



FORESTLAND STEWARDSHIP

Ranch Fire highlights value of pre-fire planning

It was one of the last fires of the century. On the evening of December 21, 1999, the Ventura County Fire Department received the report of a wildland fire in the Upper Ojai Valley.

Terry Raley, Wildland Fire Officer for Ventura County Fire District describes that night, "I can't tell you what it was like...like Hiroshima. The winds were 70-90 miles per hour, we couldn't see, people were hysterical..."

Santa Ana winds were blowing more than 25 mph when the 911 call came in, increasing to over 70 mph during the night. Sixty-eight homes on Sisar Road were immediately threatened; four schools, countless other structures, and even the City of Ojai and Los Padres National Forest were in possible danger.

Surprisingly, given the conditions, only one home and a barn were lost. This fire goes down in the history books as a success, which nobody doubts was entirely due to the pre-fire projects that had been carried out in the community.

The problem had been identified



Ojai Valley School was threatened by the fire which burned up to the cleared area.

years earlier. This was an area of dense fuel beds that had not burned in at least 50 years. In early 1993, a 5-year Burn Plan was submitted by the County to the California Department of Forestry and Fire Protection (CDF). The Plan identified those areas most at risk of a wildland fire disaster.

The goals and objectives of the Burn Plan were to:

- ◆ provide defense against wildfire destroying private property where fire hazard reduction cannot stand alone.
- ◆ provide and/or improve wildlands carrying capabilities and habitat

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Changes

Changes ahead for Forest Stewardship

James R. Geiger

Two thousand years ago Ovid, a Roman poet, already knew the significance of change. He said: "All things change. Yet nothing is extinguished...there is nothing in the whole world which is permanent. Everything flows onwards and all things are brought into being with a changing nature." And so it is with the Forest Stewardship Program, more changes are coming that I want you to be ready for. But first....

Where We've Been

It all began ten years ago when the 1990 Farm Bill created the Forest Stewardship (FSP) and Stewardship Incentive Programs (SIP). These Federal programs gave non-industrial private forestland owners (NIPFs) like you financial assistance to help you improve the management of your forestland and enhance its valuable resources. The FSP provided funds for technical assistance to prepare stewardship plans and SIP was there to help fund cost-share projects like pre-commercial thinning or tree planting.

Funding for these programs is provided by the USDA Forest Service and administered by California Department of Forestry and Fire Protection (CDF). Initially FSP was funded at approximately \$200,000 per year and SIP was at approximately \$250,000.

Changes

By 1995, SIP's success had peaked. Funding had increased to \$364,700 and over 200 California NIPFs had taken advantage of the financial incentives for various projects from tree planting to stream restoration. However, the very next year SIP experienced more than an 82% reduction in funding, and by 1999 the funding for cost-share projects was totally eliminated. Cost-share projects

had lost favor with Congress. Today, SIP is still unfunded.

This dramatic reduction in SIP funding became an opportunity for FSP to demonstrate a better way of doing business. Until 1996, FSP had concentrated on helping individual landowners with planning and other management issues. Now it was evident that FSP's strength would be in leveraging dollars to assist Resource Conservation Districts (RCDs) and other watershed groups prepare community watershed plans and conduct multi-owner projects. The shift from individual landowner plans to multiple owner plans and projects was a more efficient use of the federal dollars and demonstrated a benefit to the larger watershed community. Plans and projects must still be conducted by individual landowners, but until they are incorporated into the larger picture of a watershed level plan or project the real benefits to the community are not realized.

Yet To Come

It is obvious that more changes in forest stewardship will come. I can't say with certainty what they will be, but they will fall in the following general areas:

Funding

- ◆ SIP will probably never receive Federal funding again.
- ◆ The California Forest Improvement Program (CFIP), a state-funded cost-share program, will continue to be available to NIPFs.
- ◆ You will see more emphasis on programs that are delivered at the watershed level.
- ◆ CFIP will coordinate with FSP to place more emphasis on multi-owner plans and projects.
- ◆ You can expect water quality to be the driving force behind many future

requests-for-proposals, regardless of the agency or organization.

- ◆ Financial assistance will be more available and accessible to you as we create one-stop shopping in local watershed communities.

Watersheds

- ◆ There will be increased emphasis on the following:

- Watershed planning
- Biological studies
- Watershed assessments
- Baseline monitoring
- Satellite mapping

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- ◆ You will see increased availability of this information on the internet.
- ◆ The use of conservation easements will be linked more closely to the watershed level planning process.

Partnerships

- ◆ You will see an increased emphasis on shared responsibility between agencies, NIPFs and the community for fixing watershed problems.
- ◆ Agency roles will shift from one of working *for* communities to one of working *with* communities.
- ◆ You can expect leadership and responsibility to come from within the community (FireSafe Councils or watershed organizations) rather than from agencies such as CDF.
- ◆ The increased utilization of pre-fire fuels will depend on the development of new partnerships to create the solutions that will work for each unique watershed.

Communication

- ◆ You will see less reliance on paper communication and more on electronic communication. We will still produce a newsletter but fewer copies will be mailed. It will primarily be produced for the internet.
- ◆ You will find most new stewardship information on the internet.
- ◆ The adoption and diffusion of new ideas in your community will primarily be through one-on-one contact; you talking to your neighbor and your neighbor talking to you, etc.


