LIVING WITH WILDFIRE IN MENDOCINO COUNTY

PROTECTING OURSELVES, OUR PROPERTY, AND OUR NATURAL RESOURCES

FOREST FACTS ... WHEN TO MOW ...
RESCUING YOUR HORSES ... SAFE GROWING PRACTICES
BURN PILES ... FIRE WATER SUPPLY ... AND MORE!
A Mendocino scenario

IT'S A HOT DAY in early October. It's 2:30 and the afternoon wind has just kicked up. There's been no rain since May, and everything is tinder dry. Our CDF air tankers, command plane, and helicopter are fighting a fire near Santa Cruz. Nearly half our county's fire engines are near L.A., where160 homes burned earlier this week.

A wildfire breaks out in Mendocino County.

The fire is in a steep canyon, four miles from a paved road and 30 minutes from the nearest fire station. By the time the first local firefighters reach it, the fire is 200 acres, spreading fast, and beyond their control. They radio for more help and start looking for homes in harm's way.

The Emergency Command Center at Howard Forest leaps into action. Air tankers are ordered, but they're an hour's flight away. The nearest helicopter is 45 minutes out. Firefighters who've never been to our county are called to help. Sheriff's deputies are dispatched to evacuate residents.

As the fire grows, Joe and Barbara notice smoke below their property. They call their neighbors and fire station to find out what's happening. Lines are busy or no one's there. There's no news on the radio.

Joe gets in his pickup to scout out the situation. He finds that the fire is close to their only road, and heading up the canyon. A hundred homes are uphill from the fire. If the fire spreads, they'll all be trapped.

Joe speeds home. He's not sure if they should stay or leave—and wishes they had prepared for either eventuality. The smell of smoke drifts up the canyon.

Joe turns on a hose to wet down his home, while Barbara hastily loads children and documents into their car. They try to corral their pets, but two of their dogs run away.

Starting to panic, Joe and Barbara try to get their horses into the trailer, but they're spooked and won't cooperate.

The fire is getting closer. The smell of smoke is thick in the air, and an occasional ash falls on the ground. The sun starts to glow orange. The scene is surreal.

Suddenly the water stops flowing. The one power line along the road has burned, so the pump has quit. Phones go dead too.

Now really in panic, Joe and Barbara make one last attempt to capture their animals. With heavy hearts, they leave without them.

The drive downhill takes a long time. In places the road is only one lane, so they must back up to turnouts to let fire engines pass. Other cars are collecting behind them, making matters worse. A huge dozer on a lowboy barely fits on the road at all.

Now the sun is completely blocked. Joe turns on the headlights. Ashes are falling on the windshield. For most of the drive they can't tell where the fire is.

Luckily, they pass the fire where the canyon is wider. The fire races up the hill. Trees explode like torches. The wind is fierce.

Joe and Barbara make it to the valley floor.

But they are frightened for those who may not have escaped. They wonder if their elderly neighbors got out, and feel guilty. They are worried sick about their animals.

From the valley, they can see that the fire has spread to three neighboring canyons. Flames are leaping from treetops. Houses are burning. The scene is terrifying.

Some residents have stayed behind. Some have prepared themselves and their property in advance. Their homes are fire resistant and the brush has been cleared. Their gravity-fed water supply has a fire department connector and hose. They know the risks and are ready to meet them.

But some who stay behind aren't prepared. They think they can evacuate at the last minute. But they don't realize how fast a wildfire can move. And they don't know that most people killed by wildfires die while trying to evacuate—too late.

Fire engines from other counties begin to arrive. They check in with the chief in charge. He tells them to stop at the local fire station for maps. In the confusion, the maps can't be found. Radio waves are jammed and instructions aren't clear.

A fire chief from Napa is assigned to protect the canyon's homes. He has five engines under his command. He's nervous about fighting a wildfire without a map.

He arrives at the beginning of the road. It's narrow and bordered by pines, tanoaks, and French broom, all highly flammable. He wonders how much worse the road is farther up the canyon. He tries to reach local fire engines on his radio, but can't.

A sign tells the chief the road's name. But there's no indication of how long it is, if it dead ends, or if it connects to other roads. He doesn't know if it has tight curves his fire engines can't navigate, or if there are bridges that can't support their weight.

He wonders how many homes there are, and if the owners have prepared them to survive. Have they cleared their brush? Trimmed trees away from roofs? Are the roofs fire-resistant, or flammable shakes?

Is there room for fire equipment to turn around? Backing down a quarter-mile driveway is dangerous, and he won't send his crews into that situation.

He wonders about water. Is there water he can tap? Tanks must have National Fire connections for him to access it. He thinks about all the times he's come upon large tanks but found no way to tap them.

The chief doesn't see anyone evacuating. He wonders if everyone is gone, if some people are staying, and if any elderly or disabled persons need to be rescued.

All these dilemmas -- Joe and Barbara's, and the Chief's -- could be solved by one thing: Local preparation — by you and me.

This scenario was contributed by Julie Rogers, Executive Director of the Mendocino County Fire Safe Council, firesafe@pacific.net.
It will happen here

By Robert Bruce

October 20, 1991 was a hot, dry windy morning I will never forget. In many ways it was the defining event of my life.

It was an Indian summer Sunday in the Oakland/Berkeley hills. People went to the beach or Lake Tahoe or the 49er game. Those who stayed home experienced the fire the way my family did — as an unexpected battle for our lives, a battle we survived but 25 others did not.

My wife and I and our little dog had taken a walk that morning. The wind was blowing from the east, a Diablo wind that only occurs during the fall. The temperature was near 90º, the humidity was 6%, we were in the sixth year of a drought.

