



Mele Kalikimaka
Hau'oli Makahiki Hou

Get to know thy fellow members!

HOLIDAY POTLUCK

PARTY TIME: DEC 28, 1991
noon to sunset

PLACE: the Raymond's home

300 Copp Road

KULA

telephone: LISA 878-3564

DRESS: warmly

BRING: Family, food & drink

Good fun!

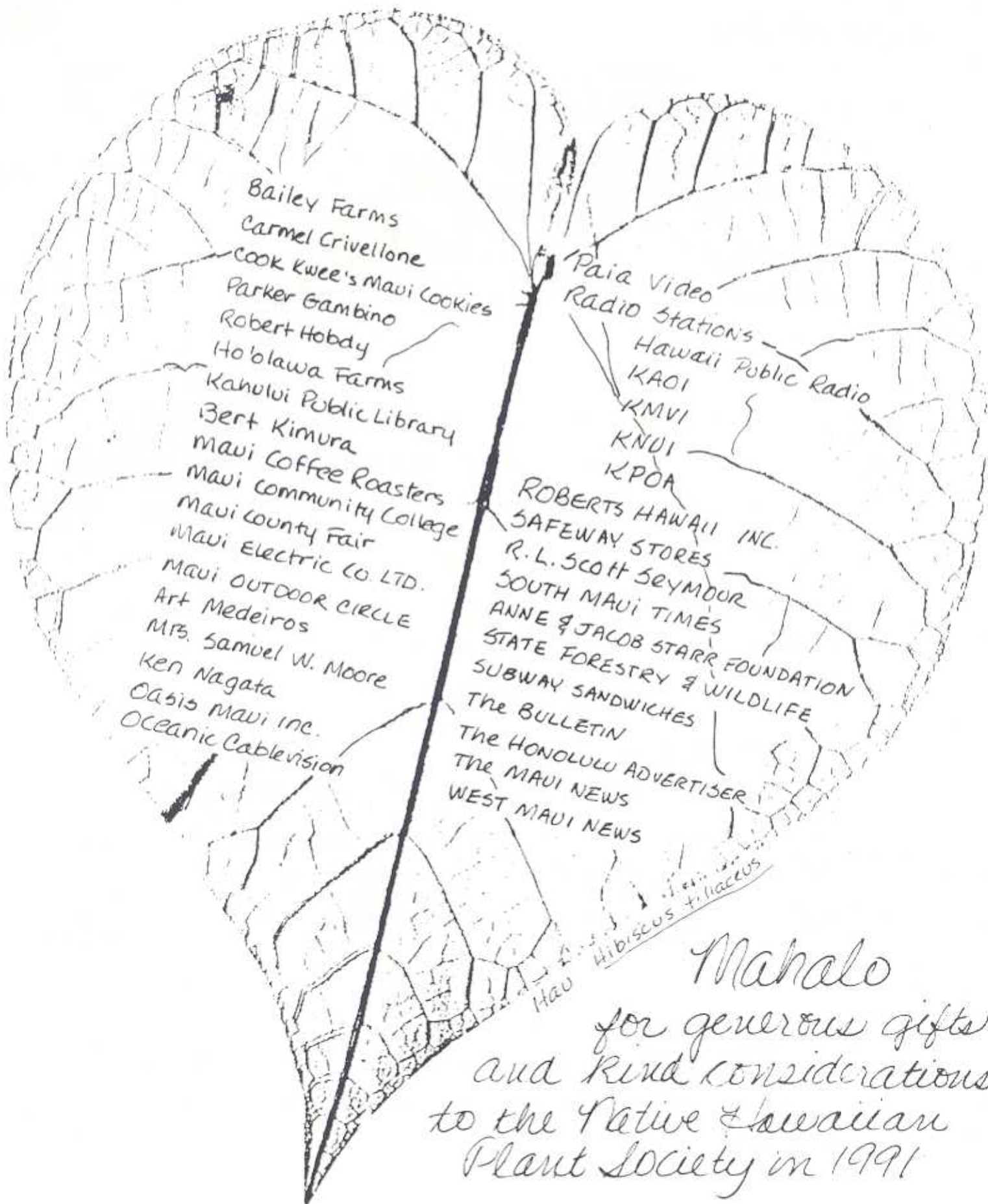
NATIVE HAWAIIAN PLANT SOCIETY NEWSLETTER

