or otherwise in its natural condition against animals, it is clear that no restoration of indigenous forests can be effected without protection by fencing.

Some of the exotic trees, like the Algeroba, are in a measure, able to protect themselves, and can be used successfully for covering suitable lands with forest growth without further protection, though even in these cases their growth and spreading from self-planting is greatly facilitated by protection from animals.

It is unlikely that any of the forest lands which have been denuded from any cause, are capable of self-restoration without artificial protection except occasional nearly inaccessible localities. It is also true that simple protection would be insufficient in many places to promote a voluntary growth to any satisfactory extent, as the heavy grasses that often cover the ground in open and moist localities, and particularly the Hilo grass where that has established itself, are sufficient to prevent the seeds of trees from germinating or to smother the young shoots of those that succeed in germinating, and to retard and enfeeble the growth of young trees.

Some of the exotics that have been successfully introduced are so hardy and such rapid growers that there is much encouragement in experimenting with them in forest culture. The Algeroba tree has already been referred to; for dry and stony land at a low altitude and not exposed to the immediate effect of strong winds from the ocean, it is an admirable tree, and left to itself, speedily creates a valuable forest, producing not only good firewood but also first-class feed for stock, where the land may have been nearly valueless before. The protection that these trees give to the soil has a marked effect upon the growth of grass underneath its shade in localities too dry for grass without their influence.

The Monkey Pod or Samang requires low altitudes and considerable moisture, and in suitable localities is a tremendous grower, making wood more rapidly than any other tree growing in these islands except perhaps a variety of banyan which is worthless for timber. The wood of the Samang is tough and easily worked, making a valuable addition to our timber woods, and at the same time grows larger in the stem than perhaps most other of our trees except the Koa, and this great size it reaches in a comparatively short time. I think this tree would prove a great success in forest culture here as far as a thousand or fifteen hundred feet above the sea.

The Australian gum trees and perhaps the iron-wood will flourish over a varying

range from the sea to several thousand feet above it, their upper-most limit here not being ascertained that I know of. The gum trees seem to prefer high altitudes, and could be probably used to advantage from the upper limit of the Samang, far up toward the summit of the mountain ranges.

It would be well for large land owners to reserve suitable localities — hilltops, steep slopes and rocky stretches of land for tree planting. The results, if not directly profitable in a pecuniary point of view, would be advantageous in the local effects upon the climate, and protection against land-slides and storms. It has come to be a necessity here that the government should inaugurate similar enterprises. In many places such artificial forests would pay handsomely upon the investments.

There are localities in various parts of the islands which are exposed to drifting sands which form hills from fifteen to thirty feet high which slowly move inland burying everything in their progress and utterly ruining the lands that they cover. This is the case at Wailua on the island of Kauai; but a heavy growth of Hau has for a long time successfully resisted and delayed these encroachments. It would seem from this that the Hau might be used in other localities to act as a barrier to such moving sand-hills.

There should be careful investigation into the destruction of trees by insects. The habits of such insects and their manner of attacking trees should be studied, and efforts made to discover remedies for and means of prevention of their ravages, and particularly suitable birds — wood-peckers and other insect-eating birds, be imported and acclimated.

The Koa tree is believed to be particularly liable to the attacks of insects. Mr. Andrews, of Makawao, says that Koa trees in that neighborhood are injuriously attacked by a large borer about the size of one's little finger, and in other places dead and decaying trees are found to be swarming with a variety of large ants.

Measures should be taken by the government and land owners to exterminate the wild goats which infest nearly all Hawaiian mountain ranges. These are probably the most destructive enemies to which our forests are exposed.

The government nursery will doubtless be instrumental in introducing new varieties of trees which will become valuable additions to our forest trees.

What can and should be done by the Government towards protecting, improving and extending the forests? and in what way can private landowners or holders under long leases be induced to do likewise? In leasing Government lands, Crown lands, and private lands on long terms, cannot a great deal be accomplished by requiring lessees to fence off or otherwise protect the woodland and to plant trees in consideration for the long term and some abatement of rent? Prizes or awards to those who plant — in proportion to the number of trees or acres planted, or amount of money expended — would have some influence; but it cannot be expected that individuals shall make large expenditures or sacrifices mainly for the public good. The Legislature should provide for assistance, either through the Agriculture Society or through special officers or commissioners.

