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Invasive plants can thrive and aggressively spread beyond their natural range, disrupting ecosystems. The Management of Invasive Plants in Wisconsin series explains how to identify invasive plants and provides common management options. Management methods recommend specific timings for treatment, as well as expected effectiveness. For more information, go to: fyi.uwex.edu/weedsci/category/invasive-plants-of-wisconsin.

Teasels (Dipsacus spp.)

easels are herbaceous plants that grow as a basal rosette for at least one year. Plants form a spiny, angled flowering stalk, 2–6' tall, typically in second or third year, then dies (monocarpic perennial).

Legal classification in Wisconsin:Restricted

Leaves: Stem leaves are opposite, large (up to 1.5' long), oblong, and covered in spines, especially along the midrib.
Leaves of flowering plants join into cup around stem. Rosette leaves are oval in young rosettes to oblong and hairy in older rosettes.

- **Common** teasel (*Dipsacus fullonum*): Stem leaves are not lobed.
- Cut-leaved teasel (Dipsacus laciniatus): Upper stem leaves are lobed.

Flowers: Summer. Common teasel begins blooming earlier than cut-leaved teasel. Small flowers clustered in dense, oval heads 2–5" long. Stiff, spiny, leaf-like bracts curve up from base of flower head. Both species have exhibited the flower color associated with the opposite species.

- **Common** teasel: Purple flowers and bracts longer than the flower heads.
- **Cut-leaved** teasel: White flowers and bracts shorter than the flower heads.

Fruits and seeds: Fruits are light brown, ridged, and hairy. About 1/5" long and each fruit contains a single seed. Fruit are borne on a compact inflorescence at end of flowering stalk.

Roots: Deep taproot, up to 2'long and 1"in diameter.

Similar species: None known.

Ecological threat:

- Invades open areas, including prairies, savannas, sedge meadows, roadsides and disturbed areas.
- Teasel is still used in horticultural plantings and dried flower arrangements.







Non-chemical control Removal

Effectiveness in season: 90–100% Season after treatment: 50–70%

Pulling and cutting the root from the stem are effective individual plant control techniques. Pull if soil conditions allow for the removal of the taproot. Alternately, cut the entire taproot with a sharp shovel or spade 1–2" below the surface. If flowers are present, bag material and dispose of it in a landfill to avoid potential for seed spread.

Mowing

Effectiveness in season: 90–100% Season after treatment: < 50%

Mowing can be effective if timed just after flower heads open, but before seeds enlarge. Plants may resprout and still flower, but rarely produce viable seed. Monitor populations and repeat mowing if concerned about seed production. Care must be taken not to mow when mature seeds could be present since this will spread the seed. While mowing has been reported as an effective means of suppression, there is no data on how many years of mowing are required to control a population.

Prescribed burning

Effectiveness in season: < 50% Season after treatment: < 50%

Spring burns can kill germinating seedlings and can suppress above-ground growth of established plants, depending on fire intensity. After the fire, established plants will quickly resprout and reinvade areas. Fire may benefit other species well-adapted to this management (e.g., prairie grasses), resulting in improved competition with teasel. Burns also allow for increased visibility of rosettes for follow-up treatment since they are often one of the first plants to green up after a burn. A handheld propane torch can be effective for treating seedlings.

Manipulation of the environment

Effectiveness in season: < 50%
Season after treatment: 50–70%

Establishment and maintenance of vigorous perennial grass species may effectively compete with established populations as well as reduce the establishment of teasel at a site.

Chemical control

Foliar

Apply directly to individual plants or broadcast across an infested area. Broadcasted foliar applications are typically the most cost-effective treatment in dense infestations. Use lower rates on smaller plants and less dense populations and higher rates on larger plants and denser populations.

2,4-D*

Effectiveness in season: 70–90% Season after treatment: 70–90%

Common name: Many

Rate:

broadcast: 1.0–2.0 lb a.e./A **spot:** For a 3.8 lb a.e./gal product: 0.6–1% (0.025–0.04 lb a.e./gal)

Timing: Apply to rosettes in fall or spring. Applications after bolting may be less effective.

