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NEWSLETTER

of the

Hawaiian Botanical Society



VOLUME XIII
NUMBER 4
OCTOBER 1974



% DEPARTMENT OF BOTANY
UNIVERSITY OF HAWAII
HONOLULU ,HAWAII 96822

DEPARTMENTS

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MEMBERSHIP YEAR IS DECEMBER THROUGH NOVEMBER

- PLEASE PAY YOUR DUES EARLY -

ARTICLES

Symposium on Threatened and Endangered Species of North America, Statler-Hilton Hotel, Washington, D. C., June 11-14, 1974. Sponsored by the Wild Canid Survival and Research Center, Box 16204, St. Louis, MO 63105.

Trip Report by P. Quentin Tomich - July 15, 1974

This report was delayed by me being on the sick-list June 21-July 14. The trip to Washington was highly productive and personally satisfying and certainly one would not have to leave Hawaii to pick up a viral laryngitis.

I departed from Honokaa late on June 7 in order to have two days in Honolulu to put the trip package together and to see several key persons active in current endangered species legislation and programs. Final clearance for the venture came only on the 4th so it was a bit of a scramble to assemble materials and ideas. Steve Montgomery, Wayne Gagne', Ruth Gay and Frank Howarth were most helpful in augmenting the things I had brought from the Big Island.

The flight out of Honolulu on the evening of the 9th, by 747 direct to Chicago, was a smooth one. I was thrilled about midnight by the panorama of lights outlining the San Francisco Bay region and the valley towns. However, even at 33,000 feet and with a clear night I could not escape the notion that Central California may be encased in a perpetual pall of murky air. The expected sparkle of lights just did not come through. The glint of a rising moon on Lake Tahoe and the faint reflection of the Sierra snowpack gave some assurance that things were a little better in the hills. Many Californians evidently are still blissfully approving of their lot and on my return stopover at Sacramento I received a lecture designed to make me feel personally responsible, as one

concerned about various aspects of the environment, not only for the scrapping of the SST project but for the energy crisis as well.

On to Washington. I arrived on schedule at Washington National in late morning of the 19th, gathered my various bags and outsized case of display panels into a cab, and was whisked past the Watergate Complex over to the Statler. I had (and needed) the afternoon to set up the display, to arrange for duplication of the 6-page flyer we had pieced together at the last minute in Honolulu, and to begin making some contacts around Washington. I noted the frequent use of Spanish among the people in the streets of the downtown area and even had to muster up a few words of it in order to make explicit instructions for the photocopy work, in a convenient basement shop recommended by Fred Evenden. My hostess in Washington was Mrs. V. Elizabeth Willet, who is an avid Audubon member and worker for the cause of Conservation. She kindly made available to me her home in suburban D. C. during my stay in the city.

OUR EXHIBIT. We had prepared our display materials with no advance knowledge of the kind of space that would be provided. Inasmuch as the program was filled before we could get a place on it, we were to concentrate effort on an effective display, and brought plenty of props. The exhibits were on the mezzanine, convenient to the meeting hall, and each display was limited to a single 3 x 7 table. Fair enough, but a little cramped. I was able to set up a colorful Hawaii Audubon Society panel on the Endangered Birds, flanked by IBP pictorial and graphic transects of the vegetation zones of Mauna Kea. The table surface held a stack of large photos of vegetation types and goat problems in and near Hawaii Volcanoes National Park, our various give-away materials, and a register. At the foot of the table was the panel on Extinct Birds of Hawaii.

The list of several Hawaii Audubon Society members in the D. C. area was useful, though nearly all on the list were on vacation or about to vacate. Richard Gauthey, who spent several years in Hawaii, was able to come over for most of one day and did an effective job of manning the display so I could attend to other matters.

Our give-aways included the flyer (partly reproduced at end of the report) that was of necessity rather quickly composed. We distributed more than 350 copies and it appeared to be a positive means of summarizing the objective of spreading the word about problems in Hawaii.