**Visit the California
Forest Stewardship
website at
[http://ceres.ca.gov/
foreststeward](http://ceres.ca.gov/foreststeward)**

Rely on the 1-800-738-TREE California Forest Stewardship Helpline. Call anytime you have a forestry question.

What Does This Mean For You?

As you can see, I expect a number of significant changes to occur in the future. They will probably be subtle changes for the most part, and yet these changes could be frustrating to you if you're not prepared. By doing a little planning and preparation you will be able to take these changes in stride.

Here is what I suggest you do:

1. Seek sources of funds for your forestland projects from a number of different sources. Don't just rely on your favorites because they won't last forever. There are a lot of grant dollars available

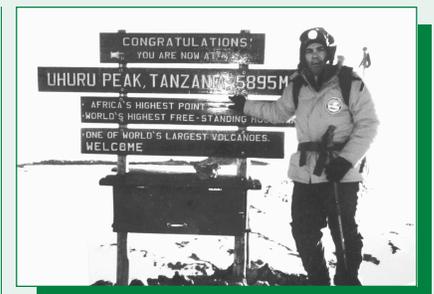
right now, but it will take some time and energy on your part to find the right one for you. Start with the Forest Stewardship website and our Helpline.

2. If you don't already have a computer, buy one and get connected to our website and communicate with us by email.
3. Rely on the 1-800-738-TREE Helpline. Call anytime you have a forestry question.
4. Become a member of a watershed or forestland owner organization. Call the Helpline to find out which one is best suited for you.
5. Don't rely on just one agency or organization to solve all of your problems. Agencies and organizations have become too specialized. Seek out the one that best meets your needs. Call the Helpline or try different websites.
6. And last, but definitely not least, rely on your neighbors. This is the key to successful communities, especially watershed communities. Together you have strength and power and can solve your watershed problems.

And Yet Another Change

Jim Geiger is leaving us. Jim has taken a new job beginning August 7, 2000. He will be working for the USDA Forest Service, and will be assigned to the Western Center for Urban Forestry Research and Education in Davis, California. Jim will be the technology transfer specialist serving the 17 western states. He will assist with the development of cutting-edge technologies and training programs from science-based information, as well as extend the Center's research expertise to solve local problems and build community capacity.

Jim brings nearly 25 years of experience working with individuals and community organizations to this new position. He is leaving his current job as the Forest Stewardship



Jim Geiger on Kilimanjaro, Africa, August 1999. Summit 19,344 ft.

Program Manager at CDF. From 1978-1993 he served as the Urban Forestry Program Manager with CDF and prior to that he worked as a City Forester for the City of Chicago.

Jim assures us he will continue to climb mountains. His next adventures are to Everest Base Camp in April/May 2001, Machu Picchu, Peru, in 2002, Aconcagua, Argentina in 2003.



Ranch Fire: a success story *(continued from page 1)*

diversity for wildlife.

- ◆ consider and protect the values of air quality, historical artifacts, and endangered plants and species.

In the spring of 1993, an education campaign was conducted to explain the potential of a major fire to people in the community. Public meetings were held, and pamphlets were delivered to residents. About 17,000 notices were sent out requiring 100 feet of defensible space clearance around homes. 99% of the community complied—the remaining properties were cleared by the county.

A working plan was created through the cooperative effort of landowners, USDA Forest Service, CDF, Ventura Air Pollution Control District, and local businesses, schools, organizations, and residents.

The Vegetation Management Burn Plan, written by the Ventura County Fire Protection District, incorporated the Sisar Road area which had no recorded fire history. The Plan involved cutting, stacking, and burning the brush from a fuel bed northeast of Sisar Road.

Fortuitously, following a series of major firestorms in 1993, the Federal Emergency Management Agency (FEMA) made grant funding available for hazard mitigation projects. The Sisar



Thanks to pre-fire treatments, only one house burned on Sisar Road (not shown).

Road project was already underway when the Fire District applied for and received a FEMA grant for \$42,000 in 1995. The County Board of Supervisors agreed to provide the matching funds of \$10,500.

Extensive work was done in the Sisar Road area:

- ◆ 200 acres of brush was cut, stacked and burned adjacent to the road in May 1994.
- ◆ An additional 150 acres was cut and stacked west of Sisar Road in 1995.
- ◆ A 659-acre prescribed fire was conducted on the west side of Sisar Creek in 1997, giving the residents of Upper Ojai a defensible space from the threat of fire under an east wind condition.
- ◆ Preparatory work was ongoing on the

areas of regrowth behind the residences in 1998.

- ◆ Approximately 65 acres of regrowth was cut, stacked and burned in the early part of 1999.

When fire finally came through the area that windy night in late 1999, it hit the pre-fire treatment areas, which slowed it enough to allow firefighters to get control.

Bob Roper, Fire Chief of the Ventura County Fire Protection District, is quick to point out that a key component of this story was the partnerships that formed in Ventura. Local citizens and organizations, and local, state, and federal agencies all contributed to the success. The Federal Emergency Management Agency (FEMA) and California Office of Emergency Services (OES) provided funding for pre-fire work. Ventura County Air Pollution Control District was instrumental in facilitating the prescribed burns. Local landowners, Fire Safe Councils, CDF, and the USDA Forest Service were all involved in the work at different stages.