1991 HIGHLIGHTS

- Jan 25 Meeting - Election of Board Members.
- Jan 27 Kanaio Natural Area Reserve field trip
- Feb 8 "Standing Room Only" attendance for guest speakers, Bert Kimura and Ken Nagata, authors of HAWAII'S VANISHING FLORA.
- Apr 2 MCC Kanahā Pond Wildlife Sanctuary field trip.
- Apr 10 Montessori School Kanahā field trip.
- Apr 22 Lahainaluna Kanahā field trip.
- Apr 25 HAWAII'S COASTAL PLANTS - outstanding program by Ray Tabata, coastal resources specialist, U.H. Manoa.
- Apr 27 Wailea Point tour of coastal plants.
- Apr 30 MCC students clear section of pluchea at Kanahā opening a vista of Iao Valley.
- May 4 Kanahā planting of 'aki'aki at Apr 30 clearing.
- May 18 'Awikiwiki Exclosure work party.
- May 24 DLNR Forestry & Wildlife Division plant Kokia cookei on Molokai. NHPS member, Richard Nakagawa responsible for propagating the rare plants.
- May 27 Gressitt Preserve work party.
- June 1,2 NHPS representatives attend Hawaii Environmental Educators Association conference at Honolulu.
- June 5 Haiku School 2nd graders are first recipients of NHPS PĀ'Ū O HI'IAKA AWARD for malama Kanahā Pond. Students planted 60 plants they had started from Kanahā seed.
- June 8 Propagation Workshop - Guest horticulturist, Carmel Crivellone. Warrants being an annual event.

1991 HIGHLIGHTS (continued)

- June 16 Full page MAUI NEWS article by Val Monson featuring Kanahā planting June 5.
- June 22 Gressitt Preserve work party.
- June 25 Kanahā field trip for 40 Maui teachers attending 'Ōhi'a Project Workshop.
- July 6,7 NHPS Board Members retreat, Haleakalā.
- Sept 27 Seabury Hall student statisticians figure 1,513,000 haole koa seeds removed during Kanahā work party. Pau hana pot luck at beach afterward.
- Oct 3-6 MAUI COUNTY FAIR - Introduced hundreds of native plants to the public. Focal point, Scott Seymour's arrangement of a'e, hapu'u, kukaenene, liko lehua, ohelo, 'ie'ie (IN BLOOM), manono and pukiawe.
- Oct 18 Meeting - Review exclosure responsibilities.
- Oct 19 Kanahā workshop at "Children are Worth It" Conference sponsored by H.A.E.Y.C., Maui Chapter.
- Oct 22 St. Joseph School Kanahā field trip.
- Nov 7,8 Kula School Kanahā field trip.
- Nov 9 Kanahā Naupaka planting makai fenceline.
- Nov 21, 22 Pukalani School Kanahā field trip.
- Dec 10 Kanahā 'Akia planting at front entrance.



Bailey Farms
 Carmel Crivellone
 Cook Kwee's Maui Cookies
 Parker Gambino
 Robert Hobdy
 Ho'blawa Farms
 Kahului Public Library
 Bert Kimura
 Maui Coffee Roasters
 Maui Community College
 Maui County Fair
 Maui Electric Co. LTD.
 Maui OUTDOOR CIRCLE
 Art Medeiros
 Mrs. Samuel W. Moore
 Ken Nagata
 Oasis Maui Inc.
 Oceanic Cablevision

Paia Video
 Radio Stations
 Hawaii Public Radio
 KAOI
 KMVI
 KNUI
 KPOA
 ROBERTS HAWAII INC.
 SAFEWAY STORES
 R. L. SCOTT SEYMOUR
 SOUTH MAUI TIMES
 ANNE & JACOB STARR FOUNDATION
 STATE FORESTRY & WILDLIFE
 SUBWAY SANDWICHES
 THE BULLETIN
 THE HONOLULU ADVERTISER
 THE MAUI NEWS
 WEST MAUI NEWS

Hibiscus + LIACUS

Mahalo
 for generous gifts
 and kind considerations
 to the Native Hawaiian
 Plant Society in 1991

1991 SURVEY RESULTS

WE HAD A GREAT RESPONSE TO OUR SURVEY. THIS SHOWED A LOT OF INTEREST IN OUR NATIVE PLANTS. THE RESULTS WILL ALLOW US TO MORE EFFICIENTLY CONDUCT ACTIVITIES OF INTEREST FOR EVERYONE. WE ARE STILL REVIEWING THE RESULTS AND WILL DISCUSS THE SURVEY AT OUR JAN. 10 MEETING. THANK YOU FOR PARTICIPATING.