Caution: Use aquatically labeled product if potential exists for solution to contact surface water. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.



aminocyclopyrachlor + metsulfuron*

Effectiveness in season: 90–100% Season after treatment: 90–100%

Common name: Streamline

Rate:

broadcast: 4.75–9.5 oz/A (aminocyclopyrachlor: 1.9–3.75 oz a.i./A + metsulfuron: 0.6–1.2 oz a.i./A) **spot:** 0.2–0.4 oz/gal

(aminocyclopyrachlor: 0.08–0.16 oz a.i./gal + metsulfuron: 0.03-0.05 oz a.i./gal)

Timing: Apply to rosettes in fall or spring.

Caution: Do not apply directly to water or to areas where surface water is present. Avoid using Streamline in areas where soils are permeable, particularly where the water table is shallow, as groundwater contamination may result. Streamline remains in the soil for months, depending on application rate, and has the potential to contaminate surface runoff water, especially on poorly draining soils or areas with shallow groundwater. Maintenance of a vegetative buffer strip is recommended between the areas Streamline is applied and surface water features. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants. Do not compost treated plants since herbicide can persist through composting process.



*Active ingredient (a.i.)

aminopyralid*

Effectiveness in season: 90–100% Season after treatment: 70–90%

Common name: Milestone

Rate:

broadcast: 4–7 fl oz/A (0.06–0.1 lb a.e./A)

spot: Equivalent to broadcast rates.

Timing: Apply to rosettes in fall or spring.

Remarks: 14 fl oz/A can be used as long as less than half of the area is treated. Depending on the volume of solution applied per acre, typical mixtures for spot treatments are 2–8 mL Milestone per gallon of water.

Caution: Do not apply directly to water or to areas where surface water is present. Remains in soil for up to one year, depending on application rate. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants. Do not compost treated plants since herbicide can persist through composting process.

chlorsulfuron*

Effectiveness in season: 70–90% Season after treatment: 70–90%

Common name: Telar

Rate:

broadcast: 1.0–2.5 oz/A (0.75–2 oz

a.i./A)

spot: 0.04 oz/gal (0.03 oz a.i./gal)

Timing: Apply to rosettes in fall or spring.

Caution: Do not apply directly to water or to areas where surface water is present. Can remain in the soil for months, depending on application rate. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

clopyralid*

Effectiveness in season: 70–90% Season after treatment: 70–90%

Common name: Transline

Rate:

broadcast: 8–21 fl oz/A (0.2–0.5 lb a.e./A)

spot: 0.2–0.4% (0.005–0.01 lb a.e./gal)

Timing: Apply to rosettes in fall or spring.

Caution: Do not apply directly to water or to areas where surface water is present. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Remains in soil for up to one year, depending on application rate. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants. Do not compost treated plants since herbicide can persist through composting process.

dicamba + 2,4-D*

Effectiveness in season: 90–100% Season after treatment: 70–90%

Common name: Weedmaster

Rate:

broadcast: 56–64 fl oz/A

(dicamba: 0.5–0.55 lb a.e./A + 2,4-D:

0.6-0.7 lb a.e./A)

spot: 0.8% (dicamba: 0.009 lb a.e./gal +

2,4-D: 0.01 lb a.e./gal)

Timing: Apply to rosettes in fall or spring. Applications after bolting may be less effective.

Caution: Do not apply directly to water or to areas where surface water is present. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants. Rates > 16oz/A (0.5 lb a.e./A) may cause stunting and discoloration of sensitive grasses, such as smooth brome.

glyphosate*

Effectiveness in season: 90–100% Season after treatment: < 50%

Common name: Roundup

Rate:

broadcast: 1.5–3 lb a.e./A **spot:** For a 3 lb a.e./gal product: 1.5–2.0 % (0.05–0.06 lb a.e./gal)

Timing: Apply to rosettes in fall or spring.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground since glyphosate is not selective. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

imazapic*

Effectiveness in season: 70–90% Season after treatment: 70–90%

Common name: Plateau

Rate:

broadcast: 8–12 fl oz/A (0.15–0.2 lb a.e./A)

spot: 0.25–1.5% (0.005–0.03 lb a.e./gal)

Timing: Apply to rosettes in fall or spring.