Is all this pre-fire effort justified financially? The total costs associated with the project preparation (chain saws, minor tools and equipment, transportation, equipment rental, CDF handcrew time, meals, and planning) came to approximately \$40 per acre. Cost of the 659-acre prescribed burn (including meals, helicopter time, and personnel costs) was about \$17 per acre—altogether a little over \$25,000.

On the other hand, the Ranch Fire consumed 4,500 acres with suppression costs over \$1000 per acre—that's more than \$5 million total!

But most impressive of all is the cost of what could have happened. With homes on Sisar Road alone valued over \$20 million, plus schools, orchards, a national forest, and a city in its path, the Ranch Fire could easily have caused astronomical damage. The fact that it didn't is a tribute to the forethought and efforts of this community.



Looking south to Ojai Valley. The foreground was burned into a "moonscape."



Seasonal Stewardship

Danger spots around your home

Untreated wood shake roofs:

Untreated wood shake roofs, which can catch windblown sparks, are the number one cause of home losses in wildland areas.

Solution: Install a fire resistant roof when you re-roof.

Debris on roofs:

Tinder dry needles and leaves on your roof and in your rain gutters can easily catch fire and endanger your home.

Solution: Sweep your gutters and roof on a regular basis, especially during the dry, hot weather of the fire season. Install a screen over the gutters.

Tree limbs too close to your chimney and roof

Tree limbs too close to your chimney can easily ignite and endanger your home. Dead limbs overhanging your home may ignite and spread a fire to your home.

Solution: Trim all tree limbs that are within 10 feet of your chimney and remove all dead limbs overhanging your home or garage.

No screen on attic and foundation vents:

Sparks or embers from an approaching wildland fire can get into your home through unprotected vents and ignite your home.

Solution: Cover your attic and foundation vents with wire mesh no larger than 1/2 inch mesh.

No spark arrester on chimney

A spark from your chimney can ignite the surrounding wild vegetation.

Solution: To ensure that you don't create your own spark hazard, screen your chimneys with 1/2 inch mesh noncombustible wire screening.

Combustible materials stored too close to your home

Firewood or other combustible materials stored too close to your home can ignite and spread a fire into your home.

Solution: Store all combustible materials away from your home and keep the lids on your garbage cans.

Address sign not visible from the street

No visible address number will cause a delay in an emergency. Remember the fire department cannot help you if they cannot find you.

Solution: Make sure your home can be quickly identified by ensuring that its address is clearly marked and visible.

Overgrown, dead landscape

Overgrown, dead landscape can ignite

and endanger your home.

Solution: Maintain your landscape. Trim and remove any dead vegetation. If you are relandscaping, choose plants that are fire resistant.

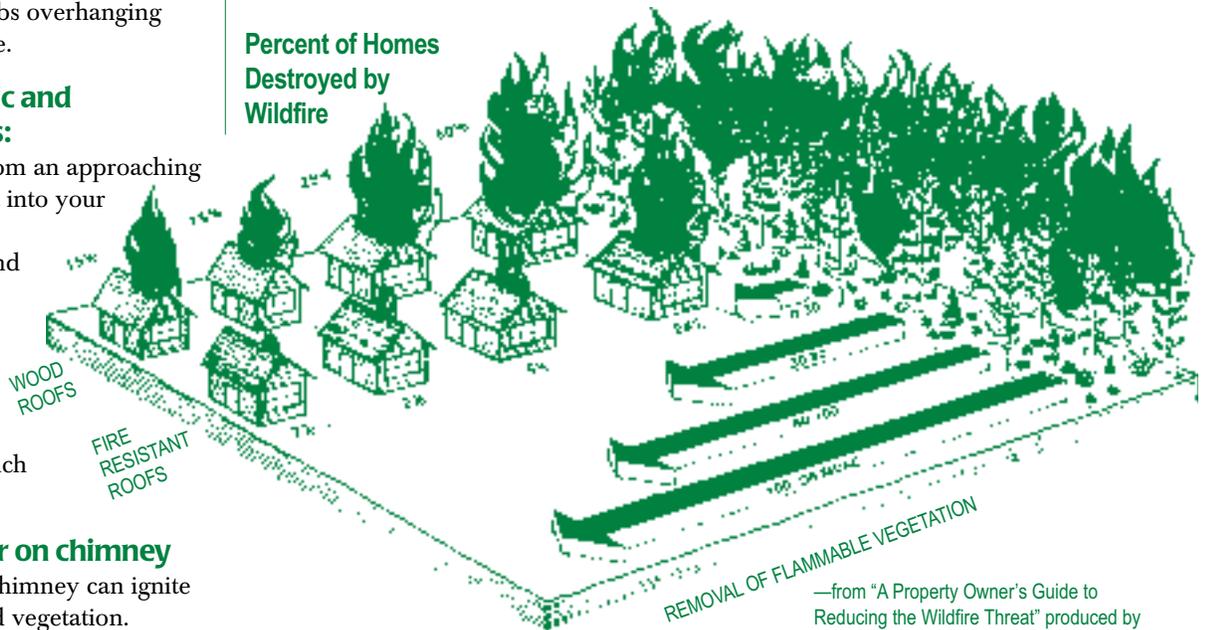
No defensible space between your home and wild vegetation

Flammable wildland vegetation too close to your home will make it almost impossible for firefighters to save your home in the event of a brush fire.

