



# SCOTCH THISTLE

(*Onopordum acanthium*)

**WHAT DOES IT LOOK LIKE?** Scotch thistle is an aggressive plant which may form stands so dense that they create a natural barrier to livestock. Scotch thistle, a biennial, lives for two growing seasons. Seeds usually germinate in the late fall. During its first year, scotch thistle produces a rosette (a clump of leaves at ground level) with a thick, fleshy taproot that may extend down 1 foot or more. Early in the second year, the plant starts to form a flower stalk that can grow up to 12 feet tall. Leaves are large (up to 2 feet long and 1 foot wide),

spiny and covered on both sides with fine woolly hairs, giving the plant a silvery-gray look. The stems have vertical rows of prominent, spiny, ribbon-like leaf material or "wings" that extend to the base of the flower heads.

**WHERE DOES IT LIKE TO GROW?** Scotch thistle thrives in sunny, moist areas along rivers and streams but can also be found in pastures, fields and along roadsides. It prefers light, well-drained, sandy or stony soils.

**WHEN DOES IT BLOOM?** Flower heads develop in midsummer generally with one head at the tip of a branch but can have as many as 7 heads per branch. Flower heads are globe shaped, upright, intensely spiny and up to 2 inches in diameter. Purple flowers appear July through September.

**HOW DOES IT SPREAD?** Scotch thistle reproduces only by seed. Each plant can produce 8,400 to 40,000 seeds. Unless the seeds are physically moved by wind, water, humans, livestock, wildlife or found in infested hay and straw, they do not spread very far from the parent plant.



## NON-CHEMICAL CONTROL

- Small infestations can be dug by hand. Be sure to cut the plant off below the surface.
- Since this plant reproduces only by seed, prevent seed production by cutting or mowing the plant before it flowers. Keep checking for new rosettes throughout the growing season and treat as necessary. Seed banks will be present for years.
- Establishing and maintaining a thick, vigorous stand of grasses in your pasture can effectively prevent scotch thistle seeds from germinating.
- Goats will graze young scotch thistle, reducing plant numbers and preventing seed production.

**CHEMICAL CONTROL** See the reverse side for information on mechanical, cultural, biological, and chemical control of Scotch Thistle. Also see our Chemical Treatment handout for more information on using herbicides.

Want more information? Contact:

**Kootenai County Noxious Weed Control**  
**10905 N. Ramsey Road**  
**Hayden, ID 83835**  
**208-446-1290**

**kcnoxiousweeds@kcgov.us or [www.kcweeds.com](http://www.kcweeds.com)**

*Kootenai County does not discriminate against individuals or groups on the basis of disability in the admission or access to, or treatment in, its public meetings, programs, or activities. Requests for assistance or accommodations can be arranged by contacting the Noxious Weed Control Department at (208) 446-1290 or County Administration Office TTY (208)446-2145 with 3 days advance notice.*

# How to Control Scotch Thistle

Scotch Thistle is a biennial that reproduces by seed only. Control is by preventing seed production.

**Mechanical** Well timed mowing or regular cultivation can eliminate seed production. Digging plants out can give very effective control if the roots are severed below the soil surface.

**Cultural** The best long term weed control is to get your desirable native plants thriving. Killing weeds is only one step, you have to also replace them with something good. Seed and fertilize so your grass can take nutrients away from the weeds and not leave available open soil for new weeds to germinate.

**Biological** Several biocontrol insects have been released in Australia, but none are available in the US because the ones that have been tested have failed host specificity tests.

**Chemical** *\*See our Chemical Treatment handout for more information on using herbicides.*

- **Aminopyralid** is the active ingredient in herbicide products such as **Milestone**. It is broadleaf selective (safe on grass) and can be effective against Scotch Thistle if applied during the rosette or bolting stages.
- **Clopyralid** is the active ingredient in herbicide products such as **Transline**. It is broadleaf selective and also safe on most conifer trees. It can be effective on Scotch Thistle rosettes.
- **Chlorsulfuron** is the active ingredient in herbicide products such as **Telar XP**. It is safe on most grasses and can be very effective on Scotch Thistle during the rosette, bolting, and flower bud stages.
- **Metsulfuron Methyl** is the active ingredient in herbicide products such as **Escort XP**. It is safe on most grasses and can be effective on Scotch Thistle if applied during the rosette to bolting stages.
- **Picloram** is the active ingredient in herbicide products such as **Tordon 22K**. It is broadleaf selective and can be effective on thistles but it is federally restricted and requires a license to buy or apply.
- **2,4-D** is the active ingredient in many herbicide products such as **Hardball, Weedar, Hi-Dep**, etc. It is broadleaf selective and can be effective small Scotch Thistle rosettes but is less effective once the plant has bolted.

*Chemical recommendations are based on University of Idaho Extension Bulletin 865 [Idaho's Noxious Weeds 2011 Control Guidelines Noncrop and Rangeland Sites](#), the book [Weed Control in Natural Areas in the Western United States](#) published by UC Davis Weed Research & Information Center, and herbicide labels.*