



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

ST. JOHNSWORT MANAGEMENT TIPS

St. Johnswort, a member of the Mangosteen family, is a perennial forb. It has a taproot with lateral roots. The yellow flowers have five petals. The leaves are oval-shaped with tiny transparent dots on the surface (hold them up to the light to notice the dots). Reproduction is vegetative and by seed. An average-sized plant can produce between 15,000 and 23,000 seeds. **Seed longevity is nine to fifteen years.** Plants are usually one to three feet tall. St. Johnswort displaces native vegetation, reduces forage value on range and pasture lands, and has been associated with livestock poisoning.



Management and control efforts should focus on reducing seed production and must be planned for many consecutive years at the existing site in order to prevent seed formation/dispersal and to monitor for, and appropriately treat, any new plants that emerge.

Effective control measures for the management of St. Johnswort include:

- 1. Mechanical (hand pulling):** Diligent hand pulling can provide control of very small infestations of St. Johnswort. Hand pulling is not feasible on large infestations. Wear gloves when pulling plants.
- 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 St. Johnswort. **Do NOT use these herbicides in lawns, turf or ornamental settings – read the label.** *For the most effective control, apply herbicides in late spring/early summer after the plants have fully emerged, but when they are still actively growing (before bloom).*

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

Tordon 22K (restricted use):	1 oz herbicide to 1 gallon of water.
Milestone:	1 – 1.25 teaspoons herbicide to 1 gallon of water.
*Opensight:	2/3 teaspoon herbicide to 1 gallon of water.
*Chaparral:	2/3 teaspoon herbicide to 1 gallon of water.
*Escort XP:	1/5 teaspoon herbicide to 1 gallon of water.
*Cimarron Plus:	1/4 – 1/3 teaspoon herbicide to 1 gallon of water.
DuraCor:	2/3 oz herbicide to 1 gallon of water.

Rates in large sprayers are as follows:

Tordon 22K (restricted use):	1 quart herbicide per acre.
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.
*Escort XP:	1 oz herbicide per acre.
*Cimarron Pus:	1.25 – 2 oz herbicide per acre.
DuraCor:	20 oz 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.

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. Biological (insects):** There are several insects available to feed on the foliage and roots of St. Johnswort. This method is most effective with large infestations (several acres or more) and when the climate is favorable to support the insects.
- 4. Cultural (tilling):** Repeated tilling may effectively control this plant; however, root fragments may be spread on tilling equipment.
- 5. Integrated management:** Management of St. Johnswort is more effective when more than one strategy is used.