

# Spotted Knapweed

*Centaurea stoebe* Sunflower Family

## Identification Tips

- Upright branched stems, up to 5 feet tall when in flower
- Flower heads are small and oval, with light purple to pinkish thistle-like flowers
- Bracts (found around the base of the flower head) have triangular black spots
- Medium-green leaves with a silvery gray cast, often deeply lobed and sparse
- Stout taproot
- Resembles a thistle but lacks spines

## Biology

Short-lived perennial or sometimes biennial. Starts as a rosette in spring or fall, followed by tall stalks and flowers in the summer. Flowers continuously from early summer into fall, as long as moisture and temperatures permit. Slight disturbances cause seeds to be expelled; seeds in soil can remain viable for up to 8 years. Plants that are cut regrow and flower again within weeks.

## Impacts

Crowds out desirable native and forage plants with its aggressive growth; threatens wildlife habitat and degrades pastures. Increases soil erosion rate. High seed production makes eradication difficult once established in an area.

## Distribution

Found throughout King County, mainly in industrial and vacant areas, fields, and gravelly riverbanks. Most common on roads and railroads in Seattle and south King County, but also found in open sites throughout the county. Prefers full sun and well-drained soils; grows especially well in loose gravel and newly disturbed areas. Introduced from Europe, most likely as a seed contaminant in alfalfa crops.

## What You Can Do

The King County Noxious Weed Control Program is actively trying to control the spread of spotted knapweed in the county. Knapweed seeds are easily spread by humans and animals. Do your part by checking for this plant on your property. Also clean vehicles and recreational gear that have been in an area known to be infested with spotted knapweed. By eliminating existing plants and stopping seed production, we can reduce or eradicate infestations over time.

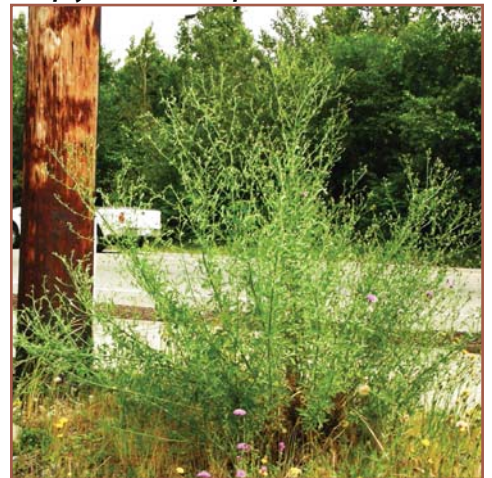
**Class B Noxious Weed:  
Control Required**



*Small, oval flower heads have light purple to pinkish flowers above bracts with triangular black spots.*



*Spotted knapweed has medium-green leaves with a silvery gray cast, often deeply lobed and sparse.*



*Full-grown plants are 2-5 feet tall with upright, branched stems.*

## Questions?

King County Noxious Weed Control Program: **206-477-WEED** [kingcounty.gov/weeds](http://kingcounty.gov/weeds)

## Control Methods

For best results, control methods should be adaptive and employed throughout several growing seasons. **Be aware: mowing alone is not sufficient for controlling spotted knapweed.** Healthy, competitive perennial grass or other vegetation is the best defense against re-infestation and the most effective long-term control method.

### Manual:

You can hand pull or dig up individual plants, making sure to remove as much root as possible. Plants in sandy soil pull easily, but those in hard-packed soil will require a shovel or stout trowel. Sites where plants have been pulled need to be watched closely for new knapweed plants, as disturbed soil aids in germination of any seeds present.

### Mechanical:

Knapweed that is periodically mowed will generally continue to flower and produce seeds, so mowing alone is not recommended. Tilling and cultivation that buries seeds and plant matter below a depth of 1 ½ inches can be effective, especially if the area is replanted with a healthy cover crop.

### Chemical:

**Follow labels exactly as written, and only use products appropriate and legal for the site. Certain herbicides cannot be used in aquatic areas or their buffers.** Double-check the label for any site-specific restrictions. 2,4-D and triclopyr are effective at time of stem elongation (usually late April to early May), before flowers open. Aminopyralid is also very effective from rosette to bolting stage or on fall rosettes. These products are selective for broadleaf plants and will not harm grass, which helps to suppress new knapweed seedlings. Glyphosate is also effective but will kill grass as well. When using glyphosate, follow with seeding or planting of appropriate species. Glyphosate is effective when most plants are at bud stage. Spray herbicide on the entire leaf and stem surface of actively growing plants; do not cut the stem until plants are dead, since this stops the plant from absorbing the chemical. A heavy seedling infestation can be efficiently controlled with an herbicide application in spring, followed by an application later in the summer or fall if needed. For more information, contact the Noxious Weed Control Program.



*Individual plants in loose soil can be hand-pulled, but those in harder soil will need to be dug up.*

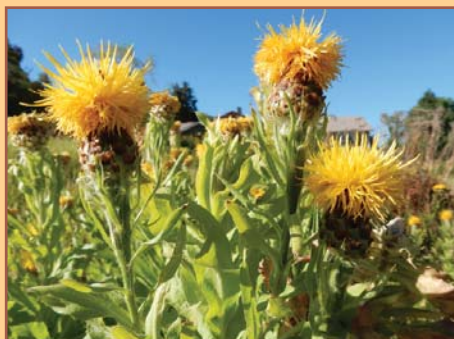
## Could be confused with:

### Several other invasive knapweeds are found in King County.

Three of the more common ones are **diffuse knapweed (*Centaurea diffusa*)**, **bighead knapweed (*Centaurea macrocephala*)**, and **meadow knapweed (*Centaurea moncktonii*)**. All of these share many of the same traits as spotted knapweed, and all have the same negative impacts on the landscape: they crowd out native vegetation, and impair the quality of wildlife habitat and pastures. All three are also noxious weeds in Washington, so please let us know if you spot them.



**Diffuse knapweed**  
(*Centaurea diffusa*)



**Bighead knapweed**  
(*Centaurea macrocephala*)



**Meadow knapweed**  
(*Centaurea moncktonii*)