We ate breakfast on our deck, sipping coffee and reading the Sunday paper. We had been remodeling our kitchen, and were taking a break from the clutter.

Bonnie saw a black smoke cloud coming up behind us on the ridge line. She and our 10-year-old, Daniel, jumped in the car and drove to Lake Temescal to investigate. Ten minutes later she called, telling me to get the video camera and come to the parking lot. I grabbed my still camera as well.

The scene was overwhelming. Fire swept like orange liquid down the slopes north of Highway 24. Houses exploded one by one. As we stood transfixed, a bush 50 feet away burst into flames. It was a bright sunny day and we could not see the firebrands floating down from the sky.

In California, when the Santa Ana (or Diablo) winds are blowing from the east and a fire occurs in a susceptible area, there is very little that any fire suppression forces or technologies can do to resist the spread of the fire. The results will depend mainly on the fuel that is downwind from the fire and the length of time that the wind continues to push the fire in that direction.

The Oakland fire was not stopped by the firefighters from 36 jurisdictions, or by CDF, or by local volunteers. It stopped because the wind reversed and the fog rolled in that night.

The East Bay hills have experienced destructive fire every generation since people began building their homes in the Wildland Urban Interface. Most of the Mendocino County homes outside the city limits of Ukiah and Willits are built in this zone.

After I arrived at the lake, Bonnie jumped back into her car and raced home. With my background as a journalist I felt more excitement than personal danger, and I raced around taking photos, as the wind whipped up whitecaps on the lake's surface. A CDF helicopter dipped water from the lake.

It was just one week after CDF’s contract with their pilots and planes had ended for the season, but one pilot who happened to be around flew down from Santa Rosa to drop retardant on the fire. But then he had to make the round trip back to reload, so the effect was minimal.

My wife had more sense than I, an experience that many couples repeated. She packed armfuls of clothes into the car and corralled the animals — our dog, a cat and a rabbit. One cat, my Himalayan named Fudge, was never seen again.

She grabbed a new computer and a few family photo albums, and we packed over to her sister’s house, thinking we might be gone overnight. We tried to get back into our neighborhood that evening, but police had it blocked off. We couldn’t get within a mile.

The next day, Monday, we returned by police van to our smoldering ruin. We found a few warm pieces of ceramic that crumbled to the touch, and an 1890s-vintage cast iron bank that had been my grandmother’s as a child. The 150-foot redwood tree in the front yard was naked of foliage, charred from bottom to top.

I lost thousands of books and a huge collection of jazz records. My mother asked for years if the bronze baby shoes survived.

It took us three years to rebuild, with predatory contractors and insurance adjusters crawling over the hills, and a city permit process that was clogged with the needs of 3,000 families.

I still get shivers every time I return and drive up Highway 24 and look at the hills, now mostly rebuilt. We moved away in 2001 for fear of earthquakes and came to Mendocino County. And where did we buy a home?

You guessed it. In the hills west above the Ukiah valley. In an area that burned to the ground in 1959.

The lesson here is clear. Anyone living away from the cool coastal fog is in danger of eventually being burned out by fire. We are in a drought year this summer, and don’t think droughts last only for a year. Next year could be just as dry, and the next year, and the next year.

Certainly, homes in the hills are most at risk, but inland towns aren’t safe, either. A massive fire in the hills will sweep down and take homes like mine, and will rain hot embers on homes and schools and businesses in the flat areas of towns. There will never be enough resources to prevent disaster. Only rain or a change in wind direction will save us.

Or good prevention and preparation. The fire will eventually happen.

My experience in 1991 led me to get involved in the Mendocino County Fire Safe Council. Now, I find it difficult to get my friends and neighbors interested in doing what they could to save their homes in case of fire. They are in denial. So were we.

Homes will burn. Family photos and treasures will be lost. Pets and livestock will die. People, especially the old and infirm, will be trapped and die. Count on it.

It’s hard to think the unthinkable, but please try.

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Wildfires: Mendocino County natives

Fire and nature

Wildfires have been around our county a long time. In centuries past, wildfires burned unhindered across our landscape. These fires consumed dead brush and fallen trees, and opened up travel routes for wild animals. Their heat caused dormant seeds to germinate, and their ashes nourished them. Gorgeous wildflowers and fresh green shoots appeared after each fire, providing premium food and habitat for wild animals and birds.

But in recent decades we have interrupted this natural cycle of fire. We have built so many homes in wildland areas that fires are no longer free to do their job. Wildfires have been vigorously fought to protect these homes. Increasing population in wildland areas has made doing “controlled burns” so difficult they are rarely attempted.

The consequence? Our county has a huge buildup of flammable vegetation. Most areas have missed several cycles of normal wildfires. The quantity of brush and unhealthy trees is unprecedented. This means that wildfires in the future will burn much more intensely and do much more damage than they did in the past.

So we must learn to live with wildfires -- and take action to protect ourselves and our natural resources from their unwanted consequences.

Mendocino County forest facts

Our county’s forests are like orchards. To be healthy and productive, they need some attention. In the past, “good” wildfires and Native Americans did this work for us. But without those good fires, forests need our help.

Many of Mendocino County’s forests haven’t received proper attention for years. By keeping good fires out, humans have essentially stopped pruning and mowing the orchard. The trees have grown wild and tangled. This may seem like a wonderful thing. But, just like an unattended orchard, their “fruit” is wild and small, and many of the trees are not truly healthy.

