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SCOTCH THISTLE MANAGEMENT TIPS

Scotch thistle, a member of the Sunflower family, is a biennial forb with a taproot. The flower heads are one to two inches in diameter and have spine-tipped bracts. The flowers are violet to reddish. The numerous stems are branched and have broad, spiny wings. The leaves are large, grayish-green, spiny, and covered with fine, dense hairs which give the leaf a woolly appearance. Mature plants can grow up to 12 feet tall. Reproduction is only by seed. **Scotch thistle can produce up to 14,000 seeds per plant and the seeds can remain viable for up to three years.** Scotch thistle competes with, and decreases the availability of, desirable forage. Dense infestations of Scotch thistle can act as a living barbed wire fence, making areas impassible for wildlife, livestock and people.



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. Monitoring for, and appropriately treating, any new plants that emerge is critical.

Effective control measures for the management of Scotch thistle include:

1. **Mechanical (hand pulling, digging & mowing):** Hand pulling and digging can be effective for small infestations. Remove as much of the root as possible and place flowering plants in bags to prevent seed dispersal. Repeated mowing when the plant bolts, but before flowering, will prevent seed formation.
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 Scotch thistle. **Do NOT use these herbicides in lawns, turf or ornamental settings – read the label.** *For the most effective control, apply herbicides in the rosette stage up to the early bolting stage.*

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

Milestone:	1 – 1.25 teaspoons herbicide to 1 gallon of water.
GrazonNext HL:	1 oz 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.
*Escort XP:	1/5 – 1/3 teaspoon herbicide to 1 gallon of water.
*Telar XP:	1/5 – 1/2 teaspoon herbicide to 1 gallon of water.
DuraCor:	0.5 oz herbicide to 1 gallon of water.

Rates in large sprayers are as follows:

Milestone:	5 - 7 oz herbicide per acre.
GrazonNext HL:	1 quart herbicide per acre.
*Opensight:	2.5 – 3.3 oz herbicide per acre.
*Chaparral:	2.5 – 3.3 oz herbicide per acre.
*Escort XP:	1 – 2 oz herbicide per acre.
*Telar XP:	1 – 2.5 oz herbicide per acre.
DuraCor:	18 oz 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.

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

3. **Cultural (revegetation):** Establishment of selected grasses to compete with Scotch thistle can be useful. Maintaining healthy pastures and rangeland and preventing overgrazing and bare spots will help prevent Scotch thistle from establishing.
4. **Grazing:** Goats can be used to graze Scotch thistle in the early rosette stage.
5. **Integrated management:** Management of Scotch thistle is more effective when more than one strategy is used.