



# FORESTLAND STEWARDS

WORKING TOGETHER FOR HEALTHY FORESTS

## Construction and design considerations to help protect your home

In the San Diego fires of 2003, approximately 14% of the homes in the burn area were lost. However, only 4% of newer homes built under the higher 2001 building code standards were lost in the same area. Construction and design can make a difference.

What are the factors that can protect your home from wildfire? In a series of workshops around the state, UC Cooperative Extension Advisor Steve Quarles provides background information and concrete suggestions to help people improve the odds of their home surviving a wildfire.

### It's more than the house

The chances of your house burning depend on more than its construction; fire behavior also plays a major part. Fire behavior is based on a number of factors including available fuel, weather, topography, fire intensity, rate of spread, brand/ember generation, and more. Some of these you can control, others you can't.

The landscape around your house makes a difference. A fire resistant landscape has plants that are less flammable, low growing, and less able to throw out embers. However, the species of plants in the landscape are often less important than their moisture content and health. You'll want to keep plants well watered, pruned, and clear out debris.

### What can you do?

It's easier to design a new home to be fire resistant. What you can do for an existing home is largely a function of your pocket-book. Be sure to use fire/ignition resistant materials whenever you do any remodeling.

The most vulnerable parts of a home to wildfire are: 1) the roof covering; 2) vents, eaves, and windows; and 3) attached decks.

### Sneaky embers

The biggest danger to homes comes from embers. Embers can hide in eaves, attics, under decks, and on roofs. These embers can enter attic spaces through vents, and ignite accumulated combustible debris under decks and on roofs. Even after the firestorm has

*(continued page 3)*



*Steve Quarles demonstrates the burning characteristics of common building materials.*

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## FORESTLAND STEWARD

Forestland Steward is a joint project of the CA Dept of Forestry and Fire Protection, UC Cooperative Extension, and USDA Forest Service to provide information on the stewardship of private forestlands in California.

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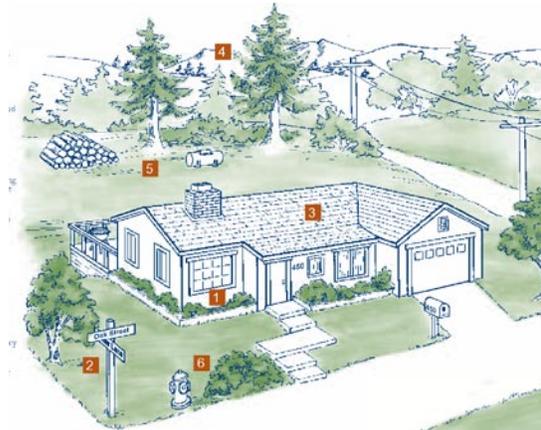
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# Fire safe information can be fun

Fire safety information has evolved to a whole new level on the California Department of Forestry & Fire Protection (CDF) website. Now, in addition to the articles and flyers traditionally found there, you'll see resources that take advantage of the creative possibilities of the web.

Two presentations, in particular, are fun to use and filled with valuable information: the Homeowner's Interactive Checklist ([http://www.fire.ca.gov/php/education\\_checklist.php#checklist](http://www.fire.ca.gov/php/education_checklist.php#checklist)) and "Controlling Nature's Wrath," a California Living-Fire Safe Video Presentation ([http://www.fire.ca.gov/php/education\\_video.php](http://www.fire.ca.gov/php/education_video.php)).



*The Homeowner's Interactive Checklist is much more than a checklist; it's entertainment for the whole family.*

## Homeowner's Interactive Checklist

This flash presentation starts with the well-known illustration of a home with numbers at critical areas of the house. Click on a number and a nice comprehensive list of things you can do comes up. But it's the audio slideshow (the little speaker symbol you probably won't notice unless you're looking for it) that makes this checklist unique. The audio/slideshow portion goes far beyond the checklist with photos and valuable information.

For example, the checklist says to post your address at the beginning of your driveway. The audio adds that the numbers should be a minimum of 4" high with a contrasting background and the sign should be of non-combustible material.

Look around the house, inside and out, for excellent tips and even find a disaster preparedness section. This is a good place to start when you work on your family's evacuation plan (see page 6).

## California Living-Fire Safe Video

"Controlling Nature's Wrath" is a professional video produced by CDF, OES,

Fire Safe Councils, FEMA, and PG&E. It covers many aspects of fire safety including the importance of pre-fire planning, fire safe construction, landscaping, evacuation plans,

prefire engineering, fire safe councils, and more. It is presented in short sections that are easy to watch on the web.

The narrators, Craig Miller and Vicki Liviakis, who lost her home in the Oakland fire, introduce the video saying "the effort you invest now will pay off even if you don't ever experience a fire."

The narrators then travel around the state to interview

landowners and professionals who illustrate fire safe issues.

