

# Musk thistle

*Carduus nutans*

Sunflower Family

## Key identifying traits

- ❑ Large, 1 ½ -3 inch diameter bent over (nodding) flower heads
- ❑ Flowers are rose, violet or purple and one per stem
- ❑ Bracts surrounding flowers are broad and spine tipped
- ❑ Upper flower stems typically bare and lower stems are winged with spines
- ❑ Leaves are dark green, lobed and spiny with light green midrib
- ❑ Older plants multi-branched & grow to over 6 ft tall

## Biology and ecology

- Biennial or sometimes a winter annual
- Invades pasture, range, forest, road sides and fields
- Reproduction of musk thistle is entirely by seed
- Numerous small roots in the fall; large fleshy taproot in spring
- Only 2% of seeds have pappus and are wind borne
- Can form dense stands, discouraging animal presence and forage

## Control

*Prevention*- Learn to identify the plant; know your property; beware of fill dirt, hay, manure and seed from outside your area

*Biological*- Biological controls well established in all parts of the county and dramatically reducing musk thistle stand density and vigor

*Cultural* - Competitive vegetation helps reduce open spaces for invasion

*Mechanical* - Mowing, cutting, digging, pulling or cultivation are all effective if done prior to flowering and repeated if necessary; seed bank will be present for years

*Chemical* - Several effective at label rates; best timing is when plants are in rosette stage or early bolt-spring and again in fall



*Where found*- Common in part of the Harvey Creek drainage with only minor outbreaks elsewhere in Stevens County. Population has decreased with effective biocontrol establishment