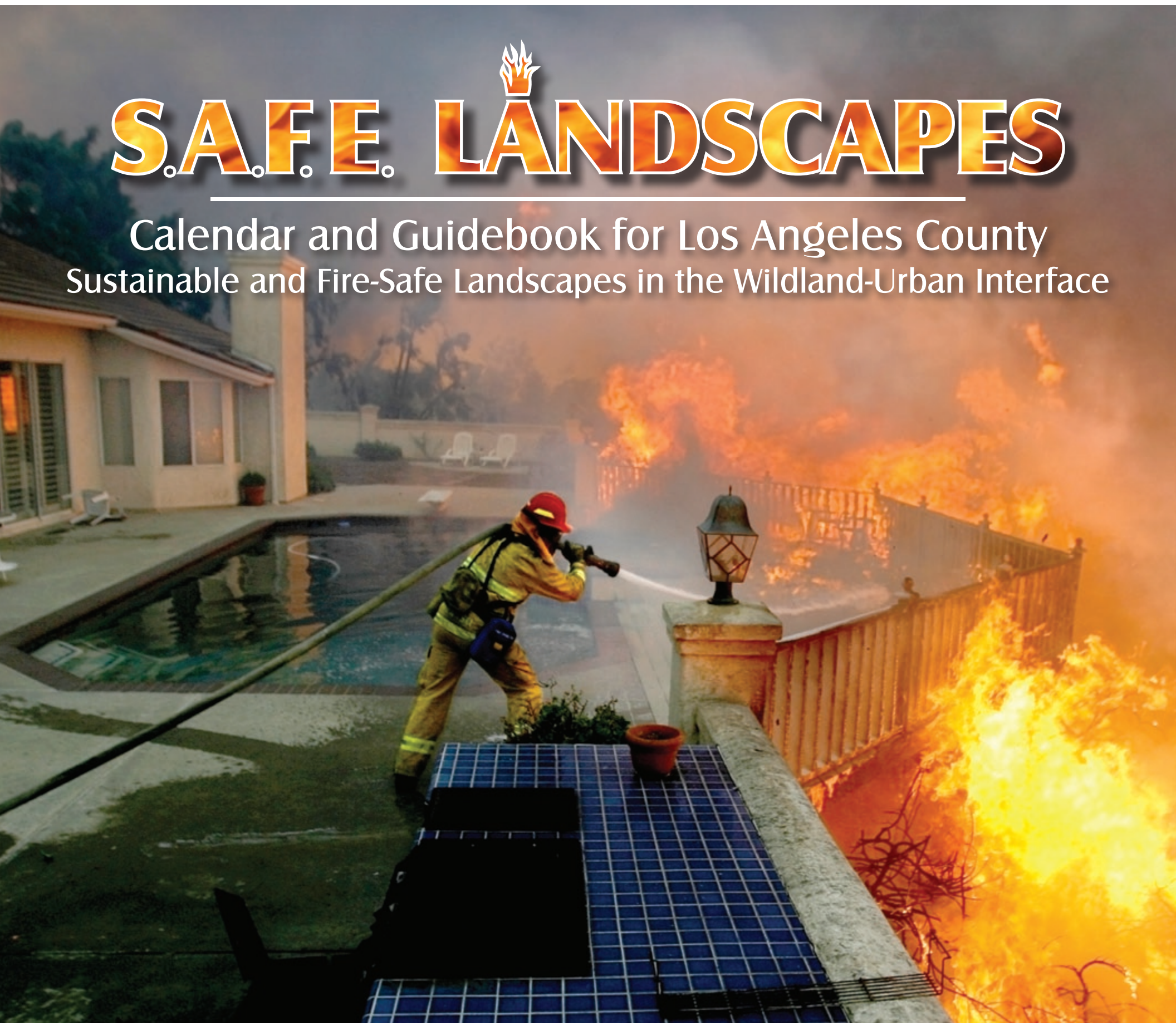
S.A.F.E. LANDSCAPES

Calendar and Guidebook for Los Angeles County

Sustainable and Fire-Safe Landscapes in the Wildland-Urban Interface



SAFE LANDSCAPES PROJECT

The SAFE Landscapes (**S**ustainable **A**nd **F**ire Saf**E**) calendar provides guidelines for creating and maintaining fire-safe, environmentally-friendly landscapes in the wildland-urban interface. This project is a collaboration between the Los Angeles and San Gabriel Rivers Watershed Council, University of California Cooperative Extension – Los Angeles and Ventura Counties, the Los Angeles County Fire Department, numerous governmental, non-profit, and business organizations (listed on the inside back cover) with support from the California Community Foundation and the National Park Service.

Los Angeles County Fire Department

Fire safety in the wildland-urban interface starts with good practices to avoid starting fires in and around the home. These practices include the use of ignition-resistant building materials and architectural features and the development of a fire-resistant landscape, where plants and hardscape are maintained so that they do not easily transmit fire. Establish your **defensible space** so that the risk of fire transmission to your property is reduced and fire fighters can safely protect your home.

There is no way to completely ensure that your home will not be exposed to wildfire. If you live in a fire hazard severity zone in the wildland-urban interface, it is not a question of IF a fire will occur, but WHEN. Preparation for wildfire requires that YOU take responsibility for your safety, property, and pets in the event of a fire. Maintain your property to reduce the risk of damage during a wildfire, and be fully prepared to evacuate.

The information in this calendar can help you reduce, but not eliminate, the risk of fire. It is arranged month by month with timely tips. We hope that you will keep the guidebook section of this calendar to use as a resource once the year has ended.

Scott Vickers

THE WILDLAND-URBAN INTERFACE AND FIRE RISK

The **wildland-urban interface (WUI)** is the area where urban and suburban development meets native, natural vegetated areas. It can be a beautiful, quiet place to live, but with the benefits come risks. One of the most pressing is wildfire, but others include risky interactions with wildlife, like bears and mountain lions, as well as physical phenomena like floods and landslides.

Within the WUI, areas are designated as fire hazard severity zones. These are areas in mountains, foothills, and canyons where adjacency to vegetated areas, difficulty of access, and weather patterns pose greater risk of wildfire. The fire response agency in each local jurisdiction has determined where these areas are and requires the management of fuels near structures. To find out if your property is in a fire hazard severity zone, contact your local agency.

SAFE BUILDINGS IN THE WUI

The Wildland Urban Interface Building Standard, also known as Chapter 7A, is a new addition to the California Building Code, and it will affect how new homes are built in wildfire-prone areas. Those who already own a home can utilize the new code to help decide what to do when remodeling. Check with your building department to find out about any local requirements.

The new code links the ability of your home to survive a wildfire with the location and maintenance of your near-home vegetation (your defensible space) and building materials used on the outside of your house.

What does the code say about the materials on the outside of your house?

- The required fire rating of your roof covering (Class A, B, or C) is defined.
- Gaps between your roof covering and roof deck (such as with clay barrel tile roofs) must be plugged at the ends ("bird stops").
- Energy-efficient dual-pane windows must include at least one pane of tempered glass.
- Energy released from burning deck boards can't exceed a maximum value.
- Vents used in eaves and soffits must resist the intrusion of embers and flames.
- Siding must be classified as noncombustible or ignition-resistant, or must pass a test approved by the Office of the State Fire Marshal.

Photograph by Stephen L. Quarles

A corner wall section: one side has a composite wood siding product and the other a fiber cement siding product. The ignition source was a burning 'A' brand (12"x12") placed in the corner. It sat on two bricks. This photo was taken ~30 min after the burning 'A' brand was placed in the corner (on the bricks).

A handbook listing products that comply with the provisions of Chapter 7A has been published by the Office of the State Fire Marshal. It's available on line at *http://www.osfm.fire.ca.gov/strucfireengineer/pdf/bml/wuiproducts.pdf*.

Photo by Jane Gates of Gates & Croft Horticultural Design

SUSTAINABILITY

In the wildland-urban interface areas of Southern California, living sustainably means protecting yourself, your family, and your property from risk, while also protecting wildlife habitat. Good fire preparation in your landscape can help protect wildlands from damage, but sustainable fire preparation also includes conserving water, avoiding invasive plant species, and limiting the use of potentially harmful chemicals such as fertilizers and pesticides.

"Sustainable" fire-safe landscaping should also be easy to maintain. By using native and California-friendly plant selections that maintain high levels of moisture in their leaves and stems with little irrigation and that grow slowly and are long lived, you can protect the health of neighboring wildlands and create a beautiful garden. For more information about sustainable plant selections, visit *www.PlantRight.org* and see the list of other references in the back of this calendar.

Jan Couver

BRUSH, FUEL AND VEGETATION — CLEARANCE, MAINTENANCE, MANAGEMENT, MITIGATION, MODIFICATION, THINNING, REDUCTION, AND TREATMENT

These terms are typically used interchangeably to mean the maintenance of vegetation (trees, shrubs, grasses, groundcovers, and vines) in a way that minimizes the transmission of fire from one plant to another and ultimately to your house. Proper maintenance for fire safety does not mean clearance of all plants, but rather the selective removal of highly flammable vegetation. When done well, "cleared" areas should still protect against excessive erosion and provide wildlife habitat.

INVASIVE PLANTS AND WILDLAND HEALTH

Most plants don't escape our yards and gardens, but the handful that do can cause serious problems. Animals, wind, and water move plants and seeds far from where they were planted. Once established in natural areas, these plants displace native vegetation and greatly reduce wildlife diversity. **Invasive plants** also fuel wildfires, contribute to soil erosion, clog streams and rivers, and increase flooding. Poor maintenance of cleared areas can promote their spread. Because they thrive in disturbed soils, improper clearance or over-clearance often leads to a landscape dominated by invasive plants. These plants can produce more fuels than native vegetation, increasing the potential for ignition.

