



Field Day Resource Guide and Next Steps

Thank you for sharing our passion for sustainable land management practices. Your commitment—large or small—goes a long way in making Oklahoma’s landscapes more resilient to weather extremes and more hospitable to our native plants and animals. Plus, sustainable land management practices delivers tangible economic and environmental benefits for farmers, ranchers, businesses, and communities for generations to come.

Prescribed Fire is Your Friend

It is well documented that Europeans encountered Native Americans using fire as an agricultural tool in Oklahoma. However, as European colonization spread, the use of fire diminished. Now we know what Native Americans knew for a long time—that fire one of the best conservation and agricultural tools at our disposal. Its practical benefits are myriad:

- Develops nutritious grazing grasses
- Manages invasive woody species
- Decreases risk of wildfires
- Increases wildflower diversity benefiting pollinators
- Improves quality and health of soil
- Benefits water cycling processes

Getting started with a prescribed fire regimen may seem overwhelming. The best way to get started is by contacting the Oklahoma Prescribed Burn Association. They can offer support through training, equipment to safely implement prescribed fire on their lands. Additionally, OSU Extension offers *Introduction to Prescribed Fire*, an online, affordable, and self-paced course.

OPBA: <https://www.ok-pba.org/>

OSU Extension Course: <https://learn.extension.okstate.edu/courses/introduction-to-prescribed-fire>

Invasive Plant Species

Invasive species threaten lives and economies around the world—devouring the valuable natural resources which native plants and animals need to survive. Managing species like eastern redcedar, sericea lespedeza, privet spp., and others makes space for native plants which benefits soil and water quality. When invasive species go unchecked, they can easily take over pastures and choke out native grass and flowers—impacting agricultural production and driving up costs. Prevention and early detection are the most effective and cost-efficient strategies to combat invasive plant growth. Invasive species can be addressed by...

- Implementing a regular prescribed fire regimen
- Target the appropriate species with carefully selected herbicides

<https://www.okinvasives.org/>

Impacts of Extreme Weather

Weather extremes have affected all Oklahomans, but agricultural producers have been disproportionately economically impacted. Unpredictable growing seasons, severe storms, rain patterns, and heat levels are just some of the ongoing challenges we face. However, there are small but mighty steps we can take to mitigate these patterns.

- Implement regenerative agricultural practices like no-till farming
- Restore degraded rangeland, grasslands, and woodlands using prescribed fire and thinning
- Remove Eastern redcedar and other non-fire adapted trees and shrubs
- Treat invasive species monocultures like sericea lespedeza

South Central Climate Adaptation Science Center <https://southcentralclimate.org/>

US Climate Resilience Toolkit <https://toolkit.climate.gov/tool/resilient-and-connected-landscapes>

Next Steps

- Ask Questions
 - All speakers are eager to discuss the challenges you and others are facing
- Seek Help
 - The organizations which the speakers represent have resources to offer and knowledge to share
- Start Small
 - Think about what makes sense for you and what will have the greatest initial impact

Local farmers, ranchers, and land managers benefit from improved soil health which have higher rates of productivity and profitability over the long term, as well as reputational value for farmers/ranchers who put conservation at the center of the management approach. Communities also reap profound benefits like improved water quality, filtration, storage; richer biodiversity; and reduced greenhouse gas emissions, mitigating the impacts of climate change.

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