Permit us to suggest the appointment of a larger committee on forestry, from several districts of each island, and that the members be requested to ascertain from old residents the extent of the changes that have taken place in the forests, springs, streams and climate during the last fifty years, and report thereon — also as to present condition and tendencies; what is being done for the protection or improvement of the forests; what kinds of trees do best and are the most valuable; what ought to be done in legislation upon the question, and any other facts or suggestions deemed important. Reports on one or more points might be made from time to time to the chairman, and some of them very soon, and all should be sent in before the 1st of October.

Chas. R. Bishop, Chairman
S.B. Dole

In April 1884, Bishop circulated a letter to interested parties requesting information on changes in Hawaii's forests in the past thirty years, and the causes, which trees grew well and where, and possible protective measures for forests. *Planters' Monthly* printed Bishop's letter and replies from E. Bond (North Kohala, Hawaii) (Planters' 1884a), E. Bailey (Wailuku, Maui), H.N. Greenwell (Kealahakua, Hawaii), and J.M. Lydgate (Laupahoehoe, Hawaii) (Planters' 1884b). The Committee's suggestion that periodic

reports be made was carried through, as short notes and reprints of articles on forestry appeared irregularly in *Planter's Monthly* in succeeding years. Dole served on the Committee through 1884 (Planters' 1884c). Bishop continued to serve as chairman or member through 1887 (Planters' 1887), and Forestry remained a standing committee of the Planter's Labor and Supply Company for many years thereafter.

Although Bishop wrote that it made him "sad and regretful" to hear of the extinction of Hawaii's flora and fauna (Bishop 1898), his motives for committee service and concern for forests were doubtlessly primarily economic. For Dole too, business not ornithology was a strong reason for advocating forestry practices which preserved soil and water. Forest preservation was, and is, good business.

ACKNOWLEDGEMENTS

The author thanks the Hawaiian Sugar Planters' Association for kind permission to reprint the complete text of the "Report of the Committee on Forestry."

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Fulvous Whistling-Duck Sighted on Maui and Molokai

Thomas S. Baskett¹, Stephen L. Berendzen², Tim J. Ohashi² ii²

In a recent article in 'Elepaio, Leishman (1986) reviewed the status of the Fulvous Whistling-Duck (*Dendrocygnus bicolor*) in Hawaii. The species was first reported on Oahu in 1982; many other sightings of both adults and young have been recorded since then on Oahu (Leishman 1986, Berendzen unpub. data). The species has also been observed on Kauai, beginning in 1983 (Leishman 1986).

Here, we report sightings of the Fulvous Whistling-Duck on Maui on 11 July 1985; and on Molokai on 15 January 1986. We believe that these are the first records for the two islands.

On Maui, we observed the single bird intermittently during a 1½-hour morning period as we collected invertebrates on Kealia pond, near Kihei. The whistling-duck, in adult plumage, was closely associated during almost all of the observation period with groups of Hawaiian Coots (*Fulica americana alai*). We counted 51 coots on the pond, but the whistling-duck was usually in company of a subgroup of about 15.

When standing among the coots on the muddy shoreline, the whistling-duck was quite conspicuous, not only because of its different color, but particularly because of its erect posture and greater height. In the latter respects, it somewhat resembled the stilts themselves.

During most of the period of observation, the birds were loafing, but there was some movement and coalescing of subgroups of coots. When this occurred, the birds, including the whistling-duck, occasionally moved into territories of Hawaiian Stilts (*Himantopus mexicanus knudseni*), triggering aggressive behavior by them. Aggression always seemed to be directed at the whistling-duck, not the coots. Once, the whistling-duck was driven temporarily away from its coot consorts to a "neutral zone"; when the stilts returned they did not harass the still-present coots.

