AG PRODUCER SAFETY DURING WILDFIRES

WILDFIRE SAFETY
Fire departments respond to over 306,000 wildfires each year according to a National Fire Protection Association study (2011–2016). Only 30,600 of these are forest or woodland fires. The remaining 275,400 are grass wildfires initially responded to by private landowners with the assistance of trained volunteer fire departments. Of all wildfire injuries, 59.5 percent happen on these grass fires because landowners’ first tendency is to stop the fire from burning additional resources.

THE BROWN VERSUS THE BLACK
Although many agriculture producers serve as trained volunteer firefighters, many of the injuries stem from producers not having the right training, equipment or approach.

Trained wildland firefighters who have completed S130/190 Wildfire Behavior Training know the safest approach to a fast-moving grass wildfire is to drive across it on the burned area, the black, and start snuffing it out. This leaves a wide safety and retreat area if the wind changes.

Getting in front of a wildfire and working it from the fuel side, the brown, places you in the heat, standing in fuel, and exposed to chemicals in the wind. Additionally, grassland fires can generate 30 inch to 30 foot tall flames roaring at you and they often throw embers over your head, starting fires behind you without your knowledge.

EQUIPMENT
Agriculture producers without formal training usually have clothing and equipment which is not fire or heat resistant. Vehicles can have fuel and lubricant seepage which can ignite. Agriculture sprayers are often designed to put out one to three gallons per minute while fire sprayers are calibrated at 25–50 gallons per minute.

FIRELINES
Firefighters, specifically with advanced training, will move far in advance of a fire and create firebreaks with equipment or hand tools. They know better than to try and combat fire advancement at the fire line. In addition, highly trained technicians can then initiate a back burn to reduce fuel in front of the fire. Starting a backfire sounds practical but when the two fires meet flames, debris and air can shoot upwards as much as four times the flame wall height which may cause some flames to jump the line.

FITNESS
Wildland firefighters with Red Card certification have to maintain a heightened level of fitness which is often tested by requiring them to carry 65 pounds over three miles of rough terrain on a regular basis. Ranchers and farmers respond to fires despite their condition and health status because their livelihood is on fire. This may place them at a life and health risk.

COMMUNICATION
Firefighters have predetermined radio frequencies so they can call up additional resources and specialties if needed. Rangeland wildfires sometimes compromise cell towers.
rendering the cell phones of producers useless. It is a good idea to have CB or other radios.

**EMERGENCY EQUIPMENT**

In addition to lacking the Nomex clothing, fireproof gloves, particulate masks, fire helmets and fire boots used by wildland firefighters, agriculture producers almost always have no alternatives if a fire turns and burns over them.

Although an undesirable option, wildland firefighters carry a fire shelter on their gear which can be deployed as an emergency wrap-around bivouac bag. This can protect them from direct fire and heat for several minutes as the fire passes.

**GENERAL FIRE RECOMMENDATIONS FOR AGRICULTURE PRODUCERS**

The following are options a producer can implement to reduce the impacts of wildfire on your operation:

- Have contact information for your local fire department.
- Take a wildfire orientation and training course.
- Keep your health and fitness in a ready state.
- Make a plan to respond with others to wildfire.
- Purchase communication equipment which is not cell dependent.
- Purchase, fill and maintain a firefighting apparatus (sprayer) at your farm or ranch during fire season.
- Understand the risks associated with weather including lightning, wind and storms.
- Know where man-made ignitions may occur near your operation.
- Invest in some fire-resistant clothing.
- Never take vehicles which leak fuel lubricant near a fire.
- Create fire breaks around important buildings and sites.
- Consider widening existing fire breaks such as county roads by practicing targeted grazing to reduce standing fuel loads.
- Let fire departments know where those fire breaks are.
- Control annual weedy grasses such as downy brome grass, ripgut brome grass and weeds like Russian thistle which can not only serve as fuel but can roll spreading fire if it starts.
- Practice rotation tillage in windward sides of cash crops in a wide enough pattern to inhibit fire passage.
- Thin and manage woody species for healthy density and vigor to resist fire.
- Have multiple escape corridors for both livestock and you.
- Last and most important, fight fires from the black with the right equipment, careful attitude and friends!

**FOR MORE INFORMATION**

More information is available by contacting your local Extension office or the Extension Disaster Education Network at www.extensiondisaster.net.