

Harnessing Fire – NMSU Cooperative Extension and NM Rx Fire Council Train Next Generation Fire Practitioners

By Doug Cram, 05/01/2017



Well before the emergence of humans on the planet, fire played a role in shaping vegetation.

Evidence suggests fire may have been burning plants as early as 440 million years ago. The question of how long humans have been using fire, for cooking, is hotly debated.

So where do these two stories converge? How long have humans been using fire to manipulate vegetation?

At least in North America, Native Americans were the first fire managers. However, that skill has largely been lost among today's landowners for a variety of reasons.

Fire is a useful management tool, but understanding when, where and how to use it takes practice. Unlike other management tools such as an axe for tree cutting or a sprayer for brush control, burning cannot simply be turned off once the match has been struck. This increases the complexity of using fire.

To address this challenge, NMSU Cooperative Extension and the NM Rx Fire Council collaborated to create an opportunity for landowners to practice using fire without the immediate concern of personal liability on their ranch.

The training was conducted in April on the NMSU Corona Range and Livestock Research Center under the direction of Shad Cox, superintendent, and Richard Dunlap, senior research assistant. Participants included Rian Nials, Jim Racher, Colton Racher, and Conner Cox. Burn instructors included Brent Racher, Tim Kirkpatrick, and Doug Cram.

The training was successful as first time burners got an opportunity to run a drip torch as well as patrol fire lines. The fire behavior was mild owing to fuel and weather conditions, but this did not detract from the primary objective of gaining hands-on experience.

To facilitate training, the NM Prescribed Fire Council provided their recently acquired [Burn Trailer](#) that citizens can borrow that contains all the tools landowners would need to burn.

Equipment that you would not find in the barn can be found in the trailer, such as drip torches, flappers, Pulaskis and sling psychrometers – an instrument used to measure relative humidity.

Speaking of weather, burning in the Corona country is one part fire experience and nine parts understanding weather.

Indeed, being able to interpret weather forecasts for the day of the burn, as well the following days is critical to successful burning.

What will be the wind speed and direction, relative humidity, ventilation rate, fuel moisture? These are all variables that must be considered and taken into consideration.

In addition, smoke must be accounted for in order to avoid impacting downwind neighbors, communities and highways.

This unique training opportunity is set to be repeated annually as well as this summer to highlight growing season conditions, a historically non-traditional season of burning that may offer equal efficacy but with reduced fire behavior conditions such as reduced flame lengths and rates of spread. Contact Doug Cram at NMSU or the NM Prescribed Fire Council to learn more about this hands-on training.