The video takes viewers to a home in Glendora to learn what it takes to do a landscape makeover for fire safety. Discussions of defensible space, fire-resistant plants, and placement provide background to help landowners make landscape decisions for their own property.

Another segment introduces the viewer to fire safe construction (see article page 1). It talks about roof materials that resist fire and embers, as well as material and design considerations for eaves, vents, windows, and decks.

A CDF officer discusses why and how to develop a family evacuation plan (see page 6 for more), how to prepare for a fire, and what to bring with you if a fire occurs.

At the community level, we learn about fire safe councils that are working with CDF to identify areas most at risk of fire. Many of these groups are working on ways to decrease that risk. Neighborhood chipping programs and shaded fuelbreaks are two activities that have been successful in some communities. Find a fire safe council near you or start your own; more information at <http://www.firesafecouncil.org/>.

(continued from page 1)

passed and the home appears to be safe, hidden embers can ignite accumulated debris or nearby vegetation, resulting in loss of the home.

The roof is the top priority for protection. A large horizontal surface, it can receive burning embers from a mile or more away. The longer the roof can withstand the assault, the better your home's chance of survival.

Roofs are rated. The best fire protection comes from a Class A roof covering. But be aware—the Class A rating can be based only on the covering (the part of the roof you see) or on the covering *plus* underlying fire resistant materials. With assembly-rated coverings you need to follow the manufacturers installation instructions exactly, including all materials.

You want to do whatever you can to keep fire from entering your house. Dual pane windows with tempered glass perform best in a wildfire. Shutters or plywood coverings installed before the fire reaches your home will also help your home survive. If you have a combustible siding, select a lap joint pattern that provides more protection. For example, shiplap joints provide more protection than plain bevel joints.

Other areas of the home are also vulnerable. Eaves, joints, vents, material in the attic, walls, fences, decks...all can cause significant problems when a wildfire occurs. There are various techniques and materials designed to protect these areas. Current research is looking for better solutions.

### Moisture or fire?

As Quarles points out, “we can guarantee a house will be rained on, but we can't guarantee it will see fire.”

There are trade-offs in making a home fire resistant. A wide overhang on a roof increases



Studies are performed on various materials to determine performance. The brands (above) help to standardize the experiments.



Each structure was ignited with a B brand. In this test structure, fire burned through the material.

vulnerability to fire, however, it's there to protect the side of the house from rain. Vents are critical to homes to allow air to circulate and remove excess moisture, but they also let in flames and embers. As a homeowner, you need to think about how to balance the risks of fire on one hand with moisture damage on the other. The ability of your home to last depends on protecting it from both of these threats.

### Maintenance matters

Just using fire resistant material isn't enough—you'll have to do some work to keep your home fire resistant. It won't matter that you have a Class A roof if flammable material is covering it. If ignited, needles and other combustible debris on your Class A roof may ignite less durable components nearby. Damaged roofing should be replaced or repaired. Gutter protection devices can help keep gutters clear but maintenance is still necessary.

### Good choices and luck

A home's ability to survive a wildfire depends on many factors: the right design, correct installation, the materials or product, proper maintenance, and, of course, good luck.

### Resources

- San Diego County strengthened their codes on eave construction and venting restrictions. [www.co.san-diego.ca.us/dplu/docs/DPLU%20664.pdf](http://www.co.san-diego.ca.us/dplu/docs/DPLU%20664.pdf).
- State Fire Marshall: <http://osfm.fire.ca.gov/UWIBS.html>

For more information, or to find out about future workshops, contact Steve Quarles, (510) 665-3580; [steve.quarles@nature.berkeley.edu](mailto:steve.quarles@nature.berkeley.edu).

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Surviving a wildfire depends on many factors: the right design, correct installation, the materials or product, proper maintenance, and luck.

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## West Nile Virus

# Well-functioning wetlands are the best defense against West Nile virus

“Don’t fight with your spouse or boss and avoid long-term physical stress...at least until November.” This advice from Dr. Thomas Scott, Natural Resource and Wildlife Specialist for UC Cooperative Extension, can help you avoid a serious case of West Nile virus.

### Take care of your health

While most people who contract the disease get little more than mild flu-like symptoms, a small number develop brain encephalitis, which can lead to serious neurological problems and even death. Those with a weakened immune system—due to age, illness, or stress—are in the greatest danger.

West Nile virus is transmitted by mosquitoes, which can pass the virus to other species. One of the most remarkable things about this virus is just how far and wide its effects go.

According to Scott, West Nile virus “defies superlatives: it has been the largest, fastest naturally-dispersed disease outbreak to ever occur in North America. It has killed the widest range and greatest number of wildlife species ever recorded in North America ranging from cold-blooded bullfrogs to high-metabolism hummingbirds, from bats to elephants.”

