The Green Glacier

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I was listening to a trivia podcast recently–and I know what you are thinking: *not another person talking about a podcast they heard…*–anyway, the trivia question was, "This tree with a color in its name is the most widely distributed conifer in the Eastern United States." Answers given were blue spruce and white pine, which were incorrect. Many of you may know the answer, as you don't have to go far to see a whole grove of them popping up in the right-of-way, scattered throughout a cattle pasture or on the edges of forest. Any ideas yet? Eastern redcedar is the answer.

Prior to European settlement, redcedars were fairly uncommon in many areas around the Midwest. Their growth was restricted to areas on rocky outcroppings atop bluffs and cliffs where fire could not reach. Fire suppression and altered land uses have resulted in their rapid expansion.

Redcedar is a hardy tree that can withstand severe drought, extreme heat, extreme cold, extreme winds, and a variety of soil types. These attributes have made it a desirable tree for many homeowners who plant them for windbreaks around their property. However, left unchecked, they can spread across landscapes fairly rapidly.

On the Dallas County website there is an excellent article written by Dallas County Roadside Biologist, Jim Uthe, titled "Cedar Tree Control." In conjunction with IDNR biologist Ryan Harr, he describes the rate of spread:

> *States to the SW of Iowa have seen loss of grassland at a rate just above 2% per year due to red cedar over the last 30 years; estimates for current loss of grassland from cedar in southern Iowa right now have been as high a 3.1%. Some are actually referring to this as "the advance of the green glacier". This is not an exaggeration. One only needs to look at historic aerial imagery, as some areas of grassland in the southern part of Dallas County that were treeless 20 years ago are now dominated by cedar forest. That is a huge ecological change in an incredibly short amount of time, especially when considering the habitat loss for pollinators and grassland birds whose numbers are already in steep decline.*

Redcedar spreads by seed. These plants are dioicous, meaning there are both male and female trees. The male trees use the strong spring winds to spread pollen to the female trees. Female trees produce fleshy berry-like "cones" that mature in the fall. Mature females are capable of producing up to 2 million seeds per tree.

The berry-like "cones" of the Eastern redcedar

The real question is, "how can you manage this rapid expansion?" There are several techniques that work with redcedar. For smaller trees (2 to 4 feet tall), cutting, mowing and burning are the best options.

Unlike other woody vegetation, redcedar does not re-sprout as long as it is cut below the lowest green branch. Foliar herbicides can be effective, but collateral damage to surrounding vegetation will likely occur. As trees get larger, cutting by hand is really the only effective way to remove them. This can be time-consuming because it takes a while to trim back the branches to get close enough to the trunk of the tree to fell it.

If you have a large stand of mature redcedar and are strapped for time and resources, there is a technique that can be rather effective. I mentioned earlier that redcedar are dioecious. You can slow the spread by targeting female trees which produce the small blue fleshy cones. This removes the seed source from the area.

I want to end this article by noting there are beneficial qualities to redcedar. It is important wildlife habitat for many species, including the Northern Saw-Whet Owl. It also provides a food source for many birds including – you guessed it! – the Cedar Waxwing. This article is meant to bring attention to the rapid expansion of redcedar and how we can minimize its effect on the landscape.