

LASCA LEAVES



Los Angeles County Department of Arboreta and Botanic Gardens

Proposition 13

FOLLOWING THE PASSAGE of Proposition 13 last June, the Department of Arboreta and Botanic Gardens was one of several cultural institutions faced with the loss of County funding and, as a consequence, the strong possibility of having to end its operation. The Chief Administrative Office had made it clear that the loss of income resulting from the amendment necessitated a budget that could probably only support "mandated" departments such as fire, police, hospitals, and welfare.

Looking for ways to avoid such a dire end, the Department came up with a number of plans intended to make the gardens at least partially self-supporting. After much deliberation, a plan was agreed upon that would institute admission and tram fees at the Los Angeles State and County Arboretum, Descanso Gardens, and South Coast Botanic Garden. It was felt that these fees combined with County funds would be enough to meet the Department's already reduced operating expenses. The fees were introduced on August 1; after a few weeks the indications were that the plan was going well. The final budget approved by the Board of Supervisors for the Department of Arboreta and Botanic Gardens calls for a 15 percent reduction. Added to an 18 percent

budget reduction over the past three years, the Department has suffered a 33 percent loss in a four-year period. This loss has been reflected in the reduction in staff, down from 149.9 positions in 1970 to 108.9 positions as of September 1, 1978.

There is little doubt of the Department's need for greater public and private support, both for the present and for the future. In the private sector, greater effort will be made to attract support from foundations specializing in assisting cultural institutions. Major public support will come from increased membership in the citizen-support organizations: the California Arboretum Foundation, the Descanso Gardens Guild, and the South Coast Botanic Garden Foundation. For people thinking of joining one of these organizations, there is a new inducement of considerable value beyond the benefits membership already brings: each organization now includes as a membership benefit unlimited free admission to the garden it supports.

Arcadia Diamond Jubilee

THE 75th OR Diamond Anniversary of the founding of the City of Arcadia was celebrated last September 29th and 30th with a variety of events that included a parade, a picnic, music by school bands, entertainment, and, as a climax, a gala

ball. A good part of the celebration took place at the Los Angeles State and County Arboretum, which in many aspects was the beginning of the city.

The observance actually began Sunday, August 27th, with an evening symphony concert at the Arboretum. Presented as a benefit for the Arcadia Diamond Jubilee, the California Arboretum Foundation, and the San Gabriel Valley Symphony Association, the concert had the flavor of the Boston Pops presentations under Arthur Fiedler. The San Gabriel Valley Symphony, under the direction of Giora Bernstein, was set up on a platform adjacent to the Bauer Pool, with the fountain and the San Gabriel Mountains serving as a backdrop. Arboretum gates were opened at six o'clock so picnickers could enjoy their meals while being entertained by the Latin America Performing Arts Ensemble and the orchestra, which offered a collection of popular selections, including excerpts from top Broadway musicals featuring soprano soloist Patti Frost.

On Saturday morning, September 30th, a breakfast was given in the patio of the Hugo Reid Adobe attended by many of the participants in the celebration. Colorful decorations added to the early California atmosphere provided by the adobe and the historic courtyard. A new cultivar of *Chorisia speciosa* was



Many of the more than 1300 people attending the concert came early to enjoy their picnic dinners and socialize with their friends before the program started.

Photo by William Aplin

named 'Arcadia' by way of permanently honoring the city's 75th anniversary. The trees in this genus, commonly known as Floss Silk Trees, are characterized by thorns on the trunk and a fruit the size of an avocado that, when ripe, bursts open revealing a mass of silky kapok. *C. s.* 'Arcadia,' developed at the Arboretum, has large peach-colored blossoms with yellow centers. Specimens of this cultivar will be planted on the grounds of the Arcadia City Hall.

County Fair

THE California Arboretum Foundation sponsored two exhibits at this year's L.A. County Fair in Pomona and came away with one First and one Second Award in the Flower and Garden Show. The popular event, which ran from September 15 through October 1, offered exhibits from all over the state ranging from such homey projects as canning, baking, and quilt-making to advanced photography and landscaping.