Just about every vertebrate species in North America is vulnerable. Luckily, the virus is not transmitted between humans.

West Nile virus has only been in California

since 2003, but by the summer of 2004 the virus had spread to all the counties of the state. Little is known about the long-term behavior and impact of the virus in California. However, even in the short period of time it has been here, it has already devastated many species of birds, most notably those in the crow family, and has had a “remarkable impact on woodland wildlife.” The larger ecological consequences of the disease are yet to be seen.

### Knowledge is power

Understanding how West Nile virus works can help you come up with a realistic protection strategy.

Mosquito larvae must live in still water for five or more days before turning into adults capable of transmitting the disease. It doesn’t take much water to support these larvae. A single discarded tire can produce 500 mosquitoes.

West Nile virus infects a mosquito when it takes a blood meal from an infected animal. It can then transmit the disease to its next blood meal. Since the virus moves faster through the population at higher temperatures, outbreaks tend to occur when temperatures are greater than 90° for a week or more. The risk decreases when the weather turns cold at night.

There are a number of commonsense steps that can be taken to reduce habitat for mosquitoes and protect yourself from the disease (*see text box next page*). The most important are to get rid of any standing water around your house where mosquitoes are likely to breed and avoid getting bitten.

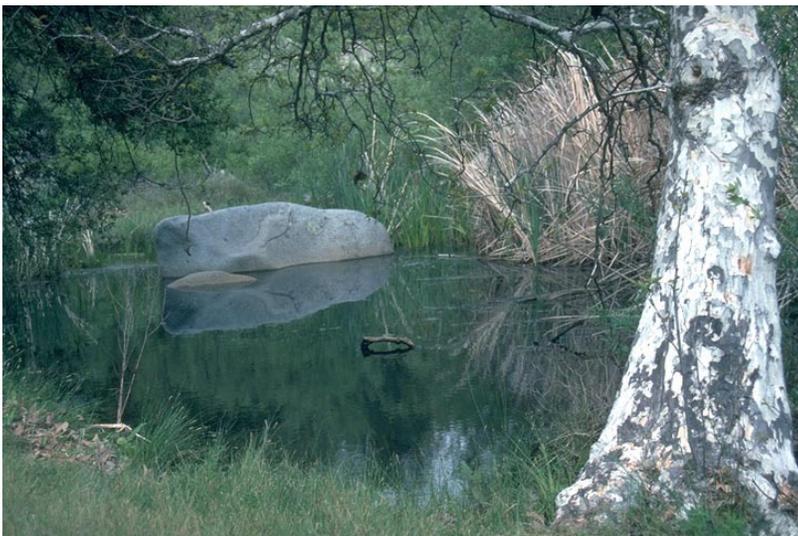
Although a number of insecticides are used to control mosquitoes, pesticides are not a long-term solution to West Nile virus. All pesticides have disadvantages, including toxicity to non-target species (including humans and mosquito predators), ecological consequences, cost, insect resistance, and other issues.

In the short-term, it may be necessary to apply a pesticide to a discreet area of infestation—a horse trough or other breeding areas near the home. But be strategic. It is not economically feasible to treat large areas like forests. It is best to look for long-term solutions that are safe and natural.

Wetlands—  
part of the  
problem or  
part of the  
cure?

*Contrary to widespread belief, intact wetlands provide the best mosquito control.*

© Marc Hoshovsky





*Playing the odds. While most mosquito bites are basically a harmless nuisance, a certain percentage can carry a number of diseases, including West Nile virus.*

### Keep your wetlands healthy

On the landscape scale, a healthy ecosystem is the best defense against mosquito outbreak.

Mosquitoes are a natural part of a healthy wetland ecosystem. They have an important role to play where they serve as food for a number of species. Fish, birds, bats, amphibians, and other insects all eat mosquito larva and/or adults. This generally keeps the mosquito population under control.

However, when wetlands are manipulated and disturbed the predators are often impacted first. While mosquitoes do well in disturbed environments, the species that eat them do not. Loss of the predators that keep the mosquito population in check can result in outbreaks.

This is a good time to check the state of any wetlands on your property and come up with a management plan for those habitats. You can use best management practices to keep the habitat healthy. A healthy wetland will have a diverse fauna of the natural enemies of mosquitoes including dragonflies, damselflies, water striders, predacious diving beetles, and other insects, fish, birds, and amphibians.

Some of the steps you may want to take include:

- Keep livestock out of wetlands.
- Fix areas where your roads cross wetlands.
- Get rid of non-native vegetation in wetlands.
- Allow compromised wetlands to recover by themselves, if possible, or actively restore wetlands to become self-sustaining.

As Dr. Scott reminds us, “Nothing works like a system that takes care of itself.”

