

S. Spotted Knapweed (*Centaurea maculosa*)

Key Characteristics:

Spotted knapweed is a member of the Sunflower family. Native to central Europe, it is a simple perennial that reproduces from seed and forms a new shoot each year from a taproot. The plant can have one or more shoots up to 4 feet tall. **Flowers** are usually lavender to purple with spotted **bracts**. Spotted knapweed tolerates dry conditions, similar to diffuse knapweed, but will survive in higher moisture areas as well.

Locations:

Spotted knapweed is one of the most invasive, aggressive weeds to plague the western United States. Very rare in Pitkin County, the largest infestation is found in patches along State Highway 82 from east of Aspen to Tagert Lakes. This infestation has been monitored and treated yearly. It is imperative that this infestation not be allowed to spread into the fragile sub-alpine ecosystem.



Biological control:

There are several insects available for release and control of large infestations of knapweed. These include two Seed-Head Gall Flies (*Urophora affinis* and *U. quadrifasciata*), the Sulfur Knapweed Root Moth (*Agapeta zoegana*), the Knapweed Flowerhead Weevil, *Larinus minutus*, and the Knapweed Seed Head Moth (*Metzneria paucipunctella*). Note that biological control is useful to reduce the size of large infestations, but will not result in eradication of the weed.

Cultural control:

If desirable grass competition is evident in spotted knapweed stands, judicious herbicide application that does not injure grasses may release the grass to compete effectively with the weeds. Irrigation may help stimulate grass competition in these cases. Seeding suitable perennial grasses is necessary to prevent weed re-invasion.

Mechanical control:

Tillage, digging, pulling and cutting will reduce or eliminate plants if repeated frequently, thoroughly and prior to seed production.

Chemical control:

Timing is critical: apply herbicides at rosette or early bolt stage. Contact Pitkin County Land Management Department for more specific information about herbicide products, application rates, and equipment calibration.

Native Look-Alikes:

Our native Tansyaster (*Machaeranthera bigelovii*), can resemble Spotted or Russian Knapweed before flowers fully open. This daisy-like bloom has purple ray flowers surrounding a yellow center and sticky, back-curving bracts beneath.

