

P. Diffuse Knapweed (*Centaurea diffusa*)

Key Characteristics:

Diffuse knapweed is a member of the Sunflower family. Diffuse knapweed was introduced from Europe and is a biennial or short-lived perennial that reproduces by seed only. The plant usually produces a single main multi-branched **stem** that is 1 ½ to 2 feet tall. The **flower** is white or pink with spiny bracts with a pronounced tip and fringed edges. **Leaves** are finely divided, existing as a ground-level **rosette** in the first year of growth. **Seedheads** are retained, and plant becomes a tumbleweed in winter, spreading seed along its way.

Locations:

The largest infestations are found at the base of Smuggler Mountain Road and in Snowmass Village across from the Snowmass Conoco. Plants have also been found along Medicine Bow Road. An early detection and early treatment philosophy could eradicate this weed in Pitkin County.

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:

Competitive vegetation helps resist infestation, but can still be displaced. Proper fertilization and irrigation will generally support competitive native grass stands. Do not overgraze.

Mechanical control:

The key to managing Diffuse Knapweed is to prevent it from going to seed. This is best achieved by pulling or digging the plant at rosette, flowering or early seed formation stages, then bagging, and removing plants. Regular cultivation, digging, pulling and cutting are effective if done frequently; the plant's hearty taproot can support several re-sprouts in one season if not removed.

Chemical control:

Contact Pitkin County Land Management Department for more specific information about herbicide products, application rates, and equipment calibration.