Solution: In most areas, a safety zone should be cleared away from your home for a distance of not less than 30 feet. As the slope of your lot increases, additional clearance of 100 feet or more may be necessary.

Clearance also depends on vegetative conditions that provide ladder fuels that enable fire to climb into trees. Trees and shrubs are fine, as long as dead or low hanging branches are removed.

—from the San Mateo Co. Fire Safe Program



—from "A Property Owner's Guide to Reducing the Wildfire Threat" produced by UC Cooperative Extension, Amador County.



Fire in California

Fire protection and resource management: a necessary alliance

Fire protection isn't all red engines and emergency response. It's also science, planning, creativity, and vision.

We are all aware that fire is a fact of life in California but, like earthquakes and computer crashes, it's easy to ignore the danger and hope the Big One won't happen on our watch.

But optimism (or ostrich behavior) has limited success. Over the last several years, fires have gotten increasingly catastrophic and expensive to fight. At the same time, population in the wildland intermix is growing exponentially, increasing the threat of ignitions while putting more lives and property at risk.

We have a problem. We can't afford to continue business as usual nor can we afford catastrophic fires. How to address the situation is an issue that involves everyone—landowners, scientists, fire fighting and resource agencies, environmentalists—everyone who cares about the health of our state and forestland.

There are no simple answers either. The issues are incredibly complex as are the solutions. All involve trade-offs, uncertainty, and risk.

Where we are

The last century has seen a deterioration in forest health. Fire suppression, forest practices, grazing, and weather have all contributed to this situation. Descriptions of Sierra Nevada forests by early visitors describe an open, park-like forest with large trees and little understory. Fires came through at frequent intervals, probably an average of 6–20 years, clearing out the undergrowth and smaller trees. Large fires were uncommon because the fuel load was low. Contrast that to today's forests: thick with small trees and brush, fuel ladders that lead fire into the crowns of trees,

dense accumulation of debris on the ground—all contributing to the danger of high intensity fire.

After a century of fire suppression, a new understanding is emerging that fire is necessary and beneficial to the forest. Low-intensity fire cleans the forest, removing debris, brush, and small trees, making nutrients more available for the soil, and providing a natural thinning process for larger trees. Small fires also create a mosaic of habitats within a forest which can increase wildlife diversity.

High intensity fires, on the other hand, can sterilize the soil of beneficial organisms and even change soil characteristics, resulting in increased runoff and erosion. When fires burn over large areas, recolonization by plants and animals takes longer. All of this increases the recovery time of the forest. Catastrophic fires are considered to be one of the greatest threats to forests today.

Where we are going

Fire management is a vastly different approach from suppression. It recognizes the inevitability and desirability of fire, then seeks to find ways to allow fire while protecting those values we care about. It is a proactive approach that attempts to decrease the damage from wildfire before it occurs. It is a creative strategy that uses the most current scientific

information to make difficult decisions.

Simply allowing fires to burn unchecked is one management option, but one that carries a very large cost. Because of the large accumulation of live and dead fuels in our forests, fires can easily become infernos which are very destructive to the forest ecosystem. In addition, homes in the intermix put lives and property at risk—an unacceptable risk to those living there.

Can we allow our forests to return to a more natural fire cycle? That is the goal—frequent low-intensity fires that singe but do not kill the mature trees while providing the benefits of fire. Unfortunately, because the risk of conflagration is so great, many forests must be treated before a fire can safely be allowed to burn. There are a number of pre-fire treatment methods available.

Mechanical fuel treatments involve such activities as thinning and pruning to remove excess fuel and fuel ladders. The material removed can then be chipped, burned, or converted to fuel or other forest products.

Prescribed burning is another technique that is often used. Prescribed fires are intentionally set under closely monitored conditions to burn at low intensity. These fires provide the benefits of cleansing the forest floor and releasing

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We have a problem, let's talk about it

...is the approach of an excellent booklet called *How Can We Live with Wildland Fire?*

Designed to aid community and group discussion, this issue book presents facts and information about wildland fire, then gives the reader

various choices to ponder. It does not suggest there is a right answer.

Copies of this booklet are available from the University of California, (530) 752-3007, or from the California Forest Stewardship Helpline, 1-800-PET-TREE.



Silviculture

Salvage timber harvesting considerations

Whether to harvest trees killed as a result of wildfire is a personal decision, but one that needs to be made fairly quickly after the fire is out. Trees that sustain heavy damage from fire die and lose their commercial value rapidly. Trees which sustain medium damage may survive but typically do not fully recover their previous vigor. This leaves them vulnerable to attack by insects and to future droughts.

Once a tree has died, it loses its commercial value quickly due to decay. The speed at which this occurs depends on the tree species (see insert box). White fir is especially quick to decay, while Douglas-fir is much more resistant and will typically take several years longer. In addition, dead trees that still contain sound wood may become infected with blue stain fungus, which does not weaken the wood, but does decrease the value and grade of lumber that can be made from it.