Mrs. John Grivich, Foundation trustee and past president, was in charge of putting together a hanging basket exhibit that won a First Award, the fourth in the past four years. The exhibit featured an as-

sortment of ferns—rabbit's foot (*Davallia*), staghorn (*Platycerium*), and maidenhair (*Adiantum*); orchids—*Phalaenopsis*, *Cattleya*, *Paphiopedilum*; and ornamental asparagus, coleus, and impatiens.

Students of the Gardening School, invited to enter for the first time last year, were invited again and this time won a Second Award. Under the supervision of Arboretum education specialist Ron Call, three first-year students, Lisa Leutheuser, Beverly Luttrell, and Jean Baines, labored mightily to landscape a 50-by 50-foot area. Under the theme the Arboretum is for People, their entry duplicated an arboretum in miniature, complete with fountain, aquatic pond, and a wide assortment of plants ranging from the common privet to the not-so-common plumeria.

Arboretum Project at Energy Fair

AN exhibit depicting the industrial potential of the rubber-bearing shrub guayule proved to be one of the highlights of a four-day Energy Fair held September 28 through October 1 at the Los Angeles Convention Center. George Hanson, Arboretum plant breeder and leader of the National Science Foundation guayule research proj-

ect being conducted at the Arboretum, put the exhibit together with the assistance of members of his research team.

The Energy Fair, which had the endorsement of state, county, and city officials plus representatives of labor, industry, and the scientific community, offered a variety of energy-creating devices ranging from a far-out wind-powered tape recorder to more or less conventional solar heaters.

The guayule exhibit demonstrated that though it is not quite conventional, at least not yet, it is a long way from being far-out.

The exhibit contained specimens of high rubber yield plants, charts showing the procedures involved in extracting raw rubber, comparative samples of rubber from the conventional rubber tree (*Hevea brasiliensis*) and guayule (*Parthenium argentatum*)—they look and feel about the same—and a golfball size piece of guayule rubber next to a shrub about a foot and a half high demonstrating the yield expected from a single plant. The exhibit reflected the present stage of Dr. Hanson's research project which is mainly concerned with collecting specimens and seed in Mexico and testing and isolating plants having the highest rubber content.

Christmas At The Gardens

Descanso Gardens

ONE OF THE MOST enjoyable times of the year to visit the various gardens is during the Christmas season. With a theme of the Nine Days of Christmas, the Descanso Gardens Guild will present their annual Christmas Show from December 2nd through the 10th with December 11th set aside for the handicapped. A red carpet reception is slated for the afternoon of December 1st for Guild members, while the evening has been set aside for the participants and special guests.

Chairperson for this outstanding event of the year, held at the Hospitality House, is Billie Loofbourow.

South Coast Botanic Gardens

HOLIDAYS IN THE GARDEN is sponsored by the South Coast Botanic Garden Foundation and has as its theme this year, "Christmas Reflections." The show will open on December 3, at 2 p.m. with a Christmas choral group. There will be another Christmas music presentation on December 10, at 2 p.m. The show will be open daily between December 4 and 10, from 12 noon to 5 p.m. On Wednesday, December 6, there will be a bridge luncheon party, featuring Christmas table decorations. Coffee and cookies will be available throughout the event and the Christmas Gift Shop will be open, featuring items from the craft work shop of South Coast Botanic Garden



The annual Christmas Show at Descanso invariably attracts thousands of visitors during its nine-day run. One reason for its popularity is the multi-national character of the exhibits and the unusual use of plant material. The tree in this photo, for example, is decorated with white and pink-white camellias.

Photo by William Aplin



Although only a few of the furnishings in the Queen Anne Cottage are the original pieces of the Baldwin family, all are faithful to the Victorian era. The Christmas decorations also are faithful to a period in which hand-crafting was typical and buying a string of lights at the local department store was unknown.

Foundation's volunteers. Local garden clubs and plant societies will be staging various aspects of the show which was visited last year by more than 3,000 persons. Chairpersons are Mrs. John Chapa and Mrs. Donald L. Brady. Mrs. Brady is a member of the Board of Counselors and Mrs. Chapa is a member of the Board of Trustees.

