

## **FF. Plumeless Thistle** (*Carduus acanthoides*)

### **Key Characteristics:**

Plumeless Thistle is a member of the Sunflower family. Introduced from Eurasia, it is a winter annual or biennial. This plant can be distinguished from Canada Thistle by the presence of many spines along its stem and from Musk Thistle by its smaller blossoms and lack of the prominent white margin present on musk thistle leaves. The plant may grow to a height of 5 feet or more and is an extremely prolific seed producer.. **Flowers** are magenta to purple and are either solitary or clustered. **Taproot** is large and fleshy.



### **Locations:**

While Plumeless Thistle is common throughout Pitkin County, it is rare Colorado at large, found primarily in the tri-county area of Eagle, Garfield and Pitkin Counties.

### **Biological control:**

When possible, it is recommended to release more than one type of insect on a weed since each type may work on a different part of the plant. Insects available for Plumeless Thistle control include:

- **Musk Thistle Seed Head Weevil**, *Rhinocyllus conicus*, is widespread in Colorado. Larvae of this insect destroy developing seeds but are not 100 percent effective by themselves. The weevil normally impacts seed production by about 50 percent. Herbicides can be combined with weevils if the insects are allowed to complete their life cycles. Unfortunately, *R. conicus* will also attack native thistle populations.
- **Defoliating Beetle** (*Cassida rubiginosa*) eats the leaves of Canada, Musk, Plumeless Thistles.
- **Thistle Rosette Weevil**, *Trichosiromus horridus*, attacks the crown area of musk thistle rosettes and weakens the plant before it bolts. This weevil has been introduced to Pitkin County, but appears to be ineffective on Plumeless Thistle.

### **Cultural control:**

Good vegetative cover tends to inhibit establishment but plumeless thistle can invade healthy sites. The best management is to minimize disturbance and revegetate with competitive perennial species.

### **Mechanical control:**

Mowing, cutting, digging, pulling or cultivation are all effective if done prior to flowering.

### **Chemical control:**

The best timing for chemical control is when plants are in the rosette or early bud stages. Effective control may require applications in both the spring and fall. Contact Pitkin County Land Management Department for more specific information about herbicide products, application rates, and equipment calibration.

### **Native Look-Alikes:**

There are several Native Thistles in Pitkin County which may be confused with Plumeless Thistle. See Appendix B for more information about Native Thistles.