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Canopy is a non-profit advocate for Palo Alto's community trees and works to educate, inspire and engage Palo Altans as stewards of new and existing trees.

#### WINTER 2000-2001

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### Key Club Saves Gunn High School Oaks

Volunteers are an essential part of Canopy's work in rejuvenating the urban forest. None of our activities would be possible without community participation. As part of our ongoing efforts to recognize and thank canopy's many volunteers, we would like to introduce you to a group of very hard-working stu-

helped plant elm trees along Pepper Street last year. One member, **Kazuya Tsurushita**, was such a dedicated tree planter that he received Canopy's "Out On A Limb Award" for participating in the most plantings in 1999/2000. Key Club members are currently helping remove ivy from around oak trees- back-

dents: the Key Club of Gunn High School.

Key Club members have given up many Saturday mornings to help at Canopy tree planti-



The crew at Gunn High School with their tools of the trade.

ng events, and most recently with the "Fungus Fighters" projects to rejuvenate oak trees on the Gunn High School campus. Individual Key Club members have helped at many of Canopy's tree planting events. For example, Key Club members breaking work as anyone who has ever undertaken ivy removal knows. They are also helping change sprinkler patterns to avoid overwatering the native oak trees.

Sponsored by the Kiwanis Club of Palo Alto, Gunn High School's Key Club has been providing community service for four years. With over 50 dedicated mem-Continues on page 3

### Winter—An Excellent Time for Home Tree Planting Canopy's Proven Tree Planting Method

all and winter are the best time to plant trees in Palo Alto. The winter rains and cool weather give trees a chance to start developing roots and adjusting to the shock of living in a "new" place outside the nursery container. Many of our readers have helped Canopy plant street trees in years past and are familiar with our planting procedures. But if you're not and you are thinking of planting your own tree in your own yard, please consider the following guidelines-they'll help ensure a healthier and happier tree:

**1.** Carefully remove the tree from its container—if it is small, pull gently to avoid damage to the roots.

**2.** Loosen roots thoroughly with your fingers and make sure there are no girdling roots—these can strangle the tree later in life. Straighten them out if at all possible; if not, cut them.

**3.** Dig a hole about 4 to 5 feet in diameter. It should be about 18 inches deep at the outside. Leave a pedestal of undisturbed dirt about 8 inches deep in the center for the rootball to sit on. The pedestal should be just deep enough to allow the root crown (where the trunk meets the roots) to be about 1-1/2 to 2 inches above ground level (it will settle) when the tree is set on it. [See diagram.] Use a stake laid across the top of the hole to help you gauge root crown height relative to the ground outside the hole.



**4.** Stand back and look at the tree—orient it in the hole as desired.

**5.** Refill the hole—use no amendments.

**6.** Add water to settle soil. Add more soil as needed to refill hole to level.

7. Build a berm of soil at least 4 inches high around the outer perimeter of Experts estimate that if a tree is planted correctly it will grow twice as fast and live twice as long as one that is incorrectly planted.

----National Arbor Day Foundation

the rootball. This will create a watering basin.

**8.** Carefully remove the nursery stake from the tree. If the tree is sturdy enough to stand on its own, do not restake. Most nursery stock these days does require staking.Place two stakes on opposite sides of the tree and 18 inches from the trunk. Wrap a separate tie around the trunk and each stake. The tie should be tight enough to keep the tree from leaning while being loose enough to allow for growth and movement.

9. Water again to test the berm.

**10.** Add mulch about 6 inches deep, keeping 3 inches of free space around the trunk to avoid trunk rot.

**11.** Water the tree deeply and slowly at least once per week with at least 10 gallons of water. Water more frequently in hot summer weather, less frequently in rainy weather. ■

# Wrap Up a Tree Gift for the Holidays

**T**o plant a tree honoring a person is a gesture of very

#### Honor those you love with a tree planted in their name.

high esteem in many cultures.This year, in addition to the presents under the

Christmas tree, why not give a tree for Christmas—a real, living tree that gives anew for many years?

For a \$50 donation, Canopy will plant a tree in honor of a special friend, an admired teacher, or a loved family member. The fortunate person will receive a beautiful card telling of your enduring thoughtfulness.