Los Angeles State And County Arboretum

CHRISTMAS DECORATIONS at the Arboretum will center around the entrance rotunda and the historical section. The feature in the rotunda will be a ten-foot dried flower stalk of the *Agave americana* decorated with large golden ornaments. Hanging from the rafters will be mobiles made from different kinds of foliage with azaleas and poinsettias grouped below. Besides the permanent display of orchids in one of the showcases, the other two showcases will feature Christmas decorations made from live plant material from Arboretum plantings and from herbs.

A Victorian Christmas will be featured at the Queen Anne Cottage. Each year, Las Voluntarias decorate the rooms of the cottage, reflecting Christmas during that period of time. The Hugo Reid Adobe and the Santa Anita Train Depot will also be decorated with wreaths, centerpieces and traditional ornaments, all reminiscent of the good old days. Las Voluntarias responsible for the decorations are Marilyn Llewellyn, Carol Overturf, and Margaret Page.

OPEN HOUSE
Queen Anne Cottage
Sunday, December 10
10 a.m. to 4 p.m.

As a special Christmas feature, the public is invited to view five rooms of this historic California landmark from the inside.



The Majestic Oaks

By Gary Cromwell

OAK TREES have long been familiar to man. In their legends, the Greeks speak of an oak under which their chief god was born, calling it the Tree of Zeus. To us, the tree would likely be an English Oak. More than a thousand years ago, Viking warriors were using the wood of the oak to build the ships in which they raided the coasts of Europe. In early California, Roman Catholic missions frequently were built near large stands of native oak trees for reasons both economic and esthetic. The Franciscan fathers presumably considered such sites ideal because of the relatively even topography characteristic of oak woodland and because of the beauty and shade provided by the trees. Economically, it was convenient to have at hand the oak bark they used for tanning hides and making leather.

Oak trees historically are symbols of strength and endurance. For example, the adage, "Tall oaks from little acorns grow," illustrates an anthropomorphic parallel between the growing of a child into adulthood and the development of a sturdy oak tree from its seed. On the practical side, it has long been known that furniture and utensils made of oak wood are impressively durable. During colonial times, oak planking was used commonly for house and ship construction on both the American and European continents.

Known botanically by the generic name *Quercus*, oaks are members of the beech family (Fagaceae). Many of the more than four hundred species are deciduous and cold-hardy, while others are evergreen and adapted to a warmer environment. Both hardwood trees and a number of shrubs are included in the genus. Most are native to north temperate regions, although some species grow in the tropics at high elevations as

far south as Colombia and the Malay Archipelago.

Approximately forty-six species of oaks are represented in the permanent plantings at the Los Angeles State and County Arboretum. Of these, some of the more interesting ones are the English Oak (*Quercus robur*), associated with Robin Hood of Sherwood Forest fame (LASCA Leaves, September 1975); the Holly Oak (*Q. ilex*), the toothed leaves of



This approximately 75-year-old English oak (*Quercus robur*) is growing on the mall in the Arboretum historical section.

Photo by William Aplin



Trunk of the Mesa Live Oak (*Quercus engelmannii*). The bark is characterized by numerous relatively narrow ridges and thin grayish scales.



Trunk of the Coast Live Oak (*Quercus agrifolia*). The bark may be smooth on younger trees, but with age it has broad checked ridges and is dark brown to gray-brown.

which resemble those of a holly shrub, and whose history dates back to the establishment of the Vatican gardens and early Rome; the American White Oak (*Q. alba*), undoubtedly one of the noblest and most striking trees on the North American continent; the Cork Oak (*Q. suber*), which has extraordinarily thick bark and is the commercial source of cork; the Spanish Red Oak (*Q. falcata*), a tall stately tree native generally to the southeastern United States; and the Black Oak (*Q. velutina*), a tall tree with glossy leaves and dark orange fall coloring.

Some may wonder about the word "live" as applied to oaks. It is generally understood to have originated in Virginia where it was applied to the only oak that remained green

all winter, *Quercus virginiana* or Virginia Live Oak. Eastern settlers in California used the same term to describe another evergreen, *Q. agrifolia* or Coast Live Oak, the word "coast" used to distinguish it from the Virginia species. Applied to oaks, then, the word "live" can be considered synonymous with evergreen. The Virginia Live Oak, by the way, can be very impressive in its native locale, reaching a height of around 70 feet and almost twice as broad. There are specimens of this tree in Sections J-11 and N-8 at the Arboretum.

