

Protecting Horse Properties Against Wildfire

Identify and reduce fire risk on your property, and have a firewise emergency evacuation plan in place for your horses.

Posted by [Alayne Blickle](#) | Sep 6, 2017



Wildfire, an uncontrolled blaze, can quickly reduce a beautiful horse property to smoldering ashes. Farms surrounded by trees and forest or rangeland with grass and shrubs—referred to as wildland urban interface, or WUI—are at particular risk. Incidentally, many horse owners choose to live in these WUI areas because they provide ample pasture, trail access, and/or scenic views. But in a dry year, vegetation can quickly become fuel for wildfire; high temperatures, limited rainfall, strong winds, and lightning all create a very high risk for fires igniting. According to the National Interagency Fire Center’s (NIFC) website, 60,000 to 80,000 wildfires occur in the United States each year, burning 3 to 10 million acres of land. In 11 Western states the amount of land burned annually has almost doubled over the past 100 years.

Stephanie Johnson is a horse owner and the natural resource advisor for Valley County, located in the west central part of fire-prone Idaho. For the last several years Idaho has endured some of the nation’s largest fires. Like much of the Western United States, fire is part of the natural system there. “We live in a fire adaptive ecosystem,” explains Johnson. “That means it’s not if a major fire is going to happen, it’s when.”

Among Johnson’s various responsibilities is the role of firewise coordinator, meaning she manages all activities related to reducing fire risk and handling local fires on the area’s private lands. This includes

facilitating fire response groups, coordinating with landowners and communities that want to pursue a firewise certification, and overseeing hazardous fuel reduction on at-risk lands (e.g., removing brush and flammable vegetation).

“Horse owners are an underserved community,” Johnson says. “There are a large number of horse owners housed in the WUI, and it’s often up to them to figure out how to be better prepared (for wildfire) and manage their own evacuation. Horse owners need to make plans in advance, not just for evacuation but so they lower their (wildfire) risk.”

As a farm owner, being firewise is exactly what it sounds like—being smart about reducing and managing your risk for fire damage. There are two firewise practices critical for owners to follow: identifying and reducing elements of fire risk on horse property and putting together a firewise emergency evacuation plan for horses.

Defensible Spaces

Wildfires start either directly (e.g., by lightning strike or an out-of-control campfire) or indirectly (e.g., embers). Windblown embers can travel a mile or more before landing on combustibles such as stored hay or shavings, leaves trapped in a gutter, or dried weeds piled up along a fenceline. The most important thing a horse owner or any property owner can do to reduce fire risk is create a defensible space around important structures. A defensible space is a landscaped area intended to reduce fire danger by minimizing vegetation and combustibles. If a wildfire sweeps in or sparks from nearby embers, having a defensible space reduces the risk that fire will spread to structures on your property. Defensible spaces also provide firefighters and emergency officials with access to safer defense points should a fire occur.

Design your defensible space by mentally drawing three concentric circles around important structures such as your home, barn, and outbuildings. The first circle should extend approximately 30 feet away from the structure’s perimeter, the second circle 60 feet, and the third 100 feet. The inner 30-foot circle is the most critical to manage. Plan for this area to have the highest water use, and keep these plants green throughout the fire season. Try to choose low-growing plants with high moisture content such as nonwoody deciduous shrubs or well-irrigated pasture/lawn. Talk to your local extension office or conservation district staff for help with choosing landscaping plants and materials that are well-suited for your region and not considered highly flammable.

Between 30 and 60 feet out from buildings you can add slightly taller drought-tolerant shrubs and plants. Plants with high salt or soap content and low oil or resin content are the least flammable. From 60 to 100 feet out from buildings, you can include trees. Deciduous trees are generally more fire-resistant than evergreens because they have a higher moisture content when in leaf, and they have a lower fuel volume when dormant. Avoid junipers and pines, both of which are highly flammable. In the outer two zones remove deadwood and trim vegetation in the spring to reduce size. Incorporate rock mulches, patios, boulders, riprap, dry streambeds, and sculptural inorganic elements into your landscaping plan as fuel breaks, as well as masonry and rock planters. Driveways, walkways, patios, parking areas, and fences constructed of nonflammable materials such as rock, brick, or cement also reduce fuel loads, as do water features, pools, ponds, or streams. Be creative, keeping in mind that less is more.

Firewise Building

When planning for new outbuildings, place them as far apart as is reasonably possible—at least 30 feet is best—to create a fuel break between them.

When feasible, build barns, shelters, and other structures on flat land rather than hilltops or in draws (low areas between parallel ridges). During a fire these areas act as chimneys, pulling hot air and flames rapidly up hillsides. Once at the top, these intense flames will consume anything combustible.

Choose nonflammable building materials such as metal sidings and roofs for barns and shelters. Avoid building log or wood structures—building codes in some areas won't even allow such structures because of fire risks.

The most firesafe fencing is wire or panel with nonflammable posts. A wood fenceline can act like a wick, leading a fire right up to a barn or shed. If you already have this type of fencing in place, you can install a gate or removable panel that you can leave open or take out during fire threats. Be aware that plastic fencing will melt and is not a good firewise choice.

