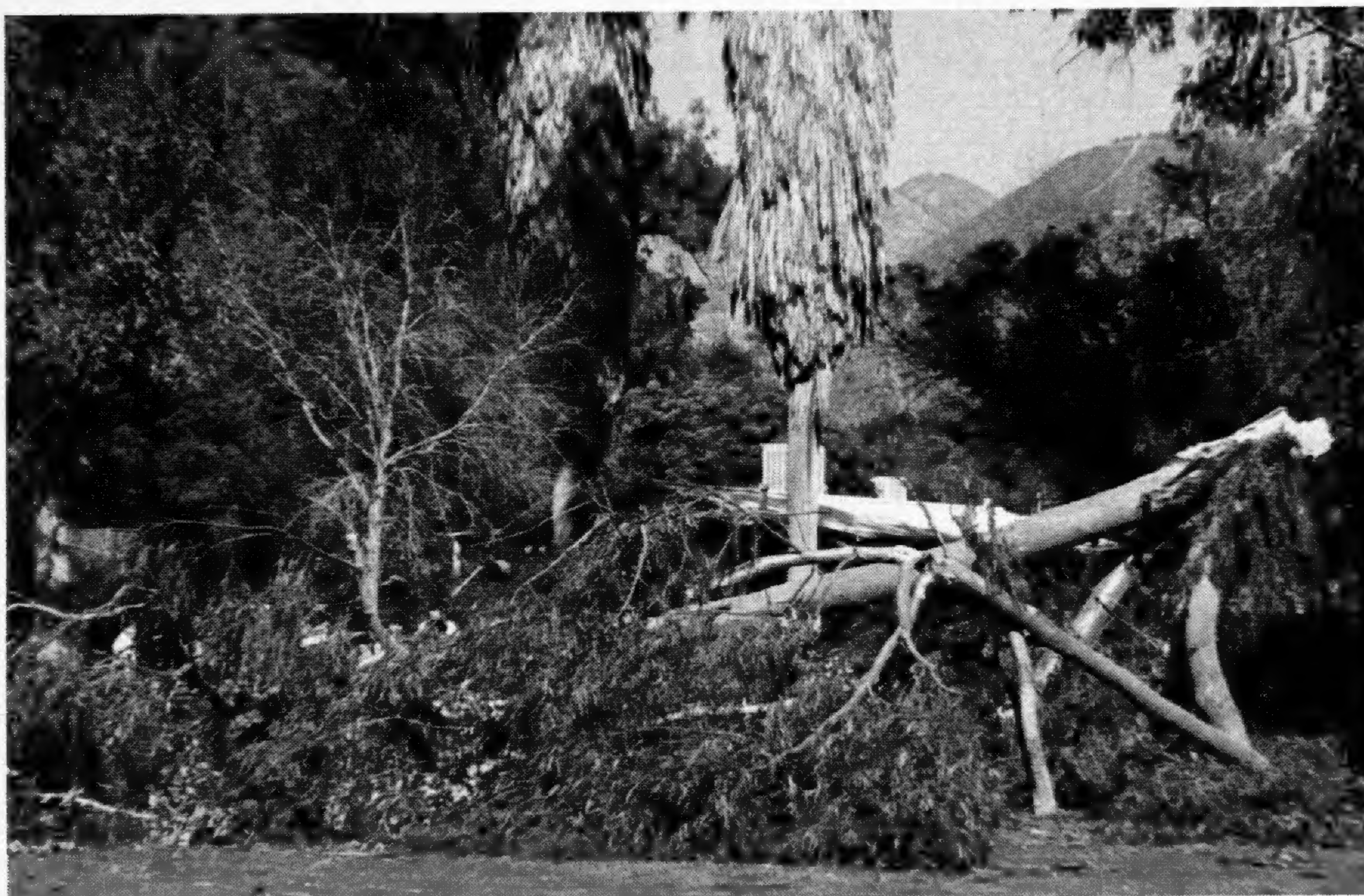


LASCA LEAVES



Los Angeles County Department of Arboreta and Botanic Gardens



LuAnn Munns

An emergency grant of \$25,000 from the Institute of Museum Services will go toward removal of large trees devastated by a windstorm at the Arboretum.