We also had a mimeo "Hawaiian Wildlife Needs Help" from State Division of Fish & Game, and a sheet on the sea turtles of the Pacific from Alan Ziegler. Fred Evenden (Executive Director of The Wildlife Society) brought by a few stacks of literature including the Position Statements and Publications Lists of TWS. Gene Kridler sent along copies of the U. S. Sport Fisheries & Wildlife "Hawaii's Endangered Waterbirds" and "Hawaii's Endangered Wildlife". Everything moved rapidly and we were totally cleaned out at the end of the meeting.

Additional references, papers, IBP reports, copies of Act 49 and maps were available to show or give to those especially interested in some particular topic.

A loose-leaf scrapbook "A conservationists' Sampler for Hawaii" contained clippings, letters, news sheets and a few short papers. It formed a useful reference for the occasional visitor who wanted some detail. There was a perennial interest in the clippings about Maui's newest living bird, the poo-uli, and the recent finds of microfossils in the lava tubes. For a stunt we distributed "Complimentary Tickets to a Non-Celebration" and thus usually made an opener about some of our difficulties with depletion of natural ecosystems.

I called the office of Representative Patsy Mink but learned she was at the Kam Day festivities in Hilo the 11th and too busy with committee meetings later in the week to come over and visit the exhibit. Copies of our flyer were sent to the entire Congressional Delegation, and replies received. The note from Spark Matsunaga suggests that someone from his office saw the display but I was not otherwise aware of it.

We were well equipped with 2 x 2 slides (vegetation, birds, goats, insects) in the event a continuous show could be set up or an odd spot found for them. It turned out we had no space for a show to go with the exhibit and the odd spots were generously filled with movie material (bowhead and beluga whales under arctic waters, and the like). Anyway, I did finally show them to Vee Willet one evening and she was very appreciative of learning about Hawaii.

THE SYMPOSIUM AND PERSONS SEEN. The program attracted and was composed of a good mix of interested citizens who work for various causes as laymen or professionals, and professionals in the academic or research life and in government. The carnivores and predator problems certainly had their day, as expected. The Washington Post covered the opening session and properly captioned the story "Turning out for Rocky and his Friends", in which an 80-lb. timber wolf and Jimmy Stewart were the stars. Secretary of the Interior Rogers P. Morton, who gave the MESSAGE, was also mentioned. If there was additional news coverage, I was unable to find it.

Occasionally the questioners were overly aggressive and there were those who sprang to the floor to give an oration on some topic not germane to the immediate subject under discussion or to rebut at length some minor point made in an earlier session. The panel discussions fell sometimes a bit flat because every one of the six panelists exceeded his initial allotted time of four minutes, leaving very little time for the intended discussion. These are merely observations and not meant to be criticisms. I hear that even the staid old AAAS is having its share of problems with activists at meetings these days.

At least 1,500 persons must have attended part or all of the conference, which is testimony in itself to the interest and ideas generated by the symposium. I was able to chat briefly with Mrs. Marlin Perkins and to thank her for inviting a representative from Hawaii. She was surprisingly well posted on correspondence and phone calls concerning representation from Hawaii.

Roger T. Peterson was still writing his paper in the earlier days of the conference and welcomed the information from our display to bolster his knowledge about birds in Hawaii. Warren King was present and spent an evening with Peterson to further fortify him on recent developments. So, as it turned out, we had a good presentation for Hawaii and a swarm of people came to our table at the next break.

On the endangered plants, Thomas Elisa (Cary Arboretum, Box 609, Millbrook, NY 12545) gave a useful accounting of the problem and cited the examples of Michigan and the Pacific States as being most advanced in drawing up their lists. He vanished in the crowd and apparently left the symposium soon after his session ended. It would be advisable for botanists in Hawaii to contact him regarding legislative action for rare and endangered plants, and approaches to making lists. Although I had been briefed on the need for seeing Ray Fosberg at the Smithsonian, regretfully it was impossible to make the contact. The motion that habitat (i.e. vegetation) is basic to the survival of endangered animal species came across very well in several segments of the conference in spite of a frequent theme of single-species orientation by some of the speakers lacking the broad view.