Salvage harvesting provides a number of advantages to landowners. Most importantly, accumulated dead and damaged trees provide fuel for future fires and their removal reduces the risk that additional fires will burn through the damaged area. Removal also reduces the spread of insects which proliferate in dead and damaged trees.

Any income received from salvaged trees can be used to recoup losses as well as to finance rehabilitation of damaged areas through replanting and installation of erosion control measures.

While salvage harvesting can produce these benefits, it must be carried out properly to avoid further resource damage. Improperly done harvesting can increase soil damage when too much soil is disturbed or the wrong equipment is used.

In the long term, some dead trees

are needed for wildlife habitat and cover. Also, dead trees return nutrients to the soil.

Because of these concerns, it is critical that salvage harvesting be carried out in a professional manner with the help of a Registered Professional Forester (RPF). If any financial benefits are to be gained, it must also be done quickly before decay depletes damaged trees of their commercial value.

How much value is Left?

How much value is left in burned trees depends on a combination of factors including species, timber quality and amount of decay, as well as market conditions. In general, pines are worth more than other species, larger trees are worth more than smaller ones, and fine-grained, knot-free logs are worth more than knotty young trees. Sound logs can be made into lumber which has a higher value than decayed wood and brush which can be sold as chips to wood-fueled power plants. The value of standing trees (stumpage) is lower than the value of the log delivered to the mill because of the cost of harvesting

and hauling logs for long distances.

Salvage harvest planning and permitting

If you choose to harvest some of the trees killed by fire on your property, you will need to acquire the proper permits. You must notify the California Department of Forestry and Fire Protection which regulates timber harvesting on private land in California.

Unlike harvesting done when there is no fire, salvaging of fire-killed trees does not require a Timber Harvest Plan (THP). It does, however, require that you file a "Notice of Emergency Timber Operations" which must be signed by a Registered Professional Forester.

If you own less than three acres of land, you can file a "Notice of Emergency Timber Operations that are Exempt" without an RPF's signature. Exemption from preparing a THP does not exempt landowners from environmental and other regulations aimed at protecting water quality, soil conditions, and riparian habitat.

—from Recovering from Wildfire (see page 10 for information about this publication.)

Conifer Decay Rates After Fire				
Years After Death	White Fir	Ponderosa/ Jeffrey Pine	Sugar Pine	Douglas-fir
1	10–20 percent of volume decayed	1/4 sapwood bluestained	Little decay, extensive bluestain	
2	50 percent of volume decayed	All bluestained, 1/2 sapwood decayed	3/4 of sapwood decayed	
3		All sapwood decayed, some heartwood	All sapwood decayed	Sapwood deteriorated, little bluestain
4				Heartwood deteriorating
5			Only large trees remain sound	Only large trees remain sound

Source: John Dale, US Forest Service, Forest Pest Management, 1987



After the Fire

Restoring the land after the Pendola Fire

The Pendola Fire burned fast and hard that Saturday night in October, 1999. After two days, dozens of landowners were burned out and over 11,000 acres of forestland destroyed.

But that's just the beginning of the story. The community immediately turned to restoration and, within a few weeks, applications for CFIP (California Forest Improvement Program) cost share funds began to come in.

"We've been impressed with the aggressive manner in which people are reforesting their land," noted Gary Brittner, who manages CFIP for the California Department of Forestry and



Fire Protection (CDF) for the Nevada-Yuba-Placer Unit. "This is high-quality land and reforestation after a fire is an important priority."

The effort to start the restoration work has involved landowners, registered professional foresters (RPFs), and government agencies such as CDF. In addition to CFIP, other emergency funds such as FIP (Forestry Improvement Program) are available to landowners who have been affected by fire.

The Pendola Fire was located between Dobbins and Camptonville in Yuba County, near Bullard Bar Reservoir. Besides timber production, this is an area highly valued for its beauty and recreational amenities.

Diane Pendola has lived on her 200 acres for 25 years; the fire was not part of her plans.

"It was never my intention to log this land. It's a huge loss. I'm very connected to this land and it was important to get

Salvage logging has been done, now the effort is turning to regeneration.



Gary Brittner stands in front of a giant slash pile—one of many remnants of the fire that must be dealt with on the Pendola property.



Nothing could stop the Pendola Fire that first day.

started with restoration immediately. It's on the top of my priority list.

"Fortunately I come from a timber family who knows how to get timber out quickly. I had a lot of help." Diane talked to loggers and a professional forester right away. She also contacted Gary Brittner at CDF for assistance and was one of the first to apply for CFIP.

In order to qualify for CFIP, landowners must have a management plan prepared by a RPF. The management plan spells out the steps to be taken to restore the property. The CFIP program pays up to a certain cap amount for each forest practice.

Diane Pendola's management plan was written by Doug Smith, an RPF who has worked with the Pendola family for years. He acted quickly from a sense of urgency to "recover the values in the remaining timber and rehabilitate the land through site preparation and planting before the brush takes over."

After a fire, the first step many land-



“It was never my intention to log this land. It’s a huge loss.”

