



## Asotin County Noxious Weed Control Board

P.O. Box 881  
Asotin, WA 99402  
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# Scotch Thistle

## *Onopordum acanthium*

**Description:** Scotch thistle is an impressive weed that can reach 8 feet in height and 6 feet in width. A thick mat of hairs give the plant a grayish appearance. The leaves can be 2 feet long and 1 foot across. Spines are present on the leaves and stems. The plant blooms in mid summer with flower heads reaching 2 inches in diameter. Flower colors range from dark pink to lavender. Although it is typically a biennial, it can sometimes grow as an annual. A rosette (up to 12 inches across) is produced the first year with a 12 inch fleshy tap root. The plant bolts early in its second year. Up to 40,000 seeds can be produced on a single plant. They are dispersed by wind, water, humans, livestock and wildlife.

**Habitat:** Scotch thistle prefers light, well-drained sandy or stony soils. It is found in areas with dry summers. Infestations can be found in areas ranging from wet meadows and pastures to sagebrush communities. This weed is associated with waste places, riparian areas, dry pastures, fields, and rangelands.

**Mechanical:** Small infestations can be eradicated by cutting off the plant below the soil. Mowing or cutting can be productive if done just before flowering or in the early stages of flowering. However, if the plants are cut too late, the seeds will mature in the fallen seed head. Mowing or cutting too early will only delay flowering, not stop it.

**Biological:** There are no biological agents that have been released for control of this plant. However, *Larinus planus*, *Rhincyllus conicus*, and/or *Trichosirocalus horridus* may be present. Surveys are needed to confirm their presence. In Canada and Australia testing is being done on various weevils and flies.

**Cultural control:** In tests, it was found that perennial grasses, esp ryegrass, was more competitive than legume species.

**Fertilizer:** Unknown

**Chemical:** These chemical recommendations are for noncropland areas and are summarized from the "Pacific Northwest Weed Management Handbook - 2003".

These recommendations are not intended to be a complete resource guide. Label requirements need to be followed for restrictions, concentrations, timing, and nontarget interactions. Chemical control can be effective, but must be maintained for several years to exhaust the seed bank.

- **2,4-D:**
  - Rate; 1.5 to 2 lb ae/A
  - Time; Spring or fall
  - Remarks; Use fall treatments to control rosettes. Use spring treatments before bolting.
  - Caution; Legumes are injured or eliminated at these rates. Avoid drift to sensitive crops.
- **Dicamba** (Banvel or Clarity)
  - Rate; 0.5 to 1 lb ae/A
  - Time; Spring or fall
  - Remarks; Use fall treatments to control rosettes. In the spring, use before flowers stalk elongation.
  - Caution; Dicamba may remain in the soil for 12 to 18 months. Grass tolerates dicamba at these rates.
- **Picloram** (Tordon)
  - Rate; 0.25 lb ae/A
  - Time; Apply in the fall
  - Caution; Most formulations are restricted use. Soil residues may persist for over three years. Many broadleaf crops are sensitive to picloram. Do not use in diversified crop areas.
- **Cholorsulfuron** (Telar)
  - Rate; 0.75 oz ai/A (1 oz product/A)
  - Time; Apply to actively growing weeds.
  - Remarks; Do not spray to frozen ground. Maintain constant agitation while mixing. Add 0.25% (by volume) of nonionic surfactant.
  - Avoid contact with sensitive crops. Avoid powdery, dry, or sandy soils if rain is unlikely
- **Metsulfuron** (Escort or Cimarron)
  - Rate; 0.6 oz ai/A (1 oz/A Escort) or 0.12 to 0.45 oz ai/A (0.2 to 0.75 oz/A Cimarron)
  - \* Time; Apply postemergence to actively growing plants
  - \* Remarks; Using a nonionic or silicone surfactant increases effectiveness. Certain biotypes are more sensitive than others.
  - \* Caution; Apply only to pasture rangeland, and noncrop areas.
- \* **Clopyralid + 2,4-D** (Curtail)
  - \* Rate; 1 to 5 quarts/A
  - \* Time; Apply to actively growing weeds.
  - \* Remarks; Rates differ for CRP applications. Consult label for specific directions. Wait at least 20 days after application before cultivation to allow for translocation.

- \* Consult label for crop rotation restrictions before using product. Several crops may be injured up to 4 years after application. Restrictions apply - see label.
- \* **Clopyralid** (Stinger, Transline)
  - \* Rate; 0.09 to 0.375 lb ae/A (0.25 to 1 pint/A). Labeled rates vary with crops.
  - \* Time; Up to the bud stage of thistles
  - \* Remarks; Best if applied to actively growing weeds. See label for registered sites.
  - \* Caution; Consult label for crop rotation restrictions before using products. Several crops may be injured up to 4 years after application.
- \* **Triclopyr + clopyralid** (Redeem R&P)
  - \* Rate; 1.5 to 2 pints product/A
  - \* Time; Apply to actively growing thistle from rosette to early bolt stage.
  - \* Remarks; Add a nonionic surfactant at the surfactant manufacturer's recommended rate. Apply in at least 10 gal/A water by ground.
  - \* Caution; Do not apply more than 4 pints product/A per year. Do not allow drift to desirable vegetation. Note label restrictions.

**Distribution:** Scotch thistle is found throughout Asotin County.

**ACNWCB Policy:** In Asotin County, Scotch thistle is controlled on a complaint basis when the complainant is an adjoining neighbor. On parcels less than 10 acres, Scotch thistle will be considered controlled when no seed production occurs. On parcels greater than 10 acres, a written complaint must be filed with the Asotin Weed Board. The Board will consider each complaint on an individual basis.

1/30/04

