



*Centaurea diffusa*

WA – Class B Noxious Weed, Prohibited Plant List

OR – Class B Noxious Weed

## **Diffuse Knapweed**

White Knapweed

**Family:** Asteraceae/Compositae

**Origins:** Native to Southern Europe, Diffuse Knapweed, was introduced to the United States in contaminated alfalfa from the Caspian Sea region of Turkestan. It was first recorded in Washington in 1907.

**Range:** Found throughout the Western United States. In Washington and Oregon, it is more heavily distributed east of the Cascades.

**Habitat:** Commonly found along roadsides, railroad tracks, trails, sandy river shores, gravel banks, and heavily grazed pastures. Diffuse Knapweed thrives in well-drained, light-textured soils and does not tolerate flooding or shade.

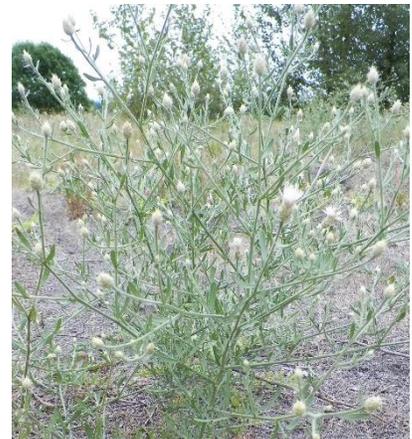
**Impact:** Diffuse Knapweed is a very aggressive species that can quickly infest large areas, reduce the quality of wildlife habitat, decrease plant diversity, increase soil erosion rates, and pose wildfire hazards. It reproduces primarily by seed but may also regenerate from the root crown. A single flower stalk can produce 1,200 seeds, which can remain viable for up to 5 years. When the plant breaks off at the base, it can be blown around like a tumbleweed and disperse its seed.

**Description:** Diffuse Knapweed is an annual, biennial, or perennial growing up to 3.5 feet tall. A rosette of basal leaves form during fall/winter, and the plants bolt and flower in the spring/summer. It has a long taproot and generally has one main stem that branches freely. Leaves and stems are greyish green in color and covered in short, dense hairs. Basal leaves are short-stalked and divided into lobes on both sides of the center vein. The stem leaves are stalkless and become smaller, less divided, and more linear near the top of the stems.

The flowers are white or sometimes pink/purple and grow in clusters at the ends of the branches. The bracts at the base of the flower heads are leathery and edged with a fringe of brown to yellow spines. Flowers bloom from June to September.

**Common Look-Alikes:** Meadow Knapweed, Spotted Knapweed, Russian Knapweed.

*\* Diffuse Knapweed is not known to be toxic. Look-alike Spotted Knapweed is potentially carcinogenic in large quantities.*



## **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.)	Cultivation is the most effective mechanical control method. Mowing before flowering will help reduce seed production but will not kill the plant. Hand pulling is only effective on small patches. Repeated pulling may be necessary, and the entire taproot must be removed.
<b>Cultural</b>	No effective cultural methods known at this time.
<b>Biological</b>	Several biological control agents are approved in Washington: the flower weevil ( <i>Larinus minutus</i> ), the broad-nosed seedhead weevil ( <i>Bangasternus fausti</i> ), the root beetle ( <i>Sphenoptera jugoslavica</i> ), the root mining weevil ( <i>Cyphocleonus achates</i> ), and the Sulfur Knapweed moth ( <i>Agapeta zoegana</i> ).

## 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 emerged plants at the time of spraying; 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; using a non-ionic surfactant will help 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.
<b>Glyphosate</b> (Rodeo, Killzall, Kleenup, Roundup)	<b>Timing:</b> Apply to actively growing Knapweed when most plants are at the 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.
<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 (WSNWCB), [nwcb.wa.gov](http://nwcb.wa.gov). Herbicide information from the PNW Weed Management Handbook (ISBN 978-1-931979-22-1) and product labels.