Wednesday September 3rd, 2025

Weed Wednesday

Issue #8

Foothills County



Plumeless Thistle – Carduus acanthoides

Designation- Prohibited Noxious Plumeless thistle was detected in Nova Scotia in the 1940's and was later reported across Canadian provinces. Originating from southern Europe and Western Asia, this winter annual or biennial thrives in sandy-loam soils. Its seed germinate in the early spring and prefers early season precipitation. Plumeless thistle can self-pollinate or is pollinated by insects and can interbreed with nodding thistle, another prohibited noxious weed.

During its first year of growth, it forms a rosette with spiny leaves. In the second year of growth of can reach between 20-100cm tall. The stems are long, branched and covered in winged ridges with 3-5mm spines. There may be the presence of woolly hair.



Plumeless thistle usually forms a basal rosette in its first year of growth.



Plumeless thistle blooms from June to August and each flower head produces between 50-80 seeds.

Its blueish-green leaves are pinnately lobed and sessile, elliptic to lance in shape. The leaf margin is toothed with lateral and terminal spines. Middle and upper stem leaves are smaller with most upper leaves being linear in shape.

The purplish red flowers are mostly solitary or clustered at stem and branch ends. The base of the flower can be up to 2.5 cm in diameter and is covered in bracts tipped with spines.

Since plumeless thistle only reproduces through seed, the flower head can be removed to prevent seed production. Hand pulling or digging prior to seed set can be an effective method on small infestations. Mowing before its first terminal buds bloom can allow for re-growth or viable seed production to continue. Mowing after the first terminal bud blooms is an effective method of control.

Aminopyralid by itself or in tank mix with either Metsulfuronmethyl or 2,4-D are registered for use on plumeless thistle. Always check product labels to ensure the herbicide is registered for use on the target plant and don't hesitate to reach out to agricultural services for more information.

The seeds of plumeless thistle can be viable in the soil for over 10 years so repeated visits to the site will be necessary for years to follow.

If you would like more information, please contact Kathleen at Kathleen.mchugh@foothillscountyab.ca or at 403-603-5409.

References-PN_FS-PlumelessThistle.pdf