What is a healthy forest? One in which each tree has room to flourish. One in which each tree’s branches get all the sunlight they need. One in which each tree has plenty to drink. One in which a wildfire would cause relatively little damage.

The basic problem with our untended forests is this: the trees are too crowded. They are competing with each other, and none of them is winning. Their branches can’t reach the sun, and their roots can’t get enough water.

The result is small-diameter trees that are susceptible to disease and pests and have many dead branches. This makes their timber less valuable and the trees less beautiful. And it makes our forests more likely to experience catastrophic fires.

Mendocino County has a huge buildup of flammable vegetation. This means that future wildfires will burn much more intensely and do much more damage than they did in the past.

DID YOU KNOW...?

Fire season in our state is now 78 days longer than it was in 1970. In southern California it essentially lasts all year.

An “average” large wildfire now takes 37.1 days to put out, compared with 7.5 days in the 1970’s.

A report by the USDA Inspector General says we are likely to soon see intense fires “beyond any scale yet witnessed.”

Climate change? You be the judge.
Why be concerned about wildfires?  
Because they can destroy many things that can’t be replaced

- firefighters ...
- your pets ...
- your family photos ...
- your view of the mountains ...
- the fragrance of nature ...
- the wildlife you enjoy ...
- the wind in the trees ...
- the dream house you built ...
- the car you restored ...
- your gun collection ...
- your grandma’s antiques ...
- the trees you planted ...
- the garden you love ...
- and you!

Why do some homes burn, while others survive?

We’ve all seen wildfire photos showing some houses still standing and others burned to the ground. The outcome depends largely on these factors:

1)  how your house is built
2)  what plants surrounds it
3)  the access to reach it
4)  if water is available that can be tapped by fire engines

Will a fire engine come to your house?

Firefighters are passionate about saving homes. They know the heartache a fire can bring. But in a major wildfire, every blaze can’t be tackled right away. And not every house can be saved.

Why? Because firefighting resources will be stretched too thin. And it may be too dangerous to try to save each home.

Many people assume that during a wildfire a fire engine will be parked at every house. Not so. More likely, one engine will be assigned to an entire road, and it might stop at your house for a few minutes.

Whether or not that engine visits your house depends mostly on your preparation. In a large fire, firefighters must “triage” homes. They will survey an area to see which homes are prepared and can be saved, and which are too dangerous to try to defend.

If they see a wide driveway, a clearing around the house, and a place to turn around, they will attempt to protect your home.

If they see a water supply with a fire department connection, they will be even happier.

If they see a narrow driveway crowded by brush, they will probably pass it by -- and leave your home to its fate.

Many firefighters have lost their lives defending homes that weren’t prepared. Let’s do our part to make their job easier and safer.

Fuel for the fire

Fire can’t burn without fuel. What is “fuel” for a wildfire? Anything that can burn. Trees, brush, grass, crops, wood piles, sheds--even your home. The main key to saving your property and natural resources is depriving a wildfire of the fuel it needs. Read on to find out how.
Home preparedness checklist

Many homes burn down from wildfires after firefighters leave, because smoldering embers were hiding under decks, in gutters, under roof tiles, and inside vents.

Most wildfires start in windy conditions, and create more wind of their own. Burning embers or “firebrands” carried by wind can travel a mile from the main fire. And the wind will drive those embers into every nook and cranny they can find.

Fact #1: Burning embers will start new fires only where there’s fuel for them to burn -- like trellises, pine needles, dead weeds, deck furniture, planter boxes, baskets, wood piles, and shake roofs.

Fact #2: They will try with all their might to invade your buildings and burn them down.

Fact #3: They won’t succeed if you prepare to stop them!

The “don’ts” of fire insurance

Because so many homes are being lost to wildfires, many insurance companies are looking for reasons to drop customers in wildland areas. So...

If you live more than ten minutes from a fire station and have insurance, be grateful.

Pay your bills on time. Don’t try to find cheaper coverage. Don’t ask about increasing your home’s value. Don’t file unnecessary claims. Don’t expect a price break because you installed a water tank.

This is the reality of life in Mendocino County.

DOCKS. Burning embers love to hide under decks and porches -- and then catch homes on fire. Prevent this by enclosing the undersides of your deck with non-flammable material or a fine wire mesh. Clear everything flammable out from under it.

CHIMNEYS. Chimney and stovepipe openings should be covered with wire mesh 1/4 inch or smaller, and an approved spark arrestor cap. Be sure to clean out your chimney every fall!

VENTS. To keep burning embers out, all vent openings should be covered with 1/4-inch metal wire mesh, or smaller.

WINDOWS. Radiant heat from a wildfire can cause windows to shatter. It can also melt window frames. Then burning embers can blow straight inside and start new fires. Large windows, including glass doors, are very vulnerable. Your best choice is double-paned or tempered glass, with small panes and metal frames.

PROpane AND OTHER tanks. Tanks should be at least 30 feet from your house. Clear all flammables 10 feet away from tanks. A fire near a fuel tank can cause it to heat up and vent or even explode. Firefighters will steer clear of such dangers, and leave your home to its fate!

DRIVEway. A driveway all the way around your house is ideal. It provides easy access for firefighters, a place for them to work -- and serves as a fire break between your home and the wildlands. Whatever shape your driveway, keep brush and branches trimmed back from it, up to 15 feet high, for fire engines’ access.

ROOF. A wood shake roof is your home’s worst enemy!

Replace your shake roof with one made of composition, metal, cement, or tile as soon as you can. Make sure all little openings are sealed, to prevent burning embers from invading.