INSTITUTE OF MUSEUM SERVICES GRANT

IN SEPTEMBER the Institute of Museum Services made an emergency grant of \$25,000 to the Los Angeles County Department of Arboreta and Botanic Gardens.

"The emergency grant program of disaster relief was designed to support those unexpected costs institutions incur in their attempts to restore programs and services to normal operation," said Lee Kimche, director of IMS.

The disaster occurred early last February at the Los Angeles State and County Arboretum when a

windstorm caused heavy damage to trees in the Australian, Historical, Asiatic, Flowering Tree, and Biblical sections as well as among the pine, palm, and bamboo collections. Cleaning up the debris from the 225 trees that were destroyed or heavily damaged placed an unendurable strain on the Department's already reduced gardening staff, and concern was arising that the condition of the grounds might begin to affect attendance.

"Basically the public enjoyment of the Arboretum depends on its healthy tree and plant collections just as a museum depends on its historical objects and art," Director

Francis Ching wrote when making his request to IMS for emergency funds. He pointed out that if the grounds are not maintained, ultimately fewer people will visit the Arboretum, endangering not only attendance receipts but plant donations, volunteer assistance, monetary donations and private grants. Evidently Mr. Ching advanced the Department's case so eloquently that the grant was approved.

The Institute of Museum Services, a division of the U.S. Department of Education, supports a variety of museums including art, history, natural history museums, general and specialized museums, aquariums, botanical gardens, planetariums, science-technology centers, and zoos.

CALIFORNIA ARBORETUM FOUNDATION MEETING

CALIFORNIA ARBORETUM FOUNDATION members gathered Sept. 16 for their annual meeting at the Arboretum.

Groundbreaking for the long anticipated Hall of Environmental Education was the highlight of the meeting. Taking part in the ceremony were many people who have been involved with the planned building including James Curry, Foundation president and Francis Ching, Department director.

Also at the ceremony were two former Foundation presidents, Cecilia (Mrs. John) Grivich and Ruth Mary (Mrs. Leland) Larson, who have been essential in keeping enthusiasm for the building high over the years. Mrs. Grivich was president when the Hall was originally proposed and became so convinced of its importance to the Arboretum that she accepted the job as the first fund raiser. She was instrumental in obtaining donations totaling nearly \$50,000 within six weeks of the opening of the fund raising campaign.

During the presidency of Mrs. Larson the steady accumulation of funds continued until, in early 1980 under the current president, Mr. Curry, the \$600,000 goal was reached. Richard Ray, as development chairman of the Foundation, recently announced the substantial grants from the Ahamson Foundation and Atlantic Richfield Co. that made it possible to begin construction of Phase I, the 8,900 square-foot central auditorium. Phase II of the Hall of Environmental Education Com-

plex planned for the future will include separate classrooms and office space.

A few of the other donors that made especially generous contributions toward the Hall include the Pasadena Foundation, Bank of America, the Stanley Smith Horticultural Trust, the Andrew Norman Foundation, Times-Mirror Foundation, and McCullough.

Two other important guests at the groundbreaking illustrated the continuing development of the Arboretum: Dr. Samuel Ayres Jr. whose vision was vital in establishing the Arboretum almost 33 years ago and whose support continues today, and Donald A. McGilvary, executive vice-president of O. K. Earl Company, architect and contractors for the Hall.

Following a buffet dinner, members reassembled for the business meeting. For the plant distribution at the close of the meeting, members chose between *Coleus blumei* 'Painted Nettle' and *Xanthorrhoea media* ssp. *latifolia*, commonly called the Australian grass tree.

SOUTH COAST CHRISTMAS SHOW

THE CHRISTMAS SPIRIT means many different things to everyone but to the South Coast Botanic Garden Foundation, it means the spirit of sharing.