One of my instructions from Hui Manu O Maui was to determine the status of the EIS for Kanaha Pond and to see what action can be taken to assure moving the proposed sewage treatment plant away from the vicinity of the pond. I walked the few blocks up 16th St. to the National Wildlife Federation. They have a modern imposing 3-story building, but like other organizations, for example the National Zoological Park and The Wildlife Society, they are spreading out to new quarters in Virginia. Washington is full of "national" headquarters. The National Rifleman's Assn. has a sleek 11-story building down the block, and nearby are the modest offices of the Society of American Foresters.

I was well received at NWF as a representative of CCH and met briefly with Louis Clapper of the Conservation Department. Shirley Strong is legal secretary for Oliver Houk, one of the NWF attorneys. In talking with her I found there are no new developments—essentially that since the untimely death of Robert Kennan nothing has been done. The airstrip extension is, of course, still an open issue which could also affect the survival or demise of Kanaha Pond. The staff of Patsy Mink referred to correspondence dated June 4, 1974 (subsequently received and is attached) indicating that the final statements from EPA for Wailuku-Kahului would be mailed June 15. As to the control of federal funds for the sewage treatment plant, it would seem there is still time to act in relation to the content of the EIS. I am assured by Mae Mull that the EIS is circulated in Hawaii, and that siting of the plant is recommended to be adjacent to Kanaha, with the alternative of the injection wells being placed some distance down the beach if further tests suggest that infiltration to Kanaha could occur from wells at the plant site. This is certainly not a satisfactory plan and the obvious route is to reopen objections through NWF if at all possible.

Earl Baysinger (Asst. Secty. of the Interior, for Endangered Species) assured me in conversation that revision of Pittman-Robertson projects, particularly for Hawaii, was in progress in line with provisions of the 1973 Endangered Species Act. Concerning the Lacy Act, he encouraged participation from Hawaii to improve it. In his presentation he declared that any introduced species is a potential threat to native ecosystems. He indicated that Public Hearings are scheduled on the Lacy Act for August 5, 1974 in D. C. and in San Francisco.

Keith Schreiner (Acting Associate Director for Federal Assistance, U. S. Sport Fisheries & Wildlife) emphasized in his talk the need for accurately defining endangered species so that efforts can be concentrated on those really in critical need of rehabilitation. I was advised in chatting with Schreiner that Hawaii's turn for land acquisition will come up again in 1976 (remember the recent expenditure for Hanalei?) but that a considerable sum could possibly be raised. My immediate hope with this news was that Bishop Estate and other owners of critical habitats would not have sold out to other interests by that time. Obviously, we need to prepare a plan, with the assistance of Sport Fisheries & Wildlife and Division of Fish & Game to be ready for 1976.

Many individuals came to our exhibit with a purposeful interest in Hawaii, "wanting to help" and "to get more information". A young lady who was planning an extended world tour with a stop-over in Hawaii posed the question of what she could do for conservation. I referred her to Life of the Land as a starter.

A representative of the Center for Field Research was soliciting proposals for Grants for Field Research Expeditions. This organization is based at Belmont, MA and its business is to fund research in various areas of the world. I have routed the application forms to the University of Hawaii (Botany, Zoology) and to Bishop Museum (Entomology). Possibly we can work up some expeditions right here at home.

A person from National Academy of Sciences working on a grant to study means for the increase of propagation facilities for primates to be used in medical research, indicated that Molokai was being considered as a location where the climate is ideal and where possibly a large share of the food for the stocks could be grown locally. With some trepidations about the spectre of escaped monkeys spread all the way from Pololu to Waipio, I suggested that the Kohala Task Force might respond favorably to the idea, for the Big Island.

