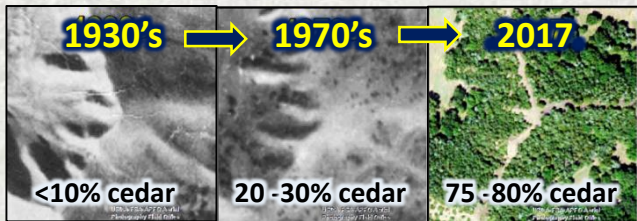
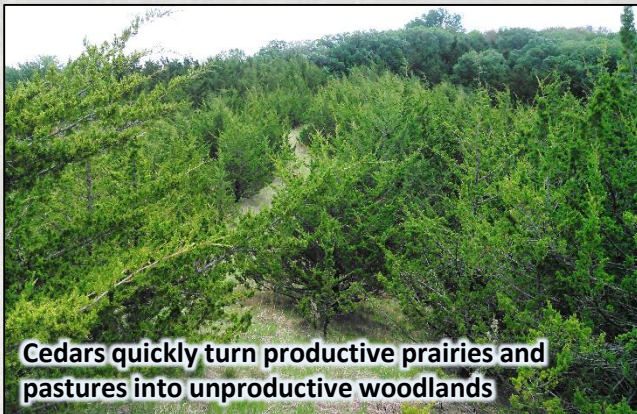


Impacts & Control of Red-Cedar Invasion in Iowa

Background

Eastern red-cedar (*Juniperus virginiana*) is an evergreen tree native to Iowa. Historically, red-cedars were limited to rocky areas, gullies, streams, and other places where wildfires couldn't reach them. However, after decades of fire suppression, tree transplanting, and seed dispersal by wildlife, red-cedars have spread quickly and aggressively across Iowa, becoming harmful. In less than 50 years, cedars can turn open prairies and pastures into dry, unproductive woodlands, reducing water and forage availability, increasing wildfire risks, and removing important habitat for wildlife.



An Invasive Native Species???

It's not always bad to have *some* cedars on your property. They're native to Iowa, some people find them attractive, and they can provide great benefits if kept under control. However, cedars can quickly become invasive, meaning they spread quickly and dominate the land. It's important to understand the impacts of cedar invasion and how to control it so you can keep your land healthy and productive.

Impacts of Red-Cedar Invasion

Cedars spread aggressively and quickly, and the cost to remove them significantly reduces the value of your land. Cedars shade out vegetation and create bare areas, and they use a great deal of groundwater—up to 30 gallons per day for a single tree. As a result, cedars can reduce livestock forage as much as 50% and reduce water for nearby homes, farms, and towns. Cedars also have very thin bark and volatile resin, which creates an extreme fire hazard. They are also linked to increased disease in adjacent apple orchards.



Grassland birds, monarch butterflies, and many other wildlife rely on treeless prairies to survive. At low abundances, cedars can benefit deer and pheasants, but as cedars spread they remove vital nesting and chick-rearing cover for birds and instead can attract predators such as hawks, raccoons, foxes, and coyotes. Cedars are a significant threat to Iowa's remaining prairies.



Controlling Cedar Invasion

The cost of cedar removal goes up as trees mature and spread. Thus, it's best to start early when trees are young and small. Although a variety of methods can be used to control cedars, the following are most commonly used in Iowa:

Cutting, Shearing, & Mowing: This is the most common and effective method of cedar control and is used year-round. Trees are cut with special attachments on a skid-loader or similar machine. To prevent regrowth, cut cedars below the lowest branch. Cut trees can then be piled off-site to help vegetation regrow.



Prescribed Burning: Prescribed burning kills tiny cedars but is less effective on saplings and mature trees. Burning should be used after cutting in order to be most effective. Burning also removes dead plant litter and rejuvenates prairie plants and forage grasses. It's best to burn in late March or early April when cedars' leaf moisture is lowest. Burning every 3-6 years keeps cedars from re-invading your land.



What Are the Results?

Prairie plants return quickly after cedars have been removed—in as little as 1-2 years! Below are several examples from right here in Iowa:



"You couldn't even walk along these ridge tops five years ago. Now, you can barely tell that there were ever trees here. The prairie came back so quickly. What I have found over the past several years is that progressive conservation practices, while at first may seem like a liability, soon return good dividends for all."

-Gary Hargroves, former Onawa resident and farmer

Landowner Assistance

Cost-share programs may be available to help you control cedars on your land. Contact the following partners for more information:

- Natural Resources Conservation Service
- Iowa Department of Natural Resources
- Pheasants Forever
- The Nature Conservancy
- Iowa Natural Heritage Foundation
- National Wild Turkey Federation
- U.S. Fish and Wildlife Service – Partners for Fish and Wildlife