That spirit is perhaps best expressed at the Foundation's annual Christmas Show to be held this year from Nov. 30 through Dec. 7. Hours the first Sunday are from 2-5 p.m. with the show open the other seven



Sentimental exhibits at South Coast Botanic Garden evoke the spirit of Christmas for visitors.

days from 11 a.m. through 4 p.m.

"The Christmas show is a gift to the community from the Gardens to help everyone celebrate the holiday spirit," said Pat (Mrs. Loren J.) Crawford, show chairman for 1980. More than 20 exhibits by garden clubs, plant societies, and individuals will fill the Horticultural Hall with each designer sharing a very personal memory of the holidays with visitors. Many of the exhibits will include favorite antiques, memorabilia and miniature scenes to enhance the old-fashioned floral arrangements that are part of the displays.

Visitors are encouraged to share the Christmas spirit with children by bringing wrapped gifts designated for either boys or girls to be placed under the Holiday "Love Tree." The



At the groundbreaking for the Hall of Environmental Education were (from left) director, Francis Ching; past CAF presidents, Ruth Mary Larson and Cecilia Grivich; current CAF president, James Curry; and O. K. Earl senior vice-president, Andrew J. Krappman Jr.

gifts will be distributed by the Peninsula Committee to cheer young patients at Children's Hospital during what could otherwise be a joyless holiday season.

Handmade Christmas gifts from the Foundation crafts class will also make it possible for shoppers to share an actual part of the gardens with recipients around the world; crafts class members gathered materials such as seed pods and dried flowers for their projects from among the plant collections at South Coast.

The Palos Verdes Symphonic Orchestra under the direction of conductor Richard Schwalbe will bring holiday celebrations to a close at South Coast with a concert December 14 at 2 p.m. A program of popular music and traditional Christmas favorites has been planned to appeal to all ages and musical tastes.

ARBORETUM CHRISTMAS

THE COLLECTION of dramatic, handmade Christmas ornaments in the rotunda of the Los Angeles State and County Arboretum expands with each passing year as volunteers Grace (Mrs. Harry) Robinson and Ruth Brankey put their talents to work. Last April they began work on their 1980 contribution, a huge wreath to match the murals of Lasca Lagoon and the Queen Anne Cottage which they finished about two years ago that are displayed in the rotunda.

The five-foot in diameter wreath is, like the murals, a collage of natural materials in a design Mrs. Brankey and Mrs. Robinson worked out by taking advantage of the contrasting colors and textures of the plant products. Lotus (*Nelumbo lutea*) seed pods simulate round bunches of holly berries surrounded by scales from the huge cones of the bunya-bunya tree (*Araucaria bidwillii*). Stars are shaped with the seed pods of the southern magnolia (*Magnolia grandiflora*) and cones from various species of pines.



LuAnn Munns

Grace Robinson (left) and Ruth Brankey use all natural materials in the new wreath they are making for the Arboretum Rotunda.

Tiny lights twinkle among the woody fruits from other trees such as the flame tree (*Brachychiton populneum* and *B. discolor*) and carrotwood (*Cupaniopsis anacardioides*) blended with the yucca and palm fibers that make up the background of the wreath.

Although Mrs. Robinson and Mrs. Brankey had each worked more than 150 hours by the time the wreath was two-thirds complete in September, they found the research they did while making the rotunda murals made construction go much faster. Because of their earlier projects they already knew the ideal glue and the most effective means for preserving plant materials.

Supplies left over from the murals also formed an important part of the Christmas wreath. "When we were done with the murals we gave all the seed pods and materials to the crafts class at the Arboretum, but now we are 'borrowing' it back a little at a time," said Mrs. Brankey with a chuckle.

Special displays in the historical complex buildings will help give the rest of the Arboretum a festive look. Foundation members and their guests will get a close-up look at turn-of-the-century Christmas orna-

ments during an open house at the Queen Anne Cottage the evening of December 6. A public open house follows on December 7 from 10 a.m. to 4 p.m.