GUTTERS. Gutters and places where roof angles meet can trap burning embers. Keep your roof free of leaves, needles, and other debris, to help prevent a fire on your roof. If more than 1/4 of your roof is on fire, firefighters will not try to save your home!

SIDING. Wood siding is fuel for a wildfire. But walls made of stucco, brick, or cement/Hardie board will resist heat and flames.

EAVES. With wind rushing against your house, hot air and burning embers can get trapped under its eaves. Boxing in the undersides of your eaves will reduce this serious risk.
Almost all vegetation will burn in severe conditions. But if you take wise actions about the plants around your home, you will greatly improve your property’s chances of surviving.

Does this mean cutting down all the trees and bushes near your house? No, No, No! It means carefully selecting and maintaining your vegetation to reduce the flames and heat that come near your buildings.

Remember, everything that can burn is fuel for a fire. So the less flammable vegetation near your home, the better.

But plants are also necessary to keep hillsides stable and prevent soil erosion. And, of course, they are beautiful and provide privacy! You can find a balance. See pages 10-15 for help with these decisions.

Firefighters call the cleared area around your home “Defensible Space.” This means vegetation is cleared back from your home enough that your home is “defensible” -- able to be defended -- in a wildfire.

A key action to prevent spread of a fire is separating plants from each other. This will prevent a fire from jumping from grass to brush to trees, or from brush to bush or tree to tree.

1. Vertical separation. Most fires start near the ground. If they stay low, they are much easier to fight than if they get into treetops. But heat rises, so fires like to climb -- from grasses to bushes to trees!

How to prevent this? Keep grass, bushes, and trees separated:
- Remove grass and weeds below and near brush or shrubs
- Prune trees high enough that anything burning below them won’t catch the trees on fire.

Firefighters request that mature trees’ branches be pruned up 10 feet from the ground, for the above reasons -- and so they can work beneath them. (continued)

It’s not just common sense . . . it’s the law!

Because so many homes, and lives, have been lost to wildfires in recent years, California law (Public Resources Code section 4291) requires that all residents of wildland areas take these actions to protect their homes:
- Clear all flammable vegetation other than trees, ornamental shrubs, and green grass or ground cover out to 30 feet from your home, or to your property line, whichever is closer. Reduce the amount of native vegetation in the 30-100 foot zone.
- Remove all dead branches from trees next to, or hanging over, any building.
- Remove all tree branches within 10 feet of a chimney or stovepipe.
- Keep all leaves, needles, and other dead vegetation off the roof and out of gutters.

These requirements may seem harsh, but they exist for our sake. Fire engines and air tankers won’t always be nearby to help, so we must prepare to help ourselves.

Around which buildings should we clear? All of those we want to save!

Fire will run uphill anywhere water runs down -- and hot and fast! If you live on a hillside, or at the top of a canyon, draw, or gulley, your home is in special danger, and your clearing distance downhill should be doubled or even tripled.

2. Horizontal separation. Fires also spread sideways, of course. This can happen from direct flame contact or radiant heat. To prevent this, separate trees and bushes from each other horizontally.

Rows of trees or bushes, just like wood fences, can carry fire a long distance very fast. Breaking up rows into sections will slow down a fire’s spread.

It’s all about flames. Keeping your house and other buildings safe means keeping flames away from them.

As we’ve seen before, those flames can either (1) rush to your house in a raging firefront, or (2) drop in from the sky as burning embers. The state laws in the previous column deal with both situations.

If you properly plant AND maintain the area within 30 feet of your home, any flames that do drop in will cause only a low intensity fire -- one that’s easy to fight.

Remove, reduce, and replace

Remove dead trees, dead bushes, and dead branches. These will burn like torches. Also remove dry grass, twigs, needles, and dead leaves on the ground, so burning embers won’t have the fuel they crave. Trim trees and bushes back from decks. Clear under your deck to bare soil.

Reduce flammable wildland trees and shrubs such as manzanitas and tan oaks. You may leave a few, but separate them from each other and keep them trimmed.

Replace flammable plants with less flammable, ornamental native plants. Small plants can be very attractive and will produce much smaller flames. And... sometimes bare can be beautiful!

Your ultimate goal is a SURVIVABLE HOME -- one that will survive without firefighters’ help! If you implement the suggestions in this paper, your home will have a very good chance of surviving on its own. See pages 8-9 for more details.
**Access to your home**

Will emergency responders be able to find your home? Will they be able to get there?

When your loved one is having a heart attack or your home is on fire is no time to start thinking about this. The requirements on this diagram may seem strict. But they all exist for one purpose:

**Helping emergency personnel to find and help you!**

**TURNAROUNDS** All driveways and dead-end roads must have places where large fire vehicles can turn around. These can be cul-de-sacs with at least a 40-foot radius, or places for a 3-point turn. Fire chiefs will not send their engines to places where they cannot turn around.

**Zones for wildfire safety**

This diagram shows three levels or zones of fire safe clearing. The purpose of these zones is to progressively starve the fire of the fuel it needs to burn as it approaches your home. See page 7 for more details.

*Also see www.fire.ca.gov and www.firewise.org.*

**HOUSE ADDRESS SIGN** Your house number sign must be visible from the road from 100 feet in both directions in a fire engine’s headlight. It should be metal and have reflective, contrasting numbers at least 3 inches tall. If there are several driveways off your road, use arrows to make it obvious which one is yours. See page 11.

**ROAD WIDTH AND GRADE** All roads and driveways must be at least 10 feet wide -- 18 feet wide in most situations. The grade should be less than 16%. The radius of turns must be at least 50 feet, so fire equipment can navigate them.