To arrange for your gift tree, fill out the enclosed envelope or call Canopy at (650) 964-6110. ■

## Key Club of Gunn High School continues from page 1

bers, they are involved in many aspects of community service including student mentoring, environmental work, and outreach to groups including senior citizens and the homeless. The club's mission is to motivate high school students to enjoy serving the community. To this end, the club undertakes a range of projects from tree planting to carwashes, from soup kitchens to bake sales. As Club President **Karen Law** explains, "We

strive for a variety of projects that are creative, fun, and most importantly, productive." The Gunn Key Club is part of a national and international network of over 4,000 high school service organizations representing 16 nations and encompassing over 206,000 members.



Gunn's Fungus Fighters diverted the lawn sprinklers to clear the oak from dangerous summer watering.



Ivy was removed from this oak and others on the oakblessed Gunn campus.

### **Canopy Welcomes Ten New Planting Leaders**

**O**n October 28, ten new people joined Canopy's dedicated crew of Planting Leaders. The Planting Leader training session was led by local arborist **Kevin Raftery** and involved instruction in planting techniques, planting safety, and hands-on experience with Palo

Alto's clay soils. The new Planting Leaders worked hard to plant three new *Prunus lyonii*, or Catalina cherries, in Ramos Park. Please join Canopy in welcoming Tyler Beatie, Jerry Tinklenberg, Michael Hutton, Ed Hale, David Bubenick, Cristy Osborne, Keelin Costello, Patrick Redmond, and Jean and Larry Bozman to our planting team. We would also like to extend our thanks to Kevin Raftery for sharing his expertise and to Jane Stocklin for her wonderful hospitality. ■

### Peninsula Tree Summit: Sudden Oak Death Syndrome and Tree Health Care

Urban trees face a multitude of challenges, many of which can be mitigated by proper care and protection. The threatened encroachment of Sudden Oak Death Syndrome has magnified the need for homeowners and landscape contractors to better understand their role in preserving the urban forest.

On January 27, 2001, the California Landscape Contractors Association San Francisco Bay Area Chapter will host a Tree Summit in the Palo Alto area. (Location has not been confirmed.) Canopy members are invited to attend. Flyers will be distributed to Canopy members in mid December.

Scheduled speakers include two U.C. Cooperative Extension Agents. Dr. Pavel Svihra, who first identified the symptoms of Sudden Oak Death Syndrome in Marin County, will present an update on the origins and spread of the disease. Dr. Larry Costello will discuss the identification of tree hazards. Morning sessions will also include presentations on the control of Sycamore Anthracnose and Powdery Mildew. Lunch will be followed by afternoon technical sessions. Among the scheduled workshops are Planting Design Under Oaks, Oak Root Collar Excavation Techniques, Deep Root Aeration and Feeding, New Sources for Tree Stock, The Role of Mycorrhizae in Maximizing Tree Health, and an update on the Glassy Winged Sharpshooter.

For further information, please contact **Maureen Gough Decombe** of the Canopy Programs Committee at (650) 327-3328, or the Canopy office at (650) 964-6110. ■

### Palo Alto Chamber of Commerce Showcase—Introducing Canopy to Biz Leaders

Canopy recently had a booth in the Palo Alto Chamber of Commerce's annual Showcase Palo Alto. This was Canopy's first appearance in the Showcase. The Showcase Palo Alto is one of the "best business-to-business networking and interactive events on the Peninsula." Canopy was able to introduce hundreds of community residents, business and community leaders to the need to preserve their urban forest and how Canopy is an integral part of the education process.

The Canopy booth was next to one of the more popular restaurants in the showcase, so almost all of the 750 attendees came by our booth looking for the free food next door. As a result, we a had satisfied public looking at our material. ■



The Canopy booth was ably staffed by Steering Committee members Susan Rosenberg and Marty Deggeller.

### History of the Christmas Tree

The Christmas tree, used as a symbol of life, is a tradition older than Christianity and not exclusive to any one religion. It's a part of our holiday customs that engages not only our senses of sight, touch, and smell, but also our sense of tradition, hope and good will. It especially gives those with a cold winter hope as it stays green all winter. Thus the evergreen is the "symbol of life".

Long before there was a Christmas, Egyptians brought green palm branches into their homes on the shortest day of the year in December as a symbol of "life triumphant over death".