Scenes from earlier, more rustic Christmases have been recreated in the Hugo Reid Adobe. A creche with handmade figures of straw, papier mache', and other materials highlights the bedroom. Pinatas and poinsettias, called *flor de Noche Buena* "flower of the Good Night" by Mexicans because they associate it with Christ's birth, decorate the other rooms of the adobe.

Holiday decorations will remain in place throughout December for the enjoyment of Arboretum visitors.

COUNTY FAIR DISPLAY

INSPIRED BY PAST successes at the flower and garden show at the Los Angeles County Fair, the California Arboretum Foundation sponsored entries in four divisions at the 1980 fair in September.

The floral building on the fairgrounds was transformed into a Central American jungle this year with the bright colors of animated birds flying overhead reflecting the equally exotic colors of the flowers below. The tree branches laden

with orchids and bromeliads that made up the CAF entry in the mounted plants division hung near a 30-foot waterfall.

The main CAF display in the lath house integrated three division entries into one large exhibit. Each of the three entries was complete in itself but was designed to enhance the other two. Potted bamboo, cycads, and raphis palms arranged around the 20-by 20-foot redwood deck were part of the entry for dramatic landscaping. Plants in the hanging container entry including ferns, coleus, and succulents were suspended from the glass and redwood structure over the deck. In the flowering plants division, arrangements of bromeliads, anthuriums, orchids, begonias, and pink vinca added splashes of color.

Two place settings arranged on the grass mat covering the deck were used to establish the entire display as a comfortable spot for a backyard picnic. "What we tried to do was create an elegant but informal atmosphere that the average home gardener could duplicate," said Earl Ross, Arboretum nurseryman, who, along with John Provine,

Arboretum superintendent, constructed the displays.

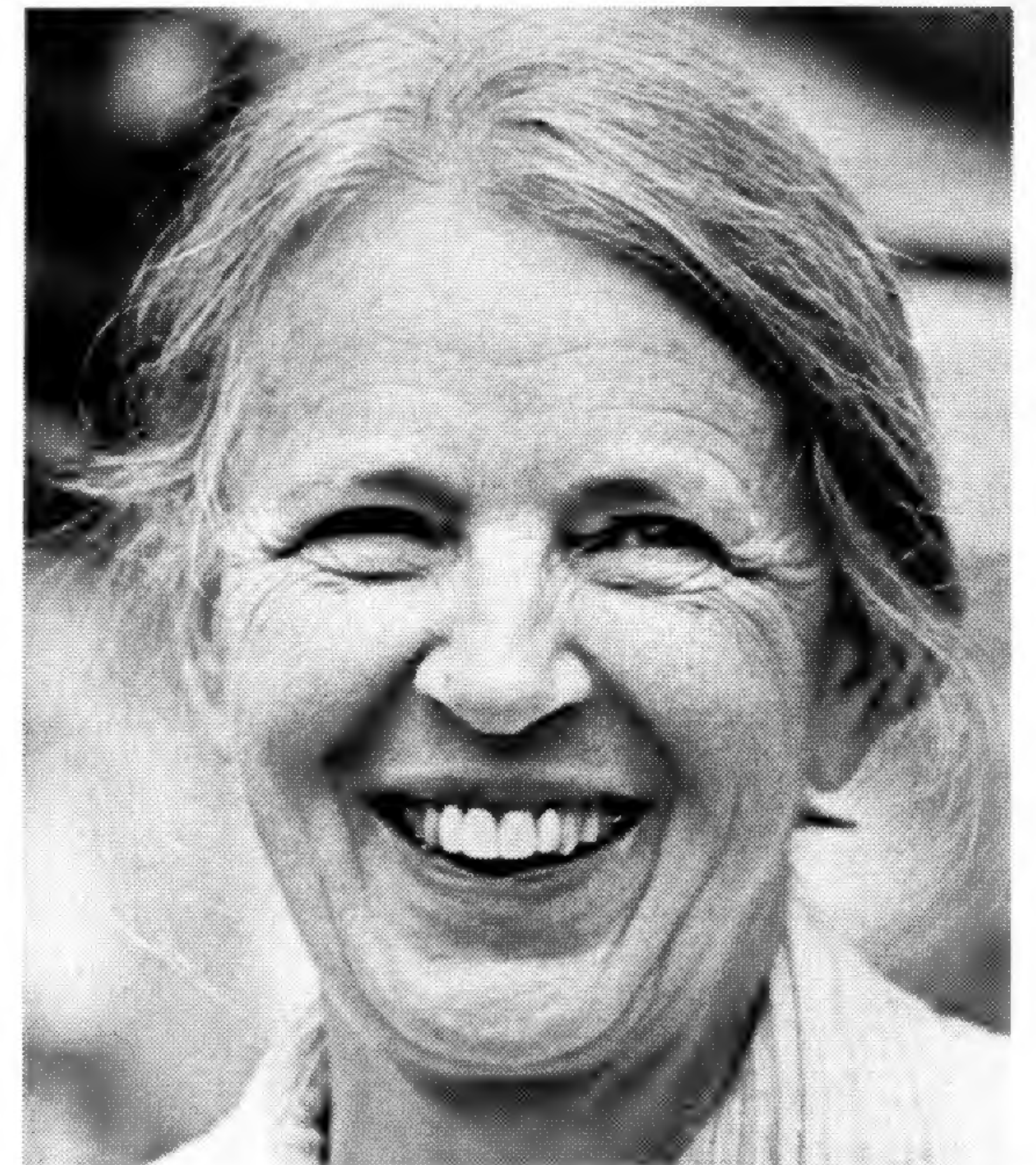
Although results of this year's judging were not yet available at press time, both Mr. Ross and Mr. Provine hope to do as well as last year when with three entries, CAF exhibits took first place in two divisions and a third place in the other.