## What you can do

### Look around your home for ways to prevent mosquitoes from breeding:

- Clean out old tires, tin cans, buckets, flowerpots, drums, bottles, or any object that holds water.
- Fill in or drain any low places such as puddles, ruts, etc.
- Keep drains, ditches, and culverts free of weeds and trash so water will drain properly.
- Keep roof gutters free of leaves and other debris.
- Cover trash containers to keep out rainwater.
- Repair leaky pipes and outside faucets.
- Empty plastic wading pools at least once a week and store indoors when not in use
- Unused swimming pools should be drained and kept dry during the mosquito season.
- Fill in or drain tree rot holes and hollow stumps.
- Change the water in horse troughs, birdbaths, and plant pots or drip trays at least once each week.
- Encourage habitat for swallows, dragonflies, and bats that eat adult mosquitoes.
- Store boats covered or upside down, or remove rainwater weekly.
- Practice balanced pond ecology using frogs, minnows, ornamental koi, or goldfish that devour mosquito larvae.
- Repair window screens to keep mosquitoes out.

### Protect yourself and your family:

- Limit activities at dawn and dusk when biting mosquitoes are most likely to be active.
- Use mosquito repellants when you are out of doors at times when mosquitoes are biting.
- Wear long sleeves, long pants, and socks to protect arms and legs.
- Do what you can to keep your immune system strong.

### Other things you can do:

- Report dead birds at 1-877-WNV-BIRD.
- For information about the disease in your community, contact your local department of health.
- Check the California State West Nile Virus website at <http://www.westnile.ca.gov> for up-to-date information on statewide monitoring and control.
- Call your local UC Cooperative Extension advisor for information on wetland protection and restoration.

## Seasonal Stewardship

Emergencies happen. If you live in a wildland area you know that you may need to evacuate quickly one day.

# Evacuation: Create a plan and practice

Some things, like wills and evacuation plans, aren't pleasant to think about, but you'll sleep better at night knowing you have them in place.

Emergencies happen. If you live in a wildland area you know that fire is a constant danger and that you may need to evacuate quickly one day. If that happens, what should you do? What do you take with you? How can members of your family find one another? These aren't questions you want to answer when a fire is upon you.

### Create a plan

Meet with your family and discuss the need for an evacuation plan. Come up with a plan together. Plan how to work as a team.

- Prepare an Evacuation Checklist to organize the things you will need (*see sample below*).
- Pick two places to meet: 1) right outside your home, and 2) outside your neighborhood in case you can't come back.
- Ask an out-of-state friend to be your family contact. Other family members should call this person to report their location. Everyone must know the contact's phone number.
- Make sure your neighbors have your contact numbers if you're away during the emergency.
- Include plans for neighbors who may need help, such as seniors or someone with a disability.

### Practice and maintain your plan

- Quiz your kids every six months so they remember what to do. Everyone must know their phone number and address.
- Conduct fire and emergency evacuation drills. Drive the evacuation routes.
- Replace stored water every three months and stored food every six months.
- Test and recharge your fire extinguishers according to manufacturer's instruction.
- Test your smoke detectors monthly and change batteries at least once a year.

### If evacuation becomes a possibility

- Locate your Evacuation Checklist and assemble the items on it. Place them in your vehicle.
- Park your vehicle facing outward and carry your car keys with you. Roll up the windows.

## Evacuation Checklist

Make up a checklist of items that are essential to you and place them in the car or protect ahead of time. The list may include:

- ✓ Important documents (bank, IRS, trust, investment, insurance policy, birth certificates, medical records)
- ✓ Credit and ATM cards
- ✓ Medications and prescription glasses
- ✓ Driver's license
- ✓ Passport
- ✓ Computer backup files
- ✓ Inventory of home contents (videotape or photograph the contents and exterior/landscape if there's time)
- ✓ Address book
- ✓ Cell phone and charger
- ✓ Personal toiletries
- ✓ Change of clothing, toiletries, etc.
- ✓ Family photo albums and videos
- ✓ Family heirlooms
- ✓ Flashlight
- ✓ Portable radio

Close the garage door but leave it unlocked. If applicable, disconnect the electric garage door opener so that the door can be opened manually.

- Locate pets and keep them nearby.
- Prepare livestock for transport.
- If possible, evacuate all family members not essential to preparing the house for wildfire. Be sure to designate a safe meeting place and contact person
- Cover up. Wear long pants, long sleeve shirt, heavy shoes/boots, cap, gloves, dry bandanna to cover your face, goggles or glasses. 100% cotton or wool clothing is preferable.
- Keep a flashlight and portable radio with you at all times.
- Tune in to a local radio station and listen for instructions.