1992 FIELD DAY SCHEDULE

PLEASE NOTE OUR NEW SCHEDULE OF TRIPS TO THE VARIOUS ENCLOSURES. THIS IS YOUR OPPORTUNITY TO LEARN ABOUT AND TO SAVE THE PLANTS AND THEIR HABITATS. WE WILL BE CLEARING WEEDS BUT ALSO TAKING TIME OUT TO LEARN ABOUT THE PLANTS (IN DECEMBER, THE MAILE FLOWERS AT AUWAHI WERE UNBELIEVABLY FRAGRANT AND THE RED FLOWERS OF THE SANDALWOOD WERE IN SPECTACULAR BLOOM). OUR FIRST SCHEDULED FIELD DAY WILL BE ON SATURDAY, JAN. 11, 1992 TO AUWAHI. PLEASE CHECK YOUR SCHEDULE FOR DETAILS.

1992 MAUI COUNTY FAIR

THE 1991 MAUI COUNTY FAIR EXHIBIT WAS A GREAT SUCCESS. IT WAS AN OUTSTANDING SHOWCASE FOR OUR NATIVE PLANTS. DO YOU HAVE ANY IDEAS FOR NEXT YEAR? WE ARE LOOKING FOR PEOPLE TO PLAN AND ORGANIZE THE 1992 EXHIBIT.

1992 MEMBERSHIP/SLIDESHOW MEETING--JAN. 10, 1992, KAHULUI LIBRARY, 7 PM.

ANNUAL ELECTION OF OFFICERS (YOUR INPUT WILL BE GREATLY APPRECIATED). BILL EVANSON OF THE DEPT. OF LAND AND NATURAL RESOURCES WILL PRESENT SLIDES AND EXPLAIN THE NATURAL AREA RESERVE SYSTEM--LEARN WHAT IS BEING DONE TO SAVE OUR NATIVE ECOSYSTEMS. THE AREAS INCLUDED ARE: AHIHI-KINAU, HANAWI, KANAIO, WEST MAUI AND PUU ALII (MOLOKAI).

ANNUAL MEMBERSHIP DUES

ANNUAL MEMBERSHIP DUES ARE \$10 A YEAR (DUE EVERY JANUARY). IF YOU DON'T SEE '92' ON YOUR ADDRESS LABEL, PLEASE RENEW YOUR MEMBERSHIP. WE APPRECIATE YOUR CONTINUED SUPPORT.

Koki'o took a strange root back to its native Molokai

By Jan TenBruggencate
Advertiser Kauai Bureau

The Molokai koki'o clings to life by the most fragile of threads.

It had been extinct on its home island but survived on other islands, like a transplant recipient, grafted onto the parts of related plants.

Today, on borrowed roots, Molokai koki'o is growing once more in its native soil.

Its revival is a story suitable for both scientific papers and children's books, and represents a significant step in a state that has more near-extinct species than any other place.

Hawaii is not known for the size or beauty of its native flowers, but the koki'o is an exception.

Its flower colors run from salmon to scarlet and it has graceful, curved petals. Its big leaves have multiple points, like a kükui or a maple.

One of Hawaii's four koki'o species is already extinct and the Kauai and Big Island koki'o species are rare. But the Molokai plant is rarer, and more delicate in that biologists have not been able to get it to grow on its own.

The only surviving plants had been grafted onto rootstock of the Kauai and Big Island species, its cousins.

Koki'o is a term used for several native Hawaiian plants related to the hibiscus. Its scientific name is *Kokia cookii*. So some people call it koki'o

See Koki'o Page A4

The Honolulu Advertiser May 25, 1991

Koki'o: In its own soil on borrowed roots

FROM PAGE ONE

and some call it kokia, and they're both right.