LIBERTY HYDE BAILEY MEDAL

DR. MILDRED E. MATHIAS, a long-term friend of the Department, has been given yet another award to add to the long list of professional commendations she has received during her career as a systematic botanist. At their annual meeting in September, the American Horticultural Society presented Dr. Mathias with the Liberty Hyde Bailey Medal, the highest honor the Society can bestow upon an individual.

To qualify for the award an individual must have made significant national contributions in at least three areas of horticultural activity. Dr. Mathias' have been in writing, plant exploration, and administration. Her books include *The Wonderful World of Ornamentals*, *Color*

for the Landscape, and *Checklist of Woody Ornamentals*. Plant exploration trips have taken her to Costa Rica, the Amazon, and Southeast Asia. When she retired after 18



Dr. Mildred E. Mathias

years as director of the botanical gardens at UCLA the Board of Regents named the gardens in her honor.

Dr. Mathias, the first woman to receive the medal since it was initiated 22 years ago, is regarded as one of the nation's foremost authorities in botanical taxonomy. The medal is meant to reward a pioneering spirit in service, rather than pure achievement, although Dr. Mathias has excelled in both areas.

Now Professor Emeritus of Botany at UCLA, she has authored numerous books in her field and offered leadership to many horticultural organizations. One of the fortunate organizations to benefit from Dr. Mathias' efforts is the Los Angeles State and County Arboretum where she began her long association in 1950 as a member of the editorial committee of *Lasca Leaves*. In 1958 she was appointed to the first of three three-year terms as a member of the Board of Trustees of the California Arboretum Foundation. She continues as an honorary member of the board and generally maintains a lasting interest in the Arboretum.



CAF entries have garnered many prizes at the Los Angeles County Fair in the past. This exhibit won a first place ribbon.

William Aplin

Their Majesties:

The King and Queen Palms



By Gary Cromwell

THE PALM FAMILY (Palmae, or Arecaceae) includes trees, shrubs, and vines. Like the grasses, orchids, and lilies, palms are classified by botanists in the subclass Monocotyledoneae of the class Angiospermae, or true flowering plants. Most palms are native to the tropics and sub-tropics of the world, and many are valued highly as ornamentals.