## If there is time before you leave...

### Inside the House:

- Close all interior doors
- Leave windows closed with the air conditioning off.
- Leave a light on in each room
- Leave the door unlocked.
- Remove lightweight, nonfire-resistant curtains and other combustible materials from around windows
- Close fire-resistant drapes, shutters, and venetian blinds
- Turn off all pilot lights
- Move overstuffed furniture, such as couches and easy chairs, to the center of the room

### Outside:

- Place combustible patio furniture in the house or garage
- Shut off propane at the tank or natural gas at the meter
- Move propane BBQ appliances away from structures.
- Close all exterior vents if possible
- Prop a ladder against the house to provide firefighters with easy access to the roof

- Make sure that all garden hoses are connected to faucets and attach nozzles set on "spray"
- Close all exterior doors and windows
- Leave exterior doors unlocked
- Turn on outside lights
- Cover windows, attic openings, and vents with plywood at least one-half inch thick
- Wet down wood shake or shingle roofs
- Fill trash cans and buckets with water and place where firefighters can find them
- If you have an emergency water source (pool, pond, etc.) and/or portable pump, clearly mark its availability so it can be seen from the street
- Assemble fire fighting tools near an outside door (shovel, rake, hoe, etc.).



Remember,  
nothing you  
own is worth  
your life!  
Evacuate  
immediately  
when asked  
by fire  
fighters  
and law  
enforcement  
officials.

## Plan for your animals

Planning ahead can increase the chance of your pets and livestock surviving a wildland fire as well.

For both pets and livestock, put together a Disaster Preparedness Kit that contains vaccination and medical records, registration papers, proof of ownership, and a current photo of your animals. You will also want to include food and water, first aid items, medications, leashes, collars, harnesses, and all other items necessary for a week or two away.

### Livestock.

Know where you can take your animals. Contact vets, friends, fairgrounds, stockyards, etc. about their ability to take your livestock in an emergency. Plan your evacuation routes. If you don't have your own trailers,



make arrangements with local companies or neighbors before disaster strikes.

Clear defensible space around your barns and pastures just as you do your home. If you must leave your animals, leave them in a preselected, cleared area with food and water.

### Pets.

Since pets may not be allowed inside public emergency shelters you should make arrangements ahead of time. Talk with animal shelters or vets for information. Find a neighbor who will check on or transport your pets in case you are not at home. Make sure that neighbor has contact numbers and a key.

## Who are we?

Much has changed since the early years when Coop Extension advisors helped farmers maximize production.

# CE advisors bring expertise from the campus to the community

UC Cooperative Extension advisors provide a great service...they are the translators between academia and the real world. While the advisors bring new ideas, research, and technology to the public, they also take back current problems and issues for researchers to work on.

## A little history

Cooperative Extension (CE) has a long and distinguished history. A national program, it came out of the Land Grant system where money was given to the states in 1887 to develop educational institutions that would serve the working class. In California, the University of California is the recipient of land-grant monies. As such they have an obligation to assist the agricultural industry, including forestry.

Cooperative Extension is funded through a cooperative relationship that includes state money (through the UC system), federal dollars, and the counties providing office space, administrative assistance, and travel.

## A brave new world

Much has changed since the early years when the job of Cooperative Extension advisors was to help farmers maximize production. Today the world is more complex. The need now is to balance agricultural productivity with

pressing environmental concerns, such as water quality, wildlife, regulatory, economic, and other issues. Today, a great deal of the work of CE advisors and specialists involves providing information and applied research about controlling the impacts of agriculture/forestry on the environment. As an example, road workshops have been held on forest properties, vineyards, and ranch lands to discuss ways to minimize water quality impacts from roads. These larger issues do not have simple answers and require thoughtful problem-solving skills.

## Extension Forestry

Cooperative Extension Forestry comprises a small group in California, but they cover a lot of territory. Richard Harris and Gary Nakamura work on statewide issues. Greg Giusti (Mendocino-Lake), Mike De Lasaux (Plumas-Sierra), and Yana Valachovic (Humboldt-Del Norte) work on the county level. Each has broad expertise and can help provide solutions to a range of forestry-related problems. In addition, all county CE advisors in forested communities have some expertise in forest issues and will consult with statewide advisors when necessary. Other forestry-related advisors include Steve Quarles (Wood Durability) and John Shelly (Forest Products).

Information may be provided through a number of educational vehicles including one-on-one consultations, meetings, conferences, workshops, courses, demonstrations, field days, videos, software, manuals, applied research, curriculum, websites, etc. This newsletter, for example, is sponsored by UC Cooperative Extension in partnership with CDF and the USDA Forest Service.

The advisors are there to help on all levels. They can provide information on straightforward questions like "how do I find my property boundaries?" to complex questions like "what are my stewardship goals?" or "why are my trees dying?"

