MANAGEMENT OF

INVASIVE PLANTS IN WISCONSIN

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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.

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Creeping bellflower
(Campanula rapunculoides)

Creeping bellflower is an herbaceous, creeping perennial. Erect stems are unbranched and form dense clumps 16–40″ tall. Stems are purple near the base.

Legal classification in Wisconsin: Restricted

Leaves: 1–3″ long, alternate. Lower leaves have long purple petioles and are heart-shaped. Upper leaves lack petioles (sessile) and are lance-shaped. Leaves are hairy on the lower surface, particularly along midrib, and have a toothed margin.

Flowers: Late spring to fall. Individual flowers ascend along one side of the flowering stem (raceme). Flowers are 0.75–1.25″ long, five-lobed, blue-purple, bell-shaped, and slightly nodding.

Fruits and seeds: Round capsule, 0.3″ in diameter that contains 50–150 seeds.

Roots: Rhizomes up to 6″ deep with vertical storage roots. Readily regenerates from perennial tissue (rhizomes and perennial roots).

Similar species: Harebell (*Campanula rotundifolia*, native) is distinguished by flowers borne in clusters and shorter stems (4–15″ tall) that are not erect. The oval-shaped lower leaves generally fall off as the plant matures.

Ecological threat:

- Invades fields, stream banks, woodlots, prairies, oak savannas, roadsides, and urban areas, especially lawns and flowerbeds.
- Creates dense stands, spreading by seed and rhizome growth.
- Tolerant to many broadleaf herbicides, such as 2,4-D.

Non-chemical control

Removal

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

Dig at least 6″ deep to locate and remove all rhizomes and perennial roots. If all perennial tissue (roots and rhizomes) is removed, populations can be eliminated. This can be difficult, especially in heavy soils. A pitchfork or other tool can be used to loosen the soil around the plant to make removal easier. If only removing shoots, the frequency and length of period necessary to reduce populations is not known, but likely many removals per year for several years will be necessary. If flowers are present, bag material and dispose of it in a landfill or burn to avoid potential for seed spread.

Prescribed burning

Effectiveness in season: 50–70%
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; this management method is not recommended unless integrated with other techniques. Fire may benefit other well-adapted species (e.g., prairie grasses), resulting in improved competition with bellflower. A handheld propane torch can be effective for treating seedlings.

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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.

dicamba*

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

Common name: Banvel

Rate:
broadcast: 16–64 fl oz/A (0.5–2.0 lb a.e./A)
spot: Equivalent to broadcast rates.

Timing: Apply during flower bud stage through the fall as long as leaves are green.

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: 70–90%
Season after treatment: 50–70%

Common name: Roundup

Rate:
broadcast: 22–44 fl oz/A (0.8–1.6 lb a.e./A)
spot: For a 3 lb a.e./gal product: 1–2% (0.03–0.06 lb a.e./gal)

Timing: Apply during flower bud stage through the fall as long as leaves are green.

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.

picloram*

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

Common name: Tordon K

Some products containing picloram are restricted-use in Wisconsin.

Rate:
broadcast: 8–32 fl oz/A (0.13–0.5 lb a.e./A)
spot: Equivalent to broadcast rate.

Timing: Apply during flower bud stage through the fall as long as leaves are green.

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 as herbicide can persist through composting process.

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.*

***Active ingredient (a.i.)**

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