Tree of heaven (Ailanthus altissima) infestation - Jason Casanova

When choosing plants for your fire-safe landscape, you can help protect the health of neighboring wildlands by avoiding invasive plants. Several are described in this calendar and you can find full lists, developed by the California Invasive Plant Council, at *www.cal-ipc.org* and the Los Angeles and San Gabriel Rivers Watershed Council, at *www.weedwatch.org*.

Anniversary dates of major Southern California fires on record can be found within the calendar section.

FEATURED PROBLEM PLANTS OF THE MONTH

Almost every month, we feature a plant or two that can have a negative impact on your landscape and local wildlands. The symbols you'll find under this section represent the following plant characteristics:

Highly Flammable

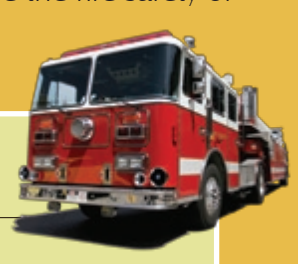
Invasive

Slobo Mitic

JANUARY

is a good time to apply organic mulches (max 3"- 6" deep) around your plants to help retain water and feed the soil. Applying mulch now will also 1) smother last year's insect eggs, spores, and weed seeds; 2) allow rain to soak in; 3) allow large pieces to break down before peak fire season. Keep organic mulches at least 30 feet away from structures.

DEFENSIBLE SPACE. Providing a "defensible space" can reduce the risk of structural damage caused by fire. This space, at least 100 feet wide in California, is the area surrounding a structure where plants are maintained to decrease the fire hazard and provide an opportunity for firefighters to safely defend your home. Vegetation that does not ignite easily should be planted in the defensible space. Landscape plants protect soils from erosion and provide aesthetic and ecological benefits. Trees and shrubs are acceptable as long as they are widely spaced and do not provide a continuous path of fuel for a fire to climb from the ground to a tree crown or roof (a **fuel ladder**). Proper landscape maintenance can dramatically improve the fire safety of a yard.



DEFENSIBLE SPACE GUIDELINES

Below are general guidelines adapted from **CAL FIRE**:

1. Create and maintain a defensible space of at least 100 feet or greater from each building or structure. Check with your local fire department on the distance required.

2. Preserve single specimens or groupings of well-spaced and well-pruned trees or other vegetation.

3. Eliminate ladder fuels within the **defensible space** zone by disrupting the vertical and/or horizontal continuity of plants.

Please visit the following websites: LA County Fire Department's Fuel Modification Plan (*http://www.fire.lacounty.gov/Forestry/PDF/FuelModificationPlan.pdf)*, Cal Fire's "Why 100 Feet?" (*http://www.fire.ca.gov/communications/communications_firesafety_100feet.php)* and WUI Building Code Information (*http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_ codes.php*).

FIRE-SAFE LANDSCAPING. Fire-safe landscapes should reduce the chance of ignition. If ignited, they should minimize the heat generated, and the ability to transmit fire to structures. Fire-safe landscapes are created by designing and maintaining a landscape where there is horizontal and vertical separation between plants to minimize the transmission of fire from plant to plant to your home. It is best to choose plants that do not encourage ignition, but it is important to understand that there are no completely fire-safe plants; all plants will burn given the right conditions. Protect your home by properly irrigated your landscape. Dead leaves, branches and other flammable debris should be regularly removed. Fire-safe landscapes should also include hardscape materials that add to the fire-resistance of the landscape. This could include brick or stone retaining walls and garden borders, swimming pools, decomposed granite paths, non-combustible deck material, stone patios and paving, etc. For more information, please see the **Los Angeles County Fire Department, Forestry Division** website (*http://www.fire.lacounty.gov/Forestry/PDF/FuelModificationPlan.pdf*).

Illustration courtesy of CAL FIRE.

JANUARY 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 *New Year's Day*	2	3 ***2001 Viejas Fire -*** *San Diego County, 16 Structures Lost, 10,353 Acres Burned*
4	5 ***1963 Red Mountain Fire -*** *Ventura County, No Structures Lost, 1,389 Acres Burned*	6 ***2003 Pacific Fire -*** *Los Angeles County, No Structures Lost, 900 Acres Burned*	7	8 ***2007 Malibu Fire -*** *Los Angeles County, 5 Structures Lost, 20 Acres Burned*	9	10
11	12	13	14	15 ***1961 Donlon & Fletcher Fire -*** *Ventura County, No Structures Lost, 2,426 Acres Burned*	16	17
18	19 *Martin Luther King Jr. Day*	20	21	22	23	24
25	26	27	28	29	30	31

Scott Vickers

FEBRUARY

is a good time to begin weed control efforts in your yard and garden. You can also carefully cut back poison oak but be sure to protect yourself from exposure.

Can you identify poison oak?

WHAT MAKES A "FIRE-SAFE" STRUCTURE? Three main factors: 1) location; 2) materials and design features; and 3) management of near-home vegetation (defensible space). Protecting your home from a wildfire is a 'package deal' – survival of your home is directly linked to how well you maintain your structure and near-home vegetation. During wildfires, most home ignitions are caused by flying embers from burning vegetation.

- The roof should have a 'Class A' fire rating. Use ignition-resistant siding. A 'complex' roof (one with many angles and intersections) can readily accumulate debris. Keep your roof and gutters clean of debris to avoid ember ignition during a wildfire.
- Fires that ignite in the attic due to embers usually result in complete loss to the home. Use attic vents designed to resist the intrusion of embers and flames. Make sure your 'fire-safe' vents allow sufficient air flow to control moisture. Dual-pane windows with tempered glass and boxed-in eaves can provide additional protection.
- Don't store combustible materials such as firewood and lumber next to your house or under your deck. When building a new deck, use materials that meet new fire performance requirements.
- New homes should be built away from ridge tops, canyons, and saddles.
- Post your address on a non-combustible sign in highly visible location. Maintain your entry roadway for adequate width to allow firefighting equipment to get to your home.

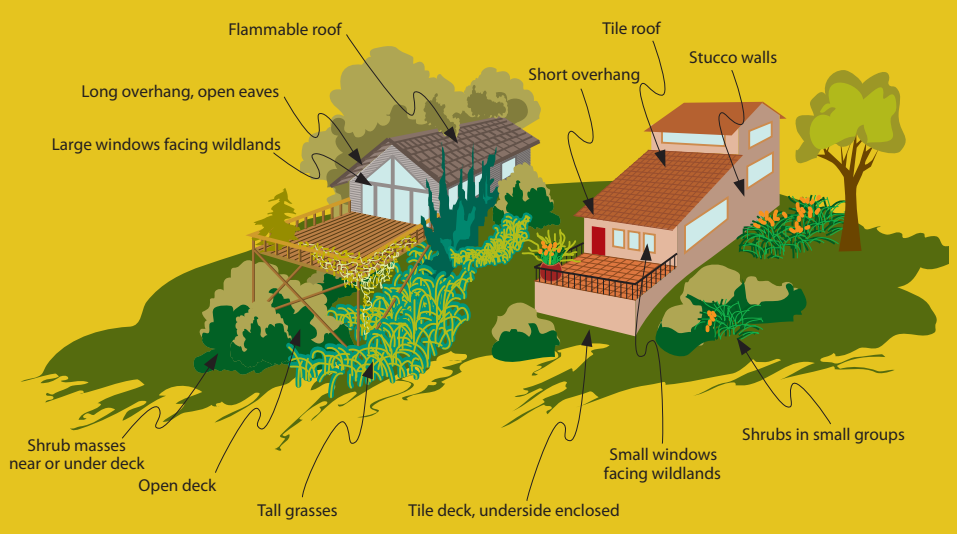
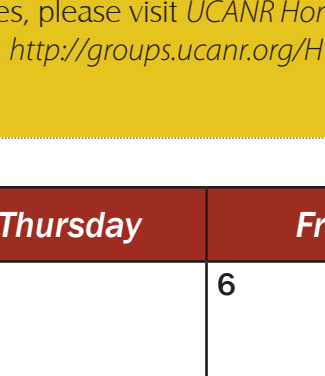


Illustration courtesy of East Bay Municipal Utility District (EBMUD)

FEATURED PROBLEM PLANTS OF THE MONTH:

Pampas Grass, Jubata Grass, Crimson Fountain Grass



Left: Fountaingrass *(Pennisetum setaceum)*
Right: Pampasgrass *(Cortaderia selloana)*

Pampasgrass *(Cortaderia selloana)*, **Jubatagrass** *(C. jubata)* **and Fountaingrass** *(Pennisetum setaceum)*, **are non-native perennial grasses with a clumped, upright growth pattern and feathery flower heads. These grasses create a fire hazard with excessive build-up of dry leaves and flowering stalks and desnse infestations out-compete native vegetation. It is well adapted to fire and soil disturbance and infestation areas greatly increase following a burn. Small infestations of Pampasgrass and Fountaingrass seedlings can be removed by hand-pulling. Mature plants may be best controlled with an appropriate herbicide. An attractive native alternative is Deergrass** *(Muhlenbergia rigens)*. **Be sure to follow proper spacing and trim back dead material in your defensible space areas.**

For more information on building and maintaining fire-safe structures, please visit *UCANR Homeowner's Wildfire Mitigation Guide* at *http://groups.ucanr.org/HWMG/*.

FEBRUARY 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10 ***1955 Houston Fire -*** *Ventura County, No Structures Lost, 500 Acres Burned* ***2002 Gavilan Fire -*** *San Diego County, 82 Structures Lost, 5,500 Acres Burned*	11	12	13	14 *Valentine's Day*
15	16 *Presidents Day*	17	18	19	20	21
22	23	24	25	26	27	28

MARCH

is a good time to give your irrigation system a check-up. Water plants deeply and only as needed. This encourages deep roots and drought-tolerance, and discourages weeds, overgrowth, and snails.