Clients include just about everyone involved in forestry including landowners, agency personnel, foresters, and other professionals who work with landowners. All consultations are confidential and at no charge. And, of

## Some publications from Cooperative Extension Forestry:

*Recovering From Wildfire, A Guide for California's Landowners.* Available through most UCCE offices (<http://ucanr.org/direct.shtml>) or Gary Nakamura (530-224-4902). \$5.

### *Southern California Forest Primer.*

This publication for the forest homeowner interested in maintaining their forest in a healthy condition. Discusses tree stress, mortality, and fire hazard. <http://ucce.ucdavis.edu/files/filelibrary/5098/11501.pdf>

*Illustrated Field Guide to Selected Rare Plants of Northern California.* Available through most CE offices (<http://ucanr.org/direct.shtml>) or Gary Nakamura's office. \$36.

course, there are no dumb questions.

Extension Forestry is a tremendous resource to California forestland owners, through both its publications and in-house knowledge. Be sure to take advantage of it.

To find your local Cooperative Extension office, look in the phone book or go to their website at <http://ucanr.org/index.shtml>.

## Don't miss these upcoming courses

Landowner-oriented workshops/short courses on fire, forest stewardship, and biomass are planned over the next few months sponsored by Coop Extension in partnership with other organizations. Some have limited enrollment, so be sure to register before the workshop. (See page 11 for details and registration information.)

### **September 17, 2005**

*Cloverdale, CA*

Wildfire and Your Home: defensible space and construction considerations for fire safe homes

### **September 30–October 1, 2005**

*Amador County*

Forest Stewardship Course

### **October 5–November 2, 2005**

*Humboldt County*

Forest Stewardship Course

### **October 12–13, 2005, Redding, CA**

Biomass Thinning for Fuel Reduction and Forest Restoration: technical field tour

### **March 24–April 28, 2005**

*Plumas-Sierra Counties*

Forest Stewardship Course

## CORRECTION!

The last issue of *Forestland Steward* contained an article on “Mechanical Fuel Reduction Around the Home” by Mike Delasaux of UC Cooperative Extension. Unfortunately, the website address was hopelessly mangled by the editor. To learn more about this worthy project, go to <http://ucce.ucdavis.edu/fuelreduction/>.



*Roads are a significant cause of water quality problems. Roads workshops sponsored by UC Cooperative Extension teach ways to recognize and reduce these problems (Extension Advisor Mike De Lasaux at right).*



*Extension Advisor Yana Valachovic observes the fire-resistant properties of various building materials during a workshop (see article p. 1).*



*Research focuses on finding fuels treatment that are economically feasible for small landowners (go to <http://ucce.ucdavis.edu/fuelreduction/>).*

## Resources

Natural processes, such as flood and fire, are integral to a healthy ecosystem.

## Make your forestland more hospitable to birds

If one of your objectives for your forestland includes enhancing habitat for wildlife, you will be interested in a series of Bird Conservation Plans developed by California Partners In Flight.

To date, six habitat and bioregion-based Bird Conservation Plans have been completed for Riparian, Oak Woodlands, Coastal Scrub and Chaparral, Grasslands, Coniferous Forests, and the Sierra Nevada Bioregion.

The conservation plans give a good background on the featured habitat and the threats facing it. They also provide species-specific recommendations and overall objectives. These are dynamic documents; recommendations will be updated as new information becomes available.

Although focused on birds, many of the conservation recommendations in the plans benefit other species as well.

The key concepts regarding bird conservation are:

- Reproductive success may be the most important factor influencing population health.
- Nesting habitat requirements vary among species.
- The breeding season is a short but vital period in birds' lives.



Photo: © 2004 Tom Greer

Acorn woodpecker

- Understory (the weedy, shrubby growth underneath trees) is crucial to birds.
- Native plants are important to birds.
- Natural predator-prey relationships are in balance, but human disturbance may create an imbalanced system.
- Natural processes, such as flood and fire, are integral to a healthy ecosystem.

For more information and to download the bird conservation plans, go to <http://www.prbo.org/calpif/plans.html>.

## Technical Assistance

Many agencies are available to provide technical assistance, referrals, information, education, land management plan assistance, and advice.

**California Stewardship Helpline**  
1-800-738-TREE; [ncsaf@mcn.org](mailto:ncsaf@mcn.org)

**California Dept of Forestry & Fire Protection**  
Forest Landowner Assistance Programs  
Jeffrey Calvert  
916-653-8286; [jeff.calvert@fire.ca.gov](mailto:jeff.calvert@fire.ca.gov)

**Forestry Assistance Specialists**  
Jill Butler (Santa Rosa) 707-576-2935  
Scott Bullock 559-243-4126  
Ed Cranz (Placer) 530-889-0111 x128  
Mary Huggins (S. Lake Tahoe) 530-541-1989  
Patrick McDaniel (Ama/El Dorad) 530-647-5288  
Dale Meese (Butte) 530-283-1792  
Alan Peters (Calav/Tuol) 209-754-2709  
Kevin Whitlock (Yuba/Nevada) 530-265-2661  
Jim Robbins (Fortuna) 707-726-1258  
Adam Wyman (Red Bluff) 530-528-5116

