



NEWSLETTER

UNIVERSITY OF CALIFORNIA BOTANICAL GARDEN

BERKELEY

Robert Ornduff, Director

Winter Quarter 1977

SPRING EVENTS SCHEDULE

February 15: Tuesday, 7:30 pm. PLANTS OF CALIFORNIA, a multimedia show in the Oakland Museum Theatre, 1000 Oak Street, Oakland. Dr. John Robert Haller, Professor of Botany, University of California Santa Barbara, designed this show as an introduction to a field course on California flora. It subsequently has been shown to outside groups and garden clubs in Southern California earning acclaim and attracting large audiences for its spectacular photography. The show here will open with a 15 minute, two-screen presentation of fall colors in New England and will accelerate with a 30 minute slide and music presentation using three screens, six projectors and 800 slides which demonstrate the overwhelming variety of plants to be found within our state boundaries and which plants are grouped together in the many California communities to be found as progress from the coast to the eastern border of the state. This is a private showing for the Docents and Friends of the Botanical Garden and the Docents of the Oakland Museum and for their friends.

March 1: Tuesday, 9:30 am. FLOWER ARRANGING, a demonstration by Christopher Designs of San Francisco in the Meeting Room at the University Botanical Garden. Coffee and doughnuts will be served prior to the demonstration scheduled from 10 am. to noon. Sponsored by the Docents of the Botanical Garden. \$3 per person. Advance registration and payment required by mail to Docents, Botanical Garden, University of California, Berkeley, Ca. 94720. Make checks payable to Docents Botanical Garden. Space limited.

March 17: Thursday, 7:30 pm. RHODODENDRONS GROWING IN THE UNIVERSITY BOTANICAL GARDEN, an illustrated lecture in the Auditorium of the Kaiser School, 25 South Hill Ct., Oakland (Hiller Highlands District), by Hadley Osborne. Mr. Osborne, President of the California Chapter, American Rhododendron Society, is also President of the Strybing Arboretum Society and a director of the American Horticultural Society. The speaker, an authority on the Rhododendrons growing in the Garden at the University, will use this lecture as an introduction to a tour of the Rhododendron Dell at the Garden on March 20. This lecture is sponsored by the Rhododendron Society with the Friends of the Botanical Garden invited guests.

March 20: Sunday, 2 pm. TOUR OF THE RHODODENDRON DELL IN THE UNIVERSITY BOTANICAL GARDEN led by Hadley Osborne. Meet at the Garden parking lot. Sponsored by the Friends of the Botanical Garden.

CURATOR REPORTS

During the past quarter, we have obtained a great number of new and interesting accessions which are too numerous to describe in detail, but a few examples might be of particular interest. One of the most unusual plants we have obtained is Espeletia schultzei (Compositae) which is a woolly rosette plant that grows under conditions of extreme diurnal fluctuation of temperature and is a native of the paramos of the northern Andes. (For more on the genus Espeletia, see Elizabeth McClintock's and Dennis Breedlove's article in the January-February issue of Pacific Discovery.) Another interesting plant is Rhus verniciflua which is the source of Chinese and Japanese lacquer. This plant is related to poison oak and the sap from which lacquer is produced causes a similar reaction to poison oak. Also of interest is the economic plant Allspice, Pimenta dioica (Myrtaceae), which is a small tree from the West Indies. This plant will be an important addition to our economic collection in the tropical house. A fourth addition is the Enkianthus quinqueflorus (Ericaceae) from Hong Kong. This showy shrub is the most beautiful member of the genus and should be a spectacular addition to our Asian collection. Another showy group of shrubs is a collection of Rhododendron occidentale (Ericaceae) originally from near Big Lagoon in Humboldt County, California. Some of these clones can be seen in the Spring 1977 issue of Pacific Horticulture. These azaleas will be part of the Agnes Rody Robb Glade in the Mather Redwood Grove. The largest addition to the Garden during the past quarter is a collection of about 200 accessions from the mountains of Chiapas in southern Mexico made by Dr. Dennis Breedlove of the California Academy of Sciences. This collection was made possible through a grant from the Stanley Smith Horticultural Trust and will be added to our recently developed Mexican Area adjacent to the parking lot. Plants of outstanding horticultural value from this collection will be propagated by the Saratoga Horticultural Foundation for eventual introduction into the nursery trade.

