From Babianas to Baboons

One of our last views of California was a colorful row of Lombardy poplars at the San Francisco airport just turning for the fall. Thirty-one hours later, on September 13, we descended through the clouds to our first views of the verdant South African countryside. Upon our arrival in Capetown, the very same Lombardy poplars adorned the landscape but here they were just showing a haze of early spring green, the first sign that we were in a different world.

Parker Sanderson, "head gardener" at the U.C. Davis Arboretum and I (the U.C. Botanical Garden horticulturist in charge of the Africa section), were here to meet with our counterparts at the Kirstenbosch National Botanic Garden and other South African gardens to see how and what they are growing and how it is interpreted. Our goal was to learn as much as possible from the experts about South Africa's plants and their floristic associations and of course see firsthand as many plants and habitats as possible.

Upon our arrival, Ernst Von Jaarsfeld, curator of succulents at Kirstenbosch, picked us up and took us to exchange money and obtain our rental car. We were then on our own to find our way to Kirstenbosch while fighting the inclination to travel on the wrong side of the road in Capetown traffic. We managed to find the garden and safely park. To our delight the clouds parted (briefly), giving us spectacular views of the 528 hectare garden and natural areas that extend up the west slopes of Table Mountain, an incredible mist shrouded back drop for both Kirstenbosch and all Capetown.

Kirstenbosch is the largest of South Africa's seven regional gardens. Unlike the others that concentrate on local flora, it attempts to grow plants from all over the country. The garden, which contains over 25,000 species, has areas of natural communities including Finbos, meaning fine brush, consisting of Restionaceae, Proteaceae, and Ericaceae as well as the Podocarpus and Leucodendron argenteum forest native to the site. Winter conditions at Kirstenbosch are similar to those of coastal California, but temperatures rarely fall below -1 degree C (30 degrees F). Interpretive displays and signage at the Garden are good and a nursery, restaurant and bookstore keep visitors free of that burdensome extra cash.

With the help of Ernst and the other garden staff we plotted our route of travel: first to the high Sutherland Plateau, then to the Richtersveld and finally to the Drakensberg escarpment in the east. The rains had been plentiful in the western region, and flowers covered the mountainsides in a profusion of color reminiscent of the display in California after our miracle rains last March. We were turned back by many a swollen river or muddy road. Quickly the decision was made to head away from the coast across the typically dry succulent Karroo to our first high and hopefully dry destination. Crossing the arid flats, we were constantly impressed with such sights as Aloe variegata, Lachenalia (cape cowslip) sp. and large flowered Babiana under the protective cover of dwarf shrubs.
The High Plateau

We arrived on the Sutherland plateau and the little town of Sutherland, and at last began to romp in the field. The town sits at 1500m elevation and is famous for being (arguably) the coldest town in the country with -16 degrees Celsius (+3 degrees F) common in winter. Since we wanted to concentrate on the colder regions (where plants grow that might survive Berkeley's winter frosts), this was clearly the place to be. The first morning, after scraping frost from the windshield, we drove off to find fields of *Homeria*, *Oxalis* spp. and dozens of other bulbs coming into flower. Bright pink *Romulea rosea*, blue *Felicias*, white and yellow *Cotula*, yellow *Spiloxene* and orange *Oxalis obtusa* adorned one vernal pool, a collection sure to challenge the best film processor. In the surrounding sandstone outcrops were gems such as *Ruschia alpina*, *Aloinopsis spathulata*, and other mound-forming alpine succulents. There were also an array of shrubby and perennial members of the Asteraceae and more bulbs such as the little spiral leaved *Bulbine torta* and *Bulbinella latifolia*.

At noon that day we were back in town for lunch; by that time it seemed everyone in town knew who we were and why we were there. We were directly ordered to the police station, at first a chilling prospect, but the head officer merely wanted us to see the succulents he grew on *Aloinopsis spathulata*, on high Sutherland Plateau (photo by Sean Hogan)

The Fog Desert

The second leg of the trip took us to the Richtersveld with Ernst, who knows the flora better than anyone and proved to be an encyclopedia with a great spell check. The area is about 800 km north of Capetown and borders Namibia. It is a true fog desert with the majority of moisture flowing in from the cold Atlantic Ocean and bathing the west-facing bluffs and mountains with light drizzles. The first stop was an abandoned diamond mining town on the Orange River, which will soon be the headquarters for the new Richtersveld National Park. Ernst is writing the flora of the area and wanted to explore several of the highest peaks and river beds for new plants. We piled into the head ranger’s truck and were off through stands of *Pachypodium namaquanum* and *Aloe dichotoma* into a moonscape of quartzite mountains. We drove overland, then hiked many kilometers into the dry river Nom, past outcrops dripping with *Conophytum*, *Cotyledon*, *Crassula*, *Stapelia*, *Anacampseros* and so many others that one could not take notes fast enough.