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**California Dept of Fish & Game**  
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**California Resources Agency:**  
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**Farm Service Agency**  
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**U.C. Cooperative Extension Forestry**  
Richard Harris  
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**USDA Forest Service**  
Sandra Stone  
707-562-8918; [ssstone01@fs.fed.us](mailto:ssstone01@fs.fed.us)

## Calendar

### September 13–15, 2005

#### Board of Forestry

Location: Lake Tahoe, CA  
 Sponsor: Board of Forestry  
 Contact: Dawn LaFranco 916-653-8007  
<http://www.fire.ca.gov>

### September 17, 2005

#### Wildfire and Your Home: defensible space and construction considerations for fire safe homes

Location: Cloverdale, CA  
 Sponsor: UC Cooperative Extension  
 Contact: Kathy Perry; [ksperry@ucdavis.edu](mailto:ksperry@ucdavis.edu) or David Lewis 707-565-2621 [djllewis@ucdavis.edu](mailto:djllewis@ucdavis.edu)  
 Cost: \$10 before 9/10/05

### September 30–October 1, 2005

#### Forest Stewardship Course

Location: Amador County  
 Sponsors: UC Cooperative Extension & UC Center for Forestry  
 Contact: Scott Oneto 209-223-6482; [sroneto@ucdavis.edu](mailto:sroneto@ucdavis.edu)  
 Cost: TBA  
<http://groups.ucanr.org/forest/>

### October 5–November 2, 2005

#### Forest Stewardship Course

Location: Humboldt County  
 Sponsors: Humboldt Co UC Cooperative Extension & UC Center for Forestry  
 Contact: Yana Valachovic 707-445-7351; [yvala@ucdavis.edu](mailto:yvala@ucdavis.edu)  
 Cost: \$50  
 Notes: 7 sessions and 2 field trips; limited to 30; call for flyer

### October 6–8, 2005

#### California Invasive Plant Council Symposia

Location: Chico, CA  
 Sponsor: California Invasive Plant Council  
 Cost: TBA  
<http://groups.ucanr.org/ceppc/Symposia/>

### October 6–7, 2005

#### Hinkle Creek Watershed Study—Tracking the Environmental Effects of Contemporary Forest Practices

Location: Roseburg, OR  
 Sponsor: Oregon State University  
 Contact: 541-737-2329; [forestry.outreach.education@oregonstate.edu](mailto:forestry.outreach.education@oregonstate.edu)  
 Cost: TBA  
<http://outreach.cof.orst.edu/advgis/index.htm>

### October 11–13, 2005

#### Board of Forestry

Location: Sacramento, CA

Sponsor: Board of Forestry  
 Contact: Dawn LaFranco 916-653-8007  
<http://www.fire.ca.gov>

### October 12–13, 2005

#### Biomass Thinning For Fuel Reduction and Forest Restoration—Technical Field Tour

Location: Redding, CA  
 Sponsors: N. Cal. Society of American Foresters and UC Cooperative Extension  
 Contact: Sherry Cooper 530-224-4902; [slcooper@nature.berkeley.edu](mailto:slcooper@nature.berkeley.edu)  
 Cost: \$100 SAF members; \$125 non-members; \$25 late fee  
 Notes: Pre-registration required—online at: <http://groups.ucanr.org/forest/>

### October 28, 2005

#### CLFA Fall Workshop

Location: Redding, CA  
 Sponsor: California Licensed Foresters Assn.  
 Contact: Hazel Jackson 209-293-7323; [clfa@volcano.net](mailto:clfa@volcano.net)  
 Cost: TBA  
<http://www.clfa.org/>

### November 15–16, 2005

#### CFPC Annual Meeting

Location: Woodland, CA  
 Sponsor: California Forest Pest Council  
 Contact: Susan Frankel 510-559-6472; [sfrankel@fs.fed.us](mailto:sfrankel@fs.fed.us)  
 Cost: TBA  
<http://www.caforestpestcouncil.org/>

### November 15–17, 2005

#### Board of Forestry

Location: Sacramento, CA  
 Sponsor: Board of Forestry  
 Contact: Dawn LaFranco 916-653-8007  
 Notes: [www.fire.ca.gov](http://www.fire.ca.gov)

### November 17–18, 2005

#### Science and Management of Headwater Streams in the Pacific Northwest

Location: Corvallis, OR  
 Sponsor: Oregon Headwaters Research Coop  
 Contact: Liz Dent 503-945-7371; [ldent@odf.state.or.us](mailto:ldent@odf.state.or.us); Bob Danehy 541-741-5219; [Bob.Danehy@weyerhaeuser.com](mailto:Bob.Danehy@weyerhaeuser.com)  
<http://www.headwatersresearch.org/>

