FOREST LANDOWNERS OF CALIFORNIA

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FamilyForestNews

President's Message

Defensible Space

FIRE is and always will be a natural seasonally occurring component across California. Each year between the months of July through October, and into November-December in the southern part of the State, California is besieged by fire. As we all know this is a naturally occurring annual event and there is no changing or altering this condition. We can only hope to reduce the number of ignitions and try to keep the burned acreage to a minimum each year. Often the worst and most destructive fires occur late in the season as seen by the recent Valley Fire in Lake County (76,067 acres burned and 1,373 homes and commercial structures destroyed) and the Butte Fire in Amador and Calaveras Counties (70,868 acres burned and 475 homes destroyed). These two fires will go down as being in the top ten most destructive fires in the state when taking the combined effect of acreage and structures burned. The Oakland Hills fire that occurred in October 1991 was only 1,520 acres, but resulted in 2,843 homes lost with 25 deaths and is often referred to as the most damaging fire on record. The Cedar Fire, to date the largest recorded wildfire in the State, occurred in October 2003. It burned 273,246 acres in San Diego County and resulted in the loss of 2,232 homes. The Cedar Fire was one of 15 wildfires burning an estimated total of 800,000 acres throughout Southern California during that month, which became known as the "2003 Firestorm" and the "Fire Siege of 2003." Images of these fires, their destruction, and resultant property loss are etched forever into the minds of us who viewed the news footage during those years. By the end of this fire season more than a million acres of California's lands will have burned placing it in the record books as one of the worst, if not the worst!

October is touted as "Fire Prevention Month" to heighten the awareness of the fire concern in our state and to provide insight as to how to reduce the potential of fire ignition and fire spread on your property through vegetation control. For those of us who have timber properties, we need to expand this awareness as "Defensible Space Month." If not already employing a defensible space action plan one should consider doing so prior to the next fire season. What is defensible space? Defensible space is essential to improve your home's and property's chance of surviving a wildfire. It's a fuel management buffer you create between what you're trying to protect (home and/or property) and the grass, trees, shrubs or any wildland area that surround it. Defensible space is needed to slow or stop the spread of wildfire. In the case of a home protection it reduces potential of the house catching fire—either from direct flame contact or radiant heat. Defensible space is also important for the protection of firefighters defending your home and property. If fire crews pull into your property during a threatening fire and see no defensible space at the home or within your

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In this fall 2015 newsletter, there were three articles about defensible space and preparing your property for possible wildfires. This document includes the excerpts from that newsletter.

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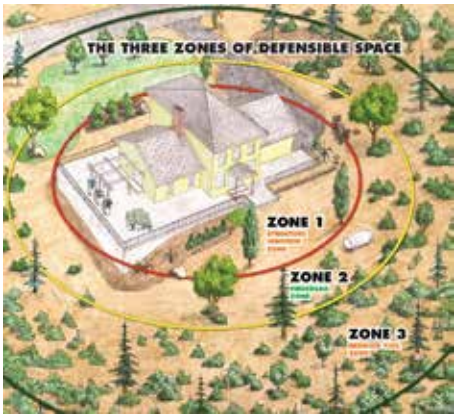

property they will abandon it and move to other locations with defensible space. The recent September 12 Field Day hosted by Registered Professional Forester Matt Green on the Plantation Forest and Timber Dell Ranch properties located just miles inland from the Sonoma Country coast demonstrate prime examples in the development and maintenance of defensible space. Each case illustrated "shaded fuel breaks" under forested conditions that could not and had no intention of stopping a wildfire on its own. These shaded fuel breaks were in place to provide a line of defense by reducing the flame length of a fire as it is moving across property. Shaded fuel breaks provide openings in overstory tree canopies and reduce understory ladder and ground fuels. As demonstrated by Mat Green they serve multiple purposes in a property's "Defensible Space Plan:"

- To bring a tree crown fire to the ground and lower the approaching flame length onto the property or as the fire approaches property improvements such as home, secondary structures or other property attributes.
- It's a designated space on the property in which a fire crew has sufficient fuel reduction and open space to allow them to take and hold a defensive position in the event of an oncoming fire.
- With reduction of ladder fuels and lower ground fuels within the shaded fuel break or defensive zone of a home it also allows fire crews, as necessary, to use backfires as a tool to further reduce the fuel to the oncoming fire and expand the fire break that they are looking to hold.
- The defensible action plans were designed to have fuel break construction and maintenance along and paralleling the high frequency potential ignition points such as public roads, power line corridors or camp/campfire use areas.
- The defensible space had built in redundancy by incorporating naturally occurring openings such as roads, a ridge, the cleared power line, etc., as secondary lines of defense near planned and constructed shaded fuel breaks, furthering the ability to control and stop an oncoming fire.
- And it was discussed how cost-sharing funds may be available thought CFIP (California Forest Improvement Program/CALFIRE)or EQIP (Environmental Quality Incentives Program/NRCS) programs to assist in the development and maintenance of defensible space once an approved management plan has been written for the property.