FIRE PREPAREDNESS FOR YOU AND YOUR PROPERTY

- Pull weeds or weed whip before the seed heads mature, to reduce fire hazards and invasive plant seed banks. This may occur any time between February and April, depending on the previous year's weather.
- Remove all stacks of construction materials, yard waste, and other debris from your yard.
- **Be ready!** Have a plan of action in place in case a wildfire occurs in your area (*see* ***Resources****: inside back cover*).
- Pre-cut and label materials to cover your windows and vents and store them, along with a hammer and nails or drill screws, in an easily accessible place.

- Locate woodpiles and fuel tanks at least thirty feet from all structures and maintain a 10 foot zone free of vegetation around them.
- Make sure your decks, porches, or landings are free of unnecessary clutter and that anything remaining can be quickly and easily removed.
- Be sure to keep your "water reservoirs" and portable tanks filled, and have mops and hoses stored with the rest of your emergency supplies (ladders, shovels, etc.).

FEATURED PROBLEM PLANTS OF THE MONTH:

Hottentot Fig, Crystalline Ice Plant

Left: Hottentot Fig, Highway Iceplant *(Carpobrotus edulis)*
Right: Crystalline Iceplant *(Mesembryanthemum crystallinum)*

Júlio Reis

Gary A. Monroe

Hottentot Fig or Highway Iceplant *(Carpobrotus edulis)* and Crystalline Iceplant *(Mesembryanthemum crystallinum)*, are groundcovers that invade coastal areas of Southern California. Both can spread to form nearly impenetrable, shallow-rooted mats that dominate native plant communities and exacerbate erosion. The woody thatch underlying these mats can also become a fire hazard. Both plants are easily removed by repeated hand pulling. Large infestations may be best controlled with herbicide. A good alternative to consider is a mix of non-invasive succulents like Kleinia *(Senecio mandraliscae)* or Catalina Island Live-Forever *(Dudleya hassei)*. For hillsides try deep-rooted San Diego Marsh Elder *(Iva hayesiana)*.

DISASTER PREPAREDNESS FOR PETS

Prepare two disaster kits for your pets – one for the home and a portable version if you need to evacuate. Include food, water, medication, and toys. Review your kits regularly to ensure that their contents are fresh. Keep in mind that pets are not allowed at evacuation shelters, so arrange a location in advance to house your pets away from the fire. If you have large animals or livestock, make special arrangements for their care during an evacuation. For more information, check out the ASPCA's website checklist at: *http://www.aspca.org* or see CDFA's disaster preparedness guides for pets at *http://www.cdfa.ca.gov/ahfss/ah/disaster_prep_Brochures.htm*.

MARCH 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7 ***1964 Polo Fire -*** *Ventura County, No Structures Lost, 684 Acres Burned*
8	9	10	11	12 ***2007 Windy Ridge Fire -*** *Orange County, 3 Structures Lost, 2,000 Acres Burned*	13	14
15	16 ***1964 Weldon Fire -*** *Los Angeles County*	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

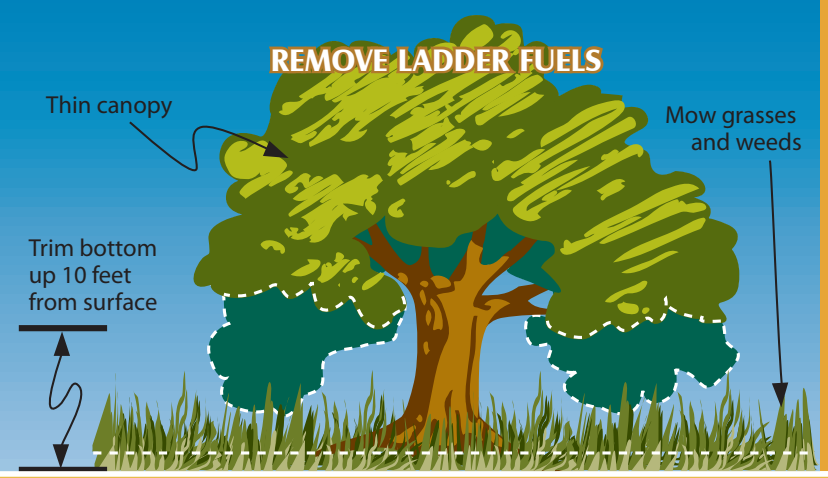


Illustration courtesy of East Bay Municipal Utility District (EBMUD)

APRIL

Be aware that most birds nest from March to September. Make sure that fuel management activities do not disturb nests. Look first before cutting.

FUEL MODIFICATION

- Landscape with plants that have fire-resistant characteristics (*see August and September*).
- Maintain your **defensible space** (*see January*) by selectively thinning vegetation within at least 100 feet or more from all structures.
- Space individual or clumps of native trees and shrubs at least 10 ft apart and remove the lower 6 ft of branches on trees taller than eighteen feet.

- Maintain plants by watering as needed and by removing dead or dry growth, leaves and needles.
- Call your local utility company before planting or pruning trees near power lines to confirm the maximum height allowable.
- Ask your local utility company to inspect yearly any utility lines adjacent to or on your property where they may contact trees.

FEATURED PROBLEM PLANTS OF THE MONTH:

Periwinkle, Ivy (English, Algerian, and Cape)

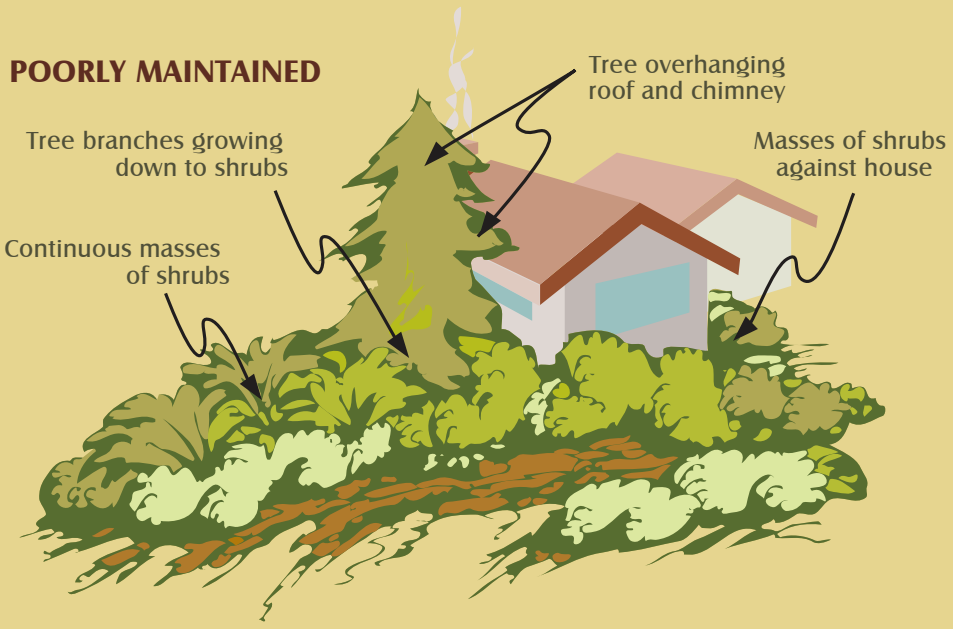
Left: Large Periwinkle *(Vinca major)*
Right: English Ivy *(Hedera helix)*


Drew Ready


Drew Ready

Large Periwinkle *(Vinca major)*, English Ivy, *(Hedera helix)*, Algerian Ivy *(Hedera canariensis)*, and Cape (also known as German) Ivy, *(Delairia odorata)* are all tenacious vines that are invasive in Southern California. Thick mats can be difficult to maintain and can hide underlying dead, dry material, which can be a fire hazard. Small infestations of all of these can be effectively removed by hand-pulling. For non-invasive vine alternatives, try California Desert Grape *(Vitis girdiana)* or Beach Strawberry *(Fragaria chiloensis)* for an additional benefit: homegrown fruit. Star Jasmine *(Trachelospermum jasminoides)* is another good alternative. If you do opt for vines in wetter parts of your garden, make sure to keep them watered well and trim back any dead material.

Which one of these matches your landscape?