**DID YOU KNOW?** A fire bulldozer on a lowboy transport is 10 feet wide and up to 60 feet long!

**WITHIN 3 FEET OF YOUR HOUSE** Clearing this area will help prevent flames from touching your home.

Remove EVERYTHING flammable: leaves, pine needles, weeds, and wood chips! Irrigated or native flowers, concrete pavers, bricks, decorative gravel, or rock mulch are good here -- and can be very attractive.

**WITHIN 30 FEET** Firefighters call you maintain it.

Remove most of it. Clear out dead branches! Irrigate the plants.
**TURNOUTS** In a wildfire, fire equipment will be entering while you may be trying to leave. Build frequent turnouts along any roads less than 20 feet wide, so vehicles can pass each other and get to safety.

**ROAD AND DRIVEWAY CLEARANCE**

Fire engines are big and tall. To give them access, remove tree branches up to 15 FEET above the road surface. To give them safe passage during a wildfire, remove brush and branches 10 FEET from both sides of all roads, wherever possible.

**BRIDGES AND CULVERTS**

Fire engines can weigh 40,000 pounds. If your bridge or culvert can't support this weight, ask a civil engineer about strengthening or replacing it. Placard your bridge with its weight allowance.

**ROAD SIGNS**

Make sure there are road name signs at every intersection leading to your home. Signs should be made of metal and have reflective letters at least 4 inches tall. If there is any possibility whatsoever of confusion, use arrows to indicate which road goes which direction.

**WATER SUPPLY**

See page 12 about making your rural water supply available for firefighting!

**DEAD END ROADS**

Mark such roads at their beginning with signs that say “Dead End” or “No Outlet.”

**OUT TO 100 FEET (OR TO YOUR PROPERTY LINE)**

This extended area, now required by state law, can provide a crucial buffer between you and a wildfire. Reduce the amount of flammable vegetation here by 30% or so. This will reduce the flames and heat coming near your home.

If you do your “homework” in this area, the flames of an oncoming fire will drop down from the trees to the ground and never reach your house.

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**DID YOU KNOW?**

A fire bulldozer on a lowboy transport is 10 feet wide and up to 60 feet long!
Outdoor fire safety

Equipment causes wildfires

CAL FIRE (CDF) reports that the largest cause of wildfires in Mendocino County is outdoor equipment. Mowers, welders, chain saws, weed eaters, and splitters all have caused thousands of acres to burn.

- Do your clearing before 10:00 a.m., never in the heat of the day or when it’s windy!
- Always keep water and a shovel close by when using equipment outdoors.
- Never use a lawn mower on dry grass.
- Never drive a vehicle into tall dry grass.
- Install spark arresters on all equipment, including tractors, quads, and dirt bikes.
- Maintain and clean your equipment to prevent a buildup of flammable materials.
- Be sure trailer hitches are secure and chains don’t drag. Last summer one loose hitch caused eight fires south of Willits.
- Always, always be aware of fire danger!

Fire safe growing practices

Gardening causes a third of the structure fires in our county. Most growers know their situation is hazardous but take no actions to prevent costly fires.

- In Navarro, a fire last winter destroyed an indoor garden and the adjacent home. Volunteer firefighters worked all night.
- On the coast, an overloaded circuit fire destroyed a drying shed and its contents.
- In Brooktrails, a fire started in hay bales placed around a generator to muffle it.

To increase your fire safety:

- Have a licensed electrician do your wiring.
- Regularly inspect all equipment that could produce dangerous heat or fire.
- Put smoke detectors in every building.
- Put two fire extinguishers at each exit.
- Many fertilizers and chemicals produce explosive vapors and should not be inside.

Take these precautions, indoor or out:

- Fit all vehicles with spark arresters.
- Keep flammables away from generators.
- Keep a fire hose and high pressure water supply at all gardening locations.

Toss a cigarette, pay a price

Cigarette butts tossed from vehicles cause most roadside fires. Think about it: a lit butt rolling into dry grass can’t help but start a fire -- and it could be a deadly one.

California law forbids tossing out anything on fire. If it’s careless, it’s a misdemeanor. If it’s intentional, you’ll end up in prison.

Either way, you are ALSO legally liable to pay the huge costs of fighting the fire.

Think. Be smart. Use your ashtray.

Native plants, saving water

Mendocino County’s native plants are those our first residents knew and depended on before European settlers arrived. They have co-evolved with animals, fungi, and microbes to form a complex network of relationships.

Landowners with knowledge of local native plants can help their land by:

- Promoting water conservation. Once native plants are established, they can survive with only seasonal rainfall.
- Recognizing non-native invasive species such as star thistle, distaff thistle, French and Scotch broom, and gorse -- and eradicating them before they take over.

What do native plants have to do with fire safety? Native plant landscapes consume much less water, which means more water is available for firefighting. This will be crucial as we continue in a drought. And many natives are less flammable than non-natives.

Learn more from the California Native Plant Society (www.CNPS.org) and its Sanhedrin (cnps-sanhedrin.org) and Dorothy King Young Chapters (dkycnps.org). See page 15 for a list of local native plant specialists.

Contributed by Geri Hulse-Stephens, botanical consultant, 25-year CNPS member, and currently vice president of CNPS’ Sanhedrin chapter.

When and how to mow

When, how, and if you mow can make a big difference in the health of your fields -- and your fire safety. Mowing too early promotes late-blooming weeds. Mowing too late spreads non-native grasses. Not mowing at all is best if the area will stay moist and green all summer. Mowing can also cause wildfires!

To discourage annual weeds, mow when they are in flower or before seed heads are fully mature. Be sure to burn or thoroughly compost clippings with seed heads.