OTHER EXHIBITS. There were about 18 display tables in all, largely for the distribution of literature. These included: Wildlife Management Institute, The Fund for Animals Inc., Wild Kingdom, American Horse Protection Association, Committee for the Preservation of the Tule Elk, World Wildlife Fund, American Association of Zoological Parks and Aquariums, Animal Protection Institute, Animal Welfare Institute, Mariculture Ltd., and our own National Wildlife Federation. A wildlife artist or two had some prints for sale and there were various buttons and other trinkets available -- "Real People Wear Fake Furs; Save the Wolf; Save the Sea Otter; Protect Wild Horses; Save the Whales"; and so on.

National Wildlife Federation was distributing a bulletin condemning defeat of the National Land Use Bill (H. R. 10294) on June 11, with a vote of 204 yeas and 211 nays (Mink and Matsunaga were among the yeas).

Irvin Naylor and an associate of Mariculture, Ltd. ("Conservation through Commerce") were handing out an elaborate packet on their green sea turtle operation at Grand Cayman Island, B.W.I. Naylor examined our turtle flyer and unreservedly commented that "George Balazs is circulating misinformation." The issue is evidently that Mariculture needs to continue collecting eggs from wild turtles until their captive stocks begin to

reproduce. I have not followed the turtle problem closely but a letter by Balazs in the May-June American Scientist appears to be what needed Naylor. It points out that all of the 19 females that laid eggs in captivity were caught as adults and reiterates some of the other unresolved problems of green sea turtle culture for commercial purposes.

I am sending the collection of pamphlets to the care of Steve Montgomery where they will be available to anyone who wishes to examine them.

CONCLUSION. This wraps up some of the significant points of the Symposium. Obviously one representative to a sizeable conference in a busy place and wearing three hats (the exhibit, the sessions, the contacts) could not adequately cover all the bases. However, it is probable that the seeds planted here and there will bear results for the good of the endangered biota of Hawaii. Finally, I want to thank all those who assisted in various aspects of the venture and I trust that the confidence of the sponsoring organizations was not misplaced in their support of me as a representative of Hawaii. Steve Montgomery has a record of the financial report.

(Note: The HBS provided \$100 from the Maui Neal Fund to help send a representative, P. Quentin Tomich to the symposium. Other organizations contributing were Conservation Council, Audubon Society, Sierra Club, Wildlife Society, Hui Manu O Maui, Bishop Museum, and IBP.---Ruth Gay)

Following is part of the flyer material distributed at the symposium:

THE OTHER HAWAII

No hula girls, no swaying coconut palms, no anthuriums or plumeria. Birds, yes, but not the saucy myna or the gentle lace-neck dove. We are referring to the wild natural ecosystems that represent the pre-Captain Cook Hawaii, even the pre-Polynesian Hawaii. Majestic forests of koa, ohia, tree fern and a host of other plants interdependent with these major species - wide expanses of lava lands with a modest vegetation supporting the nene goose. A few shoreline ponds and tiny streams, a lake at 13,000 feet elevation, all supporting their own particular set of organisms that are peculiar to Hawaii; bizarre insects and diminutive plant species and land snails. A single family of insects, the pomace flies or Drosophilidae, that tell us possibly more about evolutionary history than any other single source of information - dynamic, explosive differentiation to fill the widest possible series of ecological niches - breeding sites as diverse as the natural bleeding wounds of naio trees in an almost desert-like sub-alpine forest to the lobelia flowers of the rainiest spots on earth. And underground in the dark, silent chambers of almost endless lava tubes - the ancient channels of underground rivers of the lava flows that built the islands - are a whole new assemblage of arthropods totally adapted to these dark recesses and dependent for subsistence primarily on the roots of the ohia tree that penetrate from the rocky ceilings - bugs, tree hoppers, amphipods, even a moth that lives and dies never seeing the light of day. Eyeless spiders to prey on eyeless prey, mostly unpigmented pale creatures that have no need for the colors of light-inhabiting animal life. Finally, a cave centipede - the only endemic centipede that occurs in Hawaii.