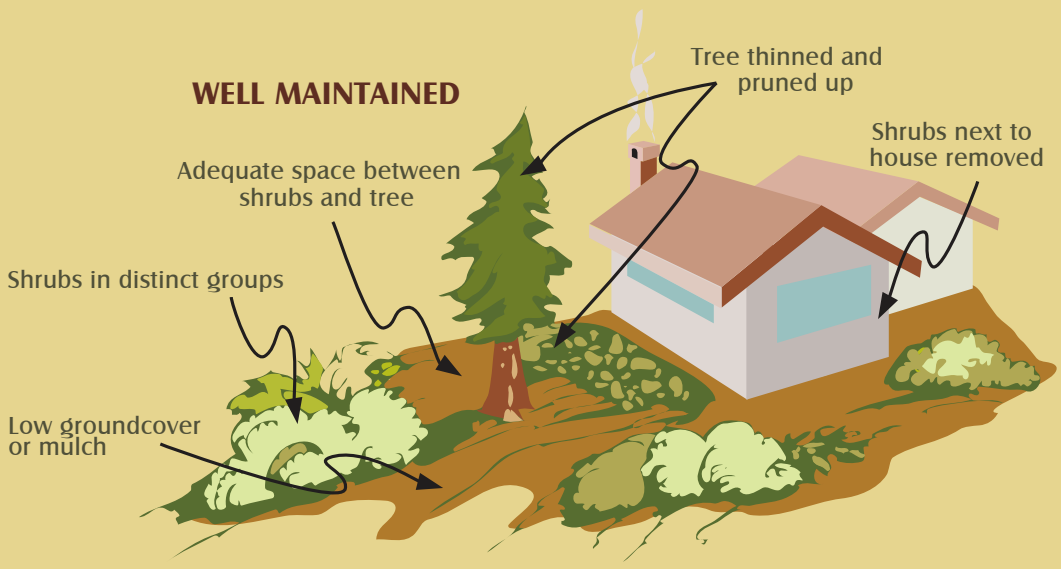


Illustration courtesy of East Bay Municipal Utility District (EBMUD)

APRIL 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4 ***1989 Bates Fire -*** *Ventura County, No Structures Lost, 193 Acres Burned*
5	6	7	8	9 *Passover*	10	11
12 *Easter* ***2007 Franklin Cyn Fire -*** *Los Angeles County, One Structure Lost, 15 Acres Burned*	13	14	15	16	17	18
19	20	21	22	23	24	25
26 ***2008 Santa Anita Fire -*** *Los Angeles County, No Structures Lost, 584 Acres Burned*	27	28 ***1996 Grand Fire -*** *Ventura County, No Structures Lost, 10,949 Acres Burned*	29 ***2008 Apache Fire -*** *San Bernardino County, No Structures Lost, 784 Acres Burned*	30		

Mark Hooghwerff

MAY

is a good time to start composting greenwaste. Also, leaving grass clippings on your lawn as mulch provides nutrients to your soil, helps retain soil moisture and keeps green waste out of landfills.

FEATURED PROBLEM PLANTS OF THE MONTH:

Castor Bean, Artichoke Thistle

Left: Castor Bean *(Ricinus communis)*
Right: Artichoke Thistle *(Cynara cardunculus)*

Michael Nickel

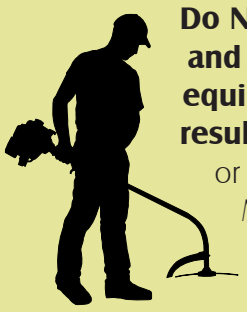
Clarence A. Rechenthin

Artichoke Thistle *(Cynara cardunculus)* is a spiny perennial herb with bright purple thistle flowerheads and an aggressive root system. The plant is known to spread along roads and trails in coastal sage scrub in Southern California. Castor Bean *(Ricinus communis)* is a perennial shrub with maple-like leaves and is found in riparian areas, chaparral, sage brush, and along roadsides. Castor Bean seeds are highly toxic to humans as well as many animals. Both plants can become dense monocultures that exclude native shrubs, herbaceous plants and grasses. They quickly colonize disturbed areas and grow rapidly, shading out native seedlings and groundcovers. The best method of control of seedlings is by hand pulling with gloves when small or in wet soil. Mature plants may best be controlled with herbicide.

FIRE HAZARD REDUCTION - IT'S YOUR RESPONSIBILITY! Brush clearance, weed abatement, and fuel modification are all terms used by fire jurisdictions to describe required treatment or thinning of vegetation on your property to reduce fire hazards. They DON'T mean the clearance of all vegetation, but selective removal to decrease fire risk. You are only required to treat the vegetation on your own property. Brush clearance on other property is the responsibility of the owner. Contact your local forestry or fire personnel if such clearance is needed. Too often, vegetation is allowed to grow unmanaged until it becomes a critical fire hazard. Generally, when this occurs, extensive effort is required by the property owner to address the problem. Some jurisdictions have more specific requirements for brush clearance inspections. Please check with your local fire department for more information.

Inspections are usually conducted by your local fire department. Additional requirements may be made by insurers. Please contact your insurance agent or insurance company for additional information, or visit *www.disaster101.com*.

Courtesy of John Todd, Los Angeles County Fire Department, Forestry Division



Do NOT remove vegetation down to bare soil, and do not destabilize hillsides by using heavy equipment; soil erosion and mudslides can result. Contact your fire department, a city engineer, or local NRCS office for erosion control techniques. Make sure brush clearance contractors understand the importance of maintaining stable slopes.

Cool winter and spring days are the best time to do fire hazard reduction in hazardous areas. Make sure mechanical tools have approved spark arrestors and avoid using them on hot dry days when sparks can ignite vegetation.

MAY 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7 ***1984 Grimes Fire -*** *Ventura County, 3,000 Avocado/Citrus Trees Lost 11,164 Acres Burned*	8 ***2007 Griffith Park Fire -*** *Los Angeles County, No Structures Lost, 817 Acres Burned*	9
10 *Mother's Day* ***2007 Catalina Island Fire -*** *Los Angeles County, 7 Structures Lost, 4,750 Acres Burned*	11	12 ***2002 Bouquet Fire -*** *Los Angeles County, 2 Structures Lost, 4,977 Acres Burned*	13 ***2008 Bighorn Fire -*** *Los Angeles, San Bernardino Counties, 0 Structures Lost, 490 Acres Burned*	14	15	16
17	18	19	20	21	22	23
24	25 *Memorial Day*	26	27	28	29	30
31						

Paul Senyszyn

JUNE

Give your leaf blower a vacation; use a rake instead. Leaf blowers blow away mulch and topsoil and they contribute to air and noise pollution. They are also a fire hazard due to engine heat and sparks.

REVIEW SUMMER VEGETATION MAINTENANCE

- Water appropriately to maintain healthy leaf moisture without encouraging excess growth.
- Hand-prune the inside branches of shrubs to reduce flush of growth. Remember, edging and shearing alone results in weak, fast growth and more fuel.
- Stay ahead of weeds by maintaining a regular schedule of hand pulling or weed whipping, before the seed heads mature, to reduce fire hazard and invasive seed banks.
- Utilize mulch to suppress weeds.
- Dry leaves and other debris that have collected in your rain gutters can be dangerous and ignite a fire very easily. Cleaning your rain gutters regularly can prevent this from being a threat.
- For general landscape irrigation, design and maintenance information, check out the Sunset Western Garden Book or Care and Maintenance of Southern California Native Plant Gardens.

Stephen L. Quarles, University of California Cooperative Extension

KEEP YOUR PROPERTY FIRE-SAFE WHEN ON VACATION.

You can take a vacation this summer with few worries if you take some preventive measures before leaving to ensure your house is fire-safe.

- Close windows and shutters.
- Check your smoke detectors to make sure they are functioning when you return from vacation. Batteries could run down or other components could fail while you're away.
- Check to make sure that all stoves have been turned off or disconnected.
- Turn off all unnecessary appliances and make sure everything that draws current is unplugged - lightning storms or sudden electrical surges could cause a fire in this equipment while you're away.
- Put your irrigation system on a timer, or better yet, enlist someone to water your property if and when needed to help maintain plant health and fire resistance.
- Make sure all flammable materials are stored completely away from the exterior of your home.
- Leave your house and car keys as well as your contact information with a neighbor or relative in case of emergency.

FEATURED PROBLEM PLANTS OF THE MONTH:

Brooms (Scotch, Spanish)

Spanish Broom *(Spartium junceum)*
Left: plant close-up
Right: plant form

Jon M. Randall

Michael Nickel

Scotch Broom *(Cytisus scoparius)* is a small to medium sized shrub with sharply angled branches and golden yellow flowers. Spanish Broom *(Spartium junceum)* is a perennial shrub with rush-like branches and light yellow flowers. They can be found throughout the southern coastal counties of California. Brooms tend to form dense stands and take over native plant communities and infestations are fire hazards during the dry season. Pulling mature plants with weed wrenches is effective for removal combined with several years of follow-up seedling control. Western Redbud *(Cercis occidentalis)*, with its deep pink flowers in spring, is an attractive alternative, but as always, take care to space shrubs properly and cut back dead branches and twigs in fuel management zones.

JUNE 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 ***1917 Thatcher Fire -*** *Ventura County, 60 Structures Lost, 44,003 Acres Burned* ***2002 Wolf Fire -*** *Ventura County, 21,645 Acres Burned*	2	3	4	5	6 ***2002 Copper Fire -*** *Los Angeles County, 26 Structures Lost, 23,407 Acres Burned*
7	8	9	10	11	12	13
14 *Flag Day*	15	16	17	18	19	20
21 *Father's Day*	22 ***1976 Los Robles Fire-*** *Ventura County, 1 Structure Lost, 2,245 Acres Burned*	23	24	25	26	27 ***1990 Paint Fire -*** *Santa Barbara County, 641 Structures Lost, 4,900 Acres Burned*
28	29 ***2001 Westlake Fire -*** *Ventura County, No Structures Lost, 278 Acres Burned*	30 ***1985 Normal Heights Fire -*** *San Diego County, 76 Structures Lost, Acres Burned Unknown* ***2007 Rancho Fire -*** *Ventura County, 0 Structures Lost, 482 Acres Burned*				

JULY

All fireworks, including the so-called "safe and sane" type, are illegal in much of Los Angeles County, including all federal lands. Always dangerous, fireworks are especially hazardous during dry and windy conditions.

Timothy Goodwin

SANTA ANA WINDS often begin in July and sometimes last into November or December. "Santa Anas" are strong, hot, very dry winds that sweep into Southern California from the east or northeast. When temperatures are warm and the moisture is very low in the vegetation, these east winds create critically dangerous fire conditions.

WHAT IS A "RED FLAG DAY"? Red Flag days refer to weather conditions that can cause a wildland fire to start and to spread rapidly. When winds exceed 25 mph and humidity is below 15%, the National Weather Service (*http://www.nws.noaa.gov*) will issue a Red Flag warning. These warnings are issued to make you aware of the hazard and as a reminder to make preparations should you be asked to evacuate.