Let's talk flame length. Flame length is the distance between the flame tip (top of the flames) and the midpoint of the flame depth at the base of the flame (generally the ground surface) and is used as an indicator of fire intensity. Flame length is predicated upon vegetation type, fuel moisture, slope and wind. The rule of thumb given to me early in my career as a seasonal fire fighter with the California Department of Forestry (CDF, now CALFIRE) is to anticipate potential maximum flame length that is three times the height of the vegetation. Thus the flame length in two-foot untended or naturally occurring grass is six feet, 15-foot brush is 45 feet, and a crown fire in 100-foot timber is 300 feet. There's little to no hope in stopping a crown fire until the fire reaches a break in topography or vegetation. The only hope in protecting property and managing a fire with a high flame length, such as crown fire or a wind driven brush fire as recently seen with the Valley Fire is to plan and manage for defensible space.

Prior to the staunch fire prevention program undertaken by the State in the first quarter of the 20th century many areas of California's wildlands have been shown to have naturally reoccurring and frequent fire events at intervals of 10 to 30 years. The 100 plus years of fire prevention has delayed this naturally occurring event and has significantly extended the frequency of forest floor fuel consumption and timber thinning by fire. The result is excessive fuel build ups within most of the forests and wildlands of the State. As stated in a recent California License Foresters Association (CLFA) conference on

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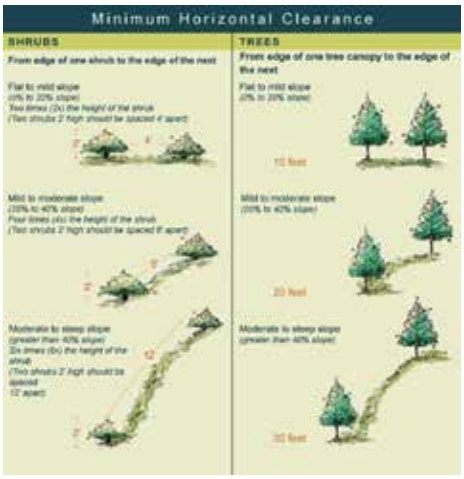

fire, Clayton Code, CLFA's President, summed up the present situation succinctly, "Regardless of how we got here, our forests are not in a condition consistent with natural fire regimes. Individual projects, regardless of scale, will provide localized benefit by attempting to mitigate losses should a fire impact that landowner. Cumulatively, the more landowners who manage their properties being respectful of natural fire regimes will eventually lead to landscape benefits."

Taking our property as an example, my wife and I live on our 40-acre timber property above the Eel River within the coastal redwood belt of Humboldt County. In our part of the world the reoccurring fire history has been said to be at a 30- to 65-year interval. Is fire less of a potential threat to us? Yes, but when it happens, it often happens in a big way. Our 40-acre property is surrounded by expansive commercial and range timberlands on three sides and a rural subdivision with a paved frontage road to the south.

The original old growth redwood on the property was cleared just prior to or at the turn of the 19th century. Following the cutting and clearing of the old growth, the property was bought up to homestead around 1910. The old growth stumps were removed on two to three acres so as to create a field for livestock grazing. This field is presently our immediate back yard off the back side of the house. Our home is situated on a north aspect just below the ridge top. We often see deer grazing, fox, skunks and the occasional coyote and bear foraging from the big bay windows that face the field and look north down the creek drainage to highway 101, the Eel River and beyond to the town of Fortuna. Though we have no written defensible space plan, we intuitively maintain a solid defensible space around our home. Field mowing is done a number of times during spring and early summer so as to only leave cropped stubble once the grass becomes dry by midsummer. Mowing leaves a cleared open space of more than 200 feet between the house and the timber downslope, which also happens to be the direction of the prevailing winds on the property. Off to the sides of our home the property is clear for a distance of 100 feet or more with only occasional yard trees, ornamental shrubbery and lawn or graveled parking areas to provide good clearance between us and the unmaintained vegetation on neighboring properties. The cleared and maintained space around our home should allow it to survive any major wildfire and is considered defensible by CALFIRE. In conversations with CALFIRE inspection staff they indicated that the field area of our home would actually be considered a safe zone in the event fire crews were overran by a fire.

