



*Centaurea x gerstlaueri*

WA – Class B Noxious Weed, Prohibited Plant List

OR – Class B Noxious Weed

## Meadow Knapweed

Hybrid Knapweed

**Family:** Asteraceae

**Origins:** Native to Europe, it was first introduced to Oregon in 1911 as a forage crop called “Bull Clover.” The first recorded site in Washington was in 1923.

**Range:** Found throughout the United States. In Washington and Oregon, infestations are more dense west of the Cascades.

**Habitat:** Commonly found in meadows, pastures, forest openings, along roadsides, floodplains of streams or rivers, and areas of water drainage.



**Impact:** Meadow Knapweed is a very aggressive species that can quickly infest large areas, reduce the quality of wildlife habitat and plant diversity, increase soil erosion rates in watersheds, and pose wildfire hazards. It reproduces from both seed and the root crown, producing an average of 1,000 seeds per plant, which can remain viable in the soil for up to 8 years.

**Description:** Meadow Knapweed is a hybrid species of Brown Knapweed and Black Knapweed. As a fast-growing perennial, it sprouts from a woody root crown, and its upright stems can reach up to 5 feet in height. Basal leaves are up to 6 inches long and 1 1/4 inch wide, tapering at both ends. The stem leaves are lance-shaped, stalkless, and sometimes shallowly lobed, while the uppermost leaves are smaller and not lobed.

Flower heads are solitary and terminal on branch tips. Bracts at the base of flower heads are light to dark brown and have papery, fringed margins. Bracts have a metallic gold sheen when plants are flowering. Flowers are rose-purple or occasionally white, and bloom from July to September.

**Common Look-Alikes:** Diffuse Knapweed, Spotted Knapweed, Russian Knapweed, Brown Knapweed, Black Knapweed.

*\* Meadow Knapweed is not known to be toxic. Look-alike Spotted Knapweed is potentially carcinogenic in large quantities, and Russian Knapweed is toxic to livestock.*

## Integrated Pest Management - Control Methods

Integrated Pest Management (IPM) combines various methods such as mechanical, cultural, biological, and chemical controls to manage pests. IPM offers the possibility of improving the efficiency of pest control while reducing its negative environmental impacts. For more information, see the Cowlitz County Noxious Weed's IPM Resources & Strategy Guide or contact your local Noxious Weed Control Board to develop a customized IPM plan.

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## Non-Herbicide Control

<b>Mechanical</b> (pulling, cutting, digging, etc.)	Hand pulling is only effective on small patches. Repeated pulling may be necessary, the entire root must be removed, and all parts must be bagged.
<b>Cultural</b>	Frequent cultivation should reduce Meadow Knapweed populations.
<b>Biological</b>	Blunt Knapweed Flower Weevil, <i>Larinus obtusus</i> . The females lay eggs in newly opened flower heads, and the eggs hatch in about three days. Larvae feed on hairs and new seeds within the flower heads. Adults emerge after three to four weeks from cocoons in the flower heads, begin feeding, and then overwinter in soil litter beneath the plants.

## Herbicide Control: Foliar Broadcast Treatment

<b>2,4-D</b> (Many Trade Names)	<b>Timing:</b> Apply during the early bolting stage before flowering. <b>Remarks:</b> Avoid drift to sensitive crops; treatment will only control plants emerged at the time of treatment; do not apply near water.
<b>Aminopyralid</b> (Milestone)	<b>Timing:</b> Fall to actively growing plants. Spring to rosettes or bolting plants. <b>Remarks:</b> Many desirable plants can be seriously injured or killed; use a non-ionic surfactant to enhance control under adverse conditions; do not apply near the root zone of desirable trees; do not compost plant material that has been sprayed by this product; do not use manure from fields that have been sprayed with this product; do not apply near water.
<b>Clopyralid + 2,4-D amine</b> (Curtail)	<b>Timing:</b> Apply to actively growing plants after most basal leaves have emerged but before the bolting stage. <b>Remarks:</b> For best results, wait at least 20 days after application before disturbing treated areas (cultivation, mowing, fertilization with shank-type applicators) to allow thorough translocation; may damage crops; do not apply near water; consult the label for crop rotation restrictions; several crops may be injured for several years after application.
<b>Glyphosate</b> (Rodeo, Killzall, Kleenup, Roundup)	<b>Timing:</b> Apply to actively growing Knapweed when most plants are at bud stage. <b>Remarks:</b> Spray complete uniform coverage, but not to the point of runoff; dust on plants may reduce effectiveness; Glyphosate is nonselective and may injure or kill any vegetation it contacts; refer to the label for use in aquatic areas; follow treatment by seeding with a locally adapted grass.
<b>Clopyralid</b> (Transline, Stinger)	<b>Timing:</b> Apply to rosettes or bolting plants before the bud stage. <b>Remarks:</b> Product will injure or kill sensitive broadleaf forages; consult the label for crop rotation restrictions before use; several crops may be injured for several years after application; do not apply near water.

\* Cowlitz County Noxious Weed Control Board does not endorse any product or brand name. Brand names are listed as an example only. Other commercial products may contain the listed active chemical for herbicide control. Always read and follow the safety protocols and rate recommendations on the herbicide label. **The Label is The Law.**

This control sheet includes excerpts from the Written Findings of the Washington State Noxious Weed Control Board (WSNWCBC), [nwcb.wa.gov](http://nwcb.wa.gov). Herbicide information from the PNW Weed Management Handbook (ISBN 978-1-931979-22-1) and product labels.