Earlier Ernst had found a new species of *Portulacaria*, named *P. armiana*, north of the Richtersveld in Namibia. He hoped he could find them in this similar habitat as well. It was a lucky day — we found the plant; about forty individuals in all. A succulent shrub about the size of a small jade plant, *P. armiana* produces a naked inflorescence up to 12 m high, evidently avoiding the marauding rodents. As we hiked up the narrow ravine, Ernst assured us that the rainy season was long over in the Richtersveld and that the area receives only 45 mm of moisture a year, mostly as fog. Soon after, torrents of rain began to fall and we were forced to scurry back to the car to high ground. It was the first rain the ranger had seen since his arrival six months earlier, and the latest rain Ernst had ever seen in the dry season!

In the following days we ascended several peaks...
making many new plant records for the area and even finding plants not yet known. Most of South Africa has been far less botanically explored than one would think. By now it was early October and the colorful fields of annuals were passing, only to be replaced by the even more dazzling members of the family Aizoaceae.

After dropping Ernst home we left on our last adventure, this time to the Drakensberg escarpment of Nuatal and the country of Lesotho. The route took us through the central Cape province and through the Orange Free State giving us a chance to spend time at the Karroo Botanic Garden in Worcester and the new Orange Free State Botanic Garden in Blomfontein. En route, we were surprised to turn a corner and find a pack of baboons forming a virtual road block, begging for food from passersby.

Cold-hardy Plants

And, yes, it was raining when we arrived at the eastern base of the Drakensbergs, but cleared as we began our ascent. We were not allowed to travel past the border of Lesotho without a four-wheel drive vehicle, so we set out on foot to reach the 3300 m Soni pass. Luckily a friendly driver gave us a lift up the switch-backed road that was littered with the rusting remains of transport trucks that didn’t make it. On top was a dry plateau covered with grasses, small ericaceous shrubs, and many beautiful species of *Helichrysum*. I was particularly interested in the clumps of *Dierama* sp., *Dymondia* sp. and *Delosperma nubigenum*, a plant that has proven hardy in places like Denver. On the return down the pass we saw emerging sprouts of *Agapanthus*, and *Kniphofia* as well as *Watsonia*, *Scilla natalensis* and an overwhelming number of other plants just beginning to flower.

From there it was a straight shot back along the south coast to the guest house at Kirstenbosch and preparations for our trip home.

The experience gained through seeing so much habitat and meeting the people that work intimately with the flora could never be matched in a classroom. I hope that future interactions with South African institutions will lead to the best representation of African flora possible in our own Garden. I would like to thank the staff at Kirstenbosch for their generosity, and the Friends of the UCBG for their staff development grant to offset film developing costs.

—Sean Hogan
BOOK REVIEWS

For more than a decade Californians have been concerned with water conservation in our gardens and landscapes. We now have many good reference books to turn to when planning a new water-saving garden or when refurbishing an old water-thirsty one. Here is a selected list of titles, old and new, to turn to for help, advice, information and just plain interesting reading.

General Interest

  A short suggestion-packed pamphlet useful anywhere in the United States.

  Gardening advice of the most practical kind on soil preparation, plant selection and plant grouping given by a master gardener and nurserywoman.

- **Month by month in a waterwise garden.** Kevin Connelly. Historical Soc. of Southern Calif. 1991. $5.00
  A series of month by month essays with practical advice on gardening written with the support of the Metropolitan Water District of Southern Calif.

- **The Mediterranean gardener.** Hugo Latym. Barron’s. 1990. $35.00
  Advice on garden design and plant selection (with descriptions of over 300 plants) written by the owner of a nursery-garden on the island of Mallorca.

- **Successful perennials for the Peninsula.** A selection by Members of Western Horticultural Soc. 1989. $10.95.
  A selection of many years of ‘Plant Notes’ on some 163 perennials successfully grown by society members.

  Plant descriptions, plant selection guides and discussions of special situations throughout the state.

- **Water-conserving plants and landscapes for the Bay Area.** East Bay Municipal Utility District. 1990. $11.95.
  A well-illustrated and charted reference on trees, shrubs, ground covers, vines and herbaceous plants.

  A synthesis of articles and advice on plant selection and water-saving techniques for the garden.

  This little book, jam-packed with information for gardeners in the Great Basin and Rocky Mountain regions of the US, has many useful ideas and practical suggestions for all of us.

