

Rural Roots & Research

Lindsay Shorter, Riley County Agriculture & Natural Resources Extension Agent

The Hidden Threat of Eastern Red Cedars

In grade school, we learn about the many benefits of trees—how they absorb carbon dioxide, give us oxygen, prevent erosion, and more. But not all trees are helpful in every environment. In fact, some can be downright harmful.

One of the biggest culprits in Kansas is the **Eastern Red Cedar**. Though native to the region, these trees have become invasive. Historically, frequent fires—sparked by lightning or set by Native Americans—kept cedar populations in check. Without those natural burns, cedars have spread rapidly, overtaking grasslands and pastures.

This invasion, known as *woody encroachment*, comes with serious consequences:

- **Wildlife loss:** As grasslands disappear, species like the lesser prairie-chicken decline.
- **Reduced biodiversity:** Native grasses and plants struggle to survive under cedar dominance.
- **Water depletion:** Cedars consume 1-17 gallons of water *per day*, leaving less for streams, livestock, and native plants.
- **Wildfire risk:** Dense cedar growth creates massive fuel loads, making fires more intense and harder to control.

I've seen these impacts firsthand. While ranching in Oklahoma, my family endured multiple wildfires. The worst came in February 2024, our home was near the Texas state line. Fires surrounded us—one to the north, and the massive Smokehouse Fire to the southwest, which became Texas's largest wildfire, burning over a million acres. My husband rushed to move cattle, while I loaded animals, picked up our child from school, and evacuated as flames closed in. Luckily, our home still stood after the wildfires, due to the bravery and resilience of our volunteer firefighters. But some of our neighbors were not as lucky.

Wildfires are devastating—deadly, costly, and nearly impossible to fight when fueled by cedar forests. Managing our land means managing cedar trees, before they manage us. These winter months are a great time to get the chainsaw or skid steer out and remove our cedar trees and open up our pastures. By opening our pastures and removing the standing cedar trees, we'll increase our forage in the pasture for the upcoming year.

A lot of producers *know* that clearing cedar trees from their pasture is a good practice, but it's hard to realize just how big the positive impact that removing those trees can offer to their available forage. Recently, K-State Extension released a "Redcedar Calculator", which allows us to calculate an estimate based on the percent of trees by diameter in a pasture, how much forage

you're losing, and how that equates to how many more cow/calf pairs you could support with the removal of those trees. If you're interested in checking out the calculator and utilizing it for your pasture, the calculator can be found on the Riley County Extension Website in the Agriculture and Natural Resources tab.

For more information regarding Agriculture and Natural Resources, 4-H Youth Development, or K-State Research and Extension, call the office at 785-537-6350, email me, Lindsay Shorter, at lindsayshorter@ksu.edu, or stop by the office. Be sure to follow Riley County K-State Research and Extension on Facebook for the most up-to-date information on Extension education programs and the Riley County 4-H program.