So far the association has not heard that any of our members incurred a fire loss on their property this fire season, and I can only hope that it remains so. Anyone reached by this newsletter that has not implemented a defensible space plan on your property should consider doing so sooner, rather than later. There are a number of ways to initiate the process by consultation with CALFIRE Unit staff and/or with your Registered Professional Forester. Readily available information can also be obtained from the web or from printed materials distributed by CALFIRE. Fire is going to happen and each of our properties will likely see a burn at some point in time, but the intensity and degree of the burn can be controlled to some extent if you are prepared. October is Fire Prevention Month, be prepared and be safe.

Create a Defensible Space Around Your Home for Next Year's Fire Season

By Denise Seghesio Levine

I remember when my husband found an ad for green-and-white-striped canvas awnings that would look great shading our big, hot, west-facing windows. Then I remembered the article I was researching on fire-resistant landscaping.

Pictures of little embers floating miles on hot winds, only to land on my little striped awnings and burst into flames, flitted through my mind. No, I told my husband. No awnings.

That was ten years ago. I was part of a team launching the new countywide "Firewise" program. We were tasked with sharing lessons learned from Southern California fires the previous years that destroyed acres of trees and habitat and hundreds of homes. And not just in the hills. Neighborhoods and single houses in other areas were destroyed when floating embers landed on roofs and flammable garden debris, igniting homes miles from the original fire.

But the lesson is in the exceptions. Some houses survived even in the midst of devastation. What was different? In some cases, it was the landscaping. All of the homes that survived had yards and gardens that were defensible space zones.

Your "defensible space" is the area within 150-300 feet of your home. In this zone, you can modify the landscaping to improve the odds for firefighters defending your home. This safety area should be kept "lean and green."

Can something so simple really make a difference? Can you create a garden that helps protect your family and property when wildfires hit our hills? Yes.

Garden maintenance is often the first step. Look around your garden and yard. What things could catch fire? Make sure flammable items are kept to a minimum, including lounge cushions and paper. If you are leaving home for the weekend, put those away.

Keep dried grasses and dead brush cleaned up. Do your work early in the morning while it is still cool. Have a hose nearby. Cut up and remove dead trees and shrubs. Don't forget dried leaves in the roof gutters and those dried sweet pea vines that are still climbing up the garage. At this time of year dried leaves and grasses aren't just debris. They are fuel.

Now is the time to look around your home's exterior. If you decide to replace flammable, dangerous plants with more fire-resistant choices, you have time to remove them now and prepare the sites for fall planting. This is doubly advantageous because most plants, and certainly our natives, will root much more deeply if planted in the warmth of fall and allowed to settle in through the rainy season. These plants will usually need much less water in years to come than the same type of plant set out in the spring.

The list of highly flammable plants includes favorites, but this doesn't mean you can't use them in your landscaping. Just keep them at least 30 feet from your house. Experts recommend a minimum of 10 feet of spacing between individual trees and shrubs, measured at the widest part of the tree or shrub.

On mature trees, remove all limbs lower than 10 feet from the ground, or one-third of the tree's crown height, whichever is greater. This step removes "ladder fuels" that allow the fire to spread from ground to treetops, or vice versa.

Avoid highly flammable trees, including California bay (Umbellularia californica), California fan palm (Washingtonia filifera), coast redwood (Sequoia sempervirens), California

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pepper (Schinus molle) and any pines, including Italian stone pine and Monterey pine. Firefighters call them target plants. Junipers, cypress and pampas grass are also troublemakers because they generate an abundance of flammable materials, or are highly resinous or dry.

Fir trees are dangerous. Remember the quick sizzle and flare when you throw Christmas boughs in the fire? Now imagine that phenomenon supersized around your wooden house.

With their fragrant resins, Camphor tree (Cinnamomum camphora), sweet acacia and cedars are highly flammable, too.

The wood-lath framing for vines that we never had time to build on our house will probably never get built now. Vines and climbing plants on combustible structures are not firewise. Any extra fuel near the house is hazardous, so plant vines away from the house.

California lilac (Ceanothus) burns well and should be kept away from the house. Creosote busch (Larrea tridentata) sounds as dangerous as it is, and all species of Juniperus are resinous and woody and best avoided.

Besides being invasive, cheery yellow-bloomed Spanish broom is very flammable. Pull it up whenever you see it. And remember to keep the plants and trees in your defensible space zone well watered and pruned at all times.

So what are better choices?

If you have the water to spare, green lawns or succulents like iceplant are very good firewise choices around the house. Hardscaping in gravel or concrete, or stepping stones or pavers with low growing herbs can also be attractive and safe spaces protecting your home.