Let us go on. A new species of bird discovered only in 1973? Yes, in the depths of the rain forest above Hana, Maui, a new GENUS and SPECIES of honeycreeper was added to the faunal list. In this same region and on Kauai since 1960, species thought to be extinct for 50 years or more have been rediscovered.

This is the OTHER HAWAII - a Hawaii we are working to preserve, to understand, to interpret, to learn from and to appreciate. It is not too late for what is left today.

THE ENDANGERED SPECIES ACT OF 1973 - WHAT'S IN IT FOR PLANTS?

There is an urgency to draw up a conservation program for endangered and threatened plant species. Since, in concert, plant species form the basis of habitat and ecosystems, they are the essential component for all other life, for without adequate habitat, all is lost. Plants are also the pillar of the food chain.

In Hawaii there are considered to be more endangered plants than all of the mainland states combined, in spite of the comparatively small size of our state. This is because about 95% of the species of native flora are endemic to Hawaii, that is, they are found nowhere else on earth. Further, many of the hundreds of endangered plants are restricted to one island in our archipelago, some are even found only on one mountain top or in a single valley. So, even before the advent of man in Hawaii, a great number were of restricted distribution and number.

This floral assemblage is extremely fragile in comparison with the continental situation. Most importantly in this respect was the complete lack of grazing and browsing animals such as goats, sheep, pigs, and cattle in the native biota. Our flora had evolved away the protective spines, thorns, stinging hairs and various poisonous qualities so prevalent in continental flora. As a consequence, much was quickly obliterated when the Polynesians and later, the Europeans, reached and colonized Hawaii, bringing with them the grazers and browsers, most of which became wild. The plants now remaining are either in areas zoned for conservation or are still extant by virtue of their inaccessibility to these animals.

The greatest conflict in saving what remains now lies in unrestricted grazing, conversion of native forests to exotic kinds by plantations and the use of conservation lands for sustained hunting of the very alien animals that are destroying the flora.

In May 1970, a 3-day Colloquium on the endangered species of Hawaii was held at the Smithsonian Institution here in Washington, D.C. It was then estimated that about 1/4 of our 150 species of ferns and more than 300 of the 2,000 species of native flowering plants could be considered rare and endangered. The Colloquium, coupled with subsequent State and Federal legislation, helped to spur interest in Hawaii's entire native biota.

The task that lies ahead is two-fold: 1) to formulate, fund and carry out protection programs for these endangered species, and 2) to establish the status of a sizable remainder of about 1/3 of the species, for which necessary knowledge is absent. Again, as for endangered wildlife, the immediate emphasis should be aimed at habitat and ecosystem preservation rather than at individual species. There is also a critical need to reassess State programs involving federal funding which in many instances are

* (erroneous statement; about 2,000 species on mainland -- editor)

really subsidized destruction of our native flora under the guise of "reforestation" where native forest now exists, on one hand, and wildlife "restoration" with alien species, on the other. And, finally, research is urgently needed to control, or eradicate if possible, exotic species of rodents and insects which are exerting subtle but often devastating impact on many species in the unadapted flora.

In summary, the concept of a national endangered plant program will only proceed with the full weight that conservationists can bring to bear on legislative bodies, just as they collectively have recently succeeded in doing for endangered animals. This "red list" of endangered plants to be prepared for December of this year by the Smithsonian Institution for the Endangered Species Act of 1973 in conjunction with their conservation specifics is an important initial step to watch for by the end of the year. What follows, if anything, is up to us.

Section 12 (Endangered Plants) of the Endangered Species Act of 1973 reads as follows: "The Secretary of the Smithsonian Institution, in conjunction with other affected agencies, is authorized and directed to review (1) species of plants which are now or may become endangered or threatened and (2) methods of adequately conserving such species, and to report to Congress, within one year after the date of the enactment of this Act, the results of such review including recommendations for new legislation or the amendment of existing legislation."