To suppress star thistle, mow when the first flowers appear and again six weeks later. Second mowing will usually be in July. Mow carefully to avoid starting a fire.

To encourage desirable annuals such as valley lupine or common madia, mow only before it has produced a flower stalk or after seeds are mature. If you must mow when desirable annuals are in bloom, mow around them and return after their seeds have matured, usually several weeks later.

Perennials such as California oat grass and native irises and lilies can be encouraged by suppressing competing annuals that grow earlier and faster. Perennial grasses offer another advantage: they reduce fire hazard because they stay green longer.

When you mow, set your blade at least 4 inches high, to reduce the risks of hitting rocks and starting fires, or disturbing the soil, thereby creating habitat for invading weeds.

For more information, see http://cal-ipc.org and http://www.alt2is.com/imcwma.

Contributed by Tara Athan, Coordinator of the Mendocino County Weed Management Areas. She may be reached at coord@imcwma.org.
CERT: being prepared

Community Emergency Response Teams (CERTs) of average citizens all over our county are learning how to take care of themselves in disasters. They know this will free firefighters and medics to help others in need.

CERT training takes place on weekends or weeknights and covers Disaster Medical Operations, Search and Rescue, Fire Safety, Disaster Psychology, and more.

This valuable training is free. For information, contact:
South Coast: Ken Reynolds 884-4155 ke6wc@aarl.net
North Coast: Stacey Well-Dye 937-4179 stacey@mcn.org
www.northcoastcert.org

Rest of Mendocino County: Christine Dektor, Americorps VISTA member, 462-2596 x101, cdektor@ncoinc.org

THE LOCAL RED CROSS CHAPTER also provides pre-disaster training, as well as post-disaster assistance, and is seeking volunteers. Contact Coordinator Kristy Monti at monti@sonic.net or 894-0754.

Evacuating your horses

Ensuring the safety of horses in a wildfire requires preparation. Most emergency responders are not trained to handle large animals, so the responsibility is yours.

• Develop a plan with your area’s horse owners and firefighters. Choose evacuation routes and holding areas.
• Everyone should have a family radio, and some should be ham radio operators.
• Make sure your pickup has full fuel.
• Secure dogs with leashes and put all pets in your vehicle. No pet stays behind!
• Load your horses and let them sit.
• Don’t go to the evacuation area until you are told by the Sheriff or fire department.
• Call or radio your route out, and also call or radio when you reach your destination.
• When you reach the evacuation area, face your trailer to the exit.
• When you reach your destination, sit.
• Wear your helmet if you unload your horses. Use extreme caution.

Take with you:
• Wire fence cutters, crow bar, and knife
• Several holders and ropes
• Whip and stud chain
• Towels to cover horses’ eyes
• Buckets, feed, and water: offer water if you’re sitting over two hours
• First aid kit and horse disaster kit, including ID sheets for each animal
• Flashlights and batteries
• Gloves, boots, coat, goggles, N-95 masks
• Phone numbers, including vets
• Money. You could be gone a long time.

For more information visit www.cthorsecouncil.org. This article was contributed by Michelle Staples, a South Coast (continued)

Resource Conservation District

Mendocino County Resource Conservation District supports conservation of natural resources, especially along rivers and streams. To date it has leveraged millions of dollars of grant funds for projects including Navarro Watershed Restoration; the Russian River’s Forsythe, McNab, and Feliz Creeks; and control of the weed Arundo, a huge fire hazard. The MCRCD creates and distributes valuable publications for rural property owners, including a Handbook for Forest and Ranch Roads, and has launched a creative streamlined permitting program. Call 468-9223 or visit www.mcrcd.org.

Contributed by Patty Madigan, Navarro Watershed Restoration Coordinator

For more complete articles about the subjects in this paper, visit www.firesafemendocino.org.

Natural Resources Conservation Service (a branch of the USDA)

The NRCS helps owners and managers of private working lands to conserve their soil, water, and other natural resources. They provide technical advice and financial assistance suited to each property’s needs. District Conservationist Stephen Smith may be reached at 405 South Orchard Avenue in Ukiah, 468-9223 x112.

A hint: Firefighters prefer horizontal numbers!
Outdoor burning and air quality

As residents of Mendocino County, we pride ourselves on our beautiful surroundings, our diverse community, and our clean air. The Mendocino County Air Quality Management District is the agency responsible for protecting our air quality. We accomplish this through state law and local regulations, including regulations for open outdoor burning. The following is an overview of the Open Outdoor Burn Program in Mendocino County.

Permissive Burn Days vs. No Burn Days

Burn Day determinations are based on meteorological data collected by the state Air Resources Board. On Permissive Burn Days, smoke from your fire is more likely to rise and be carried away. On No-Burn Days, the air is very still and may be accompanied by a low inversion. (The word “permissive” means it is permitted to burn that day.)

Permit requirements

A written Air Quality / Burn Permit is required year round for all residential burn piles, agricultural burning, and control burns.

Follow these simple rules

- If it didn’t grow on your property, you can’t burn it.
- Vegetation must be dry and free of dirt.
- Burn only on Permissive Burn Days.

Before you burn

- Find out which fire agency is responsible for your area. Call the Air Quality office at 463-4354 if you don’t know.
- Obtain a burn permit from CDF, your local fire agency, or Air Quality (see page 13).
- Call 463-4391 or 1-800-992-5441 ext. 4391 to find out if it is a “Burn Day.”
- Follow instructions on your burn permit.

Please get adequate water storage ready before you burn.