A popular belief has been that most palms produce either datelike or coconutlike fruits. In fact, many palm species probably do not bear edible or otherwise exploitable fruits for human commerce. Two such species are the king palm and the queen palm. These stately trees have ringed trunks, long featherlike leaves, and large clusters of small flowers. Both are monoecious.

Although its correct botanical name is *Archontophoenix cunninghamiana*, the king palm still is known to florists by the erroneous name of *Seaforthia elegans*. The generic name *Archontophoenix* (ar-kon'-toe-fee-nix) is a composite of two Greek words, *archontos*, meaning chieftain or ruler, and *phoenix*, an ancient reference to the date palm (*Phoenix dactylifera*). The specific epithet *cunninghamiana* honors Allan Cunningham, a British plant collector of the early 19th century. The king palm has at least five other

common names besides majestic and seaforthia palm; the names bangalow, piccabeen, pikki, wal-garri, and illawarra are from Australian aboriginal languages. The king palm's description as majestic is well deserved, for its amethyst or lilac-

colored flowers and large sheathing leaves place it among the most beautiful of palms.

A native of Queensland and New South Wales in Australia, the king palm is cultivated as a favorite garden and street tree in warmer areas



This is part of a one-acre stand of king palms (*Archontophoenix cunninghamiana*) at the Los Angeles County Virginia Robinson Gardens in Beverly Hills, Cal. The palms make exceptional garden trees.

Frank Simerly

of both the northern and southern hemispheres and is grown in greenhouses in colder climates. In the United States, it is found in Florida, California, and Hawaii. It is one of the most common palms in coastal Southern California from Santa Barbara south to San Diego.

The king palm may reach 70 feet in height under ideal conditions, but its usual stature is about 40 feet. Its single gray stem reaches 6 to 12 inches in diameter. The nearly smooth trunk bears a continuous series of ringlike leaf scars, where leaves were attached in previous years of growth. Unlike the related northern bangalow palm, *Archontophoenix alexandrae*, the king palm trunk usually is not enlarged at its base. At the top of each trunk is a semiglossy bright green crownshaft 2 to 3 feet long comprised of tightly compacted overlapping leaf bases.

Leaves of the king palm are from 3 to 14 feet long and about 2½ feet wide. The rachis, or axis of the leaf, is flanked on two sides by 40 or more evenly spaced pairs of swordlike pinnae, or leaflets. Each leaflet is green to gray-green on both surfaces and measures 1½ to 2½ feet long by 2 to 4 inches wide. The leaves are flattish and may be oriented either horizontally or vertically. When a new leaf emerges at the top of the crownshaft, it points skyward like a long green spear. Its leaflets unfold during development and the entire leaf bends downward into a graceful lateral arc.

Flower clusters of the king palm are produced in spring months throughout Southern California. The trees do not bloom every year, however; flower displays may not be so great in drier years, for example. The young inflorescence is enclosed by a pair of papery deciduous spathes (bracts) which are about 15 to 25 inches long and 5 or 6 inches wide. The bases of these bracts clasp the trunk at a point just below the crownshaft. Throughout

the much branched mature inflorescence are triads of small purplish, slightly fragrant flowers, each containing two male and a central female flower per triad.

Each of the hundreds of coral-pink to reddish orange fruits which follow is ovoid to globose, measures just over one-half inch in length, and has a coarse fibrous surface.

Except for its ornamental value, little is known about historical uses of the king palm. Aboriginal people

of New South Wales used the flaring cuplike leaf bases for carrying water. Early Australian settlers used the tree trunks for constructing fences and temporary dwellings.

The queen palm's valid botanical name is *Arecastrum romanzoffianum*, but it still is widely known by the old name *Cocos plumosa*. *Arecastrum* (ar-i-cast'-rum), from the Latin, means *Areca*-like; it indicates a basic similarity between the queen palm and the betel palm (*Areca*



William Aplin

The king palm (Archontophoenix cunninghamiana), native to Australia, is distinguished easily by its ringed trunk, smooth crownshaft below the leaves, and full crown of flat, featherlike leaves.

catechu). The specific name *romanzoffianum* refers to Nikolai Rumiantzev, Count Romanzoff, a Russian noble who financed a famous early 19th century expedition around the world.

