

It's Becoming A Tinder Box Out There

AGRI-VIEWS

by Chuck Otte, Geary County Extension Agent

It becomes very easy to watch the news out of southern California of the horrible fires and sit here in a false sense of security and think that this couldn't happen to us. But before you get too comfortable, just think back to March of 2016 when the Anderson Creek fire burned nearly 400,000 acres much of it in Barber and Comanche counties of Kansas. Or March of 2017 when over one half million acres burned in wildfires in the state. While much of this was in Comanche and Clark counties, there were also significant burns and losses in Reno, Lane, Rooks and Meade Counties.

We live in a semi-arid state. We receive enough rainfall that most years we have good vegetation growth across the state. Approximately half of the farmland acres in the state are used for crop production which means the other half is in grasslands and timber. Much of that grassland is in native warm season grasses that unlike our lawns, are green from May to September and then dry and brown the other seven months of the year. Grass and cedar trees are flammable anytime of the year but especially so during drier periods.

Wild fire risk is a combination of several factors. It starts with how much fuel load there is and how dry it is. Then you add in the wetness or dryness of the soil surface and the thatch layer of old sometimes partially decomposed plant material on top of that soil surface. If the soil and thatch layer is wet, fires will be slow to start. A cigarette discarded into damp thatch will probably just burn out. But if, as we are seeing now, the soil surface is dry as is the thatch layer then a discarded cigarette can quickly ignite the thatch and a fire can get started.

The next concern is the standing fuel load. If a grassy area is mowed five inches or shorter, then a fire burning through it will be a lower height. If wind is blowing it may move across the surface quickly, but you aren't likely to have flames leaping 10 to 15 feet in the air. But if you have a good stand of bluestem and Indiangrass with stems four or five feet tall, you get a lot more elevation in your flames. Those tall leaping flames can get caught up in the wind and the fire speed will accelerate. The higher flame height also makes it easier for the fire to get into cedar trees or other evergreens which pushes the flame height higher yet and starts to send embers in the wind ahead of the actual fire.

Wind speed is very crucial to the explosiveness of a fire. A fire will create it's own wind and atmospheric conditions. In winds under 10 mph a fire can be fairly well controlled. In 10 to 15 mph winds it's a little trickier but can be done. The danger zone starts to develop in 15 to 20 mph winds. Once winds exceed 20 mph, a fire, especially in tall grass or timber, becomes impossible to control. Relative humidity becomes an issue too. Standing dead grass that is moist from rain or even snow or dew has to evaporate the water out of it before it can burn. As the relative humidity drops below 25% or down into the lower teens or single digits, vegetation has so little moisture left in it that it will catch fire very easily.

I've detailed all of this to make the point that it is very dry right now. It's been two months since we've had significant rainfall. There's a lot of very dry fuel out about the countryside as well as right around our homes. Please do not discard smoking materials outside your home or vehicle. Be careful with cooking or recreational fires. Until we start to receive significant rainfall, our area will be a tinderbox. A fire could start easily and with gusty winds, it could be out of control before you know it.