The decline of the koki'o was in part related to a problem with all of its hibiscus relatives: They are tasty to all kinds of grazing animals.

Under heavy grazing pressure from goats, deer, cattle or other herbivores, the trees grow old and die and their offspring are eaten before they can grow and set seed.

By 1915, there was just one Molokai koki'o plant left. Molokai Ranch owner George P. Cooke collected its seeds and planted them around his home. Others were planted around the island from seed, but the trees are apparently short-lived and died out in most places before anyone thought to keep seeds to grow new ones.

By the late 1970s, there was again only one plant, growing at the Cooke home. Keith Williams, horticulturist at Waimea Arboretum, collected seeds from it, but they would not germinate. He took some cuttings and tried to root them without success.

He finally was able to graft a Molokai

koki'o onto a seedling of the Kauai species, *Kokia kauaiensis*. It grew sufficiently to provide material for a few more grafts onto the Big Island species, *Kokia drynarioides*.

Botanical gardens and state officials tried to get viable seed from the flowers produced on the koki'o without success.

Then, the surviving Molokai tree died in a fire at the Cooke home, and there was no longer a Molokai koki'o growing on Molokai — or growing anywhere else in the world on its own roots.

More plants were created through grafts, using a new grafting technique developed by Richard Nakagawa, a nurseryman for the state Division of Forestry and Wildlife.

Yesterday, they brought the plants home. The state Division of Forestry and Wildlife worked with Molokai Ranch and developed a fenced area on former koki'o land, where the trees could be planted and grow without pressure from grazing animals. Another fenced area was built on state forest land.

Gov. John Waihee planted eight of the trees in the Molokai Ranch koki'o enclosure at Puu Nana.

Unless the trees finally produce viable

seed, they may always require assistance to survive, but in moving them to Molokai, the koki'o could make a comeback from the edge of extinction.

Michael Buck, administrator of the Division of Forestry and Wildlife, said he hopes to bring more rare plants out of gardens and back to their home turf. Doing so will involve a public-private partnership that includes the National Tropical Botanical Garden's Hawaii Plant Conservation Center, Waimea Arboretum, Lyon Arboretum, Honolulu Botanical Garden and Amy Greenwell Ethnobotanical Garden on Hawaii.

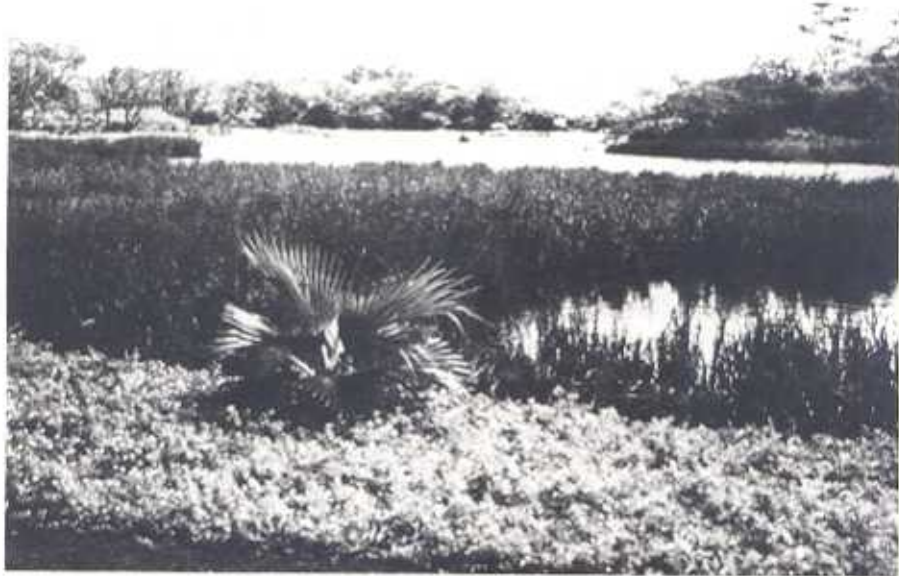
All of them will be collecting and growing rare native plants.

The National Tropical Botanical Garden's program, centered at its Kauai headquarters, has collected seed of Hawaiian plants from as many different areas as possible to expand the genetic diversity of plant species.

