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RUSSIAN KNAPWEED MANAGEMENT TIPS

Russian knapweed, a member of the Sunflower family, is a perennial forb. The roots are rhizomatous and have a black, bark-like covering. The flowers are pink to purple in color. There is one flower head per branch tip and the bracts are rounded with papery tips. Rosettes and basal leaves are grayish-green in color. Lower stem leaves are deeply lobed and upper stem leaves are narrow and toothed. Reproduction is mainly vegetative and less often by seed. **Seeds can remain viable for up to three years.** Plants usually grow one to three feet tall. Russian knapweed displaces native vegetation, reduces forage value on range and pasture lands and is toxic to horses.



Management actions should focus on reducing seed production and depleting root reserves. Control efforts must be planned for several consecutive growing seasons to be successful. Monitoring for new growth either from seeds or root buds and treating new plants as soon as possible is critical.

Effective control measures for the management of Russian knapweed include:

1. **Mechanical (mowing):** Mowing several times during the growing season when the plant is bolting can stress the plant and deplete root reserves. Mowing repeatedly during the summer, followed by an herbicide treatment in the fall, will enhance control of Russian knapweed.
2. **Herbicide: Always follow directions on the label. The label is the law!** Calibrate your equipment to ensure that you are adding the proper amount of herbicide to your tank. The following herbicides are commonly used to control Russian knapweed. **Do NOT use these herbicides in lawns, turf or ornamental settings – read the label.** *For the most effective control, apply herbicides when the plants are in the bud to mid-flowering stage or in the fall when the plants are re-growing.*

Mixing rates in small backpack or hand sprayers are as follows:

Milestone:	1 – 1.25 teaspoons herbicide to 1 gallon of water.
*Opensight:	1/2 - 2/3 teaspoon herbicide to 1 gallon of water.
*Chaparral:	1/2 – 2/3 teaspoon herbicide to 1 gallon of water.
GrazonNext HL:	1 oz herbicide to 1 gallon of water.
DuraCor:	0.5 oz herbicide to 1 gallon of water.
Tordon 22K (restricted use herbicide):	1 oz herbicide to 1 gallon of water.

Rates in large sprayers are as follows:

Milestone:	5 - 7 oz herbicide per acre.
*Opensight:	2.5 – 3.3 oz herbicide per acre.
*Chaparral:	2.5 – 3.3 oz herbicide per acre.
GrazonNext HL:	1 quart herbicide per acre.
DuraCor:	12 oz herbicide per acre.
Tordon 22K (restricted use herbicide):	1 quart herbicide per acre.

NOTE: Adding 2,4-D to your tank with any of the above herbicides may improve performance. Add at the rate of 1 – 2 quarts per acre for large sprayers or 1 – 2 ounces per gallon of water for backpack sprayers. GrazonNext HL is a premix of Milestone and 2,4-D.

NOTE: Adding a surfactant to your tank mix may enhance the performance of your herbicide and is required for certain herbicides (read the label). Add 0.5 - 1 oz per gallon of water for backpack sprayers or 1 – 2 pints per 100 gallons for large sprayers.

*** denotes that a surfactant is required for the herbicide to be effective**

3. **Cultural (revegetation):** Healthy stands of competitive vegetation can reduce Russian knapweed invasion and spread.
4. **Integrated management:** Management of Russian knapweed is more effective when more than one strategy is used.

Reference to commercial products or trade names does not imply discrimination or endorsement by the Gallatin County Weed District.