Reducing Fuel Loads

In the spring or before fire season begins, inspect your property for potential flammables. One of the simplest things you can do is clean gutters and downspouts; remove leaves, branches, and other debris where embers could possibly land and ignite. Clear weeds or dead brush accumulations from along fencelines and around building corners and walls.

During fire season water vegetation within 100 feet of buildings and keep them mowed low or grazed down. Use grazing goats or other livestock to reduce cheatgrass or other weeds in fields or behind barns. You can also remove weeds in these larger areas with mowing, prescribed burning, or herbicide application.

Remove as many flammable outdoor items on your property as possible; examples include anything that might catch an ember and ignite, such as wood patio furniture, brooms, flowerboxes, or flammable doormats. Replace them with nonflammable materials such as wrought-iron patio furniture and the cement or stone planters described. Store hay, shavings, firewood, trash, lumber, and empty feed sacks at least 30 feet away from buildings and other combustibles.

If a wildfire does break out in your area, decide early on if you need to leave. Late evacuation is a deadly option, risking human and animal lives. If you are unprepared or wait until the last minute to evacuate, emergency officials might tell you to leave your horses behind. Once you leave your property there is usually no way of knowing how long you will be kept out of the area, and horses left behind could be unattended for days. "If (landowners) are going to stay and try to evacuate their livestock," Johnson adds, "that's going to create a whole new dimension to the evacuation process." If you choose to stay and actively defend your property from fire, you need to be well aware of risks.

Julie Fiedler is the executive officer for Horse SA, a nonprofit community-based organization in Southern Australia. Part of her job entails developing educational materials about wildfire preparedness in the land Down Under.

"Southern Australia, which includes (the states) of South Australia and Victoria, is one of the highest fire danger areas in the world," says Fiedler. "It is a combination of fuel load (bushland), a dry and hot climate, and days of wind."

Victoria was the scene of the devastating 2009 Black Saturday Bushfires, which involved more than 400 fires raging for 28 days, killing 173 people and burning 1,062,553 acres of land, 2,000 properties, and 61 businesses. Entire towns were destroyed and around 78 communities were affected. A total of 58,586 livestock animals died, 183 of which were horses.

As a result the Australian horse community has rallied. As part of a national awareness campaign, horse owners are encouraged to reduce fuels on their properties and develop firewise plans for evacuation. “There are not enough fire trucks to go to every house,” Fiedler says.

Everyone’s situation differs according to the size and nature of their horse enterprise, which is why she says every horse owner needs to develop an individual evacuation plan before hot weather and fire season arrive. Use this list to help you organize your own firewise evacuation plan.

- ***In an emergency defer to local authorities*** The county sheriff is always in charge of evacuations. If possible, listen to local radio stations or contact 911 for instructions.
- ***Decide in advance which horses you will evacuate*** and make sure they are trained for transport. If you do not have enough trailer space for all of your horses, determine ahead of time if someone will be available to help haul in an emergency.
- ***During a fire situation remove all synthetic equipment from horses***, such as nylon halters, blankets, sheets, and fly masks. People often mistakenly think these materials will protect horses from windblown sparks when, in fact, if an ember alights on them, it can melt and burn the horse. Instead, use cotton or leather halters and leads and avoid leaving metal- and buckle-laden equipment on them, which can get extremely hot.
- ***Pre-determine possible locations to take your horses*** in the event of a fire. Options include another horse property, a regional stockyard or livestock sales yard, county fairgrounds, show facilities, a racetrack, or even a large park.
- ***When evacuation is not possible, place horses in the firesafe area*** on your property that you have created ahead of time. It should be as large as possible, devoid of flammable vegetation, and surrounded by fireproof (metal) fencing. A firesafe area could be a large sand arena, a large drylot turnout, or an overgrazed field or pasture. If time permits, put nonflammable metal containers full of feed and water in the middle.
- ***If you have to leave horses behind, consider identifying them*** by writing your cell phone number on their front hooves with an indelible marker or on their hips with a grease marker (the type used for cattle sales or endurance rides).
- ***Finally, never, ever turn horses loose*** This is the No. 1 rule, but it’s one that horse owners break frequently. In situation after situation, officials have had to deal with loose horses on roadways blocking both traffic and emergency personnel who are trying to deal with the fire. Loose horses become an additional liability, especially if they cause an accident or get injured and exacerbate a crisis.

Take-Home Message

Wildfires can quickly escalate and threaten rural landowners. “As climate change starts to take effect there will be more days rated extreme for fire danger,” warns Fiedler. “Fires are expected to be more intense, more dangerous. More than ever it is important for all horse owners to plan well ahead. There may be warning about an approaching fire on a day that it is possible to defend a property; other times almost no warning will be given.”

“Once horse owners see lands that had wildfires, see the devastation and the livestock that were decimated, that’s when people begin to realize the risk involved,” Johnson explains. “Agencies have to be primarily concerned about human risk, but human risk is escalated when landowners are concerned about evacuating their animals.”

While it’s easy to believe wildfires only happen to other people, that kind of thinking can lead to tragic consequences: Being proactive is the safest plan. trademarks of The Horse Media Group LLC.