Other oaks represented at the Arboretum and worthy of mention are *Q. rubra*, the Red Oak of eastern North America. It is hardy, large, and its wood is used in general con-

struction. *Q. acutissima*, native to Korea and Japan, is another oak that grows nearly as broad as it does high, reaching about 50 feet. It is popularly called Saw-tooth Oak because of its finely serrated leaves. An oak notable for its large leaves is *Q. dentata* or Daimyo Oak, native to Japan. A deciduous tree that grows to 80 feet, it has coarse, typically lobed leaves up to a foot long and half as wide.

Oak bark varies from brownish to gray, and it may be either scaly or fissured. Leaves are alternate and pinnately-veined. The leaf margins are variously toothed or lobed and rarely are entire. Both sexes occur on the same tree; male flowers are numerous, small, and occur in long narrow hanging clusters, or catkins.



A pure stand of Mesa Live Oak (Q. engelmannii) on Tallac Knoll at the Arboretum. Natural woodland scenes like this greeted the Franciscan padres who established the California missions.

Photo by William Aplin

Female flowers develop singly or in many-flowered spikes. Oak fruits are known as acorns, each nut being enclosed by a basal cupule comprised of fused bracts.

The Arboretum includes in its living plant collection two of the most distinctive California native oak species. These are the Mesa Live Oak, *Quercus engelmannii*, and the Coast Live Oak, *Q. agrifolia*. Both species occur in numerous locations throughout the Arboretum, and one of the largest outlying virgin stands of Engelmann Oak outside of San Diego County occurs on the south side of Tallac Knoll. Here the oaks create a three acre park-like setting, with a scant understory of grasses and scattered shrubs. At Descanso Gardens in La Canada, there are 30 acres of Coast Live Oak trees, including perhaps a half-dozen specimens more than two hundred and fifty years old.

In its natural range within the state, the Coast Live Oak occurs in the Coast Ranges from Sonoma County (north of San Francisco) south to San Diego County and Lower California. It is a spreading tree 30 to 75 feet high, with dark green, adaxially convex, toothed leaves and smooth to ridged bark.

The Coast Live Oak has long been associated with significant historical events in California. In 1770, Padre Junipero Serra conducted the first mass on the Monterey Peninsula beneath a large specimen, which lived on until the 1890s. Collections of this species sent to Europe in the 18th century were among the first representatives of arborescent California plants to cross the Atlantic Ocean. In the early 1840s, the first discovery of gold in California occurred beneath a Coast Live Oak in Placerita Canyon, near Newhall. This tree, the Oak of the Golden

Dream, reputedly is still living. When war between Mexico and the United States ended in 1847, the Treaty of Cahuenga was signed beneath a Coast Live Oak in Verdugo Canyon, in Glendale. This tree has since been called the Oak of Peace. In the cities of Santa Barbara and Newhall, large stands of *Quercus agrifolia* were cut down during the mid-19th and early 20th centuries and sold for firewood. Although most of the trees were replaced by exotic plants in Santa Barbara, many of the Newhall specimens stump-sprouted so that numerous multi-trunked trees occur in that community today.

The Mesa Live Oak has a more restricted natural range than does the Coast Live Oak. The Mesa Live Oak inhabits drier foothills, inland from the coast, from Pasadena east to San Dimas and south to eastern San Diego County. It too is a spread-

ing tree, from 15 to 55 feet tall, with mostly entire, flat, gray-green leaves and gray thin-scaly bark.

The Coast Live Oak and the Mesa Live Oak are two of perhaps one dozen species of native oaks of historical economic value to California Indians. The Cahuilla Indians of Southern California, among others, used acorns for making bread and mush, and they called their acorn food Weewish. Many of the groups who ate acorns preferred the more flavorful taste of the fruits of the Coast Live Oak over those of the Mesa Live Oak. Indian legends relate that the quarreling of medicine men in ancient times made the once sweet acorns bitter, and all acorns thereafter required leaching before they could be eaten. The tannins in bark of various oak species were also used by Indians and Spanish people in early California to tan animal skins and for medicinal poultices.