FROM THE DIRECTOR

“A situation is developing in California that is of great concern to those of us entrusted to protect our State’s botanical resources. There are not enough qualified botanists available in the work force to meet today’s demand for this specialized field.”

So begins a recent letter from Pete Bontadelli, Director of California’s Department of Fish and Game to University deans and biology department chairs throughout the State. He asserts that the scarcity of qualified botanists has been caused at least in part by the shift away from botany and field-oriented research in biological science departments over the past decade. The good news is that someone in high office has finally called attention to this alarming trend. And on the bright side, the number of jobs for qualified botanists is on the increase. Many government agencies need plant ecologists, botanists and wildlife biologists to write and review environmental impact statements, develop land-use plans and manage endangered species and their habitats.

The bad news is that the dearth of qualified botanists is occurring at a time when California faces increasing population and development pressures, pressures that threaten its natural resources and environment. Increasing development leads to extinction or loss of natural vegetation and habitats throughout the State. And because there is a critical shortage of qualified people to oversee and police proposed development projects, those losses are not mitigated or prevented.

We at the Botanical Garden play many and varied roles in pursuing remedies to this shortage of qualified plant biologists:

- Increasingly our education programs and docent-led tours are exposing students of all ages to the study of plants and the environment. Our hope is that at least some of these students will be enticed to learn more about plant and environmental sciences after these brief introductions.

- We are currently exploring ways to interact more closely with land management agencies on issues such as controlling exotic species, restoring habitats and managing vegetation to reduce the risk of fires. These interactions will help link the garden staff and university faculty more closely with professional resource managers.

- And, numerous Cal students who “discovered” the Garden during course field trips, have been returning as volunteers and interns on Garden projects, including curation and plant identification. With this group we include a healthy dose of career advising - encouraging them to consider future work in plant biology, environmental education and natural resource fields.

Clearly, much remains to be done to ensure the future of California’s natural diversity. Both the Berkeley campus and the Botanical Garden have long and active histories in the plant and environmental sciences. We are proud to continue the tradition by offering students of all ages first hand experiences in these exciting and important fields.

—Margaret Race
PROGRAM HIGHLIGHTS

A Dazzling Array of Spring Programs

The one feature common to all of the diverse programing at the Botanical Garden is excellence. Whether it is a propagation workshop, a school tour or a lecture on chocolate, quality is the watchword. Other organizations may offer competitive programs, but discerning Friends and the public at large have come to expect more from a University of California garden program. With these criteria in mind, the folks at the Program Committee and Education Department have spent considerable time developing programs for the calendar year 1992. We believe that this year's slate of programs, for adults and young people alike, meet these high standards, and we hope you agree! Below are a few brief highlights.

For the Nature Enthusiast

Dr. Glenn Keator, a highly respected and well-loved botanist, will launch the year's classes with a course on wildflower identification. If you have ever had the urge to learn the local flora - the Calochortus, the Clarkias, the storksills from the family to the species and common names, their stories and where they can be found, you will have that opportunity this spring. His hands-on workshop will be complemented by docent-led field visits to local "hot-spots".

One of the finest wildflower photographers in the country, John Smithers, plans to conduct his nationally acclaimed photography mini-course here at the Garden again this year. An unabashed advocate of native plants, John presents this excellent class and workshop at selected botanical gardens across the country (and the Bahamas!) We are fortunate to be able to offer it to you in April.

Our third major course offering is a basic bird-watching class, "Beginning Birding," led by an outstanding ornithologist who has organized innumerable bird trips in California, Mexico and East Africa. Dr. Udo Savalli, of the Museum of Vertebrate Zoology, will guide the new birder in developing skills and learning the local avifauna. This field-oriented class will meet in the Garden, with selected visits to local sites.

Our very own horticulturist Elaine Sedlack, who is responsible for the graceful aesthetics of our magnificent Asian section, will present a program on the rhododendrons of the collection, emphasizing newer accessions, as well as information on cultural aspects of the genus.

And, in conjunction with the opening of the dinosaur exhibit at Lawrence Hall of Science next month, Dr. George Poinar, Department of Entomology at the University, will offer a program on the preservation of ancient forms of life in amber, here at the Garden.

For the Gardener

Peter Klement, our fine rose expert here at the Garden, is conducting his very popular rose-pruning workshop again this January. Peter is in charge of the Garden's Collection of old roses, and knows all the nuances of rose care - when and how to prune.

Even if we were to be blessed with a heavy rainfall this season, the effects of drought will persist over the next year. For that reason, the Garden is offering its Drought Program for gardeners once again. If you missed the program in 1991, here is your opportunity to learn about the fine points of soil preparation, irrigation (Sarah Wikander) and plant selection (Paul Doty) for our perennial drought conditions. This year we have added a session that deals with fire defense for home gardeners, featuring a local nurseryman with considerable expertise in this area, Lee Anderson.

