CHEATGRASS

Bromus tectorum

CONTROL

Hand Pulling

Hand pulling can be very effective on small scale infestations if the plants are removed and burned before seed set. Cheatgrass is an annual species that relies on its seed for dispersal. Its seeds do not persist for very long in the soil, so preventing plants from going to seed will allow you to deplete the seed bank. Continued hand pulling is needed for multiple years in order to deplete the seed bank and eliminate small patches.

Mowing

Similar to hand pulling, mowing at the appropriate time will help prevent plants from producing seed and will allow you to deplete the seed bank. Mowing will allow you to control seed production over a larger area, but will need to be carried out multiple times in the late spring/early summer depending on rainfall. Mowing when cheatgrass has begun to turn purple will not prevent seed production. Planting crop sin late spring as part of a rotational crop system is the most effective control method for cheatgrass.

Biological control

N/A

Grazing

Grazing is an effective method of preventing seed production in cheatgrass, and should be carried out when it is tall enough to be accessible to livestock but before turning purple. Two rounds of grazing are typically necessary for seed prevention, and is required for at least two consecutive years for good control

Ideal Timing for Treatment Options		
Spring	Summer	Fall
Hand-pulling		
Mowing/Planting		
Grazing		
Foliar		Foliar

Herbicide

There are a number of herbicides that have worked well for cheatgrass, but also cause damage to desirable species. Care should be taken to prevent damage to desirable species by applying herbicide when they are dormant in the early spring or late summer/early fall. The following herbicides are recommended for control of cheatgrass. Always consult product labels and read them carefully to ensure correct species/land management usage and chemical application.



Cheatgrass Life Cycle

Life Cycle	Root	Leaves	Stems	Flower	Seed/Fruit
Annual	Fibrous	Light green and hairy, upper leaf sheaths may be smooth, but lower sheaths are hairy. Each leaf has a membranous ligule where it separates from the stem.	4 to 30 inches tall, slender and erect, slightly hairy.	Light green and inconspicuous, occur in a nodding, open inflorescence. Color changes from green to reddish-purple to brown as plant matures.	3⁄8 inch long seed, with an awn ½ to 1 inch long extending from tip.

Herbicides for Cheatgrass, Bromus tectorum

Active Ingredient	Rate	Efficacy	Comments
Imazapic	2-12 oz/ acre	Fall or Spring	Yearly treatments twice a year, all in one wetting agent shown to improve effectiveness. Broad-spectrum herbicide will cause harm to non-target. Reduces submerged and emergent leaves, do not apply to water with high turbidity.
Imazapic + glyphosate	16-20 oz/ acre	Fall or Spring	Broad spectrum weed control for roadsides wildlife habitat and noncrop areas.
Rimsulfuron	3-4 oz/acre	Late fall on emerged seedlings	Labeled for roadsides and bare ground sites not for rangeland. Preemergence or early postemergence timing will control several grass and broadleaf species.
Sulfometuron methyl + chlorsulfuron	1-1.5 oz/ acre	War/moist conditions following application accelerates herbicide activity	Noncrop situations only. Care should be exercised in the vicinity of desired plants. Has a 12 month grazing restriction.
Glyphosate	0.5-1 pint/ acre	Early spring before native seedlings emerge. Narrow window	Glyphosate is nonselective and will kill any vegetation it comes in contact with. Spray for uniform coverage, not for runoff.

Information on diagnostic identifying characteristics adapted from "Montana's Noxious Weeds" by Pokorny and Mangold, Montana State University Extension Bulletin EB0159.

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