

## **Fire: Friend and Foe**

### **AGRI-VIEWS**

by Chuck Otte, Geary County Extension Agent

Fire is a very critical and powerful natural force. The more we study ecosystems the more we realize that it is a very necessary item in the creation of and the maintenance of not just grasslands, but many ecosystems including forests. We've occasionally learned the hard way, as in the case of forest fires, that we need fire periodically. In forest settings the fires may be every 10 or 20 years while in grasslands every few years. But periodic fires are needed.

When fire is removed from ecosystems, bad things start to happen. The first and foremost is accumulation of fuel. A grassland that was burned in the past year or so is going to be harder to burn than a grassland that hasn't burned for many years. When that accumulation of thatch and fuel does catch fire, it is going to be much hotter and harder to control. When Smoky the Bear, bless his heart, tried to stop and control all forest fires, we thought it was a good thing. But then when fires did get started, they became harder and harder to control because they became so big and so hot. It may sound like an oxymoron, but the best fire control in many ecosystems, is periodic fire!

In the grasslands of Kansas, fire is very critical to keep the native grasslands as grasslands. When fire is removed, we see rapid spread of our only native evergreen, the eastern redcedar. In less than 20 years, in the absence of fire, grassland will become a cedar thicket with no grazing value for cattle and great reduction in wildlife habitat. Periodic fire, once every three to four years, will easily keep the cedar trees under control. Fire is not a replacement for good grassland management however. Placing too many cattle on a pasture, several years in a row, will greatly reduce the amount and quality of forage and encourage undesirable plants, including woody shrubs. Fire is not a replacement for good management, but it is one of the crucial tools for good management.

Mankind has had a love-hate relationship with fire from the beginning of time. Fire provided warmth, light and a way to cook food. Fire could also destroy human possessions when it was not treated with respect and used with caution. We seem to have seen the destructive side of fires a lot this spring. There's no way around it, we have a very complex scenario. We need fire as a grassland management tool. Fire produces smoke which, if in excess and concentrated, can cause very serious short and long term health and safety issues. If we don't burn, the fire risk escalates. We didn't burn very many grasslands last year so we need to this year, if we can.

Variable weather conditions, typical for Kansas, have made it a challenge to maintain fire safety. Winds can shift 180 degrees in a matter of minutes. A fire that was well managed, can suddenly spark up out of control moving even faster than the actual speed of the wind. Low humidity and high winds can make it impossible to control a fire. We see this in forest fires annually, we've seen it numerous times in grass fires already this year.

Even those not directly involved in agriculture play an important role in fire management in years like this. Don't throw smoking materials out the window, at all. A cigarette butt still smoldering has started many a grass fire alongside a road. Get one flame into dry grass in this wind and it is gone! Use great caution with charcoal grills, fire pits, literally anything that is outside that has an open flame. Even the catalytic converters of vehicles can start fires when parked in dry vegetation. We need fire. Fire is a management tool. But under the wrong conditions, fire becomes an uncontrollable foe.