### December 13–15, 2005

#### Board of Forestry

Location: Sacramento, CA  
 Sponsor: Board of Forestry  
 Contact: Dawn LaFranco 916-653-8007  
 Notes: [www.fire.ca.gov](http://www.fire.ca.gov)

## Forest Stewardship Courses

Would you like to better understand your forest, develop goals for its protection and improvement, and produce a management plan to achieve those goals in an ecologically and economically sustainable manner? If so, register now for one of the workshop/field trip series designed to assist family forest landowners like you. Class sizes limited. Call 530-224-4902 for info.

*For more information on these events call the number provided or the Forest Stewardship Helpline, 1-800-738-TREE. To submit an event, contact Sherry Cooper, 530-224-4902; [slcooper@nature.berkeley.edu](mailto:slcooper@nature.berkeley.edu). Find a more comprehensive calendar at the Forest Stewardship website <http://ceres.ca.gov/foreststeward>*

## Fire Safety

# Fire safe demonstration gardens

### Quail Botanical Gardens

Quail Botanical Gardens collects and displays plants from regions of the world with a climate similar to Southern California's. The fire



*California poppies are a native plant found on the plant list used for the UC Berkeley Fire Safe Garden.*

*© Br. Alfred Brousseau, Saint Mary's College of California*

safe garden demonstrates the type and arrangement of ornamental plants and details of house construction to mitigate the risk of wildfire.

230 Quail Gardens Drive,  
Encinitas, CA 92024  
Contact: Garden  
Manager, (760) 436-3036  
Sponsor: Quail Botanical  
Gardens Foundation

Open daily, 9 a.m.–5 p.m.  
\$5/adults, \$4/seniors, \$2/children; under 5 free  
Wheelchair accessible

### City of Santa Barbara Firescape Demonstration Garden

The Firescape Demonstration Garden shows how landscape design can significantly reduce or prevent wildfire damage to home and property. The garden is firesafe, water efficient, and beautiful all in one design.

The garden lies within a fire prone oak woodland environment. It features 1.7 acres of

water efficient, native, and non-native plants. It is designed as a self-guided tour and is divided into four zones that help reduce the spread of wildfire to your home.

Location: Mission Ridge Road and Stanwood Drive, across from 2411 Stanwood Dr.  
Contact: Ann Marie Marx, Santa Barbara Fire Department, amarx@ci.santa-barbara.ca.us; (805) 965-5254  
Sponsor: City of Santa Barbara  
Open daily, 8 a.m.–sunset; Free  
Not wheelchair accessible

### UC Berkeley Fire Safe Garden

The Berkeley Fire Safe Garden was designed to be low maintenance, aesthetically pleasing, realistic, and interactive. Included are landscape components commonly found in California homes, such as fences, raised beds, seating areas, and walkways (and complies with handicapped accessibility). All of the species are listed as "fire resistant" in four categories: native, drought-resistant, ornamental, and edible/herb.

A 15'x20' structure in the garden represents a building at risk with examples of both firesafe and hazardous materials, and construction techniques. Other features show details related to deterioration protection from fungi and termites, seismic and wind hold-downs, and thermal insulation. For more information, including the garden plant list, go to <http://nature.berkeley.edu/~fbeat/FireMit/garden.html>.

Location: Across the street from the UC Forest Products Laboratory (UCFPL), 1301 S. 46th Street, Bldg. 478, Richmond, California  
Sponsor: UCFPL and the Richmond Field Station, UC Berkeley  
Wheelchair Accessible

### Elfin Forest Fire Safe Garden

Location: Behind the Elfin Forest Fire Department at 20223 Elfin Forest Rd., Escondido, California 92029

Contact: Frank Twohy, 760/744-2186  
Sponsor: Fire Safe San Diego  
Open daily (self-tour), dawn to dusk; Free  
Wheelchair accessible

### Firescape Garden

The Firescape Garden was designed in 1993 at the Los Jilqueros Preserve on Mission Road in Fallbrook, CA. It is located on a 44-acre greenspace and is 1/2 acre in size. Open daily.

Location: North of high school on Mission Rd.  
Contact: Roger Boddard, 760/728-4297

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To save on printing costs and paper, we encourage you to get the internet version of *Forestland Steward*. Check here for an email copy of each issue instead of a hard copy.

Send to CDF, Forestry Assistance, P.O. Box 944246, Sacramento, CA 94244-2460.

Phone: (916) 653-8286; Fax: (916) 653-8957; email: [jeff.calvert@fire.ca.gov](mailto:jeff.calvert@fire.ca.gov)