And, join our own Assistant Manager Judith Finn, along with U.C. Biocontrol's Junji Hai and members of the biological pest control community, as they explore alternative means of pest control. Many of you have asked for a practical program that features non-chemical management of insects and fungal pests. The Botanical Garden is pleased to present this first in what we hope will be a series. In April, Robin Parer, owner/operator of the nursery "Geraniaceae", in Kentfield, will offer a lecture on "Twenty Successful Geraniums for Your Garden." You can expect more of these plant-family oriented horticultural programs in the months ahead.

—Carol Baird

Tori Petrocha and Randy Craig, GreenStuff day camp instructors, 1991 (photo by Bobbi Ohs)
WHO'S WHO IN THE GARDEN

Francine Henderson

By her works shall she be known...

Among the more visible volunteers at the Botanical Garden is our own Francine Henderson, who works one or more shifts each week in the Visitor Center. This tiny window of visibility doesn't begin to reveal the full scope of Francine's talents and volunteer contributions. Born and raised in Berkeley, she lived for many years in Los Angeles, where among other things, she was a stunt performer in several films. Returning to the East Bay five years ago, she renewed an old relationship with the Garden, and immediately decided to get actively involved. On her first tour of duty as a Visitor Center volunteer, she worked three hours a week, selling books and gift items. Out of necessity she learned details of the Garden as she endeavored to answer the never-ending stream of visitors' questions (which she continues to do with gusto.)

Recognizing a good worker when they saw one, the managers of the Visitor Center decided to "groom" her as a gift buyer. "Grooming" was hardly necessary, since Francine's artistic eye and sense of drama have made her a natural for the position. In fact, since she has been the Gift Buyer, gift sales have skyrocketed!

Not being busy enough, Francine participated in docent training, and teamed up with Mark Sutton, a blind student, whose dream was to create a tour for the visually-impaired, including a full-scale Braille map of the Garden. When that project was complete, and she had arranged several training sessions to acquaint the other docents with special tour techniques for the sight-impaired and blind visitors, Francine moved on to volunteer with the Horticultural staff in the seed exchange project. Every two years, the Garden publishes a catalogue of California native plant seeds, which is distributed for research purposes to more than 500 botanical gardens and arboretum world-wide. The staff collects the seeds in the wild, which must later be cleaned before they can be packaged and forwarded. Not only has Francine become a master seed-cleaner, she has also recruited helpers and trained them along the way. Her newest project will be launched in early 1992, when seed from selected Garden plants will be available for sale exclusively in our Visitor Center.

Meanwhile, as a member of Zonta and the Berkeley Women's Chamber of Commerce, Francine has been an active promoter of Garden program. She seeks to 'educate' the surprising group of people who have "lived in Berkeley for 30 years, and never knew the Garden was there."

We are incredibly grateful to Francine for her energy and her commitment to the Garden, and can't wait to see where her imagination will take her next!

— Nancy Swearengen

Landscape Buffers for Fire-prone Areas

Our sad experience with the firestorm of October 20, 1991 has generated renewed interest in planning landscaping with fire retardance in mind. It became clear to most observers that certain features of herbaceous and woody plants cause them to burn differently with respect to: (i) how hot they burn (and their explosive capabilities); (ii) the height of their flames; and (iii) the speed of the fire spread.

Forest fire specialists divide slower-burning plants into three general categories:

• fire retardant: those plants that are unlikely to burn;
• fire tolerant: those plants that can survive a fire but are a hazard because they burn easily and produce high heat; and
• fire resistant: those plants that have a combination of poor "ignitability" with low fuel volume, lower production of fuel material, and meager heat if they do catch.

Clearly, issues of drought tolerance are closely related to fire retardancy. In fact, moisture content is the number
one factor affecting flammability. And supplemental watering will increase the moisture content of plants, especially during prolonged dry seasons. But in our current drought cycle, the ideal watering regime may be unachievable. In its stead, one of the next best ways for California homeowners to protect their homesteads is to establish a landscape buffer around the home and structure, using the concept of concentric fire-defense zones. Each zone has a linear description, environmental requirements and horticultural considerations.

Here then are the four categories of zonation, as developed by Professor Bob Perry, Department of Landscape Architecture, Cal Poly Pomona.

ZONE 1: NATIVE CHAPARRAL 100'-200' from structure
Native woody vegetation needs annual maintenance: cut back, clean up leaf litter or remove highly flammable natives, i.e. California sagebrush, chamise, buckwheat.

