

Contact: Wm Terry Halleran
Regional Agronomy Field Specialist
University of Missouri Extension
Phone: 417-745-6767
Email: halleranw@missouri.edu

Date: Wednesday, June 26, 2024

Headline: Troublesome Pasture Plant of the Week – Teasel



Hermitage, MO - Common Teasel (*Dipsacus fullonum*) and/or Cutleaf Teasel (*Dipsacus laciniatus*) is often seen along roadsides, in pastures and wetter waste areas as well as ditches where the soil conditions are poor here in Missouri. Teasel is an introduced plant to North America. The genus includes about 15 species of tall herbaceous plants. *Dipsacus* species are native to Europe, Asia, and northern Africa. These exotic plants are considered to be both noxious and highly invasive as they form a monoculture capable of crowding out all other native plant species. Teasel is very prolific, as it reproduces quite well through seed germination from the prior year. For this reason, it should be discouraged and/or eliminated, if at all possible. No known grazing livestock will feed on this plant due to its bristly stem, large lanceolate leaves with spiny midrib. However, the seeds are an important winter food resource for some birds. The distinctive flower heads are commonly used in dried flower arrangements. This practice of using teasel seed heads, due to the presence of viable seeds in the teasel heads, may have encouraged the spread of this plant.

Teasel, a monocarpic biennial, meaning the rosette stage may persist for more than one year, but the plant dies after it flowers, are easily identified by their prickly stem and leaves. Their basal leaves on the rosette are widest near the tip and taper to the base with wrinkled rounded teeth. This plant may reach heights of 7 feet as stems are angled and covered with downward turned prickles. Leaves on bolted plants are opposite, lanceolate, and may be up to 2 feet long with spines on underside of midrib. The inflorescence is ovoid, 1.5 to 4 inches long and 1 to 2 inches wide, with a basal whorl of spiny bracts. When the plant flowers, tubular corollas are present which may be light purple, dark pink, lavender, or white in color. The first flowers begin opening in a belt around the middle of the spherical or oval flowerhead, and then open sequentially toward the top and bottom of the flower, forming two narrow belts as the flowering progresses. The dried head persists afterwards, with the small seeds maturing in mid-autumn.

A single plant can produce as many as 40 blooms, each of which can produce more than 800 seeds. The seeds are easily dispersed by water, birds, animals and humans.

In rainy weather, some seeds may germinate when still in the seed head. Cutleaf teasel has a similar growth habit to common teasel, but has lobed leaves with spines on the margins. Rain water can collect in the cup-like receptacles that form where sessile leaves join the stem; this structure may perform the function of preventing sap-sucking insects such as aphids from climbing the stem and feeding on the plant. If left unchecked, teasel can form large dense patches and severely impact the habitat.

Teasel weed control usually requires a multi-pronged approach. Teasel seeds germinate throughout the year, but most commonly in spring and fall. Mechanical control methods include digging up young rosettes with a long tool, such as a dandelion digger, but be sure to dig deep enough to get the long taproot. Seedlings can be pulled from moist soil by hand but remember to wear gloves to avoid the stickers. The key to controlling teasel weeds is to prevent any mature plants from setting seeds, but mowing isn't effective because the plant is determined and will develop new flowering stalks if the stalks are cut before the plant blooms. In fact, mowing is actually counterproductive because the new, shorter stems may lay horizontal to the ground where flowers reseed easily below the height of the brushhog's mower blades. The best way to gain teasel weed control is to remove flowering stalks by hand before seeds are mature. Dispose of the flowering heads in sealed bags to prevent spread. Be persistent because the seeds remain in the soil; controlling teasel weeds may require up to five years or even more.

Large stands of common teasel can be treated with a wide variety of herbicides such as 2,4-D or glyphosate. Look for the cheapest and most effective chemical that will do a good job of control. Apply the chemicals to rosettes in spring or fall. Teasel rosettes are not dormant during the winter and could be treated during spells of above freezing weather. Therefore, the window is quite wide – anytime up to bolting. Treating early provides the potential advantage of reducing injury to desirable forbs. 2,4-D alone at a rate of at least 1.0 lb ae/ac, or in combination with other growth regulator herbicides is effective. Using Crossbow, a non-restricted herbicide, which contains 2,4-D plus triclopyr works well in pastures and non-crop areas. Spring applications of glyphosate may be recommended and are especially useful in warm-season grass (WSG) plantings, as undesirable cool-season grasses can be suppressed as well. This treatment should be applied before May, before active growth of WSG begins. Use at least 1.5 lb/ac on an acid equivalent basis. This will translate to 42 to 64 oz product/ac, based on the formulation. Earlier applications will preserve desirable forbs as well. Encourage the growth of healthy native plant populations to prevent re-infestation of common teasel.

There is not a one-kill-all chemical choice out there, so read the label carefully. Select one that is listed as a control for teasel.

As always do your research, chose wisely, apply safely, and protect those around you when using any chemicals.

For more information on pasture plant identification, please contact your local MU Extension Agronomy Field Specialist.