

# Cheatgrass

*Bromus tectorum*

## What It Is

Cheatgrass is an invasive non-native winter annual grass. Also known as downy brome and military grass, the plants are 6 to 24 inches tall and are easily identifiable by their dense, drooping seed heads. Cheatgrass is one of the first plants to green up in spring and stays that way only for six to eight weeks. Then it turns reddish to tan and dies by early summer, when it becomes a major fire hazard.

## Why we hate it

Cheatgrass can outcompete native vegetation used by wildlife, native grasses and forbs eaten by cattle, and winter wheat raised by farmers. Like many native invasive species, it can completely replace a vibrant and diverse landscape of dozens of native plant

species with a monoculture.

Because cheatgrass are the first plants to green up in spring, they steal soil moisture from other vegetation. They are also the first to cure in midsummer, and are extremely flammable. Native plants and forbs evolved in fire regimes that happen only every several years, and later in the season. But cheatgrass thrives in the midsummer fires it fuels, often every year. The early, frequent fires eventually kill native vegetation from areas where cheatgrass is present.

## Where it's found

Cheatgrass is found in every Montana county on both urban and rural open, dry habitats, ranging from abandoned parking lots to rangeland.

## How it spreads

Cheatgrass seeds stick to animal fur and human clothing, spreading the plant's abundant seeds. ■

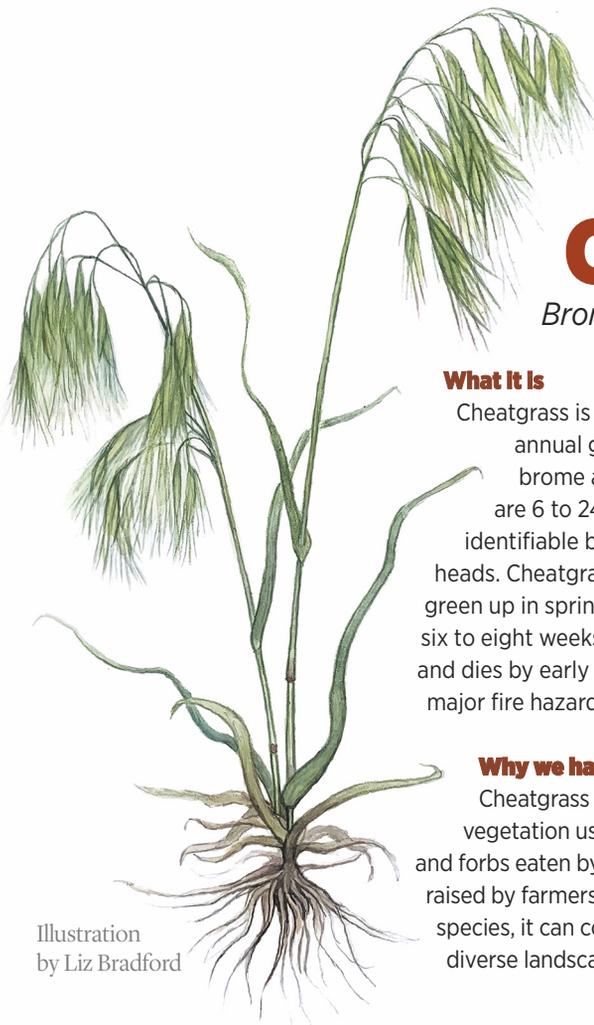


Illustration by Liz Bradford

## THE MICRO MANAGER

*A quick look at a concept or term essential to fisheries, wildlife, or state parks management.*

### “Perched Culvert”

Before a road is built crossing a stream, a culvert (metal pipe) is installed so the stream water can continue to flow underneath the roadway. Most culverts are 12 to 18 inches across and are found beneath the hundreds of thousands of miles of county and logging roads in Montana, especially in the state's western forests.

Most fish, which need to move upstream to spawn in tributaries and then downstream afterward, can swim through culverts. But they can't when the culvert becomes “perched.”

A perched culvert is one with a downstream outlet that sits higher than the streambed, creating a small waterfall too high

for upstream-moving fish to enter. They aren't installed that way. The perching effect is caused over time as heavy stream flows move through too-small culverts, causing increased water velocity that erodes the stream at the pipe's outlet.

Across western Montana, perched culverts impede native bull trout population recovery by blocking upstream movement of bulls trying to reach spawning habitat. Perched culverts also block other fish species, especially those like sculpins that can't leap well.

A sole benefit of perched culverts and other fish barriers is they prevent non-native brook trout and rainbow trout from moving upstream and competing or hybridizing with native bull trout or westslope trout.

FWP biologists identify perched culverts



Fish can't swim upstream when a culvert “perches.”

and work with the U.S. Forest Service, U.S. Fish & Wildlife Service, timber companies, and other agencies to replace them with bigger culverts or bridges that can better handle heavy stream flows and do not create downstream erosion over time. ■