



903 N. Black Avenue  
Bozeman, MT 59715  
(406) 582-3265

## LEAFY SPURGE MANAGEMENT TIPS

Leafy spurge, a member of the Spurge family, is a long-lived, deep-rooted rhizomatous perennial forb. The roots have brownish rhizomes with pink buds. The flowers are yellow-green and inconspicuous, surrounded by heart-shaped yellow-green bracts. Leaves are one to four inches long, narrow and alternate along the stem. Reproduction is mainly vegetative, but also by seed. **Seed longevity is two to five years.** All plant parts contain a milky white latex sap. Plants usually reach heights of two to four feet tall. Leafy spurge is very aggressive and competitive because it is one of the earliest plants to emerge in the spring and one of the last to go dormant in the fall.



Management and control efforts should focus on depleting root reserves and reducing seed production. Control efforts must be planned for many consecutive years at the existing site in order to prevent seed formation/dispersal. Monitoring for, and appropriately treating, any new plants that emerge from seeds or roots is critical for success.

## Effective control measures for the management of leafy spurge include:

- 1. Mechanical (hand pulling):** Hand pulling of first-year growth may provide some control, especially in environmentally sensitive areas. Hand pulling is not feasible for more established infestations. Wear gloves when hand pulling.
- 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 leafy spurge. **Do NOT use these herbicides in lawns, turf or ornamental settings – read the label.** *For the most effective control, apply herbicides when plants are in the bud stage or during the fall re-growth stage before a killing frost.*

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

Dicamba:	1 - 2 oz herbicide to 1 gallon of water.
Glyphosate (non-selective herbicide):	2.5 oz herbicide to 1 gallon of water.
Tordon 22K (restricted use herbicide):	1 oz herbicide to 1 gallon of water.
2,4-D Amine:	2 oz herbicide to 1 gallon of water.

### Rates in large sprayers are as follows:

Dicamba:	1 – 2 quarts herbicide per acre.
Glyphosate (non-selective herbicide):	2% solution.
Tordon 22K (restricted use herbicide):	1 quart herbicide per acre.
2,4-D Amine:	2 quarts herbicide per acre.

**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.

- 3. Cultural (revegetation):** Planting desirable plant species to compete for nutrients can be a useful tool.
- 4. Grazing:** Properly timed sheep and goat grazing can be used in the management of leafy spurge.
- 5. Biological (insects):** A number of insects have been approved for the control of leafy spurge. The most effective and well-established biocontrol agents in Montana include two species of flea beetle.
- 6. Integrated management:** Management of leafy spurge is more effective when more than one strategy is used.