



# FACT SHEET

## SPOTTED KNAPWEED

*(Centaurea stoebe)*

- Spotted knapweed grows 8 to 40 inches tall with branched stems.



- The leaves are blue-gray in color. Those at the base of the plant are about four inches long and divided into lobes. Leaves further up the stem are smaller.

- It is a biennial or short-lived perennial, forming rosettes (see above) the first year. The blue-gray color makes the rosettes easy to recognize.



- The solitary flower heads are surrounded by bracts with a dark spot on the tip, giving the plant its common name. Bracts are modified leaves, usually near a flower. In most knapweed species the bracts form a cup-like structure that supports the flower head. Some knapweeds are similar-looking and differences in the bracts can be an important way of distinguishing species

- The flowers, which bloom from June to October, are pink to purple in color, but can be white.
- The plant has a stout tap root
- Sunflower family

### DISTRIBUTION:

Spotted knapweed is common on roadsides in Jefferson County, especially in and near Port Townsend and in the Cape George area.



### WHY BE CONCERNED?

- Spotted knapweed is an aggressive and invasive species that invades pastures and meadows.
- Unpalatable itself, it displaces grasses and other more valuable forage plants.
- Spotted knapweed can inhibit the growth of surrounding vegetation by exuding toxins through its roots and leaves

**Spotted knapweed is a Class B Noxious Weed.**

**Control is required in Jefferson County.**

## ECOLOGY:

- Spotted knapweed grows mainly on disturbed, dry sites such as roadsides, industrial sites, gravel pits and abandoned railroads—all places from which seed can easily be dispersed. The seeds are too heavy to be distributed very far by wind alone; they fall to the ground within a few feet of the plant. Vehicles, livestock or contaminated hay or gravel often disperse seed over longer distances.
- It is a biennial or short-lived perennial, growing from a woody root crown.
- Reproduction is mostly by seed, but the crown can re-sprout.

## CONTROL

### Prevention and early detection are the best means of control!

- **Practice** good pasture management; avoid overgrazing, irrigate and fertilize as needed, and reseed bare ground. A healthy pasture will resist weed invasion.
- **Use** weed free hay and seed; avoid bringing in weed contaminated soil.
- **Clean** equipment that has been used in infested areas.
- **Remove** seedlings when young; newly established plants can usually be pulled without leaving root fragments in the ground.
- **Replant** newly weeded areas with desirable (preferably native) plant species that will discourage reinfestation.
- **Dispose** of weeds properly; bag or burn seed heads or fragments that may resprout.
- **Monitor** the site for several years; promptly remove new seedlings.

**HANDPULLING/DIGGING** works best early in the year when the soil is moist, plants are small and come out easily and there are no seeds to worry about. Note the spotted knapweed, being tap-rooted, is MUCH easier to control manually than meadow knapweed, which has an extensive, fibrous root system.

**MOWING** will slow, but not stop the spread of knapweed. Plants that are periodically mowed continue to flower and produce seed on shorter plants, prolonging the season of growth and flowering. Mowing is best done after most of the flowering has ended but before seeds have matured (flower is open less than 10 days). At this time there is usually not enough moisture available for plants to regrow.

**Caution:** Anyone working with spotted knapweed should wear protective gloves and avoid getting sap into open cuts or other abrasions.

**BIOLOGICAL CONTROL:** Two gall flies, *Urophora affinis* and *Urophora quadrifasciata*, a moth, *Metzneria paucipunctella*, and a beetle, *Shenoptera jugoslavica*, have been introduced into North America for biological control of knapweeds.

**HERBICIDES** can be effective, but should always be applied with care. Do not apply herbicides over or near water bodies. Read the label to check that you are applying a herbicide in the right place, to the right plant, at the right time, and in the right amount. For perennial weeds, long term control requires stopping seed production **and** attacking the weed's root system. Translocated herbicides, (ones that move throughout a plant's system) are recommended. These are most effective on young, actively growing plants because the herbicide moves around the plant more quickly. Also, herbicide is more easily absorbed by clean, new leaves.

- **Note:** Most herbicides will **NOT** prevent germination of weed seeds already in the soil, so monitoring and retreatment are necessary.

**Call the Weed Board for specific herbicide advice.**