—Diane Pendola



owners take is salvage timber harvest. This allows the landowner to recover some financial value from the trees before they deteriorate (see chart on page 7). It also reduces the fuel hazard and helps clear the site for replanting.

Doug Smith emphasizes that after a fire people should contact CDF or UC Cooperative Extension to “get on it right away” because time is of the essence.

For Diane Pendola, salvage logging has offset the expense of the restoration work. “I look at it as the money from the timber going back to the forest.”

But salvage logging was the easy part. Now comes site preparation and more difficult choices.

There are a number of ways to go about preparing the land for replanting. The decision of which method(s) to use depends on the individual situation—each is unique. Cost, goals, impact on the soil, regulations, and other factors all need to be taken into consideration. Expert

advice is important here.

Doug Smith plans to make sure that the new growth is protected from fire. Part of the management plan includes steps to protect the trees from future fire.

As part of her longer-range plans, Diane Pendola wants to enhance the wildlife and riparian values of her land. Under CFIP, she is allotted a certain amount of money for these goals as well.

Diane Pendola has nothing but praise for CFIP. “Why wouldn’t people want to take advantage of a program like this? Gary [Brittner] has been very helpful. Everyone’s been great—loggers, foresters, CDF—they’ve all been nothing but helpful.

“I really appreciate that the government makes money available to private landowners for restoration. It shows vision; recognition that it’s one forest, one ecosystem.

“It’s a very wise program.” ▲



New seedlings are beginning to grow on the bare ground. More replanting, over 40,000 trees, will be done this fall.

Fire Protection & Fuels *(continued from page 6)*

nutrients while protecting the forest from larger wildfires by removing excess fuel.

None of these solutions is without controversy. Thinning changes the appearance of the forest, which some find objectionable. Prescribed fire can have a negative affect on air quality and always carries the risk of escaping out of control. These concerns must be addressed when making fuel management decisions.

Fuel management does not mean that all areas need to be treated. This is neither desirable nor economically feasible. Instead, strategic areas are identified and treated. The decisions depend on the val-

ues to be protected in the specific area.

Today, much of the decisionmaking is done by community groups, with the assistance of resource agencies such as CDF. Fire Safe Councils, of which there are currently about 90 in California, are volunteer, nonprofit organizations that set priorities, plan projects, find funding, and carry out on-the-ground activities to reduce the threat of wildfire.

To get involved in fuel management decisions in your area, contact your local CDF Unit or call the California Forest Stewardship Helpline, 1-800-738-TREE. Find the California Fire Safe Council at <http://www.firesafecouncil.org/>. ▲

CFIP can provide assistance

The California Forest Improvement Program (CFIP) is designed to improve timber production of non-industrial private forestlands while also improving other resources such as fish and wildlife habitat and soils. The goal is overall improvement of the forest ecosystem.

The cost share rate of the CFIP program is usually 75%, up to \$50,000 per contract, but in some situations it can be higher. Rehabilitation after natural disasters such as fire can qualify for up to 90% cost share.

Activities that qualify for cost-share assistance include management planning, reforestation, site preparation, thinning, land conservation (erosion control, forest road rehabilitation, revegetation) and fish and wildlife habitat improvement.

To qualify for CFIP, landowners must have an approved management plan and own 20–5000 acres of forestland (lands that are or have formerly been 10% covered by forest trees).

CFIP was funded at \$2.2 million during FY 1999–00, all of which has been allocated. Funding is expected to be renewed this fiscal year and applications are being accepted continuously.

For more information, contact the California Forest Stewardship Helpline at 1-800-738-TREE or your local CDF Unit. The CFIP application form is available online at <http://ceres.ca.gov/foreststeward/funding.html>. ▲



Resources

New publication can help after fire

Anyone who has had the misfortune of experiencing a fire on their forestland will find *Recovering from Wildfire* an excellent first step toward recovery.

This eight-page brochure is chock-full of information on issues of concern to landowners as well as resources for further assistance.

It's impressive to see how much solid information can fit in a scant eight pages. The publication covers emergency resources, how to assess damages, erosion control measures, road protec-

tion, salvage harvesting, and forest regeneration. There are tips on contracting with a registered professional forester and a short discussion of tax implications. There is also a section on cost-share programs and who to contact.

Recovering from Wildfire was published by Shasta County University of California Cooperative Extension, Forestry. You can request a copy from Shasta County UCCE, Forestry, 1851 Hartnell Avenue, Redding, CA 96002, (530) 224-4902 or call the California Stewardship Helpline, 1-800-PET-TREE.

Hardwood Product Directory

While hardwoods comprise a significant portion of California forest species, they remain less than one half of one percent of the annual value of the state's timber industry shipments. A meager 7% of the state's manufacturing needs for hardwood is met by California hardwood resources.

The **1999 California Hardwood Product Manufacturers Directory** was created as part of the ongoing effort to encourage a viable hardwood industry in California. This directory contains useful information for those looking for products, suppliers, and markets. The directory is divided into six categories: landowners, loggers, primary manufacturing, secondary manufacturing, wholesale retail, and business services.