It is growing many of the plants in a new 2,500-square-foot expansion of its greenhouse and distributing seedlings and seeds to the public.

In many cases, there are more of a native species growing in cultivation than in the wild.

Feb. 14, 1992, 7 p.m. at the Kahului Library NHPs will present guest speakers, Pat Horimoto and Dennis Kana'e Keawe. They are master weavers of hala, 'ie'ie and makaloa; working to revive the dying craft and setting standards of traditional Hawaiian excellence.



Makaloa growing in the wetland of the Kanaha Bird Sanctuary, Maui.

Photo by Diane Ragone, 1990.

Cyperus laevigatus, commonly known in Hawaii as *makaloa*, was plaited into soft and supple mats which were highly prized by Hawaiian royalty.

Photo by Diane Ragone, 1990.



The Bulletin Volume XXI Number 3

National Tropical Botanical Garden

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St. John, eminent botanist, dead at 99

By Bob Krauss
Advertiser Columnist

Harold St. John, one of Hawaii's most distinguished and adventurous scientists, died quietly at age 99 Thursday in the small house he built with his own hands in Manoa Valley.

An internationally recognized botanist, St. John "retired" in 1958 as professor and chairman of botany at the University of Hawaii. He had produced 185 scientific reports describing the rare plants he had discovered.

He continued on the staff at the Bishop Museum, publishing scientific works used by botanists around the world. At last count, in 1986, his works totaled 410.

One of St. John's colleagues, a scientist at the University of Michigan, called him "an incredible person... who probably did as much as anyone in the world to expose people to the special features of Hawaiian plants."

St. John was instrumental in establishing the Lyon Arboretum and Foster Botanic Gardens as public institutions.

He wrote in and spoke seven languages, wrote descriptions of plants in Latin, and taught probably the most popular botany class at the Uni-

versity of Hawaii because he took students on campus field trips and acted as cheerleader while making them face a tree and chant its scientific name.



St. John

He said he never bothered to get up to see Halley's Comet in 1910 because all he cared about was botany. All of his degrees, including his doctorate, in 1917, came from Harvard.

From 1920 to 1929 he taught at Washington State College at Pullman. He taught botany at the University of Hawaii from 1929 to 1958, at the same time working at the Bishop Museum.

St. John saw action in France during World War I as a lieutenant in an artillery unit. During World War II, he tramped the mountain jungles of Colombia for the U.S. government,

Packages of specimens discovered by St. John during his expeditions into jungles, from Taiwan to Uganda, occupy 1,000 square feet of Bishop Museum storage space.

He was born on July 25, 1892, in Pittsburgh and began collecting plant specimens at age 6. He

looking for a source for quinine because America's source in Java was in Japanese hands.

From 1953 to 1958, he served as associate director of Lyon Arboretum. But there was no money for maintenance. St. John and a few volunteers repaired some old buildings on the grounds, rented them and saved the arboretum from bankruptcy.

When the city Board of Supervisors was reluctant to take over the Foster garden as a botanical park, St. John helped lead the campaign that won the necessary votes.

He celebrated his 90th birthday by rafting down the Colorado River.

His wife, Elizabeth, active in community work, died in 1970.

He is survived by his children, Charles E. of Princeton, N.J., Robert P. of Cupertino, Calif., Mary Zemach of Los Alamos, N.M., and Mary Martin of Maui; 11 grandchildren; and five great-grandchildren.

Services will be at 3 p.m. Jan. 5 at First Unitarian Church of Honolulu. In lieu of flowers, donations may be made to University of Hawaii Foundation, Plant Science Botany Fund, P.O. Box 112770, Honolulu, HI 96828-0270.

The Native Hawaiian Plant Society offers heartfelt sympathy to the family of beloved Harold St. John.

Many will remember past Xmas visits to Maui when Dr. St. John shared with us his knowledge of native Hawaiian plants.

Mahele na pua o ka lima aloha



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M E M B E R S H I P



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- Other \$ _____

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- New Member
- Renewal Member
- I would like to volunteer.

(Contributions are tax deductible within the limits of Federal and State regulations.)

CHANGE OF ADDRESS: PLEASE GIVE US NOTICE. OUR NEW, ECONOMICAL NON-PROFIT MAILING RATE DOES NOT INCLUDE FORWARDING.