EDUCATION PROGRAM

DOCENT ENRICHMENT PROGRAM

Trix Machlis, Education Coordinator, has announced the schedule of a spring enrichment program for current Garden docents that will include seven general sessions on Tuesday mornings from 9:30 am.-noon. These will be at three week intervals, along with a variety of special workshops which will be arranged between the scheduled sessions. General session subject matter includes analyzing the pronouncing plant names, tour skills, the plant kingdom and plant diversity, general introduction to the Mexican and South American areas along with a correlation between the vegetation of the Mexican and South American and Australian areas; the Garden's China Hill plantings, plants of the Arctic-Alpine region, the pond community, carnivorous plants, commonly occurring weeds in the Garden which are edible, new world domestication of food plants, pollination ecology, and poisonous plants in the Garden. The workshops will focus on yet other areas of interest such as plant propagation; ferns; birds in the Botanical Garden; trees in this Garden, on campus and in the Blake Garden; and microorganisms, decomposers and pests. In most cases, Docents will act as discussion leaders and guides. For a more detailed schedule, subject content and name of discussant/guide, contact Trix Machlis at 642-3352.

DOCENT TRAINING PROGRAM

The popular docent training program has been postponed until the fall of 1977 in favor of the ambitious enrichment program for the present group of 52 docents. Persons not already on the docent applicant waiting list and wishing to be informed of the fall program should write to Dr. Gertrude Machlis, Education Coordinator, Botanical Garden, University of California, Berkeley, Ca. 94720 asking to be so notified.

GROUP TOURS AVAILABLE

Guides are available for group tours. Reservations should be made at least two weeks in advance by calling 642-3343 and by mailing in a \$5.00 non-refundable registration fee for each scheduled visit to the Garden. The following tours are offered for:

Elementary and Junior High Schools:

Five Senses Tour (recommended for grades K-2) emphasizes the use of the senses-smelling herbs, seeing colors, hearing sounds, etc.

Life in Early California takes a look at some of the plants used for food, fiber, medicine, and utensils by the California Indians.

Life in the Forest provides a discussion of how the environment affects plants and how plants affect the environment, illustrated by the plants in our "forest".

Life in the Desert offers a walk through the desert area in the Garden with a discussion about desert animals and plants and how they adapt to their harsh environment.

Economic Plants provides a tour of the plants we use for food, drugs, fibers, dyes, etc. Includes herbs and tropical plants such as coffee and rubber.

High Schools and Adults:

All of the above except the Five Senses Tour.

California Plant Communities examines some of the plant communities of the state through a tour of the California Area of the Garden.

Plant Kingdom surveys the different types of higher plants found in the world today.

Plant Diversity and Adaptation offers a variation of the tour on the Plant Kingdom with more emphasis on how plants manage to live where they do.

Flowering Plants and their Pollen Vectors offers a tour on plant fertilization that will vary from season to season depending on what is in bloom, but which is best suited to the warmer months when insects are abundant.

General Tour provides a walk through the major areas of the Garden.

Special Programs

Special tours can be designed for any age group, as well as long-term projects involving several visits to the Garden.

GARDEN USED BY VARIOUS CAMPUS DEPARTMENTS

Under the direction of Mr. Russell A. Beatty and Prof. Robert J. Tetlow, students taking a graduate course in the Department of Landscape Architecture at UC Berkeley, made a series of possible plans for the development of the field between the Mather Redwood Grove and Centennial Drive. These plans incorporated various plant communities such as the Mixed Evergreen Forest, Oak Woodlands, Chaparral and Valley Grassland which the Botanical Garden hopes eventually to be able to develop in this area. The nine different plans were reviewed by members of the Botanical Garden staff who were impressed by the work that the students were able to accomplish in the few weeks of this project. It is hoped that many of the ideas presented by these students can be used when this area is finally developed.

Dr. J. Desmond Clark, Professor of Anthropology and archeologist on the Berkeley campus, used samples of fiber plants from the Garden along with information from the Garden reference library to assist him in use-wear research. Desmond was trying to determine whether stripping of the leaves to extract the fibers would result in polish and gloss on the edge of stone blades set in a shredding knife. The reason for these experiments was to see whether one could produce the same kind of use-wear and gloss that is present on stone artifacts from a site in eastern Ethiopia with occupation material dating to some 15,000 years ago. Desmond states in a recent letter to the Garden that "While, of course, one cannot be certain as to precise function it is possible to say that by working silica-secreting plants such as wild grasses, 'sickle gloss' will result. Since the prehistoric population after about 1,500 B.C. was pastoral they must have had much need for ropes."