On Molokai, the single Fulvous Whistling-Duck, also in adult plumage, was heard and seen at Kakahaia National Wildlife Refuge by Berendzen and eight other observers, including four wildlife professionals. It was first heard at 9:30 AM in a freshwater marsh invaded by bulrushes (*Scirpus* sp.) and that afternoon was seen on an island in a freshwater impoundment adjacent to the marsh.

DISCUSSION

Range expansions of the Fulvous Whistling-Duck in the continental United States and elsewhere have been well documented; see, for example, Bolen and Rylander (1983). In some localities, this expansion may be related to changes in land-use patterns and growth of special crops (Bolen and Rylander 1983). An instance is the presence of breeding Fulvous Whistling-Ducks in southern Louisiana following the advent of rice culture there (Lynch 1943, Meanley and Meanley 1959).

Whatever the reason, it seems clear that the Fulvous Whistling-Duck now is established and expanding its range in Hawaii. Leishman (1986) expressed concern that its continued range expansion may have deleterious effects on nesting Hawaiian waterbirds. Accordingly, he recommended that the whistling-duck be monitored closely to assess its breeding status and interactions with native species. To this end we record our observations of occurrence of the Fulvous Whistling-Duck on Maui and Molokai.

ACKNOWLEDGMENTS

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VOLCANO, HAWAII, CHRISTMAS COUNTS -1985-

Larry Katahira

The 14th consecutive Volcano Christmas Bird Count was conducted on 4 January 1986 under ideal conditions with clear skies in the morning and overcast in the afternoon. Thirty-four observers in 8 groups covered a total of 68.5 miles (18 on foot, 50.5 by car) and spent 41 hours in the field (33 on foot, 8 by car). Twenty-five species and 1 "subspecies" (Green Pheasant) accounted for a grand total of 5,002 birds. Refer to 'Elepaio 45:127-130 for comparison with counts of the previous four years.

Five endangered birds - Nene, 'Io, Hawaii Creeper, 'Akepa, and 'Akiapola'au - were again recorded; however, the 'O'u was missing from this year's count. Unfortunately, only one party-hour was spent at Olaa Tract, where the 'O'u has been sighted in previous years. At Keauhou Ranch and Kilauea Forest Reserve, where past counts have produced the highest numbers of endangered forest birds, only 2 'Akiapola'au and one Hawaii Creeper were recorded. This was partially attributed to fielding only one experienced birder in these areas.

The highlight of the count occurred at Kulani, where experienced biologists covered the forest from Kulani Cone to the Former Mauna Loa Boys' Home. Totals of 7 'Akiapola'au, 10 Hawaii Creeper, and 12 Hawaii 'Akepa were recorded; most were recorded near Pu'u Kipu. This is an area of mesic koa-ohia forest where minimal coverage occurred in previous years, but the area will receive more attention in future counts.

SECTORS COVERED

1. Kipuka Puauulu, Golf Course and adjacent areas: Paul Higashino, Keiko and Nina Kokubon, Jill and Rachelle Ley.
2. Kilauea Crater Rim: same as Sector 1.
3. Mauna Loa Trail, 6,600'-8,200': Les Chow, Fern Duvall, Rachel Liebman, Jaan Lepson, Jack and Marti Lockwood, Bob Morford, Jay Munns, Rob Zimmerman.
4. Keauhou Ranch: Mac Brock, Linda Cuddihy, Pat Finnegan, Shelly Gareau, Howard Hoshide, Steve Johnson, Larry Katahira, Allen Ramos.
5. Mauna Loa Road, 4,000'-6,600': same as Sector 3.
7. Stainback Highway and Pu'u Maka'ala: Bill and Mae Mull.
8. Kilauea Forest Reserve: same as Sector 4.
9. Olaa Tract: Reggie David, Bruce and Robin Eilerts, Andy Engilis, Betsy and Wayne Gagné, Jim Jacobi.
10. Kulani: Reggie David, Marie Ecton, Bruce and Robin Eilerts, Andy Engilis, Betsy and Wayne Gagne, Jim Jacobi, Maile Kjar-gaard, Julie Williams.