If you plan to replace trees like bays and pines that are highly flammable, or if you are choosing new trees where you have space, a list of safer replacements includes white alder (Alnus rhombifolia), carob (Ceratonia siliqua, also known as St. John's bread) and one of my favorite sights in spring, the Western redbud (Cercis occidentalis). Citrus trees, with their lush green foliage and sweet-smelling blossoms, conjure images of Morocco and are welcome in the firewise garden.

Pomegranate (Punica granatum), pineapple guava (Feijoa sellowiana) and the sculpted madrone (Arbutus menziesii) are beautiful additions. All these plants have a low percentage of dead matter or debris, high moisture content in the leaves and low resin. As for shrubs, space them on no less than 10-foot centers, in groups of no more than three. You're trying to deny a fire continuous fuel.

Most silver-foliaged, drought- and deer-resistant plants are good bets. Their reflective foliage conserves their moisture and provides an illuminating foil to more deeply colored plants.

For color, consider irises of all varieties, daylilies, lily-of-the-Nile, agapanthus and birds of paradise. Deeply textured geraniums and pelargonium come in rich colors ranging from shell pink and salmon to classic bright red or deep maroon. In dryer areas, rockroses in all their colors, such as Cistus villosus and Cistus purpureus, add wispy texture and more fire resistance.

If your favorite plant is on the flammable list, keep it at least 30 feet from the house. And remember, even fire-resistant plants can be dangerous if you don't keep them well watered and pruned.

We are lucky to be able to learn from other communities and perhaps avoid their tragic outcomes. We all have to do our part to protect our homes, our neighborhoods and our beautiful watersheds.

Being fire-safe takes a village, but your own backyard is the place to start.

https://www.readyforwildfire.org

Wildfire in Your Forest

By Ron Berryman, RPF

The images on the news are terrifying; flames leaping hundreds of feet in the air, smoke columns diverting aircraft, thousands upon thousands of acres consumed and residents being evacuated. In the aftermath, images of the destruction show the true impacts of the fire that has reduced entire watersheds into a grey, snag-filled landscape.

Each year forest land owners dread the coming of fire season and hope their property isn't among those shown in the nightly newscasts. The problem is that "hope" doesn't alleviate the problem of overstocked, fuel-loaded forests. Those owners who recognize the problem and proactively work to address it in a realistic manner are less likely to lose their forests to fire.

A walk or drive through the forest looking for the signs of fuel loading should be the first step. For those unfamiliar with fire behavior, having someone who works with fire along during the drive is essential. Fire prevention personnel can point out problems that often escape those who are not trained in fire science.

Are the roads accessing your forest safe enough for fire personnel to use in fighting a fire or are they potential death traps with brush and slash adjacent to the roads? Fire personnel are trained to avoid using such roads for fear of being burned over by an oncoming fire. If your road is deemed safe to fight a fire from, your forest is more likely to be saved. Clearing brush and slash back at least 50 feet from roadsides and thinning and pruning the trees within this zone creates a safe zone that could well mean the difference in saving a forest. Keep in mind that maintaining this zone as a shaded fuel break is important as well.

Overstocked forests, meaning those areas that have more trees per acre than desirable, contribute to fires in two basic ways; the trees in close proximity to one another help spread the fire and the competition between trees has reduced the overall vigor of the stand. In many cases a harvest designed to thin the forest to reduce the fuel loading will probably reduce this problem. If the forest is close enough to a biomass plant, chipping the slash will reduce the fuels even more.

These treatments, while necessary in many cases, are not cheap in time, money or labor so it may be desirable to break this work into stages. In my particular case, I work each spring and fall on a different road section, using a priority ranking to determine which roads will be treated first. In some instances a contractor is used where the proper equipment has proven itself cost-effective over hand labor. In other instances, particularly in the maintenance phase, hand labor works quite well.

Take care in choosing how to dispose of the slash. Chipping can reduce the slash to a saleable product if one is close enough to a biomass plant but chipping can be expensive. Burning the slash is a cheaper method, but has its own drawbacks as the fire from the burn piles can spread into the forest, defeating the entire purpose of the original plan. Be sure to consult with someone well-versed in burning before you attempt this on your own. Time of year and weather conditions are critical elements here.

The results of your efforts are quite striking. Overstocked stands with too many small trees are converted into an attractive forest with well-spaced, pruned trees that will someday provide income for the owner. Proper spacing of the trees has the added benefit of concentrating additional growth on these trees which helps them grow faster. The increased vigor of these stands helps to ward off attacks by insects and reduces overall stand mortality, so your efforts translate into much more than a fire-resistant landscape that can be enjoyed for years to come.