GIFT OF SLIDES

Mr. William Anderson of Santa Cruz, California donated to the Garden 100 high quality slides of flowers in bloom in this Garden. Each slide came precisely identified. The slides will be added to the Jepson Herbarium slide collection and made available for use by the Garden's educational program. Donations of additional slides and photographs of the Garden collections are invited. Such gifts are tax deductible with the value of the gift estimated by the donor.

PERSONNEL NEWS

Mrs. Pamela Reis is Administrative Assistant at the Garden succeeding Ms. Gloria Gamblin who accepted a position with the University of California Press. Pamela, a UCB graduate in biology, came to the Garden from an assignment with the Health and Medical Sciences Program on campus.

Jonathan Donchin, a horticulturist, joined the Garden staff in October. He replaces Wayne V. Roderick who resigned, after 16 years at the Garden, to become Supervisor of the East Bay Regional Park District Native Plant Botanic Garden. Jonathan comes directly to the Garden from the three year horticultural program of the Royal Botanic Gardens, Kew where he earned the Kew Diploma of Horticulture. He was one of the few non-British students in his class. Before Kew, Jonathan worked for a year at Wisley for the Royal Horticultural Society. All this training in horticulture tops a B.A. from UC Santa Cruz with majors in anthropology and art. Jonathan is most interested in telling others about his experiences at Kew and so has put together a slide show of the four seasons there. While in England, he appreciated the

PERSONNEL NEWS (continued)

opportunity to view mature plantings that are native of that area which when seen here as introduced species are almost unrecognizable because of size and young age.

COMINGS AND GOINGS

Director Robert Ornduff spent about two and one half weeks in December in Guatemala and southern Mexico collecting plants and seeds for the new Mexican area of the Garden. In Guatemala, he collected mainly at 8,000 feet or above in the volcanic uplands north of Guatemala City. In Mexico, he obtained a large number of specimens from the Nevado de Toluca west of Mexico City, from the high ridges east of the city of Oaxaca, and from the slopes of Orizaba. Among the things that he obtained were several accessions of Penstemon, an interesting Bocconia with entire leaves, a plant of the 10-foot high horsetail, Equisetum giganteum, and specimens of two aquatic species of Habenaria, an orchid.

Associate Director Nancy Vivrette is on sabbatical leave winter quarter.

GARDEN VISITORS

Fall Garden visitors included Carlton B. Lees, Vice-President of The New York Botanical Garden and R.L. Taylor, Director of the University of British Columbia Botanical Garden.

GARDEN FEATURED BY OTHERS

The Botanical Garden was described by Gene Bauer in the October 1976 issue of Golden Botanical Gardens, the newsletter of the Arboreta and Botanical Gardens Committee of the California Garden Clubs. This Garden is located in the Bay Bridges District of the association. The Berkeley Garden Club, a unit of the district, is a contributing member of the Friends of the Botanical Garden.

The flyer announcing the November one-man exhibition of the works of Tom Fawkes at the Fountain Gallery in Portland, Oregon in November 1976, features an acrylic painting titled "Strawberry Canyon Site." The green metal labels that appear in the painting as well as the subjects in it clearly identify it as the upper slope of the New World Desert section of the Botanical Garden.

MOVES

The new propagating house is now operational with misting system, sewer line, and electricity connection installed. This now frees the old propagating house to be used as a display house for carnivorous plants and ferns that will be open to the public daily in the near future. At the same time, equipment required by the designer/carpenter scattered in several structures has been consolidated at the barn in the research work area. This change has meant moving the indoor lunch room for the outside staff to the head house near the central area of the Garden.

WEATHER

We are well into our second dry year with only 8.04 inches to date. Season 1975-1976 was one of the driest on record, if not the driest in the history of the weather bureau in San Francisco and this season may well set another record. 13.45 inches of rain were recorded in the Garden last season compared with an annual average of about 26 inches. Right now the Garden requires far more watering than usual so there is real concern about the effect of possible water curtailment. For example, in the Mather Grove understory plantings were made anticipating fall and winter rains to get them well started but instead watering is required. As for temperature, it has been mild with the low temperature in January 1977 of 27° and a high of 68°.