Some jurisdictions also have programs to remove vehicles on Red Flag days in posted locations. This helps citizens evacuate and fire companies gain access during a wildfire. Be aware of Red Flag days and respect parking restrictions. If citizens become trapped in their vehicles during an evacuation, this can lead to a catastrophic situation. Please go to *http://fire.lacounty.gov* for L.A. County Fire Dept. Red Flag information or contact your local fire department.

FAMILY FIRE DRILL. Now is the time to create a fire escape plan for your family. Establish at least two exit paths out of each room, as well as a place away from the house where your family can meet once everyone is out of danger. In a multi-story house, consider roll-out evacuation ladders for upper-floor rooms. Show every family member how to "stop, drop and roll." This technique has been proven to be a life-saver. Remember that a plan won't help unless everyone in your family knows and understands it. Check with your local fire department for up-to-date fire drill procedures and see Los Angeles County Fire Department's Exit Drills in the Home (*http://www.fire.lacounty.gov/FirePrevention/PDFs/EDITH.pdf*). Everyone who is capable needs to learn how to use the fire extinguisher. Be sure to practice several times. In an emergency situation, you need to act without hesitation, so if you have to stop and think about how to operate the extinguisher, you might not be able to control a fire in time. For information on different types of fire extinguishers, please visit *http://www.fire-extinguisher101.com*.

FEATURED PROBLEM PLANTS OF THE MONTH:

Myoporum, Tree of Heaven

Left: Myoporum *(Myoporum laetum)*
Right: Tree of Heaven *(Ailanthus altissima)*

Carolyn Martus

Bill Neill

Myoporum *(Myoporum laetum)* is a small evergreen tree or shrub with a broadly spreading crown. Tree of Heaven *(Ailanthus altissima)* is a deciduous tree or shrub that can reach heights of 30-65 feet. It can create dense thickets and produce copious seeds, contributing to its ability to spread and crowd out native vegetation. Both Myoporum and Tree of Heaven grow and spread rapidly and have invaded significant areas along the coast of Southern California and along streams in riparian areas. Seedlings can be pulled by hand, but pulling must be done when the soil is moist and the plant is small, due to long, strong taproots. A great alternative as a dense screen or tree is the Australian Willow *(Geijera parviflora)*.

JULY 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 ***1985 Wheeler Fire -*** *Ventura County, 0 Structures Lost, 122,724 Acres Burned* ***1988 Piru Fire -*** *Ventura County, No Structures Lost, 12,068 Acres Burned*	2	3 ***1985 Black Mountain Fire -*** *Ventura County, No Structures Lost, 1,324 Acres Burned*	4 *Independence Day* ***2007 Zaca Fire -*** *Santa Barbara County, 1 Outbuilding Lost, 240,207 Acres Burned*
5	6	7	8	9	10	11 ***2004 Pine Fire -*** *Los Angeles County, 15 Structures Lost, 17,418 Acres Burned*
12	13	14	15	16	17 ***2004 Foothill Fire -*** *Los Angeles County, No Structures Lost, 6,000 Acres Burned*	18
19	20 ***2004 Crown Fire -*** *Los Angeles County, 7 Structures Lost, 11,966 Acres Burned*	21	22	23	24	25
26	27 ***1977 Sycamore Fire -*** *Santa Barbara County, 234 Structures Lost, 805 Acres Burned*	28	29 ***2002 Pines Fire -*** *San Diego County, 37 Structures Lost, 61,690 Acres Burned*	30	31	

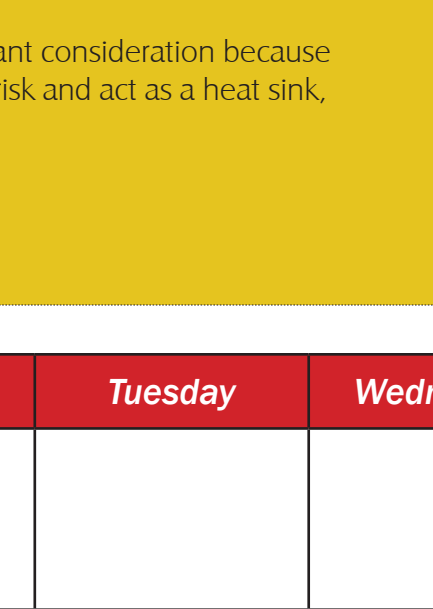
Fall plant sale at Rancho Santa Ana Botanic Garden. Image courtesy of Barbara Eisenstein.

AUGUST

is a good time to begin planning for the fall planting season. Local botanical gardens or community colleges host design classes that will help you make the most of your garden.

FIRE-RESISTANT PLANT CHARACTERISTICS. When choosing plants or identifying which plants to keep when performing fuel modification, look for plants with fire-resistant characteristics.

- Ability to store water in leaves or stems
- Ability to resprout after a fire
- Produces limited dead and fine material
- Extensive, deep root systems for controlling erosion
- High moisture content maintained with limited watering
- Low-growing or prostrate in form
- Open loose branches with a low volume of total vegetation
- Low levels of volatile oils or resins
- Not considered invasive (Visit *www.plantright.org* to find recommended alternatives to invasive plants.)
- Slow growing with little maintenance needed



Heuchera x 'Wendy' and Dudleya hassei, Rancho Santa Ana Botanical Garden. Drew Ready, Los Angeles & San Gabriel Rivers Watershed Council

The moisture content of plants is an important consideration because high levels of plant moisture can lower fire risk and act as a heat sink, reducing the intensity and spread of fire.

FEATURED PROBLEM PLANTS OF THE MONTH:

Mexican Fan Palms

Mexican fan palm *(Washingtonia robusta)*
Left: plant form
Right: plant close-up

Bill Neill

Forest & Kim Starr

The Mexican Fan Palm *(Washingtonia robusta)* grows to 100 feet tall; the trunk is slightly curved or bent with compact bright green fan-shaped palm fronds. Mexican Fan Palms can form dense mature stands in river, stream and wetland areas. If not properly pruned, these palms hold on to their large collars of dried and highly flammable fronds. Many fire officials blame the rapid spread of the Old Fire in San Bernardino on Mexican Fan Palms. Removal of these palms is best when they are young, as they are costly to remove once they mature. Consider using the Guadalupe Palm *(Brahea edulis)* or the Mexican Blue Palm *(Brahea armata)* as a substitute for Mexican Fan Palms. They grow more slowly, stay smaller, and are not invasive.

On steep slopes, be sure to keep shrubs and trees (for example, Coast Live Oak) with deep root systems to help prevent erosion!

AUGUST 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20 ***1963 Creek Road Fire -*** *Ventura County, No Structures Lost, 4,533 Acres Burned* ***1963 Squaw Flats Fire -*** *Ventura County, No Structures Lost, 439 Acres Burned*	21	22 ***1978 Happy Camp Fire -*** *Ventura County, No Structures Lost, 463 Acres Burned*
23 30	24 31	25	26 ***1996 Marple Fire -*** *Los Angeles County, Structures Lost Unknown, 19,861 Acres Burned*	27	28 ***1967 Warring Canyon Fire-*** *Ventura County, 1 Structure Lost, 4,003 Acres Burned*	29

BEFORE Pruning

AFTER Pruning

SEPTEMBER

Ensure that your landscape is still fire-safe. Clear your roof of fallen debris to prevent ignition from flying embers in the event of a wildfire. Maintaining your property is a year-round task.

PRUNING FOR HEALTHY PLANTS. Most plants will benefit from occasional corrective pruning, and all will benefit from the removal of dead wood. Time the pruning of individual plants over several years to allow them to recover. Try pruning about 1/3 of your plants in a given year, so that all are pruned at the end of three years. Regularly remove dead material and branches from your trees and shrubs. For deciduous trees and shrubs, prune before they have lost their leaves, when it is easier to see the dead branches. Hand-prune inside branches to reduce flush of growth. Hedging and shearing alone results in weak, fast growth and more fuel.

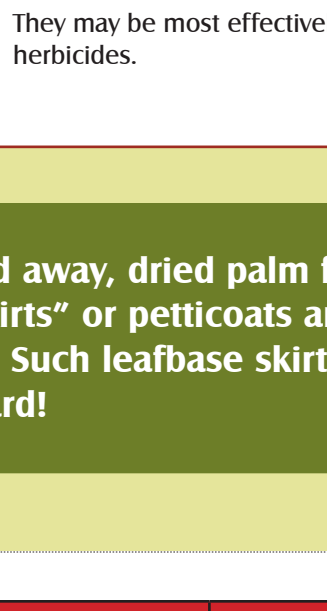
CHARACTERISTICS OF FLAMMABLE PLANTS. Plants to consider removing from your property or to avoid purchasing have the following flammable characteristics:

- retain large amounts of dead material within the plant
- produce a large volume of litter
- contain volatile substances such as: oils, resins, wax, or pitch

FEATURED PROBLEM PLANTS OF THE MONTH:

Arundo, Tamarisk

Left: Arundo *(Arundo donax)*
Right: Tamarisk *(Tamarix ramosissima)*



Bill Neill

Carolyn Martus

Arundo *(Arundo donax)* and Saltcedar or Tamarisk *(Tamarix spp.)* are two of the most devastating plants invading rivers, streams and wetlands in Southern California. Arundo can reach heights of 30 feet, forming dense stands that crowd out native plants and degrade wildlife habitat. Massive amounts of dormant dry vegetation in streams in the dry season pose a serious fire risk. In large storm events clumps can become dislodged, accumulate downstream, and increase the risk if flooding. Small pieces of the plant or root that break off often re-sprout, spreading the infestation throughout a watershed. Tamarisk is a large shrub or tree with many branches and very small, scale-like leaves. At least four species are found in streamside and wash areas of California. Tamarisk has a high capacity for water use, and can cause a reduction in groundwater supplies and it often spreads rapidly after a major disturbance, such as a fire. Removal of both Arundo and Tamarisk is difficult, as all root material must be killed or removed to avoid re-sprouting. They may be most effectively controlled with the use of herbicides.

