

## **Invasive Species Fact Sheet-Musk Thistle**

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**Species Common Name:** Musk Thistle, Nodding Thistle

**Species Scientific Name:** *Carduus nutans*

**Native Range and Introduction:** This plant is native to Eastern Europe and Western Asia. It was first introduced into the United States in the mid 1850's probably from ballast water. It has spread across the United States primarily as contaminated seed stock.

**Description:** Biennial forming a rosette the first year, which can grow up to seven or eight feet tall at maturity, leaves are lance shaped with serrate margins that are spines tipped. The midrib of the leaf is white and the entire plant is hairless. Flowers are purple, and have distinctive triangle shaped bracts (modified leaves) on the back of the flowering heads. Prolific seed producer with up to 120,000 seeds produced per plant.

**Ecological and Economical Threat:** Needs some disturbance to become established, but then can spread quickly with the amount of seed it produces. This can lead to both ecological losses through loss of native vegetation and biodiversity and economical losses through reduction of crop yields or loss of grazing capacity.

**Regulated Status in Wyoming:** Musk Thistle is on to the Wyoming State Designated Noxious Weed List. The species is also on the North American Invasive Species Management Association Weed Free Forage Noxious Species List which Wyoming uses as their weed free forage standards.

**Distribution in Wyoming:** Found in all counties in Wyoming.

**Control Options:** Remember as it is a biennial species stopping seed production is KEY!!!

Mechanical: The plant can be removed below the top of the soil, by pulling or chopping.

Chemical: Many herbicides will work for this species including Milestone (Aminopyralid) in range or pasture, Banvel (Dicamba) in some crops, or 2, 4-D in lawns.

Biological: This species has been one of the real success stories in biological control. The Thistle Rosette Weevil has shown great results in attacking and depleting stands of this species.

Cultural: Competition for resources by perennial plants should help keep this biennial species in check.

Integrated Weed Management: This could include an early season herbicide application teamed with a fall mechanical clean up or a high population weevil release.

### **Online Resources:**

URL: <http://www.invasiveplantatlas.org/subject.html?sub=3011>

URL: <https://www.invasivespeciesinfo.gov/plants/muskthistle.shtml>

Image 1 URL: <http://www.invasive.org/browse/detail.cfm?imgnum=0580013>

Image 2 URL: <http://www.invasive.org/browse/detail.cfm?imgnum=1459773>

Image 3 URL: <http://www.invasive.org/browse/detail.cfm?imgnum=5437966>



Image 1-Basal Rosette



Image 2-Flowering Head and Mature Head (Seed Produced)



Image 3-Leaves and Stem

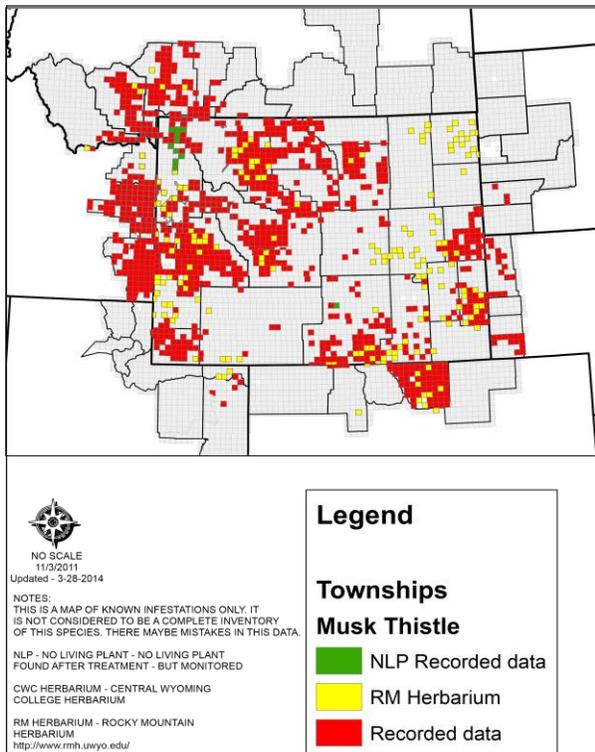


Figure 1-Musk Thistle Distribution in Wyoming and Surrounding States  
URL: [http://wyoweed.org/images/Weed\\_Maps/Musk\\_thistle.pdf](http://wyoweed.org/images/Weed_Maps/Musk_thistle.pdf)