FRIENDS OF THE BOTANICAL GARDEN REPORTS PROGRAM

The Friends first Open House on September 26, 1976, attracted 600 persons to the Garden and indicated desirability of repeat events, while the plant potting session in November suggested interest in scheduling a plant propagating workshop at a later date. Director Robert Ornduff's lecture on plant collecting in Morocco, an expedition that added accessions to the Garden's North African collection, highlighted Garden visitor interest in learning how the areas in the Garden are developed from planning stage, through plant collecting, seed exchange, propagation, and grounds preparation, to final display point. The Program Committee Chairman is Fitzhugh Rollins.

MEMBERSHIP

This spring, the Friends' brochure, designed under the direction of August Fruge and Harlan Kessel with the assist of Frank Barnett, will be mailed widely in the bay area. Members who also receive a brochure through this general mailing are urged to pass it on to a non-member. More members mean more money is available for extension and renovation of plant collections at the Garden and enrichment of the Garden's educational program. Memberships are our major source of income.

NOMINATING COMMITTEE

Mai Arbegast, Elizabeth McClintock, and Evelyn Ratcliff have been appointed Nominating Committee members to submit nominees for Board of Trustees vacancies for election by the membership at the Annual Meeting in May. The term of office of three at-large members of the Board of Trustees expire June 30, 1977. Those whose terms expire are Lincoln Constance, Howell V. Daly, Jr. and Elizabeth W. Hammond. At-large Board members continuing are August Fruge, Alice Howard, Mary L. Jefferds, Robin Parer, Marvin Schmid and George W. Wasson. The elected officers are Jerome Carlin, President; Fitzhugh S. Rollins, First Vice President, Marjorie G. Schmidt, Second Vice President; Nancy R. Wilson, Secretary; and Vincent A. Clemens, Treasurer. Their terms of office expire June 30, 1978.

VOLUNTEERS NEEDED

Jerome E. Carlin issues call for volunteer help with publicity, the Newsletter, and membership, recruitment and mailings. In addition, the Docents could use Tuesday and Thursday help with potting for their May Plant Sale. For more information, call 642-0849 or 642-3343.

SELECTED UNIVERSITY OF CALIFORNIA PRESS TITLES OFFERED AT SPECIAL DISCOUNT TO FRIENDS

Prices indicated are to MEMBERS ONLY and include a 25% discount on the regular retail price, sales tax, postage and handling. Purchases directly support the FRIENDS OF THE BOTANICAL GARDEN.

ORDER FORM

ISBN	QUANTITY	TITLE/AUTHOR	DISCOUNT PRICE	TOTAL
00899-5		California Desert Wildflowers/Munz	\$ 3.15	
00901-0		California Mt. Wildflowers/Munz	3.15	
00896-0		California Spring Wildflowers/Munz	3.15	
02146-0		Flora of So. Calif./Munz & Keck	13.18	
02089-8		Flora of Trinity Alps/Ferlatte	8.74	
02119-3		Flora of White Mts. Calif. & Nev./Lloyd	7.19	
00578-3		Marin Flora/Howell	8.74	
00903-7		Shore Wildflowers of Calif./Munz	2.35	
02506-7		Sierra Wildflowers/Niehaus	3.15	
01168-6		Spring Wildflowers SF Bay Region	2.35	

Name _____

Address _____ Zip _____

Amount Enclosed _____ Membership dues enclosed if necessary _____

Make checks payable to the Friends of the Botanical Garden and mail to Friends of the Botanical Garden, University of California, Berkeley, Ca. 94720

MEMBERSHIP BENEFITS

Besides enjoying a book discount on selected University of California Press Titles, members will be invited to attend free lectures, garden tours of special seasonal interest, and other Garden events which will be announced in a periodic newsletter. Memberships will support and extend various world-wide living plant collections, displays, reference materials, the educational program and facilities of the Garden. Dues are tax deductible.

Student	\$5	Contributing	\$25	Patron	\$250
Individual	\$10	Supporting	\$50	Sustaining	\$500
Family	\$15	Sponsor	\$100	Benefactor	\$1,000

Friends of the Botanical Garden
University of California
Berkeley, California 94720

Nonprofit Org.
U.S. Postage Paid
Berkeley, Ca.
Permit No. 244

Stanley Smith
Horticultural Trust
Belhaven House, Dunbar
E. Lothian EH 42 INS Scotland