

The prescribed burning season in Kansas has started. The outlook for potential wildland fire in Kansas is above normal for parts of Kansas (see recent Agronomy eUpdate article <https://bit.ly/3kn35gM>). This article discusses reasons for conducting a prescribed burn and ways to have a safe and successful prescribed burn when much of the state is in a heightened state for wildfires. In addition, there are some online tools and resources that will be useful when planning a prescribed burn.

## Reasons for conducting a prescribed burn

Brush control and increased stocker gains often top the list when you ask that question. Decades of data have indicated that a mid- to late-spring burn enhances stocker gains with an average of an additional 32 pounds per animal grazing burned pastures. Stocker gains from burned pastures have almost always been higher, even in dry years. Brush control is more apt to occur once the woody plants are leafed out. The exception is eastern red cedar, vulnerable to prescribed burning at any time. Other reasons for burning include conservation of the native plant community, improving grazing distribution, enhancing wildlife habitat, and decreasing the severity of wildfires. Maintenance of conservation reserve program (CRP) acres is another use of prescribed burning. Normally, CRP acres are burned between February 1 and April 15 in eastern Kansas and February 1 and April 30 in the west. Summer burns after July 16 are also allowed in Kansas. Be sure to check with your local FSA office regarding burning of CRP in your county.

## Weather forecasts and smoke model

Weather forecasts can be obtained from the NWS offices in Topeka, Wichita, Dodge City, Goodland, Hastings, NE, Kansas City/Pleasant Hill MO, and Springfield, MO. Online, simply type [weather.gov/](http://weather.gov/) and the name of your NWS office.

Weather conditions for conducting a safe prescribed burn are:

- wind speeds 5-15 mph,
- 40-70% relative humidity, and
- air temperatures of 50-80°F.

The amount of cloud cover and mixing height will influence smoke dispersal. Check under the hourly forecast to see what is expected. That hourly forecast is also helpful to see when wind shifts might occur.

A smoke model located at [ksfire.org](http://ksfire.org) predicts the direction smoke from a fire will travel based on current weather conditions, location, date, amount of fuel, and size of area to be burned. Another site providing useful information relative to conducting a prescribed burn is the [Kansas Mesonet](http://Kansas.Mesonet). You can see current humidity and wind direction at [mesonet.ksu.edu/fire/rh](http://mesonet.ksu.edu/fire/rh) at 70+ locations across the state.

If you plan on prescribed burning this year in particular, here are a few things to be mindful of:

- Fires will burn more aggressively, be unpredictable, and hard to contain - especially during periods of light wind.
- If prescribed burning, we recommend cutting larger fuel breaks in advance and expect less effective timber control lines.
- Fire response and prescribed burning this spring will require more people/equipment due to conditions.
- Know the forecast 2-3 days in advance and prepare accordingly.
- **Make sure prescribed fires are completely extinguished.**
- Consider waiting until green-up is more established.
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## **Know the prescribed burn regulations**

If you are planning to burn this spring, be sure to know your local regulations. Kansas regulations require the person conducting the burn to:

1. notify the local fire authority,
2. not create a traffic safety hazard,
3. not create an airport safety hazard, and
4. insure that the burning is supervised until the fire is extinguished.

Your county may require a burn permit. Always check with local authorities to ensure burning is allowed before starting a prescribed burn. Thank you to Chip Redmond - Kansas Mesonet, Walt Fick – KSU Range Management Specialist, and Eric Ward – Kansas Forest Service for the information in this article. If you have any additional questions about the contents in this article, please contact Hunter Nickell at any of the Southwind Extension District Offices.

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