Oaks are valuable forest timber trees and are useful as street and park plantings and for home gar-

dens. Some of the low-growing species are superb for planting on dry rocky hillsides. Oaks generally prefer rich, somewhat moist soil, but our western oaks like good drainage and can withstand seasonal dry periods. Unfortunately, California's native oaks often are susceptible to attack by oak root-rot fungus (*Armillaria mellea*) and by representatives of more than four insect orders. In a natural environment, characterized by periodically hot dry spells, the trees usually can withstand these pathogens. In urban settings, however, where improper cultivation techniques such as over-watering and overfertilizing are too often employed, the usually present soil fungi are encouraged to develop extensively and result either in outright death of the trees through root decay, or in weakening them so that insects might infest the trees. The Arboretum advocates following planned horticultural procedures in order to preserve for future generations the many interesting and

beautiful oak specimens growing in Southern California. A horticultural sheet entitled "Care of Native California Oak Trees" is available at the Arboretum Information Center. This one-sheet publication covers the major aspects of preservation and maintenance of our California oaks.

Many people overlook the oak as an addition to the garden, thinking they will never see the tree mature; however, native California oaks make excellent landscape specimens and under cultivation may grow relatively quickly. *Quercus agrifolia* may, in a matter of 15 to 20 years, reach a height of 25 or more feet and a girth of 8 to 10 inches. Although the native oaks are not readily available in nurseries, the ardent gardener who searches diligently likely can find one or more plants to suit his interest.

Gary Cromwell is a biologist and plant taxonomist in the Department's Research Division.

LOS ANGELES STATE AND COUNTY ARBORETUM, Arcadia

NOVEMBER 4, 5—Sat. 9 a.m. to 5 p.m.

Rose and Horticultural Show
Presented by San Gabriel Valley Rose and Horticultural Society

**NOVEMBER 11, 12—Sat. 9 a.m.-5 p.m.
Sun. 9 a.m.-5 p.m.**

Chrysanthemum Show
Presented by Pasadena Horticultural Society

**NOVEMBER 18, 19—Sat. 9 a.m.-5 p.m.
Sun. 9 a.m.-5 p.m.**

Novice Bonsai Show
Presented by Santa Anita Bonsai Society

NOVEMBER 19—2 p.m.

Sunday Afternoon Talk
Bromeliads
Tim Lorman, horticulturist

**DECEMBER 9, 10—Sat. 1 p.m. to 5 p.m.
Sun. 9 a.m. to 5 p.m.**

Camellia Show
Presented by Southern California Camellia Society

DESCANSO GARDENS, La Canada

NOVEMBER 5—2 p.m.

Sunday Afternoon Talk
Grafting
George Lewis, superintendent

CALENDAR

NOVEMBER, DECEMBER, JANUARY

DECEMBER 1—1 p.m.

Red Carpet Tea (Invitation)
Presented by Descanso Gardens Guild

**DECEMBER 2-10—9:30 a.m. to
4:30 p.m. daily**

Nine Days of Christmas
Presented by Descanso Gardens Guild

JANUARY 14—1 p.m.

Rose Pruning Demonstration
Presented by Descanso staff and Pacific Rose Society

SOUTH COAST BOTANIC GARDEN, Palos Verdes Peninsula

**NOVEMBER 4, 5—Sat. 10 a.m. to 5 p.m.
Sun. 10 a.m. to 5 p.m.**

African Violet Show
Presented by African Violet Council of Southern California

NOVEMBER 12—10 a.m.

Sunday Morning Walk
Aquatic Section
Edward Hartnagel, ass't. superintendent

NOVEMBER 12—2 p.m.

Sunday Afternoon in the Garden
Dried Pine Cone Christmas Wreaths
Suzy Seamans, co-director of Arts and Crafts Workshop
Presented by South Coast Botanic Garden Foundation

**DECEMBER 3-10—10 a.m. to
4:30 p.m. daily**

Holidays in the Garden, "Christmas Reflections"
Presented by South Coast Botanic Garden Foundation

JANUARY 7—2 p.m. to 4 p.m.

Rose Pruning Demonstration
Presented by South Coast Rose Society

JANUARY 14—1 p.m. to 4 p.m.

Fruit Tree Pruning Demonstration
Superintendent Armand Sarinana and staff

JANUARY 26, 27, 28—10 a.m. to 5 p.m.

Camellia Show
Presented by South Coast Camellia Society