This resource was produced by the California Hardwood Industry Initiative, a consortium of state and federal agencies working to develop the hardwood industry. Participants include the California Trade and Commerce Agency, California Resources Agency, California Department of Forestry and Fire Protection, California Energy Commission, University of California Division of Agriculture and Natural Resources, and USDA Forest Service.

The Hardwood Product Directory is expected to be updated yearly. Those who wish to be included in the directory are encouraged to submit their information to the UC Forest Products Lab at 1301 S 46th St, Blvd, 478 Richmond, CA 94804 (510) 215-4299.

This publication is available free of charge from the California Forest Stewardship Helpline at 1-800-738-TREE or from the California Hardwood Industry Initiative, 801 K Street, Suite 1700, Sacramento, CA 95814 (916) 322-5665.

Technical Assistance Resources

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

California Stewardship Helpline (800) 738-TREE; ncsaf@mcn.org

California Department of Forestry & Fire Protection

Forest Landowner Assistance Programs
Jeffrey Calvert
(916) 653-8286
jeff_calvert@fire.ca.gov

Forestry Assistance Specialists
Jill Butler
(707) 576-2935

Rich Eliot
(707) 946-1960

Tess Albin-Smith
(707) 961-1531

Adam Wyman
(530) 529-8548

Chris Waters
(530) 644-2345 x292

Tom Sandelin
(559) 243-4108

California Resources Agency:

California Environmental Resources
Evaluation System (CERES)
Deanne DiPietro
(916) 653-8614
deanne@ceres.ca.gov

California Association of RCDs

Thomas Wehri
(916) 447-7237
carcd@ns.net

Natural Resources Conservation Service

Jerry Reioux
(530) 792-5655
jerry.reioux@ca.usda.gov

Farm Service Agency

Larry Plumb
(530) 792-5520

California Dept of Fish & Game

Marty Berbach
(916) 327-8839
mberbach@dfg.ca.gov

U.C. Cooperative Extension Forestry

Richard Harris
(510) 642-2360
rrharris@nature.berkeley.edu

Gary Nakamura
(530) 224-4902
gmnakamura@ucdavis.edu

USDA Forest Service

Sandra Stone
(707) 562-8918
sstone/r5@fs.fed.us



Calendar

July 20, 2000

Cfpc's Insect and Disease Field Meeting 2000

Mt. Shasta area, McCloud Flats
California Forest Pest Council
Dave Schultz 530-242-2335;
dschultz01@fs.fed.us
Effects of commercial timber harvest and prescribed burning on western pine beetle, black stain root disease & annosus root disease

July 25–26, 2000

California Forest Pest Council's Summer Weed Tour

Lake Almanor, CA
California Forest Pest Council
Ed Fredrickson 530-365-7669
edf@rfpco.com

July 27–29, 2000

CFSC'S Summer Field Meeting: Visit the Area Where the Cascade & Sierra Nevada Ranges Meet

Chico, CA
California Forest Soils Council
Dean Burkett 530-343-2731
mailto:dean.burkett@ca.usda.gov; David Howell 707-822-7133
david.howell@ca.usda.gov
\$10 reg. plus \$15 for 7/27 dinner

July 28–29, 2000

NorCal SAF Summer Meeting: The Pacific Lumber Company's Sustained Yield and Habitat Conservation Plans (SYP/HCP)

Scotia, CA
NorCal Society of American Foresters
Questions: Barry Dobosh 707-764-4307
dobosh@mail.northcoast.com,
Registration: Sherry Cooper 530-224-4902
shcooper@ucdavis.edu
\$60-\$70; Register by July 15 to avoid late fee of \$10.

August 7–9, 2000 9 a.m.

Board Of Forestry

Concord, CA
California Dept. of Forestry
916-653-8007; fax 916-653-0989

August 13–19, 2000

Forestry Institute for Teachers

Plumas County, CA
Northern California Society of American Foresters

707-467-0600 or 707-467-1871;
ncsaf@mcn.org
K-12 Teachers
<http://www.toshop.com/forestry> or
<http://www.humboldt.edu/~csy1/NorCalSAF/FIT.html>

August 14–20, 2000

Summer on the Salmon (S.O.S.) Noxious Weed Week—Symposium and Work Week (and Fun)

Sawyers Bar
Salmon River Restoration Council
530-462-4665
<http://www.srrc.org>

August 23–25, 2000

Archaeological Training #68 - Three-day Class

Redding, CA
California Dept. of Forestry and California Licensed Foresters Assn.
Hazel Jackson 209-293-7323, fax 209-293-7544
clfa@volcano.net
\$325
<http://www.clfa.org/>

August 27–30, 2000

Riparian Ecology and Management in Multi-land Use Watersheds Summer Specialty International Conference

Portland, OR
American Water Resources Assn.
703-904-1225
awrahq@aol.com
<http://www.awra.org/>

September 7–8, 2000

Cumulative Watershed Effects: Status, Gaps and Needs

Sacramento, CA
University of California, The Forestry Center and the UC DANR N. Coast & Mtn.
Joni Rippee 510-642-0095, fax 510-643-3490
rippee@nature.berkeley.edu
\$120-\$150
<http://www.cnr.berkeley.edu/forestry/watershed.html>