If not trimmed away, dried palm fronds form persistent "skirts" or petticoats around the trunks of fan palms. Such leafbase skirts can present a high fire hazard!

SEPTEMBER 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 ***2003 Curve Fire -*** *Los Angeles County, 50 Structures Lost, 20,857 Acres Burned*	2 ***2007 North Fire -*** *Los Angeles County, 0 Structures Lost, 2,200 Acres Burned*	3	4 ***2006 Day Fire -*** *Ventura County, 11 Structures Lost, 162,702 Acres Burned*	5
6 ***1955 Refugio Fire -*** *Santa Barbara County, 20 Structures Lost, 84,770 Acres Burned*	7 *Labor Day* ***1932 Matilija Fire -*** *Ventura County, No Structures Lost, 220,000 Acres Burned*	8	9	10	11	12 ***1948 Wheeler Springs Fire -*** *Ventura County, 17 Structures Lost, 22,503 Acres Burned* ***2007 Pine Fire -*** *San Diego County, Structures Lost Unknown, 2,170 Acres Burned*
13	14 ***2007 Butler II Fire -*** *San Bernardino County, Structures Lost Unknown, 14,039 Acres Burned*	15	16	17	18	19 *Rosh Hashanah*
20	21	22 ***2003 Williams Fire -*** *Los Angeles County, 62 Structures Lost, 38,984 Acres Burned*	23	24	25 ***1970 Foothill Fire -*** *Ventura County, 12 Structures Lost, 4,731 Acres Burned* ***1970 Wright/Clampitt Fires -*** *Los Angeles Cty., 183 Structures Lost, 135,028 Acres Burned*	26 ***1970 Laguna Fire -*** *San Diego County, 382 Structures Lost, 175,425 Acres Burned* ***1970 Camarillo Heights Fire -*** *Ventura County, 3 Structures Lost, 183 Acres Burned* ***1973 Potrero Fire -*** *Ventura County, 3 Structures Lost, 12,297 Acres Burned*
27	28 *Yom Kippur* ***2005 Topanga Fire -*** *Ventura, Los Angeles Counties, 3 Structures Lost, 24,175 Acres Burned*	29	30			

Justin McAlister

OCTOBER

is a good time to prepare for fall planting. Be sure to water plants in your defensible space and fuel management zone until regular winter rains arrive.

FIRE AND CHAPARRAL. Chaparral is California's most extensive native plant community. It is also the State's most characteristic wilderness, dominating foothills and mountain slopes from the Rogue River Valley in southern Oregon to the San Pedro Martir in Baja California. Properly defined, chaparral is a semi-arid, shrub dominated association of hard-leaved woody plants shaped by summer drought, mild, wet winters, and naturally recurring fires every 30 to 150 years plus. *(Halsey 2008, http://www.californiachaparral.com/chaparralfacts.html)*

Diverse Chaparral Plant Community - Photo by Rick Halsey

Chaparral often grows in a continuous stand of dense vegetation, creating a potentially flammable landscape. During dry weather with strong winds, fires in the chaparral spread rapidly. Many chaparral shrubs have flammable characteristics such as small fine leaves and the production of leaf litter and peeling bark. Wind driven, chaparral-fueled fires often burn hot and produce tall flames. From the flames come burning embers which can ignite homes.

In your defensible space, it is possible to reduce the fire risk posed by wildfire. Avoid planting, cut back, and remove the most flammable native species, including Red Shank, Chamise, California Sagebrush and Buckwheat. Properties with slopes and mature chaparral need greater spacing between shrubs. Maintain vertical and horizontal separation between plants to avoid fuel ladders. Water adequately so that plants are healthy and have high moisture content. Contact your local fire agency for more information.

Chamise (*Adenostoma fasciculatum*)

FEATURED PROBLEM PLANTS OF THE MONTH:

Eucalyptus Blue Gum

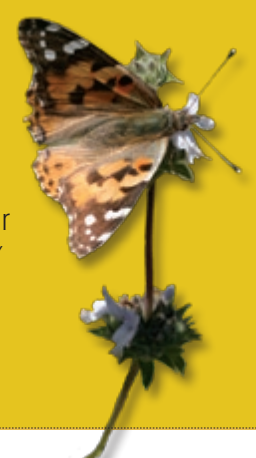
Eucalyptus *(Eucalyptus globulus)*
Left: plant close-up
Right: close-up of trunk

Jon M. Randall

Jon M. Randall

Blue Gum *(Eucalyptus globulus)*, native to Australia, is a tall (100-180 foot), aromatic (flammable resins, gums) with bark that sheds in long strips, leaving contrasting smooth surface areas. It is distinguished by tall growth habit, smooth bark, long leaves, and large, solitary, waxy buds and fruits. Within groves, biological diversity is lost due to displacement of native plant communities. Eucalyptus is a highly flammable and invasive and should not be planted near wildlands. Seedlings can be hand pulled but mature tree removals should be left to a professional. See the National Park Service Eucalyptus Newsletter *(http://www.nps.gov/goga/parkmgmt/fire_edu_newsletter_eucalyptus.htm)*.

NOTE that beyond your defensible space, native plants are essential ecosystem components and provide habitat for native birds, butterflies and other wildlife. Southern California's chaparral is known worldwide for its high levels of unique diversity of plants and animals. To preserve this natural heritage, its important to live responsibly in the wildland-urban interface. For more on our State's threatened biodiversity visit *http://www.biodiversityhotspots.org/*.

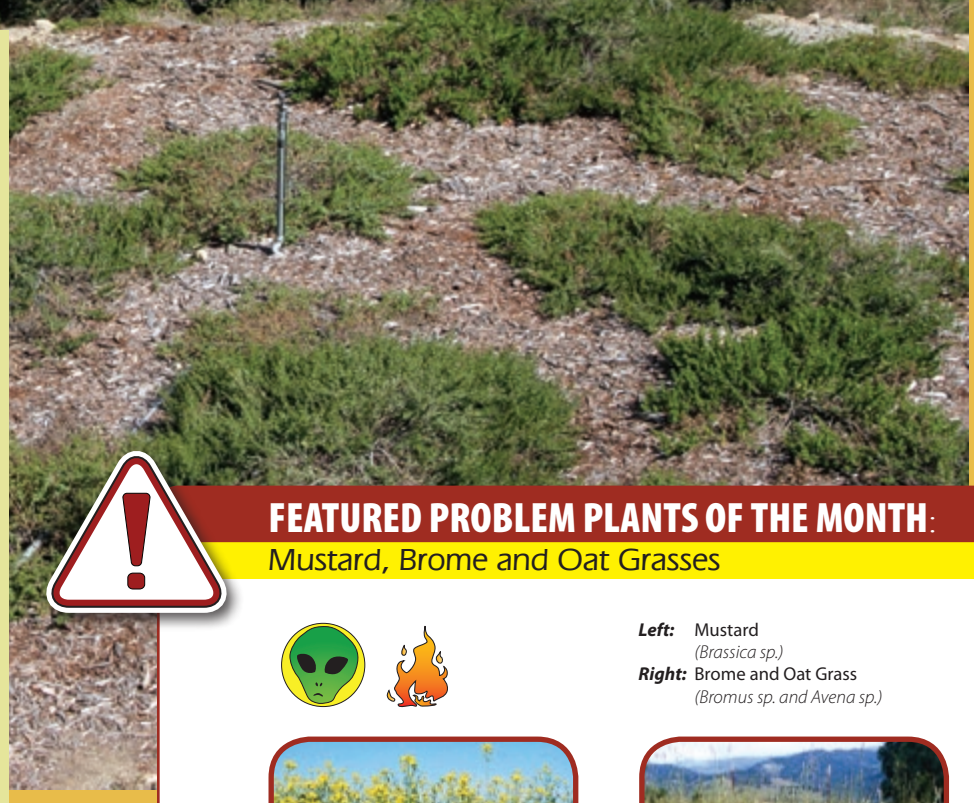


OCTOBER 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
11	12 Columbus Day ***2008 Marek Fire -*** *Los Angeles County, 42 Structures Lost, 4,824 Acres Burned*	13 ***2008 Sesnon Fire -*** *Los Angeles County, 78 Structures Lost, 14,703 Acres Burned*	14 ***1985 Ferndale Fire -*** *Ventura County, 20 Structures Lost, 46,809 Acres Burned*	15 ***1967 Sence Ranch Fire -*** *Ventura County, 76 Structures Lost, 18,354 Acres Burned* ***1967 Devonshire-Parker Fire -*** *Ventura, Los Angeles Counties, 48 Structures Lost, 23,088 Acres Burned*	16 ***1967 Timber Canyon Fire -*** *Ventura County, 8 Structures Lost, 10,841 Acres Burned* ***1967 Ditch Road Fire -*** *Ventura County, 13 Structures Lost, 1,245 Acres Burned*	17
18	19	20 ***2007 Ranch Fire -*** *Los Angeles County, Structures Lost Unknown, 58,401 Acres Burned*	21 ***1958 Calumet Fire -*** *Ventura County* ***2003 Grand Prix Fire -*** *San Bernardino County* ***2007 Buckweed/Canyon Fires -*** *Los Angeles County* ***2007 Harris/Witch Fires -*** *San Diego County* ***2007 Santiago Fire -*** *Orange County*	22 ***2007 Rice Fire -*** *San Diego County* ***2007 Cajon Fire -*** *San Bernardino County* ***2007 Grass Valley Fire -*** *San Bernardino County* ***2007 Slide Fire -*** *San Bernardino County* ***2007 Rosa Fire -*** *Riverside County*	23 ***1978 Kanan Fire -*** *Los Angeles County* ***1978 Mandeville Cyn. Fire -*** *Los Angeles County* ***2003 Piru & Simi Fires -*** *Ventura County* ***2007 Poomacha Fire -*** *San Diego County* ***2007 Ammo Fire -*** *San Diego County*	24
25 ***2003 Old Fire -*** *San Bernardino County, 1,003 Structures Lost, 91,281 Acres Burned* ***2003 Simi Fire -*** *Ventura County, 48 Structures Lost, 107,560 Acres Burned* ***2003 Cedar Fire -*** *San Diego County, 4,847 Structures Lost, 273,246 Acres Burned*	26 ***1993 Green Meadows Fire -*** *Ventura County, 45 Structures Lost, 38,477 Acres Burned* ***2003 Paradise Fire -*** *San Diego County, 223 Structures Lost, 56,700 Acres Burned* ***2006 Esperanza Fire -*** *San Bernardino County, 54 Structures Lost, 40,200 Acres Burned*	27 ***1993 Kinneloa Fire -*** *Los Angeles County, 196 Structures Lost, 5,485 Acres Burned* ***1993 Laguna Fire -*** *Orange County, 448 Structures Lost, 14,437 Acres Burned*	28	29	30	31 *Halloween*