REDWOOD IN HAWAII

by L. W. Bryan

In Hawaii many thousands of coast redwood, (Sequoia sempervirens) have been planted by the Division of Forestry and private land owners. One of the best known plantings is a 2½-acre grove within the Bishop Estate Honaunau Forest Reserve in South Kona, Hawaii. These trees were planted in 1927 at an elevation of 3,500 feet and an average annual rainfall of about 75 inches. They have grown well and when last measured in 1963 were found to contain 47,000 board feet of lumber per acre.

The oldest known coast redwoods in Hawaii are found growing at Umikoa, Kukaiau Ranch Headquarters, Hamakua, Hawaii, at 3,500 feet elevation and with an average annual rainfall of about 71 inches. There are two of these trees which when I first saw them in 1921 were of fair size. No one was able to tell me their history but old records show that this species was being distributed at the Government Nursery in Honolulu before 1902 so I suspect that they were planted about that time and came from the Honolulu Nursery and are now 70 or more years old. Of interest is the fact that for the first time they are producing cones which is, as far as I know, the first time that this species has produced cones in Hawaii. Although I must add that seed taken from the cones has not been fertile.

While the Umikoa redwoods are the oldest they are not the largest. In 1973, Charles Wakida, Forester, measured the largest of these two trees and furnished me with the following data; Circumference = 163" BH, Height = 97', Spread = 45'. In comparison within the

Hilo Forest Reserve, Land of Piha at 5100' elevation and an average annual rainfall of 120" coast redwood were planted in 1927. The largest tree that I was able to locate had the following measurements; Circumference = 174", Height = 95', Spread = 35'. Using the Key Points that are used by the American Forestry Association in recommending Champion Trees for registration shows that the Piha tree, although much younger, is the State Champion with a total of 278 points as compared with 271 points for the Umikoa Tree. Perhaps the greater rainfall in Piha may be the reason.

TO SAVE A RARE NAUPAKA

by Otto and Isa Degener

Mr. Rene Sylva, under date of July 22, wrote: "A recent story in the Maui News indicates that they are going to develop all the sand dunes of Waihee. This includes the sand dunes next to the Golf Course, where 300 or more of this rare naupaka [Scaevola coriacea Nutt.] still survive. I do not think we should lose any more rare Hawaiian plants. Hopefully you can make some suggestions to me or to the Botanical Society, as to some remedy to this serious situation."

This false jadetree, more resistant to drying than the common naupaka-kai, was first described from Kauai in 1843. It has been exterminated from our Archipelago so far as we know excepting from isolated patches of sun scorched, consolidated dunes extending from Wailuku to Waihee Point, Maui. To be sure, St. John and Kosaka collected the species near Mahana, Lanai, in 1938, but we are not sure it still persists there. We failed to find it anywhere during our concentrated botanizing between July 1963 and February 1964.

It is our suggestion that the owners of the area where this endemic naupaka persists be advised of their great, good fortune in harboring a plant on their property that has taken Nature many millions of years to evolve; that they be aided in building a climb proof, golf ball-proof fence on the makai side of the colony; and that a properly executed sign be posted to acquaint golfers and visitors of this unique prize. For immediate action, we advise the collecting of seeds of this species by the Society, and their distribution to any institution and/or person willing and able to propagate them. Records should be kept as to where such seeds have been planted so that future botanists will know whether a colony is truly native to a certain spot or owes its existence to Mr. Rene Sylva's timely warning.

(Note: The October, 1972 Newsletter has an article by Wesley H. C. Wong, Jr., District Forester, Maui, concerning Division of Forestry efforts on behalf of this creeping naupaka. On August 12, 1974, Wesley Wong wrote me in part, "Nothing much has changed on the status of involvement. I am still trying to get the Boy Scouts to take over our Hale Kii Heiau planting site. I have 200 plants in my nursery ready for Hale Kii Heiau. We planted 25 in our Kahoolawe beach trial plot. They failed." --- Editor.)

