

The ENEMY: Musk thistle (*Carduus nutans*) is a biennial weed that invades any piece of property that can be found. It is the tall thistle with a baseball size flower head. In contrast, Scotch thistle has an egg size flower and grows much taller. Musk thistle, also called *Nodding thistle*, forms a rosette the first year and then sends up 1 to 6 vegetative upright extensions (up to 6 foot tall) that produces terminal pink flowers. Secondary growth extensions form from mid-length produce flowers as well. These seed heads will always be flat on the bottom and have bright pink flowers. The rosette leaves are unique in that they serrated with white outer margins.

STRATEGY: This plant is very invasive. It spreads by wind which allows it to travel onto adjacent lands. Its rosette can get 3 feet in diameter which allows it to shade desirable plants and rob the soil of needed nutrients. Being a thistle the plant hosts many sharp points that makes it so no animal wants to pass close to it.

DEFENSE: As with most annual and biennial plants it can be controlled with a shovel. Ensure that you get at least 4 inches of the root or it will grow back. Also, loosen the soil by cutting into the soil and working in a circle; when you return to the starting point pry the shovel handle back and pull the plant out of the ground as to limit the amount of disturbed soil. Biological insects have been released for over 25 years. The larvae from the Rhino beetle will eat the seeds in the top flower. The lower (secondary) flowers are not affected as they bloom later, and it ensures viability to the future of the insects. Roundup and 2,4-D are not effective on this plant except in the early spring. Using advanced products such as Escort XP and Telar XP are very effective as well as Curtail, Milestone, Opensilght, or Tordon 22K. My favorite stage of growth to treat this thistle is at bloom, that way you can see them and get the new rosettes as well. Like us on Facebook.