MINNESOTA DEPARTMENT OF AGRICULTURE

Noxious and Invasive Weed Program - http://www.mda.state.mn.us/weedcontrol

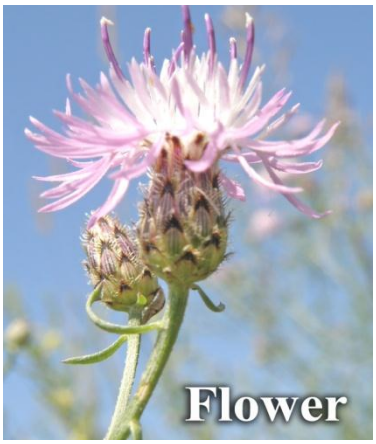
Prohibited Noxious Weeds

Spotted Knapweed – *Centaurea stoebe* L. ssp. Micranthos (Gugler) Hayek

Noxious Weed Classification – Spotted knapweed is listed as a Prohibited – Control noxious weed in Minnesota. Efforts must be made to prevent seed maturation and dispersal of plants into new areas. Failure to comply with the Minnesota Noxious Weed Law (Minnesota Statutes 18.75 -18.91) may result in an enforcement action by the county or local municipality.

Origin – Native to Europe and Asia

Impacts – Spotted knapweed is highly invasive and can severely decrease the biological diversity of native and agronomic habitats by reducing the availability of desirable forage for livestock operations, degrading wildlife habitats, and hindering reforestation and landscape restoration efforts. Spotted knapweed produces a chemical that is toxic to other plants, thus allowing it to quickly spread in areas where it becomes established.



Description – A biennial or short lived perennial species that grows approximately 2- 4ft tall with gray-green hairy foliage and pinkish or purple flowers. Following seed germination, low lying rosettes with deeply lobed leaves are formed in the first year of development and a thick taproot is formed. The plant "bolts" in the second year producing stout branching stems with alternate leaves that have few to no lobes and become progressively smaller up the stem. Small oval pink to purple flowers are produced at the end of branched stems and are covered with stiff bracts marked with dark "upside-down V" markings that give the flowerheads a spotted appearance. The plant blooms from June through August and reproduces by seed.

Habitat – Spotted knapweed prefers dry-sandy soils and can be found growing in a wide range of natural and disturbed habitats in Minnesota. This plant typically invades natural areas, pastures, forest and field margins, mining areas, non-maintained gravel pits, and is commonly found growing along roads, railways, and trails.

Distribution in Minnesota – Spotted knapweed is found throughout most of the northern half of Minnesota and it continues to spread into the southern counties.

Control and Management – Persistent hand-pulling or digging may be practical on small patches of spotted knapweed. The plant produces a long taproot and removing as much of the root as possible is recommended. Hand-pulling can be effective in sandier soils where the plants are easier to extract. Regular site check-ups will be required to ensure that re-sprouts and new seedlings are destroyed.

Mowing, when applied before flowering, can be performed to reduce seed production. However, because spotted knapweed plants continue to bloom throughout the summer and into early fall, repeated mowing throughout the season is required to keep the plants from re-sprouting and producing seeds. Make sure to wash equipment thoroughly following mowing to prevent spread of seeds to new areas.

Various herbicides have been used successfully against spotted knapweed in Minnesota. If you plan to use herbicide treatments, check with your local University of Minnesota extension agent, co-op, or landscape expert for assistance and recommendations. There are several businesses throughout MN with state-certified herbicide applicators that can be hired to perform chemical applications for spotted knapweed and other noxious weed species. Early spring and late fall herbicide applications that target rosette growth have been shown to produce good overall management results. Follow-up treatments may be necessary to kill new seedlings or plants unaffected by the initial application.

Biological control, using host-specific natural enemies of spotted knapweed, is an option for reducing large infestations in Minnesota. Biological control agents feed specifically on spotted knapweed and can be an added benefit when used in combination with other methods of control. The Minnesota Department of Agriculture, in cooperation with the Minnesota Association of County Agricultural Inspectors, oversees a statewide biological control program for this noxious weed that is free of charge to landowners. To learn more about biological control, contact the MDA or your County Agricultural Inspector.

PERSISTENCE IS THE KEY!

Controlling spotted knapweed infestations can take several years to achieve satisfactory results, especially on stands that are several years old and have an established seed bank. Controlling small stands is crucial to prevent larger problems from occurring. Large established stands of spotted knapweed can be very difficult to control.