Cowlitz County Noxious Weed Control Board
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Centaurea macrocephala

WA – Class A Noxious Weed, Prohibited Plant List

Bighead Knapweed

Lemon Fluff, Yellow Bachelor's Button, Great Golden Knapweed

Family: Asteraceae/Compositae

Origins: Native to Romania and Armenia. First introduced into North America on the east coast in 1812.

Range: Limited distribution in the United States.

Habitat: Commonly grows in grassy areas such as pastures or meadows, and thrives in subalpine climates. Bighead Knapweed is often planted as an ornamental and grows well in flower beds.

Impact: Bighead Knapweed quickly establishes in high elevation grassy fields and subalpine meadows, and out-competes native grasses and other forage species, reducing biodiversity and limiting food species for wildlife and livestock. Once established, it can be difficult and costly to remove. It reproduces by seed and root divisions. Each flower produces up to 200 seeds, which are dispersed by animal and human traffic.

Description: Bighead Knapweed is a perennial species that can grow up to 5 feet in height and develops a long taproot. The plant stems are upright and unbranched, terminating in a single flower head. The leaves are broadly lance-shaped with toothed edges and pointed tips with a rough surface. Basal, or rosette, leaves are stalked, and they can reach 15 inches long and 3 inches wide. The leaves and leaf stalks get progressively smaller up the plant stem, with the top leaves being stalkless. Stem and leaves may have some small hairs.

The solitary yellow flower heads are globe-shaped and 1 to 3 inches in diameter. The bracts beneath the flower head have thin, papery, fringed margins. The lower bracts show evidence of spines. The flowers bloom from July to August.

Common Look-Alikes: Yellow Button Mum, Yellow Dahlia, Balsamroot ssp.

** Bighead Knapweed is not known to be toxic. Look-alikes Yellow Button Mum and Yellow Dahlia are toxic to cats, dogs and horses if injested.*

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

Mechanical (pulling, cutting, digging, etc.)	Pulling Bighead Knapweed is impractical for large infestations, but small plants may be dug out. When the flowering stem is broken off without removing the taproot, a new stem will grow from the woody crown, producing another flower head later in the season. Repeated mowing will reduce seed production and will eventually diminish root reserves.
Cultural	Maintain healthy desirable vegetation. Do NOT introduce this plant into your garden.
Biological	Biological agents are currently not available for Bighead Knapweed in Washington State.

Herbicide Control: Foliar Broadcast Treatment

2,4-D (Many Trade Names)	**Timing:** Apply during the early bolting stage before flowering. **Remarks:** Avoid drift to sensitive crops; treatment will only control plants emerged at the time of spraying; do not apply near water.
Aminopyralid (Milestone)	**Timing:** Fall to actively growing plants. Spring to rosettes or bolting plants. **Remarks:** 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.
Clopyralid + 2,4-D amine (Curtail)	**Timing:** Apply to actively growing plants after most basal leaves have emerged but before the bolting stage. **Remarks:** 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.
Glyphosate (Rodeo, Killzall, Kleenup, Roundup)	**Timing:** Apply to actively growing Knapweed when most plants are at bud stage. **Remarks:** 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.
Clopyralid (Transline, Stinger)	**Timing:** Apply to rosettes or bolting plants before the bud stage. **Remarks:** 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.
2,4-D (MCP Amine-4, Amine 400)	**Timing:** Apply during the early bolting stage before flowering. **Remarks:** Avoid drift to sensitive crops; treatment will only control plants emerged at the time of spraying; 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 (WSNWCB), nwcb.wa.gov. Herbicide information from the PNW Weed Management Handbook (ISBN 978-1-931979-22-1) and product labels.