Cheatgrass – bad for the environment, bad for pets

My first spring in Colorado, I was pleasantly surprised to see the early greening in a nearby field. But by the end of June, the grass had turned dry and brittle and its dart-like seed heads clung to my shoes and socks. And then my dog began to limp and I learned about awns.

My introduction to cheatgrass is one shared by millions of Coloradans and their pets and livestock dating back to its first appearance in the 1890's when the seeds arrived via packing material and bedding from Europe. Its spread was immediate and rampant, earning it the title, "the weed that won the West."

So complete has been the Western invasion that it is now the dominant plant on more than 150 million acres, often times forming a dense monoculture at the expense of native plants. It has the distinction of making the State of Colorado's "Noxious Weeds" list.

Although cheatgrass (or downy brome as it's sometime called) appears in every state, it found a prolific niche in Western rangeland where it filled the void left by the reduction of native vegetation by livestock grazing.

An annual, cheatgrass is 4 to 30 inches tall with drooping spikelets of 5-8 flowers. The vibrant green of the spring grass quickly turns to a reddish-brown when it dies off by July.

No fair – it's cheating

The effects of cheatgrass are many – and none of them are good.

Because it emerges early in the spring, it "cheats" other vegetation by being the first to germinate in the spring, crowding out native grasses and usurping available moisture. And because it dies off in early summer its thick mats of dry vegetation are potent tinder for wildfires. It thrives in the aftermath of fire, producing more fuel and thus more-frequent fires.

A Bureau of Land Management publication reported that if Western states continue to lose acreage to cheatgrass monocultures, there could be annual wildfires millions of acres in size.

Its effect on croplands cut into yield; even a moderate infestation in a wheat field can cut yield by as much as 50 percent.

And while it is palatable in early spring, providing forage for wildlife and livestock, once the seeds set it becomes unpalatable and crowds out other forage.

The barb-like seeds - called awns – lodge in the eyes, ears and gums of livestock and pets, and the shoes and socks of hikers.

Awns are a serious pet problem

Jolene Duncan, DVM, at Lyons Veterinary Clinic said she regularly sees pets suffering from cheatgrass awns.

“The seeds can work their way into any part of your pet's body and cause not just pain but even life-threatening infections if you don't catch them early enough,” said Duncan.

The seeds can get stuck in pet's fur, skin, eyes, nose, ears or mouth and have even been found in dog’s lungs, she said.

Dogs and cheatgrass don’t mix. This stand of early grass will soon turn dry and produce thousands of barbed awns that infect pets and livestock.

Duncan said pet owners can protect their animals by grooming thoroughly and often and trimming a dog’s fur short in the summer. After a long walk or hike, check the dog’s body for awns, especially around the paws, ears, nose and mouth.

And watch for signs of irritation such as pawing at ears or eyes; tilting or shaking of the head; tearing, squinting, discharge, coughing or swallowing repeatedly. Duncan said that if you suspect your dog has a cheatgrass seed lodged somewhere in his or her body, get them to the vet right away.

Black fungus offers hope

So what can be done to control cheatgrass? At present, herbicides like glysophate (Roundup) and paraquat can be used but application must be timed perfectly, difficult since cheatgrass germinates in both fall and spring. Application of these chemicals also kills desirable species.

However, the science of managing or restoring rangelands full of cheatgrass is advancing. Promising research has been done on using the so-called “Black Finger of Death” fungus to kill seeds before they

germinate. U.S. Forest Service research shows that while cheatgrass plants can cover a square yard with as many as 25,000 seeds, application of the fungus can reduce that amount to 300 seeds.

Other research underway suggests that a change in the soil chemistry may defeat cheatgrass.

For now, however, Coloradans will have to learn to live with this prolific invader. Aldo Leopold in his book, “A Sand County Almanac,” said of cheatgrass, “I listened carefully for clues whether the West has accepted cheat as a necessary evil, to be lived with until kingdom come, or whether it regards cheat as a challenge to rectify its past errors in land-use. I found the hopeless attitude almost universal.”

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