Caution: Do not apply directly to water or to areas where surface water is present. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Imazapic can remain in the soil for months, depending on application rate, and has the potential to contaminate surface runoff water during this timeframe. Maintenance of a vegetative buffer strip is recommended between the areas imazapic is applied and surface water features. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

imazapyr*

Effectiveness in season: 90–100% Season after treatment: 70–90%

Common name: Arsenal

Rate:

broadcast: 48–64 fl oz/A (0.75–1.0 lb a.e./A)

spot: 0.5–1% (0.01–0.02 lb a.e./gal)

Timing: Apply to rosettes in fall or spring.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground since imazapyr is not selective and can remain in the soil for several months to more than a year, depending on application rate. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

metsulfuron*

Effectiveness in season: 90–100% Season after treatment: 70–90%

Common name: Escort

Rate:

broadcast: 0.75–1.0 oz/A (0.5–0.6 a.i./A) **spot:** 0.04 oz/gal (0.02 oz a.i./gal)

Timing: Apply to rosettes in fall or spring.

Caution: Do not apply directly to water or to areas where surface water is present. Remains in the soil for months, depending on application rate.

Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

picloram*

Effectiveness in season: 90–100% Season after treatment: 70–90%

Common name: Tordon K

Some products containing picloram are restricted-use in Wisconsin.

Rate:

broadcast: 8–16 fl oz/A (0.13–0.25 lb a.e./A)

spot: Equivalent to broadcast rates.

Timing: Apply to rosettes in fall or spring.

Caution: Do not apply directly to water or to areas where surface water is present. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Remains in the soil for more than one year, depending on application rate, and has the potential to contaminate surface runoff water during this timeframe. Maintenance of a vegetative buffer strip is recommended between the areas picloram is applied and surface water features. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants. Do not compost treated plants since herbicide can persist through composting process.



sulfometuron*

Effectiveness in season: 90–100% Season after treatment: 70–90%

Common name: Oust

Rate:

broadcast: 3.0–5.0 oz/A (2.25–3.75 oz a.i./A)

spot: Equivalent to broadcast rates.

Timing: Apply to rosettes in fall or spring.

Caution: Do not apply directly to water or to areas where surface water is present. Applications can result in bare ground since sulfometuron is not selective and can remain in the soil for months, depending on application rate and site conditions. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

triclopyr*

Effectiveness in season: 90–100% Season after treatment: 70–90%

Common name: Garlon

Rate:

broadcast: 16–32 fl oz/A (0.5–1.0 lb a.e./A)

spot: 1–2% (0.04–0.08 lb a.e./gal)

Timing: Apply to rosettes in fall or spring.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

Cut stump

Cut a stem of a plant near the base and apply herbicide to the cut surface that remains rooted in the ground. Do not use this method if snow covers the cut surface. Use lower rates on smaller plants and higher rates on larger plants.

triclopyr*

Effectiveness in season: 90–100% Season after treatment: 70–90%

Common name: Garlon

Rate: 20-5% in oil (0.8-1.0 lb a.e./ gal)

Timing: Apply any time of year.

Remarks: Products containing this active ingredient can have different instructions for mixing. Labels will recommend mixing the product in a water- or oil-based carrier (e.g., basal bark oil). Consult the label to determine the appropriate carrier.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

Herbicide information is based on label rates and reports by researchers and land managers. Products known to provide effective control or in common use are included. Those that do not provide sufficient control or lack information for effectiveness on target species have been omitted.

References to pesticide products in this publication are for your convenience and not an endorsement of one product instead of a similar product. You are responsible for using pesticides in accordance with the label directions. Read the label before any application.







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