Romans adorned their homes with evergreens during Saturnalia, a winter festival in honor of Saturnus, their god of agriculture. Druid priests decorated oak trees with golden apples for their winter solstice festivities. To the Druids, sprigs of evergreen holly in the house meant eternal life; while to the Norsemen, they symbolized the revival of the sun god Balder To those inclined toward superstition, branches of evergreens placed over the door kept out witches, ghosts, evil spirits and the like.

In the middle ages, the Paradise tree, an evergreen hung with red apples, was the symbol of the feast of Adam and Eve held on December 24th. The first recorded reference to the Christmas tree dates back to the 16th century.

In Strasbourg, Germany (now part of France), families both rich and poor decorated fir trees with colored paper, fruits and sweets. Late in the Middle Ages, Germans and Scandinavians placed evergreen trees inside their homes or just outside their doors to show their hope in the forthcoming spring. The retail Christmas tree lot also dates back that far—in those times, older women would sell trees harvested from nearby forests.

In 1834, Queen Victoria's husband, Prince Albert brought the first Christmas tree to Windsor Castle for the Royal family. This tradition then spread through to popular culture in Britain and the rest of the English speaking world.

Our modern Christmas tree evolved from these early traditions. ■

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### **Christmas Tree Care**

When you get your Christmas tree home, cut off the bottom two inches of the trunk. If you are not going to put it inside right away, store it in a cool shady place with the trunk in a bucket of water.

When it is time to bring the tree inside place it in a tree stand of the correct size for the tree. Fill the basin of the stand with water.

Check water levels frequently. If the water level drops below the stump the sap from the tree will form an impermeable barrier within a few hours. and the tree will no longer

be able to absorb water. A newly cut eight-foot tree can take up over a quart of water in the first few hours and an equivalent amount daily thereafter. Keep the tree well watered and it will remain sturdy and attractiveand avoid becoming a fire hazard.

#### OTHER FAMOUS CHRISTMAS GREENERY

Holly, with large bright berries is the most popular Christmas plant. It was once believed that it was a protection against witches and the evil eye.

Rosemary, is traditionally associated with remembrance and friendship.

Others include: poinsettia, the Christmas Rose, the yew and the bay.

### Know your trees—Michelia doltsopa

#### by Susan Rosenberg

f you find yourself stuck in traffic along Oregon Expressway this winter, don't despair. Once you inch your way to the block between Louis and Ross Road roll down your window. You'll spot the bowl-shaped white flowers on the eight *Michelia doltsopa* trees planted in the median first. Then, with luck, you'll catch their heady fragrance which is a true tropical perfume. If you're not willing to get snarled up in traffic just

to smell this tree, make your way to the Gamble Garden Center. In front of the Carriage House is a stunning and distinctly upright specimen that originated from a rooted cutting taken off the tree at Filoli.

Michelia doltsopa originated in Tibet and western portions of China. It was introduced to this country in 1918 and is a member of the magnolia family. This

gives it a familial tie to the rows of magnolia grandiflora trees that line Palo Alto's streets. It grows anywhere from 25 to 40 feet depending on growing conditions.

An excellent lawn tree that likes a sunny position in well-drained but moist soil. It requires little pruning, and looks good year round. The best reason to plant this tree, though, is for the jolt of tropical perfume you'll have right outside your doorstep in the dead of winter. ■

### Update of Tree Preservation Ordinance

As reported in our Autumn 2000 edition, the City of Palo Alto is in the process of updating its Tree Preservation Ordinance (viewable online at www.city.palo-alto.ca.us). The impetus for the update is to consider the inclusion of redwoods as protected trees as well as to make the ordinance more adaptable to unique or hardship conditions. Your comments on this study are very much appreciated and may be directed to the Department of Planning and Community Environment, City of Palo Alto, 250 Hamilton Avenue, Palo Alto, CA 94301 or by calling (650) 329-2441. Their email address is treeordupdate

@city.palo-alto.ca.us. ■

### Remember Canopy in Your Yearend Giving

**C**anopy's new fundraising campaign (see Autumn

2000 newsletter) is off to a great start with several new donations of \$500 and up. Our goal is to raise at least \$36,000 from non-city sources this fiscal year. If you would like to make your own tax-deductible contribution, please use the envelope enclosed with this newsletter. Donations of appreciated stock can also be accepted;

to make arrangements contact Canopy directly at (650) 964-6110. ■

Checks dated and mailed by December 31, 2000 qualify for a tax deduction on your 2000 return.

