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#### DALMATIAN TOADFLAX MANAGEMENT TIPS

Dalmatian toadflax, a member of the Figwort family, is a perennial forb. It has a taproot as well as horizontal roots with adventitious buds. The snapdragon-like flowers are bright yellow with an orange throat. The leaves and stems are waxy. Leaves are heart-shaped, alternate and clasp the stem. Reproduction is vegetative and by seed. Plants usually grow up to three feet tall. A mature Dalmatian toadflax plant can produce up to 500,000 seeds. **Seed longevity is 10 to 13 years.** Dalmatian toadflax displaces native vegetation, increases soil erosion and reduces forage value on range and pasture lands.



Management and control efforts should focus on reducing seed production and depleting root reserves. Control efforts 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 from roots or seeds.

# Effective control measures for the management of Dalmatian toadflax include:

1. 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 Dalmatian toadflax. Do NOT use these herbicides in lawns, turf or ornamental settings – read the label. For the most effective control, apply herbicides after the plants have fully emerged but are still actively growing and up to early bloom, through re-growth late in the fall.

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

Tordon 22K (restricted use herbicide):	1 – 2 oz herbicide to 1 gallon of water.
*Telar XP:	1/3 - 1/2 teaspoon herbicide to 1 gallon of water.

## Rates in large sprayers are as follows:

Tordon 22K (restricted use herbicide):	1 – 2 quarts herbicide per acre.
*Telar XP:	2 – 2.6 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

- 2. Biological (insects): There are several insects available to feed on the seeds and roots of Dalmatian toadflax. Biological control is used when there are large weed infestations (several acres or more) and the climate is favorable to support the insects.
- **3.** Cultural (competition & revegetation): Plant competition can prevent the invasion of Dalmation toadflax, so it is important to promote healthy desirable plant communities.
- 4. Grazing (livestock): Sheep and goats can be used to suppress Dalmatian toadflax in areas that are difficult to access, but they must be trained to eat it.
- 5. Integrated management: Management of Dalmatian toadflax is more effective when more than one strategy is used.