EVENTSA Friend of Botany Passes on

Amy Beatrice Holdsworth Greenwell, 53, a Big Island botanist and specialist in Hawaiiana, died at the Queen's hospital on August 5, 1974 after a long illness.

Miss Greenwell, who resided in Kealahou, was the daughter of the late kamaaina rancher Arthur L. Greenwell of Kona.

Her passion for Hawaiian studies led her to extensive writing and research on local plants; she co-authored the fifth volume of *Flora Hawaiiensis* with botanist Otto Degener.

Miss Greenwell was a member of the Hawaiian Botanical Society. On May 6, she received a certificate of recognition from the Society for her contributions to the aims of the Society.

Sixteenth Annual Hawaii Forestry Conference

Lanai was the host island for a field trip for participants in the 16th Annual Hawaii Forestry Conference on October 10, 1974. More than 70 people were briefed by Hawaiian Botanical Society member, Robert Cushnie on development plans and natural resources and problems on the island. Robert Hobby, Assistant District Forester contributed greatly to the discussions of native flora. The guided tour extended from Lanai City to Lanai Hale and down to the beach near Halepalaola landing for a picnic lunch.

The following Botanical Society members were program participants during the conference sessions at the Maui Beach Hotel, Kahului, Maui on Friday October 11: Dr. Charles Lamoureux, Mr. Steve Montgomery, Mrs. Carol Whitesell, Mr. Robert Nelson. The conference theme: Hawaii's Forest Resources and Their Optimum Use -- Various Viewpoints.

SOCIETY BUSINESSMinutes of the regular meeting of June 3, 1974

The meeting was brought to order by the President, Dr. Theobald, at 7:35 PM. The extensive minutes of the previous 50th anniversary meeting were discussed and approved for publication in the Commemorative Bulletin. The Treasurer's report indicated \$222.20 in income and a balance of \$237.96 in the checking account. There were 31 members and 8 guests in attendance.

In Old business it was noted that the anniversary meeting had been a success and that the commemorative booklet would probably be ready in the fall.

In New business it was brought to the attention of the Society that Dr. Quentin Tomich was planning to attend a symposium on Threatened and Endangered Species of North America in Washington, D.C. on June 11-14. It was moved and seconded that the Society provide \$100 to help defray the costs of travel to the meeting.

A question was raised regarding Fosberg's list of endangered species and Steve Montgomery noted that it would be published by the Pacific Tropical Botanic Garden as an occasional paper in the near future.

The speaker Mr. Ed Petteys, Timber Survey Forester, was introduced and he spoke on the "Extent and rate of spread of the ohia decline for a selected site on the island of Hawaii". There was considerable discussion generated regarding possible causes for the dieback and the evidence presented was questioned as to interpretation. The meeting adjourned at 8:45 and refreshments were served.

Jean Maka
Secretary

PUBLICATIONSA New Annual Publication Announced

The KEW RECORD OF TAXONOMIC LITERATURE will be published annually by Her Majesty's Stationery Office for the Royal Botanic Gardens Kew. It will list all periodical articles, books, and papers relating to the vascular plants of the world. The Kew Record is intended to fulfill the need for a unified coverage of flowering plants, gymnosperms, and ferns. The 1971 edition, published in spring 1974 is priced at \$ 14.30 by post.

Notes from Drs. Otto & Isa Degener

For the record, we wish to correct a typographical error appearing on page 1334 of Sparrow, F. K. Three Monocentric Chytrids. *Mycologia* 65(6): 1331-1336. 1973. The paragraph should read: "Soil at base of Eleocharis sp. growing in patch of spring-fed meadow at coast, Ninole, Kau, Island of Hawaii. Coll. O. and I. Degener No. 32715. Leg. Mrs. Robert Ogawa." Dr. & Mrs. Ogawa's daughter was a colleague of Dr. Sparrow in Michigan.

