

Public-Private Partnership Hunts Houndstongue in Colorado



Houndstongue is a prolific producer of Velcro-like seeds that are poisonous to cattle and horses.

ocated 11 miles outside Denver, the Rocky Mountain Arsenal National Wildlife Refuge (NWR) provides ample opportunities for hiking, guided tours and catch-and-release fishing. Visitors can see bald eagles and endangered owls soaring and enjoy watching many other animals roaming free in this beautiful place. The Refuge faces the constant encroachment of the city, but is also facing another invader: houndstongue.

Challenge:

New to the refuge in the last decade, houndstongue is dangerous to both native plants and cattle. With Velcro-like seeds, it easily attaches to the coats of deer roaming through the area, furthering its spread. In addition, houndstongue is poisonous to cattle and horses, forming an alkaloid during digestion that eventually destroys the liver. The effect of the plant on wildlife is yet to be determined.

The settlers' impact on the land from previous generations has complicated the removal of houndstongue. Pioneers created "shelter belts" around homesteads within what is now the Refuge, leaving behind 60 years' worth of tangled, dense and sometimes thorny shrubbery that must be traversed on foot in order to control houndstongue and other invasive plants. In addition, other invaders such as cheatgrass and Canada thistle are waiting in the wings to move into new areas of the Refuge.

Solution:

Staff at the Refuge began by mapping infestations, and working with experts at universities and county weed officials. They then formed a coalition that includes Shell Oil, the Denver Botanic Garden and the Mile High Youth Corp to start controlling houndstongue.



The Mile High Youth Corps and Refuge volunteers work to control houndstongue.

The group uses integrated vegetation management techniques to control houndstongue, including hand-pulling in order to prevent seed production, prescribed burns to stimulate native vegetation, and herbicide treatments to keep houndstongue and other invasive weeds at bay. Volunteer crews help with many of the treatments throughout the season.

Result:

In the first year of the program, 166 acres were treated, with an increase to 192 acres the following year. Refuge staff continue to monitor infestations and seek funding for new eradication efforts, and more volunteers participate in control efforts every year. Refuge visitors have seen an increase in wildlife, including deer, hawks and coyotes and enjoy the more abundant native plants in the Refuge. Bald eagles are successfully nesting within the Refuge, and the population of burrowing owls and bison is growing.



Learn More:

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