



Spotted knapweed

(*Centaurea maculosa* aka *C. stoebe*, *C. biebersteinii*)



Spotted Knapweed

General	Family: Asteraceae Native Range: Central Europe Introduced to North America in the late 1800's or early 1900's Very invasive herbaceous long-lived biennial/short-lived perennial List B - eradication required
Habitat	Found in meadows, pastures, roadsides, and sandy or gravelly sites. Soil erosion is sometimes an associated problem because roots do not hold soil as well as native vegetation. Causes serious decline in forage and crop production. Areas heavily infested with Spotted knapweed will probably need to be reseeded once the plant is controlled
PLANT	
Vegetation	Plant 1-4 feet tall Forms rosettes the first year and bolts in the spring of second growing season (May to June). Rosette leaves are 6 inches long and deeply lobed 1 to 20 upright stems, 1-3 feet long
Roots	Taproot
Flower	Color: Pink or purple Single $\frac{3}{4}$ - 1 inch wide Bracts have black tips, fringed edges. No terminal spine Flowering occurs summer through fall (late June-October)
Seed	Each plant can produce as many as 40,000 seeds Most seeds fall within 3 feet of the plant Seeds can stay dormant for 8 years
Seedling	Seeds germinate in spring or fall
Reproduction	Reproduces by seed

CONTROL			
BIOLOGICAL	None - Biological control is not an option under eradication		
CHEMICAL	<i>Herbicide</i>	<i>Rate</i>	<i>Timing</i>
	Aminopyralid (Milestone)	5-7 ounces/acre*	Spring - rosette to early bolt Fall - rosette
	Clopyralid (Transline, Stinger)	2/3 to 1 pint/acre *	Spring - after all shoots have emerged, rosette to early bud Fall - rosette
	Clopyralid + 2,4-D (Curtail)	2-3 quarts/acre*	Spring - after all shoots have emerged, rosette to early bud Fall - rosette
	Picloram (Tordon 22K) <i>Restricted Use Pesticide</i>	1-2 pints/acre*	Spring - rosette to mid-bolt Fall - rosette
	Dicamba (Banvel, Vanquish, or Clarity)	1-2 pints/acre*	Spring - rosette Fall - rosette
		*Add non-ionic surfactant @ 0.32oz/gal water or 1 qt/100 gal water	
CULTURAL	Prevention Removal - make sure the entire root is removed. Must be repeated as new plants germinate. Any flowers must be bagged and disposed of at a landfill. Revegetation - Maintaining good ground cover helps to prevent re-infestation		
MECHANICAL			
Burning	n/a		
Grazing	n/a		
Mowing	Before flowering followed by herbicide treatment		

***Use all chemicals according to the manufacturer's label.
No specific recommendation or endorsement is made or implied by listing the above methods or products.***