July 9, 1895, A. A. Heller collected his lichen No. 2536 on a kukui tree somewhere on Kauai. This lichen, deposited in the Smithsonian, was described and figured by Mason E. Hale, Jr., as Leptotrema hawaiiense [sic] Hale in *Phytologia* 27(6):490, 499, 1974. O. & I. Degener.

In the "Flora Hawaiiensis" May 11, 1937 appears the illustrated description of the seamulberry or bottomnangrove under the name Conocarpus erecta L. Sp. Pl. 176. 1753; yet in St. John's "List and Summary of the Flowering Plants in the Hawaiian Islands" appearing August 30, 1973, the same plant is given the name "Conocarpus erectus." According to the International Code (Recommendation 75A): "Stenocarpus --- and all other modern compounds ending in the Greek masculine carpos (or carpus) --- should be masculine." This recommendation, however, hardly concerns Linnaeus' name published in 1753. His orthography "Conocarpus" in no way can be construed as a "modern" one.

Linnaeus was a classical Latin scholar who considered trees feminine, just as the Latin name for them, arbor, is feminine. This practice applied even to tree names ending in us. Dr. W. E. Stearn, in his *Botanical Latin*, page 60, quotes a pertinent rime:

"A woman, island, country, tree
And city feminine we see;
Penelope, Cyprus, Germania, Laurus, Athenae."

The kane writer collected Conocarpus as a tree in Bermuda in 1921; and as a tree in New Providence Island in 1946. In fact, from the latter island he introduced to our streets and gardens the gray halophyte Conocarpus erecta var. sericea. Until Botanists and Foresters find it correct to change the feminine spelling of Quercus alba (white oak), Q. macrocarpa (mossycup oak) and Q. rubra (red oak) to the masculine, the writers shall continue to use Conocarpus erecta and var. sericea.

Medicinal Plants of the Polynesians

Bernard Zepernick's "Arzneipflanzen der Polynesier," Baessler-Archiv, Museums fuer Volkerkunde, Berlin, just arrived in the islands though published in 1972. Of its 307 pages, 117 are devoted to over 400 species. Of these 400 species, more than half occur in the Hawaiian Islands. The plants are listed by their commonly accepted scientific names, followed by pertinent synonyms; by the vernacular names used in Hawaii, Fiji, Marquesas, Samoa, Tahiti, and other island groups. The range of the species is given, and what part of the plant was used for what illness. The chapter on therapy involves 67 pages, and over 600 prescriptions are here discussed. As fifty pages in small print are devoted to a list of native names in the various Polynesian dialects, the reader notes how closely related most of the original inhabitants of Polynesia are. As expected, the exception is found in the dialects common to Fiji, an archipelago peopled by Melanesians in the interior, and Melanesian-Polynesian strains along the coast due to continuous trade and inter-marriage between Fijians and Tongans. Zepernick's German book about medicinal plants of Polynesia is somewhat technical. In the Hawaiian Islands it should be of special interest to the botanist, physician, philologist and student of Hawaiiana. It is a treasure trove for the pharmacologist, giving him clues after ignoring the hocus-pocus as to which plants to assay. The book is a problem for one lacking a reading knowledge of German. A two-page English summary, however, will help the American reader to judge the value of the work. The author is very careful in quoting precisely which species is employed by the native "medicine man." Perhaps he might have added that if the Polynesian lacked a certain species for his practice, such as Pipturus albidus, he might have used any species of the genus that happened to be available. It is certainly a blessing in disguise that Kaaiakamanu & Akina's 1922 puerile pamphlet about Hawaiian herbs of medicinal value was unavailable. It defames the Kahunua lapaau mai, and it defames the kane reviewer's former colleague at the University of Hawaii who never seriously identified the plants with which the two Hawaiian authors pestered him. One specific change we should like to see in a second edition: namely the use of oliviformis for the Hawaiian maile.

Otto & Isa Degener

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