VALUABLE WATERSHED SPECIES: These plants will hold the soil and ground moisture well:
- Arctostaphylos spp. (manzanita)
- Camorthus spp. (wild lilac, blue blossom)
- Comarostaphylis diversifolia (summer holly)
- Carya spp. (silk tassel)

*** All plants above should be thinned (to reduce foliage mass) and planted sparsely. The goal in this zone is to reduce fuel volume and lower fire intensity.

ZONE 2: INTERMEDIATE ZONE 50'-100' from structure
A combination of selected plants with low volume, slow burning characteristics. Irrigation is needed to start the planting, but they should become self-sufficient. Supplemental water will increase the moisture content of plants during the dry season.

LOW FUEL VOLUME NATIVE PLANTS:
- Eschscholzia californica (California poppy)
- Lupinus spp. (annual lupines)
- Mimulus spp. (monkey flower)

NATIVE SPECIES WITH HIGH KINDLING POINT
- Rhus ovata (sugar bush)
- Rhus integrifolia (lemonade berry)
- Rhus laurina (laurel sumac)
- Prunus lyonii (Catalina cherry)
- Prunus licifolia (holly leaf cherry)

ZONE 3: FIRE RETARDANT PLANTING 30'-50' from structure
Plants in this zone should be low growing (under 18") and receive regular irrigation to maintain a high moisture content. Large shrubs should be at least 18' apart and pruned to eliminate dead and burnable plant material. To further reduce fire hazards, removal of undesirable domestic plant species should be considered in Zones 3 and 4.

LOW GROWING, HIGH FIRE RETARDING PLANTS—SUCCULENTS
- Carpobrotus spp. (sea fig)
- Delosperma 'Alba' (white trailing ice plant)

Fire-ravaged trees in the Oakland Hills, October 1991 (photo by Carol Baird)

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**LOW GROWING, MODERATE FIRE RETARDING PLANTS—HERBACEOUS PERENNIAL**

- Arctotheca calendula (Cape weed)
- Ajuga reptans (carpet bugle)
- Gazania rigens lucelena (trailing gazania)
- Linnaea canadensis (Lippia)
- Myoporun parvifolium (Myoporun)
- Osteospermum fruticosum (African daisy)

**LOW GROWING, MODERATE FIRE RETARDING PLANTS—SHRUBS**

- Acer spp. (maple)
- Agapanthus africanus (lily of the valley)
- Arbutus unedo (strawberry tree)
- Bougainvillea (Bougainvillea)
- Ceanothus (summer holly)
- Cercis occidentalis (Western redbud)
- Convolvulus cneorum (bush morning glory)
- Feijoa sellowiana (pineapple guava)
- Myoporun spp. (Myoporun)
- Neheplasis exaltata (sword fern)
- Nerium oleander (oleander)
- Pittosporum spp. (pittosporum)

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—Ann Ingham
**GARDEN NOTES**

**Coming home:** The National Park Service used the Mather Grove amphitheater at the Garden to induct a VIP Volunteer on October 18, 1991. The inductee was Stephen "Sandy" Mather McPherson, the great-grandson of Stephen T. Mather, for whom the Grove is named. Stephen T. Mather was one of the founders of the National Park Service. The title of the program was "Coming Home," appropriate because the University of California played a critical role in the founding of the National Park Service.

**Docents:** The new Fall Docent Class enrolled 18 docents-to-be, and is off to a great start, with guest lectures in botany, evolution and ecology, brilliant floral displays set up by Jerry Parsons, and well-organized tours by garden staff. The experienced docents, under the leadership of Leonard Skinner, President of the Docent Council, held a very successful kick-off brunch in mid-September. And the fall tour schedule was completely full, including two weeks of Biology 1B from campus.

**Honors:**

Martin Grantham, horticulturist, has been appointed Chair of the Pollen and Scion Committee of the Magnolia Society. Martin's duties will include storage and dispensing of pollen to magnolia hybridizers worldwide.

Curator Robert Ornduff attended the American Institute of Biological Sciences meetings in San Antonio in August and the Missouri Botanical garden's annual symposium in October. He visited the Arnold Arboretum as a member of Harvard's overseer committee for the arboretum. Dr. Ornduff taught a new course on biogeography this fall on campus.

Horticulturist Roger Raiche was recently honored by the Berkeley Horticultural Nursery for his extraordinary work on his home garden in Berkeley (Best Large Garden).

Education Director Carol Baird taught Biology 1A, the introductory course for majors on campus, during the summer. Dr. Baird's 'Freeze' article from last year's winter newsletter was featured in the July issue of American Horticulturist, and was excerpted in the recent Pacific Horticulture.