The queen palm, also known as pindo palm or pindoba (Portuguese, meaning coco-palm), is a native of central and southern Brazil. Like the king palm, the queen palm is cultivated today in many parts of the world where the climate is

warm and sufficient water is available. It is a common tree from Brazil south to Argentina, and in coastal and interior Southern California. It also is grown outdoors in Hawaii, southwestern Arizona, on the Gulf Coast of the United States, along the coasts of Georgia and South Carolina, and in northern and central Florida.

The queen palm may reach about 40 feet in a 30-year period. It is neither long-lived nor insensitive to

smog. The gray-brown trunk, which has many ringlike leaf scars, is thicker than that of the king palm and may grow up to two feet in diameter.

Queen palms bear a lush grouping of ten or more arching, 8 to 15 foot leaves. The leaves emerge from a fibrous sheath at the top of the trunk. The many soft leaflets of each leaf are less than one inch wide, green on both sides, and each droops downward at about midpoint. The leaflets, radiating in several planes around the leaf rachis in groups of one to five, collectively appear like a large bird plume.

The young inflorescences of *Arecastrum romanzoffianum* are covered by a pair of two to three-foot spathes. At maturity the three-foot long branched flowerstalks bear many small cream-colored to yellowish flowers. Triads of two male and one female flower each occur nearly throughout the inflorescence, except near the top; here are found single or paired male flowers. Hundreds of ovoid green single-seeded fruits, each about one inch long by 1¼ inch wide, follow the flowers. Mature clusters of yellow-orange fruits hang heavily from the axils of the lowest leaves during late spring and early summer. The fruits have a fleshy fibrous exterior.

The queen palm is a prized ornamental tree. A carbohydrate food known as sago starch is taken from the pith of the queen palm and certain other palms; it is eaten by Brazilian Indians and by others in the tropics. Sago starch also is used in sizing of textiles. In South America the young flower buds are processed in oil or vinegar and eaten as a vegetable.

Both the king palm and the queen palm are cultivated at the Los Angeles State and County Arboretum. Representatives of these trees are found around the historical area, in the prehistoric jungle, near the lagoons, and east of Tallac Knoll.



William Aplin

Brazilian queen palms (*Arecastrum romanzoffianum*) have ringed trunks and lush crowns of leaves reminiscent of ostrich plumes. These palms grow best on flat ground with no competing plants around their bases.

More than 15 king palms, from 15 to 30 feet tall, are concentrated in small groupings across the east-west road south of the historical area, opposite the rose garden and around the historical area comfort station. A one-acre grove of king palms also is located at Los Angeles County's Virginia Robinson Gardens in Beverly Hills. Nearly a dozen magnificent specimens of the queen palm, from 15 to 30 feet high are growing on the north side of the Arboretum's lower lagoon, inside the prehistoric jungle, across the road on the east side of lower lagoon, and about midway between the Hugo Reid Adobe and the train depot.

The king palm is half-hardy, while the queen palm is regarded as hardy; the former will temporarily withstand between five and ten degrees of frost (down to about 25°F.), but unprotected or young trees may be killed at about 27°F.

The queen palm will survive at temperatures down to about 18°F., although young plants may be injured at 25°F. Extended temperatures of 112°F. or more will burn the leaves of both species.

As with all palms, the king and queen require some care. Both thrive in a rich moist soil. Natural nitrogenous fertilizers such as stable manure are best. Both species respond well when planted on nearly flat ground, with no other plantings around them. It is best to keep groundcovers and other competing plants away from the base of these trees. Plan to wash them occasionally with a garden hose to reduce insect pests.

Plant king palms and queen palms in sheltered areas, away from winds, such as on the leeward side of other trees or near tall buildings. The queen palm especially needs protection from strong wind so the leaf-

lets will not be shredded. Sheltering of the trees in desert areas also prevents damage from excessive heat due to direct exposure to the sun. Both palm types are shade-tolerant. They also require considerable moisture and therefore do best in coastal areas.