VOLCANO, HAWAII, CHRISTMAS COUNT, 4 JANUARY 1986

| SPECIES | AREAS: | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | Total |
|---------------------------|--------|-----|-----|-----|-----|------|------|-----|-----|------|-------|
| White-tailed Tropicbird | . | 3 | . | . | . | . | . | . | . | . | 3 |
| Hawaiian Goose (Nene) | 2 | . | . | . | . | . | . | . | . | . | 2 |
| Hawaiian Hawk ('Io) | . | . | . | 4 | 1 | 1 | 1 | . | . | 6 | 13 |
| Kalij Pheasant | . | 5 | . | . | 1 | 1 | . | . | . | 16 | 23 |
| Ring-necked Pheasant | 1 | . | 1 | . | 1 | . | . | . | . | . | 3 |
| Green Pheasant* | . | . | . | 2 | 1 | . | . | . | . | . | 3 |
| California Quail | . | . | . | 10 | . | . | . | . | . | . | 10 |
| Lesser Golden-Plover | 10 | 8 | . | 70 | . | . | . | . | . | 16 | 104 |
| Spotted Dove | . | . | 1 | .. | 2 | . | . | . | 1 | . | 4 |
| European Skylark | . | . | . | . | 9 | . | . | . | . | 1 | 10 |
| Hawaii 'Elepaio | 7 | 2 | . | 10 | 16 | 8 | 15 | 1 | 32 | . | 91 |
| Hawaii Thrush ('Oma'o) | 13 | 15 | . | 43 | 4 | 231 | 69 | 6 | 194 | . | 575 |
| Melodious Laughing-thrush | . | . | . | . | 1 | 4 | . | . | . | 1 | 6 |
| Red-billed Leiothrix | 20 | . | . | 5 | . | . | . | 3 | 13 | . | 41 |
| Common Myna | 13 | . | . | 1 | . | . | . | 14 | 11 | . | 39 |
| Japanese White-eye | 30 | 10 | 18 | 19 | 92 | 47 | 4 | . | 140 | . | 360 |
| Northern Cardinal | 9 | . | . | 7 | 21 | 4 | 2 | . | 19 | . | 62 |
| House Finch | 8 | . | 2 | 22 | 19 | . | . | . | 20 | . | 71 |
| Hawaii 'Amakihi | 15 | 1 | 53 | 16 | 87 | 20 | 16 | . | 71 | . | 279 |
| 'Akiapola'au | . | . | . | 2 | . | . | . | . | 7 | . | 9 |
| Hawaii Creeper | . | . | . | . | . | . | . | . | 10 | . | 10 |
| Hawaii 'Akepa | . | . | . | . | . | . | 1 | . | 12 | . | 13 |
| 'I'iwi | 1 | . | 20 | 25 | 15 | 17 | 45 | 1 | 167 | . | 291 |
| 'Apapane | 49 | 63 | 49 | 314 | 138 | 1250 | 323 | 23 | 724 | . | 2933 |
| House Sparrow | . | . | . | . | . | . | . | . | 3 | . | 3 |
| Nutmeg Mannikin | . | . | . | 8 | 18 | 7 | . | . | 11 | . | 44 |
| No. Individuals | | 178 | 107 | 144 | 558 | 426 | 1590 | 476 | 49 | 1474 | 5002 |
| No. Species | | 13 | 8 | 7 | 16 | 15 | 11 | 9 | 7 | 20 | 25 |

*Subspecies of the Ring-necked Pheasant

THANK YOU SUSAN SCHENCK!

Among the loyal, hard-working volunteers whose efforts for the Society too often go unsung is Susan Schenck, our tireless Registrar for Local Members and compiler of the annual 'Elepaio indices. For at least seven years she has prepared the index for each volume of 'Elepaio, completing it in time for distribution with an early issue in the next volume. These have been done accurately and promptly, in a manner that tends to obscure how much work and effort go into them. After completing the first 12 issues of volume 46 (through June 1986), she is turning this job over to Joel Simasko. Thank you, Susan for a job well done, and much appreciated over the years. And thanks to Joel, too, for taking over this important task.