Acting Director Margaret Race served as consultant for NASA (the National Aeronautics and Space Administration) and participated in a National Academy of Sciences Review in Irvine in September. In her former position in the Office of the President of the University, Dr. Race was a leading figure in the development of the University's environmental impact statement on the release of genetically engineered microorganisms; her expertise in this area was deemed necessary in NASA's discussion of extra-terrestrial microorganisms and the eventual return of samples from Mars after the turn of the century.

—Carol Baird
Annual Meeting

Sunday, October 27, in the Garden. Highlight of the meeting were reports by the following Committees:

NOMINATING: Officers for the 1991-92 year are Robert Riddell, President; Gladys Eaton, Vice President; Ramona Davis, Treasurer; and Thomas Shaw, Secretary. Members of the Board are Eleanor Bade, Frederick Coe, James Lattie, Errol Mauchlan, Robert Ratcliff, June Smith, James Van Sicklen, and William Weeden. Ex-Officio members are Margaret Race, Acting Director; Elmo Morgan, Honorary Trustee; Diane Kothe, Propagator; Marilyn LaBrash, Docent; and Robert Raabe, Associate Director.

MEMBERSHIP: Five hundred and twenty new members joined the Friends this past year for a 27% increase. Renewals averaged 86%. A New Member Breakfast that included a program and behind the scenes tour was attended by about seventy-five people. Benefits were reviewed to make sure the Committee could carry out its responsibility to the members at the various levels.

VISITOR CENTER: The volunteer staff turned over $30,000 to the Friends as the result of excellent book, gift and plant sales at the Visitor Center. Volunteers are still needed to staff the Center.

PROJECT DEVELOPMENT: Money for a new Garden sign at the entrance was donated by a Friend through the Campus Development office. The parking lot is at long last in the process of construction. Plans for staff headquarters and entrance are continuing to be reviewed by Campus.

VOLUNTEER HONORED: The meeting was followed by a tribute to Jim Jones, long-time volunteer propagator and generous donor to the Garden. In honor of his contributions to the Garden, the Friends installed a plaque in the propagators' greenhouse. Jim joins Myrtle Wolf in being honored for his exceptional dedication to the Garden.

—Gladys Eaton


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<td>Centennial</td>
<td>2,404</td>
</tr>
<tr>
<td>TOTAL</td>
<td>85,938</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Balance June 30, 1991</th>
<th>232,462</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Assets:</td>
<td></td>
</tr>
<tr>
<td>Checking Account</td>
<td>16,171</td>
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<tr>
<td>Savings Account</td>
<td>9,300</td>
</tr>
<tr>
<td>Sales Tax Reserve Account</td>
<td>780</td>
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<tr>
<td>Certificate of Deposit</td>
<td>100,000</td>
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<tr>
<td>Treasury Bill</td>
<td>60,000</td>
</tr>
<tr>
<td>Market Savings Account</td>
<td>45,991</td>
</tr>
<tr>
<td>TOTAL</td>
<td>232,242</td>
</tr>
</tbody>
</table>

| U.C. Berkeley Foundation Account July '90-June '91 |

<table>
<thead>
<tr>
<th>Disbursed from Current Use Fund to UCBG Regents Account</th>
<th>17,373</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endowments:</td>
<td></td>
</tr>
<tr>
<td>Directors' Fund</td>
<td>59,043</td>
</tr>
<tr>
<td>Twenty-First Century Fund</td>
<td>23,135</td>
</tr>
</tbody>
</table>
CONTRIBUTIONS

New Members

The Friends of the Botanical Garden welcome the following new members:

Fred & Judith Balderston      Daphne & R.J. Bertero
Neil W. Beach                Allan C. Bittick
Mrs. Stephen Bechtel, Jr.    Patricia M. Boyd
Brad and Lizz Bernstein      Dr. & Mrs. Branson

The Newsletter is published by the Friends of the Botanical Garden, a non-profit organization that provides support for the U.C. Botanical Garden. Articles may be reprinted with credit to the authors and the U.C. Botanical Garden.

Staff:
Dr. Margaret Race, Acting Director
Lisa Krieshok, Production

Horticulturists:
John Domzalski
Gerald Ford
Martin Grantham

Newsletters:
Carol Baird, Editor
Lisa Krieshok, Production

Grateful Thanks

The Friends wish to thank these donors who have made a substantial gift over and above membership:

American Rhododendron Society
Elly & Bill Bade
Carol Baird & Alan Harper
Mollie Balamuth
Mrs. Stephen Bechtel, Jr.
Richard & Linda (Price) Beidleman
Daphne & R.J. Bertero
Mr. & Mrs. J. L. de Benedetti
Daniel Campbell
Mr. & Mrs. Thomas A. Delfino
Harland Hand
Virginia W. Havens
Eleanor & Jack Higson
Bob & Ann Ingham
James H. Jones
Mr. & Mrs. Raymond Jewell
Susan & Henry Kahn
James Lattie
Elmo & Frances Morgan
Terry & Vandye O'Reilly
David & Phyrne Osborne
Dr. Eugene H. Peck
Dr. Robert D. Raabe
Warren G. Roberts
Mr. & Mrs. Fitzhugh Rollins
Mr. & Mrs. Roger J. Sippl
Jack C. Stafford
Marian & Hans Ury
Inge von der Hude
Myrtle Wolf
### In Memory

The Friends offer appreciation and thanks for gifts from these donors.

