

# SCOTCH THISTLE

(*Onopordum acanthium* L.)



# SCOTCH THISTLE

State Noxious Weed List: **No.**

Scotch thistle is a native of Eurasia and has become naturalized in portions of western North America. Scotch thistle can thrive in well-drained, sandy or stony soils. The plant occurs in pastures, croplands, rangelands, roadsides and construction sites but prefers disturbed areas and sites near ditches. Scotch thistle has regal stature. During the reign of Malcolm I of Scotland, Norsemen attempted to capture the Staines Castle by wading across the moat in their bare feet, only to find the moat dry and overgrown with thistle. The painful cries by the warriors roused the castle guards and the Norsemen were defeated. To commemorate this victory, the flower became the emblem of Scotland.

## Identification and growth form:

Scotch thistle is a biennial herb that can grow up to 12 feet tall. Stems of the plant are hairy or cottony, and have broad, spiny wings. Leaves are large, spiny and covered with fine, dense hairs that give Scotch thistle a grayish-green, cottony appearance. Upper leaves are alternate and have prominent triangular lobes that occur on the margins. Lobes of the leaf end with a prominent, sharp, green to white spines.

Flower heads are terminal, numerous and 1 to 2 inches in diameter. Flowers are pale purple to red and subtended with a series of overlapping bracts tipped with a spine. Seeds are oblong to obovate, four-angled, deep brown to black, about 3/16 of an inch long and wrinkled. Plants can produce 70 to more than 300 flower heads that can produce 100 to 200 seeds per head. Therefore, a single plant can produce 8,400 to 40,000 seeds. Seed viability can range from one to more than 16 years, depending on seed burial depth.

## Why is this plant a concern?

Scotch thistle is an aggressive species that can out-compete and decrease desirable forage. The plant also can degrade wildlife habitats and recreational areas. Scotch thistle infestations can become impenetrable, thorny barriers that severely limit land use by wildlife, livestock and man.

## How do I control this plant?

Scotch thistle reproduces solely through seed production. Seeds generally germinate in late fall but germination can occur anytime throughout the year.

**Chemical.** Scotch thistle can be controlled effectively with Milestone (aminopyralid), Stinger, Transline or Curtail (clopyralid), Tordon (picloram), or dicamba (various) or Overdrive (dicamba plus diflufenzopyr). Products that contain metsulfuron (Escort, Cimarron Max, others) will control biennial thistles in the spring and will eliminate seed production when applied in the bolting to bud growth stages.

**Mechanical.** Hand-pulling small infestations of Scotch thistle can be an effective control method. Mowing prior to seed dispersal may limit the amount of seed available for germination. However, if the plant is cut after flowers begin to show color, viable seed may still be dispersed.

**Biological.** *Lixus cardui* Olivier (Coleoptera: Curculionidae), a weevil from Europe was evaluated by Australian researchers to control Scotch thistle. However, this insect has not been released in North America.