In the past few months Susan has completed another big job which will benefit the Society for years to come. She has transferred the Society's list of Local Members to a computer file, and developed a program to print address labels automatically for each month's 'Elepaio. The file may be updated easily for new members and address changes, thus saving countless hours each month formerly required to hand-type individual cards for each member, prepare master sheets, and xerox labels.

Based on her experience with another organization, she saw the need and benefits to Hawaii Audubon and researched the available computer programs. After Board approval of the project, she bought the program, planned the format and spent many, many hours enter into the entire Local Membership roll. Now, Local Members have a computer-printed label on their 'Elepaio which even looks better than the computer-printed label provided regularly by National Audubon for our Joint Members.

Many thanks again, Susan, for recognizing the need and doing all the work to develop this immensely valuable and time-saving program for Hawaii Audubon.

BALD EAGLE STAMP PROGRAM

Thanks from Florida Audubon Society for our support for their Bird of Prey program. They have received many commemorative and foreign stamps that they sell to help fund the center to save Florida raptors.

If you save stamps and want to help, send them to Susan Schenck, 98-1038 Moanalua Rd #2201, Aiea, HI 96701.

VOLUNTEERS NEEDED

Coordinator for back issues of 'Elepaio. Maintain the Society's complete file of back issues, currently stored at Bishop Museum. Fill and mail orders for back issues (perhaps 10 orders per year). Xerox occasional extra copies as needed. Contact Bob Pyle 848-4155 (weekdays), 262-4046 (home).

Registrar for Joint Members. Liaison with National Audubon Membership Department to maintain Joint Membership rolls. National sends monthly computerized report of New Members, Renewals, Expires, etc. National also sends mailing labels each month for 'Elepaio mailing. This is currently a complex job. If you are looking for a real challenge correcting and updating the labels and devising ingenious ways to streamline and simplify the job, contact Bob Pyle, 848-4155 (weekdays), 262-4046 (home).

Mailing volunteers. Members willing to volunteer only one Sunday afternoon a year each, helping with monthly 'Elepaio mailing (sticking on preprinted labels, as well as sorting, counting, and bundling by zip code). Please telephone Alan Ziegler at 247-5318 day or evening to sign up. Many thanks!!

ALOHA TO NEW MEMBERS

We welcome the following new members and encourage them to join in our activities.

Local Members and Subscribers:

Charles Avenengo, San Francisco, CA; Nancy J. Budd, Kapaa, HI; Linda W. Cuddihy, Volcano, HI; Randall Czaplicki, Wahiawa, HI; Shelagh DeBelder, Honolulu, HI; Linda Dunn, Los Angeles, CA; Barbara J. Faiks, Grand Rapids, MI; Sharyn Fernandez, Concord, CA; Gayle Goff, Kailua, HI; Max Guenther, Honolulu, HI; Roxie Haugseth, Bainbridge Island, WA; Jon Kawamura, Salem, OR; Robert H. Libman, Chicago, IL; Julie Mallett Kaneohe, HI; Jean Morse, Alexandria, VA; Barbara Murray, Santa Rosa, CA; Johanne Sauve, Honolulu, HI; Hedy A. St Denis, Arlington, VA; Michael Tat, Honolulu, HI; Jan TenBruggencate, Lihue, HI; Lee Trachtenberg, Kaneohe, HI; David Ward, Jr. Avalon, NJ.

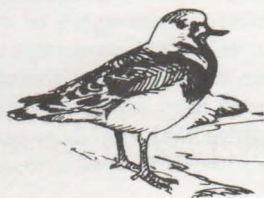
SEPTEMBER PROGRAM

As tentatively scheduled, the speaker for the 15 September program will be Dr. Robert Fleischer, a research ecologist with the Hawaii Evolutionary Biology Program at the University of Hawaii. Dr. Fleischer conducts research on a wide range of avian evolutionary topics. This pursuit has taken him this summer to the mountains of the Western U.S., the rainforests of Panama, and even the jungle at Waikiki. At the time this issue went to press, Fleischer was studying finches on Pearl and Hermes Reef, beyond the reach of our program organizer. Though the topic of his presentation has not been determined, it is guaranteed to be fascinating. Join us at the McCully-Moiliili Library, Monday, 15 September at 7:30 PM.