NOVEMBER

is a good time to adjust your sprinkler timer. Water when no rain is predicted or when low humidity and Santa Ana winds create the need.



Coyote Brush Groundcover (Baccharis pilularis pilularis). Photo by Drew Ready

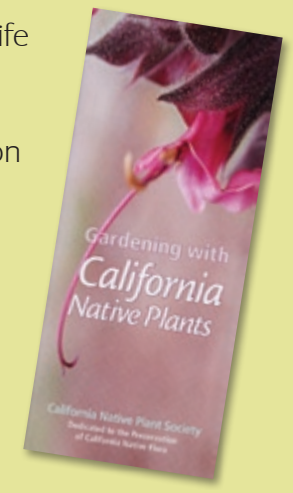
DROUGHT-TOLERANT LANDSCAPING. Create eye-catching gardens and landscapes that save water, prevent pollution, and protect the environment with drought-tolerant landscaping that uses designs and plants suited to local conditions.

How to create a drought-tolerant landscape:

- Use **native** and **low-water-use** plants
- Group plants according to their irrigation needs
- Limit turf areas to those needed for practical uses
- Use efficient irrigation systems
- Schedule irrigation wisely
- Make sure soil is healthy
- Remember to mulch
- Provide regular maintenance, especially to ensure fire resistance

In short, plan and maintain your landscape with these principles of water efficiency in mind and it will benefit the environment for years to come. In addition, attractive, water-efficient, low-maintenance landscapes will also increase home values. Drought-tolerant landscaping offers many economic and environmental benefits, including:

- Lower water bills from reduced water use
- Reduced landscaping labor and maintenance costs
- Conservation of natural resources and preservation of habitat for plants and wildlife
- Fewer yard trimmings to be managed or landfilled
- Reduced runoff of stormwater and irrigation water that carries top soils, fertilizers, and pesticides into lakes, rivers, and streams
- Extended life for water resources infrastructure (e.g., reservoirs, treatment plants, groundwater aquifers), thus reduced taxpayer costs



FEATURED PROBLEM PLANTS OF THE MONTH:

Mustard, Brome and Oat Grasses

Left: Mustard *(Brassica sp.)*
Right: Brome and Oat Grass *(Bromus sp. and Avena sp.)*

Joseph DiTomaso

Joseph DiTomaso

Invasive plants like Black Mustard, Common/Field Mustard, and Saharan Mustard *(Brassica nigra, B. rapa, and B. tournefortii)* are often miscontrued as harmless "naturalized" exotics. The same is true for the invasive grasses like Slender Oat, Wild Oat *(Avena barbata, A. fatua)* Cheatgrass, Red Brome/Foxtail Brome and Ripgut Brome *(Bromus tectorum, B. medritensis, and B. diandrus)*. Despite being here for over a century, these plants continue to have severe impacts on the environment. Dense stands of these invaders supress wildflowers and other low growing native plants. After fires, they monopolize available soil mosture long before many natives have a chance to germinate and reestablish. They die and dry in the spring/early summer and are responsible for increasing the ingintion potential and fire frequency of our wildlands due to their fast burning fine fuels. For more info visit: *http://articles.latimes.com/2008/mar/02/local/me-greenhills2*

NOVEMBER 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 ***1993 Old Topanga Fire -*** *Los Angeles County, 323 Structures Lost, 18,000 Acres Burned*	3	4	5	6 ***1961 Bel Air Fire -*** *Los Angeles County, 484 Structures Lost, 6,090 Acres Burned*	7 ***1955 Ventu Park Fire -*** *Ventura County, 8 Structures Lost, 13,956 Acres Burned*
8	9	10	11 *Veterans Day* ***1986 Bradley Fire -*** *Ventura County, No Structures Lost, 9,229 Acres Burned*	12	13 ***2008 Tea Fire -*** *Santa Barbara County, 210 Structures Lost, 1,940 Acres Burned*	14 ***2008 Sayre Fire -*** *Los Angeles County, 600 Structures Lost, 11,244 Acres Burned*
15 ***1977 Carlisle Fire -*** *Ventura County, No Structures Lost, 1,368 Acres Burned* ***2008 Freeway Fire -*** *Orange County, 400 Structures Lost, 30,305 Acres Burned*	16	17	18	19	20	21
22	23	24 ***1980 Panorama Fire -*** *San Bernardino County, 325 Structures Lost, 23,600 Acres Burned* ***2007 Corral Fire -*** *Los Angeles County, 87 Structures Lost, 4,901 Acres Burned*	25	26 *Thanksgiving*	27	28
29						

DECEMBER

is a good time to prepare for frost. Move tender container plants to a protected area. Plants killed by frost can become a fire hazard in the wildland-urban interface.

HOLIDAY TREE SAFETY IN THE HOME

Preventing Christmas Tree Fires

Take special fire safety precautions when keeping a cut tree in the house. A burning tree can rapidly fill a room with fire and deadly gases.

Selecting a Tree

Needles on fresh trees should be green and hard to pull from the branches, and the needle should not snap if the tree has been freshly cut. The trunk should be sticky to the touch. Old trees can be identified by bouncing the tree trunk on the ground. If many needles fall off, the tree has dried out and is a fire hazard.

Caring for Your Tree

Do not place your tree close to a heat source, including a fireplace or heat vent which can dry it out. The heat will dry out the tree, causing it to be more easily ignited by heat, flame or sparks. Be careful not to drop or flick cigarette ashes near a tree. Do not put your live tree up too early or leave it up for longer than two weeks. Keep the tree stand filled with water at all times.

Disposing of Your Tree

Never put tree branches or needles in a fireplace or woodburning stove. When the tree dries out, discard it promptly. The best way to dispose of your tree is by taking it to a recycling center or having it hauled away by a community pick-up service.

Outdoor Lights

Inspect outdoor decorative lights and make sure electrical elements are clear of any leaf litter or dead plant material.

FEATURED PROBLEM PLANTS OF THE MONTH:

Pines, Juniper, Cypress

Left: Pine *(Pinus spp.)*
Right: Juniper *(Juniperus spp.)*

Drew Ready

J. E. (Jed) and Bonnie McClellan

Pines *(Pinus spp.)*, **Junipers** *(Juniperus spp.)* **and Cypress** *(Cupressus spp.)* **species have characteristics that may make them highly flammable, such as the production of leaf litter or peeling bark, or the presence of volatile oils and resins. Though it may be possible to reduce their fire risk with frequent watering, intensive pruning, and wide spacing, it is recommended that these native species not be planted near homes in very high fire severity zones and care should be taken to remove them from the fuel management zone. Note that beyond the fuel management zone, the native species of these plants are important and attractive components of wildland ecosystems and provide habitat for native birds and wildlife. In Southern California these include:**

White Fir *(Abies concolor)*
Torrey Pine *(Pinus torreyana)*
Yellow Pine *(Pinus ponderosa)*
Coulter Pine *(Pinus coulteri)*
Grey Pine *(Pinus sabiniana dougl.)*
Tecate Cypress *(Cupressus forbesii)*
California Juniper *(Juniperus californica)*

Please unplug your Christmas tree lights before you leave the house!