King palms and queen palms are raised from seed, using adequate moisture and bottom heat. The king palm seems to germinate more readily, while the queen palm is slower to start. Transplant these palms when they are young, because older trees may not survive the shock of being moved.

The plant enthusiast and palm lover will never regret including the king palm or queen palm in the garden. They are extraordinary trees.

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

LOS ANGELES STATE AND COUNTY ARBORETUM, Arcadia

NOVEMBER 1, 2 — 9 a.m. to 4:30 p.m.

Novice Bonsai Show
Santa Anita Bonsai Society**

NOVEMBER 14 — 8 p.m. to 10 p.m.

Lecture "Think Small With California Natives"
Dick Tilforth, Theodore Payne Foundation**

NOVEMBER 23 — 2 p.m.

Sunday Afternoon Talk*
"Plants for Small Areas"
John Provine, Arboretum supt.

DECEMBER 7 — 10 a.m. to 4 p.m.

Public tours through Queen Anne Cottage*
\$1.00 per person

DECEMBER 13, 14 — 9 a.m. to 4:30 p.m.

Camellia Show
Southern California Camellia Society**

JANUARY 11 — 9 a.m. to 4:30 p.m.

Bulb Sale
Southern California Gladiolus Society**

JANUARY 16 — 8 p.m. to 10 p.m.

Lecture "Flora of Catalina Island"
Mark Hoefs, Theodore Payne Foundation**

JANUARY 24, 25 — 9 a.m. to 4:30 p.m.

Bonsai Show
Baiko-en Bonsai Kenkyukai Society**

*Sponsored by California Arboretum Foundation

**Co-sponsored by California Arboretum Foundation

CALENDAR

NOVEMBER, DECEMBER, JANUARY

DESCANSO GARDENS, La Canada

NOVEMBER 1, 2 — 9 a.m. to 4:30 p.m.

Chrysanthemum Show
Glendale Chrysanthemum Society**

NOVEMBER 2 — 2 p.m.

Sunday Afternoon Talk*
"Grafting"
George Lewis, Descanso superintendent

DECEMBER 10 — 8 p.m. to 10 p.m.

Lecture
"Chapparal, Flowers & Fires in the Santa Monicas"
James Kenney, Theodore Payne Foundation**

JANUARY 11 — 1 p.m. to 4 p.m.

Rose Pruning Demonstration*
George Lewis, Descanso superintendent
*Sponsored by Descanso Gardens Guild
**Co-sponsored by Descanso Gardens Guild

SOUTH COAST BOTANIC GARDEN, Palos Verdes Peninsula

NOVEMBER 2 — 2 p.m.

Talk*
"Planting Now for Color in the Fall, Winter, and Spring"
Rocky Marshall

NOVEMBER 9 — 2 p.m.

Talk*
"Planting a Succulent Wreath and Making an Evergreen Wreath"

NOVEMBER 16 — 2 p.m.

Talk*
"Herbs for Everything"

NOVEMBER 30 thru DECEMBER 7 —

Sunday 2 to 5 p.m.

Dec. 1 - 7 11 a.m. to 4 p.m.

"Holidays in the Garden"*
Displays of Christmas decorations

DECEMBER 14 — 2 p.m.

Christmas Concert*
Palos Verdes Symphonic Band
Richard Schwalbe, director

JANUARY 4 — 2 p.m.

Talk*
"How to Have Year Round Color in Your Garden"
Florence Sullivan

JANUARY 11 — 2 p.m.

Rose Pruning Demonstration
South Coast Rose Society**

JANUARY 18 — 1 p.m. to 4 p.m.

Fruit Tree Pruning Demonstration*
Armand Sarinana, South Coast superintendent

JANUARY 24, 25 —

Saturday 2 p.m. to 4:30 p.m.
Sunday 9 a.m. to 4:30 p.m.

Camellia Show
South Coast Camellia Society**

*Sponsored by South Coast Botanic Garden Foundation

**Co-sponsored by South Coast Botanic Garden Foundation