



# About Our Projects

Our program implements a variety of projects designed to improve habitat for at-risk animal and plant species threatened by encroaching eastern redcedar, non-native cool-season grasses, and other invasive plants. Secondary benefits of these projects include improved forage conditions for grazing and the reduction of woody fuels that reduces the risk of wildfire. Most of these projects involve mechanical tree removal, prescribed fire, or both.

Most of our projects are located in the Niobrara Valley between Valentine and north of Stuart. The majority of our projects are conducted on private lands via a habitat agreement with the landowner to provide technical assistance and help with funding. We also participate in a few projects on public lands, including NGPC Wildlife Management Areas.

Our mechanical tree removal projects range in size from 20 acres to over a hundred acres. The terrain varies from flat to steep, with many projects being on moderate slopes. The vegetation communities in our project sites include deciduous woodlands, ponderosa pine woodlands, mixed-grass prairie, sandhills prairie, and scattered tallgrass prairie sites in the river bottoms. All of these plant communities have a substantial eastern red cedar component that our projects target for removal. We occasionally have projects that also have a forest thinning component, usually in ponderosa pine woodlands. In these projects the cedar is removed and the residual pines are thinned to return the area to the open, park-like appearance of healthy ponderosa pine woodlands. Landowners accomplish their mechanical tree removal goals by either hiring a contractor to do the work or by doing it themselves.

Our prescribed fire projects range from about 40 acres to over a thousand acres in size. They include large expanses of prairie as well as underburns in hardwood bottoms and pine woodlands. They are conducted prior to or after mechanical cedar removal projects, or, in some cases, in place of them. Where cedars are small and there is plenty of dry grass to provide fuel, we have experienced success in killing cedar using fire alone. Some landowners who are dealing with infestations of larger cedar trees prefer to cut them first, burn or chip the slash, then wait until enough grass comes back to provide sufficient fuel to kill the many seedlings that emerge within about 14 months after mechanical treatment. Other landowners prefer to burn first and then mechanically remove the trees that survive the burn. This creates less mechanical work, but it does leave standing dead cedars. Some landowners do not like these “skeletons,” although they do provide the benefit of keeping cattle at bay while the grass beneath these trees recovers.

Landowners generally choose one of three ways to accomplish their prescribed burning goals: hire a contractor, arrange with a local rural fire department to conduct the burn as a training exercise and fund generator, or work with their neighbors to do the burning themselves. To further the latter method, Niobrara Valley landowners have formed the [Niobrara Valley Prescribed Fire Association](#) to provide training and equipment and facilitate neighborhood burning networks.