Most of us can't provide this perfect system, of course. But there are ways to modify your system to make it helpful.

If your system can deliver at least 40-50 gallons per minute, it can provide “fire water” by simply installing a 1½ or 2⅛-inch male National Hose pipe thread fitting in a place a fire engine can reach. Most tanks can be made accessible by:

1) If an engine can park within 12 feet, put a 2½-inch pipe from the tank to a place a fire engine can reach. Most tanks are adaptable, consider purchasing a tank just putting a PVC pipe into your tank from the discharge port, you can build a siphon by where fire engines can park, and build your standpipe or hydrant there.

2) If a fire engine can't get this close, lay a 2½-inch water line, more if you can. Run the line to a place about 50 feet away from your house that is accessible to a fire engine, and build your connection there.

In rural parts of our county, water for firefighting can be hard to find. Many homes have thousands of gallons stored, but it can't be tapped by firefighters because the needed fittings are missing.

The ideal firefighting system is a tank or pond located 100-250 feet uphill, with a 2½ or 3-inch water line down to your home and a 2½-inch valve and National Hose fire thread fitting. This can provide 250 gallons per minute without a pump.

Fire engines can pump from your pond or pool if they can get within 12 feet. Clear a way for them. Paint all fire water fittings red, and mark the location of your water with a blue reflector on the road or a “fire water” sign pointing to the tank, pond, or hydrant. Firefighters will love you for it!

For more information on air quality and open outdoor burning, please call us at 707/463-4354 or visit our web site at www.co.mendocino.ca.us/aqmd.

This article was contributed by Donna Roberts of the Mendocino County Air Quality District.

The Mendocino County Fire Safe Council

...is a nonprofit organization whose goal is to save lives, property, and natural resources from being devastated by wildfires. Its activities include:

- Conducting awareness and educational events. Please call 462-3662 if you would like one for your road association, neighborhood, or other group.
- Obtaining federal grant funding and performing projects to reduce wildfire risks. So far the Council has completed $242,000 of such projects.
- Creating improved maps of rural subdivisions for use by firefighters
- Supporting local volunteer fire departments, especially those struggling the most to make ends meet (see page 13 - contribute to them!)
- Creating wildfire preparedness plans for the county and local communities
- Promoting properly located, easy-to-read road and house number signs
- Helping start local Fire Safe Councils in areas like yours; please contact us!

For ways you can contribute, please see the other side of this page.

Firefighters' delight: a 10,000-gallon water tank with a valve and 2-1/2” National Hose male fitting, located where a fire engine can easily connect to it, full of water and ready to protect your home and property!
Mendocino County Fire Departments

Did you know...?

Our county has 21 local fire departments. Only 14 have ONLY volunteers. 19 are special districts and receive tax income. 2 receive no taxes at all: Westport & Whale Gulch. Only half of Mendocino County is in a fire district.

The other half receives emergency services but doesn’t pay for them. The County government has provided only limited help to fire departments and ambulance services. Most departments rely on federal grants and fundraisers to survive. Basic firefighting gear costs $1,200 per person. A new fire engine costs $250,000 or more.

Volunteer firefighters spend huge amounts of time in training. Training is expensive. Volunteer firefighters are usually the first at scene of medical emergencies and traffic accidents. Your life could depend on how well your fire department is equipped and its firefighters trained.

Contribute today to your local Fire Department!

Comptche
Chief Larry Tunzi
937-0728
comptchefire@pacific.net
Box 164, Comptche 95427

Coveo
Chief Bill Baker
983-6719
covelofire@pacific.net
Box 36, Coveo 95428

Elk
Chief Jeff Roy
PO Box 151, Elk 95432

Fort Bragg
Chief Steve Orsi
961-2831
fbd8300@yahoo.com
141 N. Main, FB 95437

Hopland
Chief Hoss Milone
744-1222
hoplandvfd@pacific.net
Box 463, Hopland 95449

Laytonville/Long Valley
Chief Jim Little
984-6055
laytfire@mcn.org
Box 89, Laytonville 95454

Leggett
Chief Ely Reighter
leggettfire@gmail.com
Box 191, Leggett 95585

Mendocino
Chief Danny Hervilla
937-0131
mvfd@mcn.org
44700 Little Lake, 95460

Potter Valley firefighters

Albion-Little River
Chief Oliver Seeler
937-0888
chief@albionfire.com
Box 101, Albion 95410

Anderson Valley
Chief Colin Wilson
895-2020
avvfd@pacific.net
Box 398, Boonville 95415

Brooktrails
Chief Daryl Schoepnner
459-4441
firedept@btsd.org
24800 Birch, Willits 95490

Hopland firefighters head home

It’s not my responsibility. Yes, it is. State law requires residents of wildlands to take action to protect their property. Firefighters will do all they can, but preparing to survive a wildfire is your responsibility.

I’ve got insurance. Insurance can help rebuild a house, but it can’t heal your blackened forest or bring back your dead pets. And most insurance will not cover your home’s replacement value (see p. 6).

I don’t have the time. In our county, wildfire safety must be a priority. The lives of you and your family could depend on it.

Some excuses for not preparing. What’s yours?

It’s too expensive. Some preparations cost little or no money. Do what you can. If you are elderly or disabled and have a low income, contact the Fire Safe Council at 462-3662 or firesafe@pacific.net to be put on a waiting list to receive assistance.

It won’t happen to me. Many people whose property was destroyed by wildfires have thought the same thing (see page 3).

I refuse to cut down trees. You don’t have to cut down trees to make your home safer. Often pruning them up and back from your roof is all that’s needed.

