

CONTROL

Hand Pulling

Hand pulling is not an effective tool for the management to Russian knapweed as it will rapidly re-sprout from rhizomes.

Mowing

While Russian knapweed does spread by seed, it mostly spreads by rhizomes through the soil. Mowing will reduce biomass, but it is not an effective method of control for this species.

Biological control

N/A

Grazing

Grazing is not an effective tool for the management of Russian knapweed due to its deep, rhizomatous root system and can actually cause a neurological disorder called "chewing disease" in horses.

Herbicide

There are a number of herbicides that provide effective control of Russian knapweed. The herbicide chart on the

| Ideal Timing for Treatment Options | | | | |
|--|--------------------|--------------|--|--|
| Spring | Summer | Fall | | |
| Hand pull most of the taproot with plant, and bag flower heads if present when pulled. | | | | |
| Grazing | | Grazing | | |
| | Biological Control | | | |
| Foliar Spray | | Foliar Spray | | |

back lists approved controls for Russian knapweed. Always consult product labels and read them carefully to ensure correct species/land management usage and chemical application.







| Russian | Kna | pweed | Life (| Cycle |
|---------|-----|-------|--------|-------|
| | | | | |

| Life Cycle | Root | Leaves | Stems | Flower | Seed/Fruit | Toxic |
|------------|--|--|--------------------------------------|--|---|--------|
| Perennial | Rhizomes with black, bark-like covering | Basal leaves toothed, covered with fine hairs, grayish-green. Lower stem leaves deeply lobed, 2 to 4 inches long. Upper stem leaves narrow, toothed, and up to 2½ inches long. | One or more stems up to 3 feet tall. | One purple flower head per branch tip. Bracts rounded with papery edge. | Oval, gray or ivory with long white bristles. | Horses |

Herbicides for Russian Knapweed, Centaurea repens

| Active Ingredient | Rate | Efficacy | Comments |
|--|--------------------|---|---|
| Picloram | 2-4 pint/ acre | Spring at bud to mid-flowering growth stages; or late in fall | Use higher rates for older or dense stands; late treatments in fall to dormant plants very effective. Cannot use near surface water, shallow ground water, landscaped areas or current/future vegetable gardens |
| Aminopyralid | 5-7 fl oz/ acre | Spring and summer at bud to flowering growth stages; or late in fall | Use higher rate for older stands; late treatments in fall to dormant plants very effective; Milestone may be used to edge of ponds or streams. Do not apply to landscaped areas or current/future vegetable gardens |
| Clopyralid | 1 pint/ acre | Spring after all shoot have emerged, bud to mid-flower growth stages; late in or fall | Late treatments in fall to dormant plants are very effective |
| Chlorosulfuron/ Aminocyclopyrachlor | 5.5 oz/ acre | Spring after shoots have emerged through the fall | Late fall treatments into winter when conditions are suitable for spraying is very effective |
| Chlorsulfuron | 1 oz | Spring bud to flowering growth state; or late in fall | Late treatments in fall to dormant plants are very effective; temporary injury to cool season grasses may occur from fall treatments |
| Aminopylarid + 2-4,D | 2-2.5 oz/ acre | Effective if used from bolt to bud or in the fall | Can be applied to water's edge. Do not apply in landscaped areas or in current/future vegetable gardens |

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