- Frances Gray Scott, who died in the Berkeley/Oakland Hills fire, from Mary Schrotter.
- May Blos, who died in the Berkeley/Oakland Hills fire, for the California Natives Education project, from Myrtle Wolf.


### Gifts In Kind

The Friends offer appreciation and thanks for gifts in kind.

- Patty Brown
- Deb Dight
- James H. Jones
- Susan Kahn
- Mrs. Karen Kersey
- Daisy Mah

- Mary Lee Jeffers, a member of the founding board of the Friends of the Botanical Garden, and Honorary Trustee of the Friends, was awarded the Benjamin Ide Wheeler award honoring “Berkeley’s Most Useful Citizen.” Curator Robert Ornduff and Acting Director Margaret Race attended the award luncheon October 28, 1991. Ornduff offered the official “greetings from U.C.” Past awardees associated with the Garden have been Robert W. Ratcliff (1979), currently chair of the Friends Project Development Committee, and Thomas B. Shaw (1975), present Secretary of the Board of the Friends of the Botanical Garden.

- A new California Area Endowment Fund has been established through a generous gift from Marian and Hans Ury which was given in memory of her parents, Louis S. Bloom and Edith L. Bloom. Interest from the fund will be used to improve the landscape, interpretive features and collections of the Garden’s California section area.

### In Honor

The Friends offer appreciation and thanks for gifts from these donors in honor of:

- Harland Hand, from the Modesto Garden Club, upon visiting his garden.
- Dr. Robert Ornduff, from Eleanor & Jack Higson.
- Mary Ricksen, from Mrs. Adolphus E. Graupner, Jr.

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### Membership

The Friends of the Botanical Garden offers public education programs and provides independent funding to support the many needs of the Garden. You can enjoy and support the Botanical Garden year-round by becoming a member of the Friends of the Botanical Garden.

**Membership benefits include:**

- Newsletter
- Workshops, lectures, and tours
- Discount on Visitor Center purchases
- Discount on educational classes
- Early admission to Spring Plant Sale
- Discount subscription on *American Horticulturist* magazine
- Volunteer opportunities

**Friends of the Botanical Garden Membership Application**

Yes, I would like to support the U.C. Berkeley Botanical Garden as a member:

- □ Student* .......... $10  
- □ Individual .......... $25  
- □ Family .......... $35  
- □ Contributing .......... $50  
- □ Supporting .......... $100  
- □ Sponsor .......... $250  
- □ Patron .......... $500  
- □ Benefactor .......... $1000  

Name ____________________________

Address ____________________________

City/State/Zip ____________________________

Telephone ____________________________

Contributions are tax deductible. Please make checks payable to Friends of the U.C. Botanical Garden and mail to: Friends of the Botanical Garden, U.C. Botanical Garden, Berkeley, CA 94720

* Full-time only.
Calendar of Events

ROSE PRUNING  Sat, JANUARY 25
Learn the art of pruning roses from the Garden’s rose specialist, Peter Klement. Meeting Room, 10am-noon. $10 members, $15 non-members.

ASIAN SECTION TOUR  Sats, Suns, FEBRUARY
The Tour of the Month will emphasize the Asian section. Tours are free: meet your Docent at the Visitor Center at 1:30 pm.

PLANT CLINIC:  Sat, FEBRUARY 1
Bring your ill plants to see Dr. Robert Raabe, UC Plant Pathologist. First Saturday of the month, 9am-12, Meeting Room.

DINO DAYS  FEB-MAY
Dinosaurs may be extinct, but some of their favorite foods are still growing, even in Berkeley! In conjunction with Lawrence Hall of Sciences’ Dinosaurs ’92 exhibit, the Garden will provide a free self-guided tour of prehistoric plants. Secure the brochure at the Visitor Center.

BEGINNING BIRDING  Suns, FEB-MAY
Join veteran ornithologist Dr. Udo Savalli from U.C.’s Museum of Vertebrate Zoology for eight early morning bird walks. Here is your chance to learn the common birds of the East Bay, their songs, and some woody lore! Starts Sunday, February 23 8 am, Tour Orientation Center. $45 members, $55 non-members for the series.