SEPTEMBER FIELD TRIP

Sunday, September 14th
Waipio Peninsula
Leader: Bob Pyle (246-4046)

The Society's field trip scheduled for Sunday, September 14 will visit Waipio Peninsula near Pearl City on Oahu. This is an excellent area to see and study migrant shore birds, as well as native water-birds such as Hawaiian Stilt and Hawaiian Coot. Bring binoculars, field guide, and a spotting scope if you have one. Wear shoes appropriate for walking on dusty (possibly muddy) dirt roads. If gates are locked, there will be considerable walking. If the day is sunny, you may want to bring a hat, sunscreen and water. Meet at 7:00 AM on Punchbowl Street next to the Hawaii State Library, where car-pooling will be available. Leewardites may arrange to meet the group near Waipio around 7:30 AM. For more information, call the leader, Bob Pyle, at 262-4046 (home). The trip probably will end before noon.



FREE ICE CREAM

Will again be served to those volunteers who help with the typing, proof-reading, or paste-up of next month's 'Elepaio at Thane Pratt's house, 954 Spencer St. on Saturday, 20 September, at 1:00 PM. Phone 524-8464 for more information. Authors of articles, notices, etc. are reminded that these must be received by 15 September to be included in the October issue.

Many thanks to Marie Morin (Welcome back, Marie!), David McCauley, Bob Pyle, Joel Simasko, and Susan Schenck for helping with the production of the September issue.

'ELEPAIO

| | | |
|------------|--|----------|
| Editors | Thane Pratt | 524-8464 |
| | Sheila Conant | 948-8241 |
| Production | Robert Fleischer, Marie Morin, Robert Pyle | |
| Mailing | George Campbell, Susan Schenk, Alan Ziegler | |

(MANUSCRIPTS of articles and newsletter items may be sent to the Managing Editor at 954 Spencer St., Honolulu, HI 96822. Articles not subject to peer review MUST be received by the 15th of each month to be considered for publication in the next month's issue.

IF NOT A MEMBER, PLEASE JOIN US

JOINT MEMBERSHIP

(National and Hawaii Audubon Societies)

| | |
|---------------------------------|----------|
| Individual..... | \$ 30.00 |
| Family..... | 38.00 |
| Sustaining..... | 50.00 |
| Supporting..... | 100.00 |
| Contributing..... | 250.00 |
| Donor..... | 500.00 |
| Life (single payment)..... | 1500.00 |
| Dual Life (single payment)..... | 2000.00 |

Special rates for full-time students and Senior Citizens (65 years of age or older) are available. Please write for application form.

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(Hawaii Audubon Society only)

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| Junior (18 and under)..... | 3.00 |
| Subscriber (non-Hawaii residents).... | 6.00 |
| Life (payable in three equal annual installments)..... | 150.00 |

All Local Memberships and Subscriptions are for a calendar year January through December.

CALENDAR OF EVENTS

- Sept. 8 (Mon.) Board Meeting at Bishop Museum at 7:30 PM. Call Phil Bruner at work, 293-3820.
- Sept. 14 (Sun.) Field Trip to Waipio Peninsula. See page 169 for details.
- Sept. 15 (Mon.) General Meeting at McCully-Moiliili Library at 7:30 PM.

TABLE OF CONTENTS

- Bishop and Dole on Forest Management. *Anita Manning*.....163
- Fulvous Whistling-Duck Sighted on Maui and Molokai. *Thomas S. Baskett, Stephen I. Berendzen, and Tim J. Ohashi*.....166
- Volcano, Hawaii, Christmas Count. *Larry Katurahira*.....166

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