It will look ugly. Not unless you want it to! Fire safety actions can make your property much more attractive, like a park, and can improve its dollar value and wildlife habitat.

I’ll lose my privacy. Again, this is up to you. There are many ways to keep a privacy screen between your home and your road or neighbors while still making your home safer. Moving your screen farther away from your home is often a good option.

My neighbors don’t clear, so why should I? Because the more YOU clear the safer YOU will be. Report your neighbors to CDF.
Brush clearing - Weed eating - Tree trimming

Steve Thomas
President
(707) 462-4719
P.O. Box 748
Ukiah, CA 95482
fax (707) 462-7522
www.firesafyardservices.com

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Planting the Right Tree in the Right Place

The best way to ensure that trees and overhead power lines don’t get tangled up in the future is to plant wisely now.

If you’re planning to landscape an area near poles and power lines, here are some factors to consider:

- The maximum mature tree height should be no closer than 10 feet from high-voltage wires
- No trees should be planted within 10 feet of a power pole
- Trees should be planted at least six feet to the side of underground facilities

For more information on smart landscaping, such as a list of power-line-friendly trees, visit [www.safetree.net](http://www.safetree.net) or [www.pge.com/trees](http://www.pge.com/trees) and click on education. Also, call Underground Service Alert at 1.800.227.2600 at least two working days before you plant to have underground utilities location.

REMEMBER...

The responsibility for saving your home from wildfire is yours! Each action you take will make your home, outbuildings, property, and natural resources more resistant to fire. The task may seem overwhelming, but start somewhere and do what you can.

Native plant specialists
Mario Abreu 964-4352
abreu@mcn.org
Mendocino Coast Botanical Gardens
Ken Montgomery 895-3853
Anderson Valley Nursery
See ad on page 14
Peter Warner 964-8242
corylus@earthlink.net
Chuck Williams 462-8984
Sanhedrin Chapter, CNPS
Jim Xerogeanes 468-3148
Mendocino College Nursery
Hensley Creek Road, Ukiah
jxerogea@mendocino.edu
Teri Jo Barber and Karen Youngblood
Ridge to River 357-0857

Mendocino County Farm Bureau
The Farm Bureau represents rural residents and agriculture, doing with them what individuals cannot do alone. Membership in the Farm Bureau gives a wide range of services and benefits. Call 462-6664 or email mendo fb@pacific.net to join

This ad placed courtesy of the Fire Safe Council

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GOT BRUSH?
If a wildfire is heading your way

SHOULD YOU STAY OR LEAVE?

*Plan to leave promptly unless you have prepared yourselves and your house to deal with the heat, flames, wind, and noise a wildfire can bring.*

Be aware that evacuating may be extremely difficult if your only road is barely wide enough for fire engines to enter, with no turnouts for vehicles trying to leave. If you live in such a place, you should prepare ahead to “shelter in place” in your home while the fire passes, or go to a pre-designated “safety zone.” Both of these involve risks. For details see firesafemendocino.org.

- EARLY ON, if possible, evacuate children and elderly or disabled persons. Having them safe will make decisions easier.
- Relay your plans -- to leave or stay, a meeting place, who will go where -- to a contact person outside the area. Be sure all family members can reach that person.

GETTING READY TO LEAVE

- Decide on only ONE evacuation vehicle. All roads will be dangerously crowded.
- Tune to a local radio station for news.
- Wear only cotton or wool clothes (jeans, long-sleeved shirt) and sturdy shoes. *Do not wear any synthetic clothing* (polyester, nylon, etc.) -- it can melt onto your skin and cause horrible burns.
- Prepare to evacuate pets and large animals. (See page 11 for horses.) Put pets, in carriers, in your vehicle. Pack their food and water for several days.
- Put your evacuation vehicle in your garage or driveway, facing out, ready to go, with keys in the ignition.
- Disconnect any electric door openers so the door can be operated manually.
- Carry gloves, goggles, and a moist handkerchief to cover nose and mouth.

WHAT TO TAKE (PUT IN VEHICLE)

- Medications and eyeglasses
- Family photos, videos, heirlooms
- Computer or computer backup files
- Phone numbers
- Clothing and toiletries for a week
- Nonperishable food, drinking water

PREPARING -- INDOORS

- Take down lightweight curtains. These could catch fire due to radiant heat.
- Move stuffed furniture away from windows, for the same reason.
- Close heavy drapes, shutters, and blinds -- these will help keep the heat out.
- Fill bathtubs and sinks with water.
- Close all windows and exterior doors, to prevent sparks from blowing inside.
- Close doors between rooms. If a fire starts in one room, this will slow it down.
- Leave a light on in each room and porch, so firefighters can see your home.

PREPARING -- OUTDOORS

- Put patio furniture, planter boxes, wood piles -- everything flammable -- either indoors or at least 30 feet from the house.
- Shut off propane at the tank or natural gas at the meter. Leave electricity on.
- Close exterior vents, to keep out embers.
- Prop a tall ladder against your house to give firefighters access to the roof.
- Connect all garden hoses to faucets, with nozzles set to spray.
- Fill trash cans and buckets with water and place them around your house.
- If you have water with a fire department connector (see p. 12), post a large sign at your driveway pointing to it.
- If you can, cover windows, attic openings, and vents with heavy plywood.
- If time permits, clean off your roof.
- Leave all exterior doors unlocked so firefighters can enter if necessary.
- Close your garage door behind you.

Finally, hope and pray that no one is hurt: you, your neighbors, or your firefighters. And remember, most people who die in wildfires were trying to evacuate -- too late.