September 8–12, 2000

Public Policy Institute and Issue Framing Workshop

UC Davis Extension
Call 800-752-0881 to be placed on mailing list for detailed brochure

October 26–29, 2000

SERCAL's 7th Annual Conference: Trends and Lessons in Ecological Restoration
Santa Barbara, CA

The Society for Ecological Restoration California Chapter (SERCAL)
Susan Clark 661-634-9228
smclark@lightspeed.net
<http://www.sercal.org/>
To be held at the University Center, UC Santa Barbara

October 27, 2000

CLFA Fall Workshop: Road Maintenance

Sacramento, CA
California Licensed Foresters Assn.
Hazel Jackson 209-293-7323, fax 209-293-7544
clfa@volcano.net
\$125-\$150
<http://www.clfa.org/>

November 27–30, 2000

Managing Watersheds in the New Century

Monterey, CA
Watershed Management Council
Rick Kattelman 760-935-4903
rick@icess.ucsb.edu or
510-273-9066
<http://watershed.org/wmc>

November 27–December 1

Fire Conference 2000: The First National Congress on Fire Ecology, Prevention and Management

San Diego, CA
Joint Fire Science Program, Cal. Assn. For Fire Ecology, Int'l. Assn. Of Wildland Fire, Tall Timbers Res. Sta., & University of California
800-752-0881 or 530-757-8777
\$275 - \$325
www.universityextension.ucdavis.edu/fire/Section002U631or002U632

For more information on these calendar items, call the number given or the Forest Stewardship Helpline, 1-800-738-TREE. To submit an event or to receive this calendar by e-mail, contact Sherry Cooper, 530-224-4902; shcooper@ucdavis.edu.

ONLINE CALENDAR!

Find a more comprehensive calendar, updated monthly,

at the California Forest

Stewardship website:

<http://ceres.ca.gov/foreststeward>



Planning

Fire Cycles

Claralynn Nunamaker

It's not at all uncommon to hear the phrase that fire is "a natural part of the landscape." But what does that really mean? There is a whole science devoted to *fire ecology*, that looks at how fire helps shape the landscape and interacts with the biological resources in that landscape. But let's look at one particularly important concept in fire ecology, the *fire cycle*.

Where there is fire, there is a fire cycle. The fire cycle is the number of years, on average, that a fire historically moved through the area. It is also called the *fire return interval*.

Every ecosystem has a fire cycle. Even the coastal areas have fire cycles, though they are very long—perhaps 300 years or more. But in very hot, dry areas, fire cycles might be as short as every 1–7 years. In Mendocino County, fires might have come through on average every 15-40 years. The number of years depends on many variables such as the forest or vegetation type and the size of the area you are considering.

When the fire cycle is allowed to function, the result is frequent, low-

intensity fires. But when the fire cycle is interrupted, the stage is set for a catastrophic fire.

Think of a few oak trees losing their leaves every year. If you burned one year's accumulation of fallen twigs and leaves, you'd have a well-behaved little fire with flame lengths of a few inches to maybe a foot. The base of the oak trees would get a little warm and might even blacken a bit.

But allow the fallen twigs and leaves to accumulate for 50 years before you decide to burn; some will have decomposed, but you'll have a lot of fuel for that fire. Instead of a nice little fire, you'll have a raging inferno whose flames will most likely reach into the tree itself, burning the live leaves and killing the tree.

The longer the disruption in the fire cycle, the more destructive the fire will be. Remember that it's not *if* a fire will occur, it's *when*.

Claralynn Nunamaker is a Registered Professional Forester and writes a column on forestry for the Mendocino County Observer. She is also the voice behind the California Forest Stewardship Helpline.

Spirit moving in all things

- Fire moving here
- Spirit moving here
- Spirit moving fire
- Fire moving exploding consuming
- Spirit moving in all things
- Moving in Fire
- Moving through the underbrush
- Licking up the trunks of trees
- Burning underground through gnarled roots
- Through holes of mice and moles
- Through bear homes and Deer home
- Manzanita ablaze
- The fox with burned paws
- Exposed in the meadow
- The birds flown away
- Helicopters chopping through dense smoke
- Yellow-coated fire-fighters
- Soot-faced intense
- Spirit moving through their arms
- Fire in their eyes
- Spirit in their sad-softened smiles
- Shared Spirit moving
- Through the fire
- Through the fire-fighters
- Through the Wind
- Tossing flame in all directions
- Through the water
- Moving in hoses
- Held by many hands
- Fire moving through
- The nests of yellow-jackets
- The breeding grounds of lady bugs
- Fire moving through the cries of loss
- Grieving in the ash
- Spirit moving Fire
- Fire in the Heart
- Heart in the Spirit
- Spirit in the Heart
- Everything changes

Still
Spirit Movng Here

—Diane Pendola

How can the *Forestland Steward* newsletter help you?

I d like to see more information on _____

My suggestion is _____

Add me to the mailing list / Change my address:

Name _____

Address _____

City, Zip _____ Phone _____

e-mail _____

Send to CDF, Forestry Assistance, P.O. Box 944246, Sacramento, CA 94244-2460.
Phone: (916) 653-8286; Fax: (916) 653-8957; e-mail: jim_geiger@fire.ca.gov