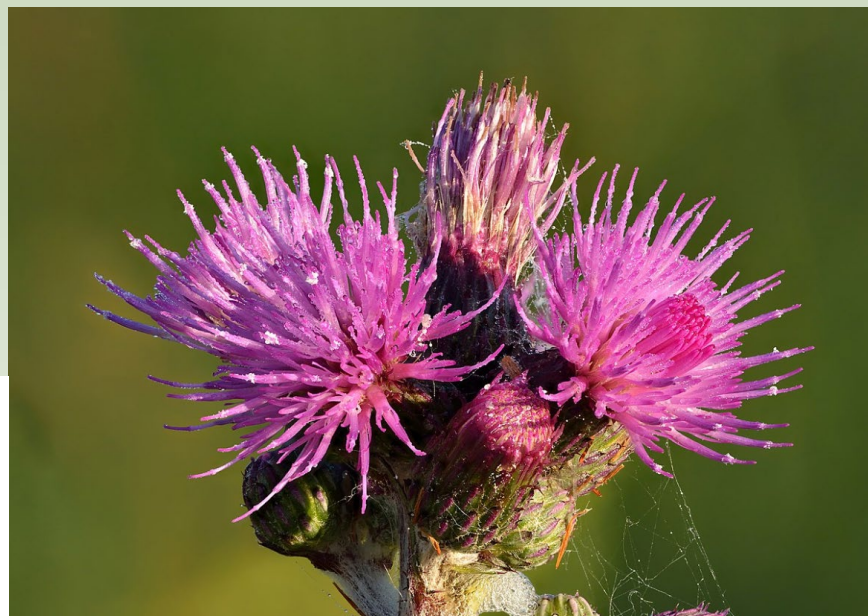




Cirsium palustre

marsh thistle

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WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES

achene:

A small, usually single-seeded, dry, indehiscent (not opening at maturity) fruit

decurrent:

With an adnate wind or margin extending down the stem

monocarpic:

Flowering and bearing fruit only once and then dying; term can apply to annuals, biennials, or perennial

pappus:

The modified calyx of the Asteraceae, consisting of awns, scales, bristles, or plumes at the apex of the achene

vernalization:

A process of thermal induction in plants, in which growth and flowering are promoted by exposure to low temperatures



marsh thistle



bull thistle



Scotch thistle



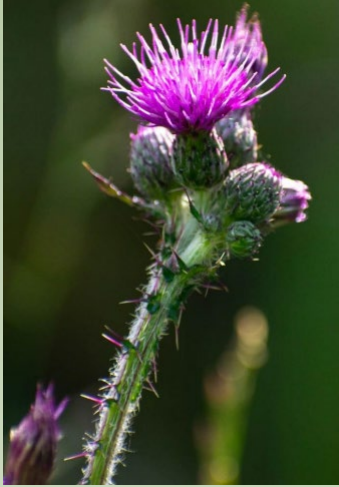
plumeless thistle

Cauline leaves decurrent 5-10 cm at mid stem on mature plants



Clusters of 12+ small (<2 cm wide) flower heads

Cirsium palustre/marsh thistle



VERY dense flowerheads
vs.
not quite as dense flowerheads



Leaves decumbent
down the stem
vs.
leaves not decumbent
and stem unwinged



Up to 7 feet tall
vs.
2-5 feet tall



Cirsium arvense/Canada thistle



Cirsium brevistylum/clustered thistle

- Strongly spider webbed
- Leaves often surpassing flowerheads
- Flowerheads 2-4 cm



Cirsium vulgare/bull thistle

- Stem spiny winged
- Flowerhead bracts spine tipped
- Flowerheads 2.5-4 cm



Carduus nutans/musk thistle

- Leaves mostly glabrous
- Flowerheads 4-8 cm
- Pappus capillary, not plumose



Cirsium edule/edible thistle

- Leaves with long soft hairs
- Flowerheads often solitary
- Flowerheads 2-4 cm



Carduus acanthoides/plumeless thistle

- Lower leaf +/- glabrous, hairy only along midrib
- Middle and outer bracts spine tipped
- Pappus capillary, not plumose



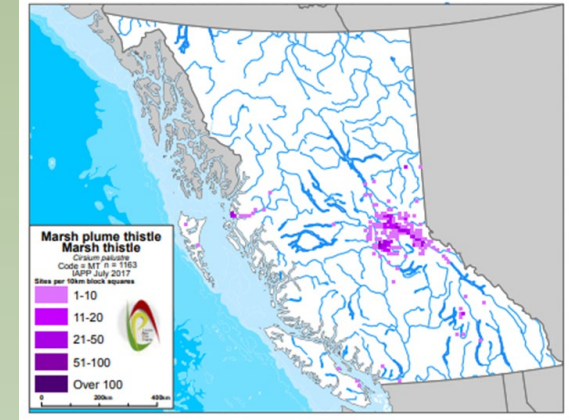
Onopordum acanthium/Scotch thistle

- Broadly winged stem
- Flowerheads 2.5-5 cm
- Leaves up to 3x5 dm



Species info

- Monocarpic perennial that may bloom after second year, but more often blooms between years 3-6
- Damage to the flowering stem of the plant will trigger bloom in the following year
- Plants are shade tolerant when vegetative but not when flowering
- Can hybridize with both Canada and bull thistle
- First recorded in North America in 1974 in British Columbia
- Now found in many cool-season regions of the Northeastern and upper Mid-Western USA, British Columbia, Ontario and Nova Scotia in Canada and portions of New Zealand
- One Washington State population near Spokane



Marsh and Canada thistle hybrid!



All about seeds

- Flowers are self-compatible, but most often pollinated by bees
- Plants may produce up to 2,000 seeds
- Seeds are mostly dispersed short distances by wind, although there are reports of very low levels of dispersal wind dispersal of 160-820 feet
- Seeds can be transported on equipment including mowing and logging equipment
- Most seeds do not persist in the seed bank past 3-5 years
- Seeds rarely emerge from depth, almost always requiring light for germination
- Seeds rarely emerge without vernalization
- Seedlings can emerge from April-October, but most commonly emerge in June and July



Resources

<https://www.nzpcn.org.nz/flora/species/cirsium-palustre/>

<https://www.nwcb.wa.gov/pdfs/Marsh-thistle-Cirsium-palustre.pdf>

<https://www.minnesotawildflowers.info/flower/marsh-thistle>

<https://www.fs.usda.gov/database/feis/plants/forb/cirpal/all.html#83>

<https://bcinvasives.ca/invasives/marsh-plume-thistle/>