DECEMBER 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3 ***2006 Shekell Fire -*** *Ventura County, 7 Structures Lost, 13,600 Acres Burned*	4 ***1962 Culbert Lease Fire*** *- Ventura County, 4 Structures Lost, 5,314 Acres Burned* ***1993 Towsley Fire -*** *Los Angeles County, No Structures Lost, 1,800 Acres Burned*	5
6	7	8	9	10	11 ***1958 Malibu/Zuma Fire -*** *Los Angeles County, 103 Structures Lost, 18,000 Acres Burned*	12 *Hanukkah*
13	14	15	16	17	18	19
20	21 ***1999 Ranch Fire -*** *Ventura County, 4,371 Acres Burned*	22	23	24	25 *Christmas*	26
27	28 ***1956 Lake Sherwood Fire -*** *Ventura, Los Angeles Counties, 20 Structures Lost, 35,164 Acres Burned*	29	30	31		

REFERENCE WEBSITES

California Fire Alliance	*http://www.cafirealliance.org*
California Chaparral Institute	*http://www.californiachaparral.com*
The California Fire-Safe Council	*http://www.firesafecouncil.org*
CAL FIRE Wildland Hazard & Building Codes	*http://www .fire.ca.gov/fire_prevention/fire_prevention_wildland.php*
California Invasive Plant Council	*http://www.cal-ipc.org*
California Native Plant Society	*http://www. cnps.org*
California Office of the State Fire Marshal	*http://osfm.fire.ca.gov/*
City of Beverly Hills Fire Department	*http://www.beverlyhills.org*
City of Los Angeles Fire Department	*http://www.lacity.org/*
Disaster101.com	*http://www.disaster101.com*
Firewise Communities	*http://www.firewise.org/*
Los Angeles and San Gabriel Rivers Watershed Council WeedWatch Program	*http://www.lasgrwc.org/exotics.html*
Los Angeles County Fire Department, Forestry Division	*http://www.fire.lacounty.gov/Forestry/Forestry.asp*
Los Angeles County Weed Management Area	*http://acwm.co.la.ca.us/scripts/wma.htm*
Mountains Recreation and Conservation Authority	*http://www.mrca.ca.gov*
National Institute of Standards and Technology - Building and Fire Research Lab	*http://fire.nist.gov/*
National Park Service – Santa Monica Mountains National Recreation Area	*http://www.nps.gov/samo/home.htm*
Natural Resources Conservation Service - NRCS	*http://www.nrcs.usda.gov/feature/wildfire.html*
PlantRight	*http://www.plantright.org*
The Fire Safe Council	*http://www.firesafecouncil.org/*
The Red Cross	*http://www.redcross.org*
UC Agriculture and Natural Resources - Homeowner's Wildfire Mitigation Guide	*http://groups.ucanr.org/HWMG/index.cfm*
UC Berkeley Center for Fire Research and Outreach	*http://firecenter.berkeley.edu*
UC Cooperative Extension Los Angeles; Sustainable and Fire Safe Landscapes	*http://celosangeles.ucdavis.edu; http://ucanr.org/safelandscapes*
USDA Forest Service - Fire Management	*http://www.fs.fed.us/fire*
US Geological Survey - Natural Hazards - Wildfire	*http://www.usgs.gov/hazards/wildfires*

Fill in your personal information, make a copy to keep with your disaster kit, and have one posted in the kitchen to leave in the house for your reference and for firefighters.

Name

Home Address

Home Phone Cell Phone E-mail

Additional Family Members Living at Same Address (incl. alternate phone #s)

Location and Phone Number of Children's School

Contact Person in Another Area (name, address, phone, alternate phone)

Location of Any Hazardous/Flammable Substances (propane tanks, etc.)

Location and Phone Number of Nearest Fire Station

Location and Phone Number of Nearest Police Station

Location and Phone Number of Nearest Emergency Room

Location of Nearest Red Cross Shelter

REFERENCE BOOKS

Bornstein, Carol, David Fross, and Bart O'Brien. 2005. *California Native Plants for the Garden*. Los Olivos: Cachuma Press.

Bossard, Carla C., John M. Randall and Marc C. Hoshovsky. 2000. *Invasive Plants of California's Wildlands*. Berkeley: University of California Press. Download this book online at *http://www.cal-ipc.org/ ip/management/ipcw/index.php*.

Brenzel, Kathleen Norris, editor. 2007. *Western Garden Book*. Menlo Park: Sunset Publishing Corporation.

Carle, David. 2008. *Introduction to Fire in California*. Berkeley: University of California Press.

DiTomaso, Joseph M. 2007. *Weeds of California and Other Western States*, Volumes 1 &2. University of California – Agriculture and Natural Resources Publication 3488, Oakland, CA

Halsey, Richard W. 2008. *Fire, Chaparral, and Survival in Southern California*. San Diego: Sunbelt Publications.

Jensen, Sara E. and Guy R. McPherson. 2008. *Living with Fire: Fire Ecology and Policy for the Twenty-first Century*. Berkeley: University of California Press.

Keator, Glenn. 2007. *Designing California Native Gardens, The Plant Community Approach to Artful, Ecological Gardens*. University of California Press.

O'Brien, Bart, Betsey Landis, and Ellen Mackey. 2006. *Care and Maintenance of Southern California Native Plant Gardens*. Los Angeles: MWD of So. Calif.

Pittenger, Dennis R. 2002. *California Master Gardener Handbook*. Phyllis M. Faber Books.

Rundel, Philip W. and Robert Gustafson. 2005. *Introduction to the Plant Life of Southern California: Coast to Foothills*. Berkeley: University of California Press.

Sugihara, Neil G., Jan W. van Wagtendonk, Kevin E. Shaffer, Jo Ann Fites-Kaufman and Andrea E. Thode, editors. 2006. *Fire in California's Ecosystems*. Berkeley: University of California Press.

University of California Cooperative Extension, California Department of Water Resources, and the United States Bureau of Reclamation. 2000. *A Guide to Estimating Irrigation Water Needs of Landscape Plantings in California*. Sacramento: Department of Water Resources.

DO YOU HAVE AN EMERGENCY SUPPLY KIT READY?

- bottled water
- water purification kit
- 3-day supply of food
- goggles
- respiratory masks
- work gloves
- flashlights
- batteries
- prescription medications and spare eye glasses
- protective clothing: sturdy shoes, cotton jeans, cotton long-sleeved shirts, scarves, bandanas
- FRS radio
- a first aid kit and first aid book
- hand sanitizer
- wool blankets
- a local map
- paper and markers
- pictures of family members

For Further information, please visit *www.redcross.org*.

II. Family Reunion information, fill out and make a copy for each family member

Where Will You Meet in the Event of Emergency? (name of place, address, phone number)

Out of State Contact (name, address, phone, alternate phone, email)

Health Care Provider/Doctor (address, phone, member number)

List all Medication, Dosage, Prescription Number, Prescribing Doctor

Pets (names, type, special needs)

Veterinarian (name, address, phone number)

Content by:

Valerie Borel, *UC Cooperative Extension, Los Angeles & Ventura Counties*
Sabrina Drill, Ph.D., *UC Cooperative Extension, Los Angeles & Ventura Counties*
Bill Nash, *Ventura County Fire Department*
Drew Ready, *Los Angeles & San Gabriel Rivers Watershed Council*
John Schoustra, *Nursery Growers Association of California*
John Todd, *Los Angeles County Fire Department - Forestry Division*

Design & Layout by:

Drew Ready, *Los Angeles & San Gabriel Rivers Watershed Council (Los Angeles County 2009 layout revisions)*
Valerie Borel, *UC Cooperative Extension, Los Angeles & Ventura Counties (Ventura County 2009 layout revisions)*
Jason Casanova, *Los Angeles & San Gabriel Rivers Watershed Council*

For questions, please contact:

UCCE - Los Angeles and Ventura Counties
Natural Resources Department
http://ucanr.org/safelandscapes
phone #323-260-2267

When 2009 ends, tear off the calendar dates and save this as a seasonal guide to fire safety.

Cover photo: WALL OF FIRE: Firefighter Jason Falarski "Battles to Save a House" by Wally Skalij, Los Angeles Times, October 23, 2007. Used with permission from LA Times Reprints. For more information about this photograph visit: http://www.latimes.com/news/local/la-me-fighter28oct28-w,0,5872999.story

We hope you enjoyed this SAFE-Landscapes Calendar! Please take a few minutes to answer these questions so that we can improve our program!

Do you live in or own property in the wildland-urban interface? __Yes __ No

Please rate the following: (circle one)	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. I found this calendar useful	1	2	3	4	5
2. Information in this calendar was new to me	1	2	3	4	5
3. I liked having the information in a calendar format	1	2	3	4	5
4. I am saving this to review in future years	1	2	3	4	5
5. I would have preferred to get this information in another format	1	2	3	4	5
6. I still feel the need for more information	1	2	3	4	5
Since reviewing this calendar:					
7. I am changing/have changed my landscape	1	2	3	4	5
8. I am more concerned about invasive species	1	2	3	4	5
9. I have taken invasive species out of my landscape	1	2	3	4	5
10. I avoided buying any invasive landscape plants	1	2	3	4	5

Do you recommend any additional topics or other improvements?

LA2009

Place
Postage
Here

SAFE Landscapes
UCCE – Los Angeles and Ventura Counties
Natural Resources Department
4800 E. Cesar Chavez Ave.
Los Angeles, CA 90022

SAFE LANDSCAPES STEERING COMMITTEE

American Society of Landscape Architects, University of California Los Angeles
Stephanie Landregan

Beverly Hills Fire Department
Greg Barton

California Chaparral Institute
Chris Blaylock (also **San Diego Natural History Museum**)
Rick Halsey

California Fire Safe Council
Cathy Brooke

City of Los Angeles Fire Department
Robert Knight

Los Angeles and San Gabriel Rivers Watershed Council
Jason Casanova
Drew Ready
Nancy Steele

Los Angeles County Agricultural Commissioner's Office/Weed Management Area
Sherlan Neblett

Los Angeles County Fire Department, Forestry Division
John Todd

National Park Service – Santa Monica Mountains National Recreation Area
Christy Brigham
Marty O'Toole
Marti Witter

Natural Resources Conservation Services (NRCS)
Casey Burns
Brooks Engelhardt
Ellen James

Nursery Growers Association of California
John Schoustra

Palos Verdes Peninsula Land Conservancy
Andrea Vona

University of California Cooperative Extension – Los Angeles
Valerie Borel
Sabrina Drill
Don Hodel
Rachel Surls

University of California Div. of Agriculture and Natural Resources Fire Workgroup
Gary Nakamura
Steve Quarles

United States Department of Agriculture Forest Service
Janet Nickerman

This project is supported by the Los Angeles County Fire Department Division of Forestry
and funded by the California Community Foundation,
California Department of Conservation, and National Park Service.