### Reducing the Effects of the Summer Sun Working to Cool Urban Heat Islands

**S**an Jose recently hosted a workshop on the San Jose Cool Communities Program. The program is designed to reduce or

Cooling Los Angeles by just 3 degrees F has the same effect on smog as removing 50% of on-road cars from area highways. eliminate heat islands within the City of San Jose, but the principles apply to Palo Alto also. Heat Islands are urban areas that become significantly hotter than the sur-

rounding forested or agricultural areas due to displacement of vegetation by dark roads, roofs and pavement of the city. Hard, dark urban surfaces absorb and retain heat, creating a veritable dome of hot air over a city. Smog formation increases in conjunction with this rise in temperature. Cooling a city has a strong effect on reducing (ground-level ozone) air pollution.

Researchers at the Lawrence Berkeley National Laboratory (LBNL) have done computer simulation models of Los Angeles. They show that a 20 year program of surface lightening and tree planting would result in profound reductions in air pollution and air conditioning bills. Scientists in the Heat Island Unit at LBNL show \$535 million per year in smog related respiratory problems and energy savings resulting from cooling the Los Angeles basin 5 degrees F. Limited modeling for summer scenarios showed "that the impact of cooling Los Angeles by about 3 degrees F. has the same effect on smog as removing 50% of the on-road cars from Los Angeles's roadways." Hashem Akbari, Phd., Heat Island Group Leader at LBNL continues, "this is so big nothing else compares."

Three major strategies are incorporated in reducing urban heat islands: Increase the solar reflectance of roofing surfaces; build roadways and payed areas out of materials that reflect heat and light; and plant more trees, particularly around buildings and in parking areas. Scientists have found that buildings with light-colored roofs that reflect the sun's rays use up to 40% less energy for cooling than buildings with darker roofs. The same applies to paved areas. Roads and parking lots paved with materials that reflect more sunlight last longer and reduce the surface heat thereby reducing smog formation.

Trees have great potential to cool cities through shade and "evapotranspiration." Evapotranspiration occurs when plants evaporate water through pores in their leaves. The process draws heat out of the air as it evaporates, cooling the air. One mature, properly watered shade tree with a crown of 30 feet can "evaportranspire" up to 40 gallons of water in a day, which is the equivalent of removing all the heat produced in fours hours by a small space heater

**Buildings with** Through the liaht-colored simple roofs that reflect approach of the sun's ravs use planting trees up to 40% less and using energy for coollight-colored ing than buildreflective mateings with darker rials on roofs roofs. and pavement. urban residents can be more comfortable -and take comfort in knowing that the environment is benefiting as well.

#### **CALENDAR OF CANOPY EVENTS**

#### December

2 Planting—College Terrace 16 Planting—West Bayshore TBC Mayor's Planting

#### January

20 Planting 27 Tree Summit:"Sudden Oak Death"

February 10/11 Planting—Barron Park/ Green Acres 24 Planting—Palo Alto Hills

#### March

10 Planting

24 Planting

31 Tree Talk, co-sponsored by Gamble Garden "Selection of Small Trees for the Home Garden" by Barrie Coate, Lucie Stern Ballroom, 9:30 am

### Canopy's Annual Tree Talk

**C**anopy's Annual Tree Talk, co-sponsored by Gamble Garden and the City of Palo Alto, will be held at 9:30 am, March 31, 2001, in the Lucie Stern Ballroom.

The talk, entitled "The Selection of Small Trees for the Home Garden" will be given by noted horticultural consultant and consulting arborist, **Barrie Coate**. Mr. Coate will discuss how to choose a tree taking soil, moisture, sun, shade and other factors into account. Through slides, he will illustrate varieties of trees and the importance of correct tree selection. ■

#### Canopy's Leadership

#### Steering Committee

Forest Preston. III. Chair Joe Hirsch, Vice-Chair Brad Denson, Treasurer James Crawford. Secretary Dave Bubenik Bill Courington Marty Deggeller Kate Feinstein Rita French Mary McCullough Susan Rosenberg Gail Schubert Jane Stocklin Lanie Wheeler

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