RHODODENDRONS  Sat, FEBRUARY 8
A review of the magnificent rhododendron collection at the BG’s Asian section, from Albrechtii to zeylanicum as provided by its horticulturist Elaine Sedlack. Established plantings, new acquisitions, cultural and taxonomic information. Meeting Room and tour. 10am-noon. $5 members, $8 non-members.

PRESEVATION OF LIFE IN AMBER  Sun,FEBRUARY 9
Enjoy a talk by U.C.’s Dr. George Poinar, one of the world’s leading authorities on the beautiful plant product amber, that often encases ancient forms of life. After his talk, Dr. Poinar will also evaluate your own pieces of amber. Meeting Room, 11am-1pm. $5 members, $8 non-members.

NATURAL PEST CONTROL  Sat, FEB.22
Join our own Assistant Manager Judith Finn and members of the biological pest control community, as they explore alternative means of pest control. Meeting Room, 10-1130 am. $5 member, $8 non-members.

WILDFLOWER IDENTIFICATION CLASS  Thur eves, FEB 28-APR 9
Dr. Glenn Keator, well-known botanist and educator, and author of the new book The Complete Garden Guide to Native Perennials of California, will present an evening course on identification of wildflowers in the major plant families of California. Cost for the series is $50 members, $75 non-members, or $10 per workshop. Enrollment is limited. Meeting Room, 7:30 pm, with optional field trips to be announced.

BUG DAYS!  Fri, Sat, Sun, Mon FEB 28-MAR 2
Our most popular event! If you missed it last year, here is another chance for you to experience the wonderful world of insects and their relatives. The second annual BUG DAYS! EVENT, featuring live insects from the SF Insect Zoo. Bring the whole family. Meeting Room 10am-3pm. $1 child, $2 adult.

POLLINATION IN THE GARDEN  Sats, Suns MARCH
The Tour of the Month brings you a pollinator’s view of our Spring burst of flowers. Tours are free: meet your Docent at the Visitor Center at 1:30 pm.

PLANT CLINIC:  Sat, MARCH 7
Bring your ill plants to see Dr. Robert Raabe, UC Plant Pathologist. First Saturday of the month, 9am-12, Meeting Room.

DROUGHT, FREEZE & FIRE RESISTANT GARDENS  Sats, MAR 7, 14, 21, 28
A series of four programs on ways to prepare your garden so as to effectively combat summer drought conditions and retard freeze and fire damage. Industry experts will speak on Soil Preparation, Irrigation Techniques, (Sarah Wikander, Irrigation Equipment Co.), and Plant Selection (Drought: Paul Doty, Berkeley Horticultural Nursery), (Fire Retardation: Lee Anderson, Cupacabana Nursery) Meeting Room: 10am-noon. $5 per program (members) or $17 for the series, for non-members $8 per program.

CALIFORNIA NATIVES  Sats, Suns, APRIL
The Tour of the Month will emphasize the California section. Tours are free: meet your Docent at the Visitor Center at 1:30 pm.

PLANT CLINIC:  Sat, APRIL 3
Bring your ill plants to see Dr. Robert Raabe, UC Plant Pathologist. First Saturday of the month, 9am-12, Meeting Room.

WILDFLOWER PHOTOGRAPHY  Thu, Sat, SUN APRIL 2, 4-5
If you have ever wanted to capture California’s floral bounty on film, come learn these skills with John Smithers, well-known photographer. Slide lecture Thursday night 7-10pm, aided field work in the Garden 7-11am Saturday and Sunday, with critiques in the Meeting Room 5-7 pm each evening. Lecture only: $10 members, $15 non-members. Lecture plus weekend fieldwork and evening critiques: $125 members, $175 non-members.

COMING ATTRACTIONS:
20 SUCCESSFUL GERANIUMS FOR YOUR GARDEN  Sat, APRIL 25
ART IN THE GARDEN  Weds, APRIL 29-JUNE 10
SPRING PLANT SALE  Fri, Sat, MAY 8, 9

For further information on classes and events, call the Visitor Center, 642-3343. To register for classes, send checks to UC Botanical Garden. No refunds the week before the class date unless class is cancelled. Pre-registration is suggested, as classes fill early.

The Garden is open every day of the year except Christmas from 9:00am to 4:45pm. Free public tours led by docents are given on Saturdays and Sundays at 1:30pm. Admission to the Garden is free.

Friends of the Botanical Garden
University of California
Berkeley, California 94720
Address Correction Requested

Plants are for sale at the Visitor Center all year & 642-3343

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