

T.I.P.S.

Targeted Invasive Plant Solutions

5 Marsh Plume Thistle



Marsh Plume Thistle • *Cirsium palustre* • Synonyms - Marsh thistle

Legal Status

- ✓ Invasive Plants Regulation, *Forest and Range Practices Act*
- ✓ Noxious Weed (Regional), *Weed Control Act*

Distribution

Has a limited distribution in BC with the majority of sites located in the central interior. It is actively contained/controlled or monitored at a few sites in Coastal BC, one site near Revelstoke and another near Vernon. Marsh Plume thistle is a noxious weed in the Bulkley-Nechako and Fraser-Ft. George Regional Districts.

A containment area has been established between Purden Lake and Valemount. Early detection and rapid response efforts should focus on locations outside of this containment area, which is mapped in the Invasive Alien Plant Program (IAPP) application.

Identification

Flowers: Purple, found clustered at end of stem and branches (if present).

Stems: Spiny; usually single un-branched stem; 0.3–2.0 m in height. Purple in colour as plants mature and flower.

Leaves: Spiny and hairy.

Fruits: Seeds are parachute-like for dispersal by wind.

Similar Species: Distinguished from most other thistles by its single un-branched stem with spiny wings.

Ecological Characteristics

Habitat: Prefers moist to wet, naturally-open, or disturbed habitats (e.g. Moist woodlands, riparian areas). Has also been observed on roadsides, right-of-ways, and other disturbed areas.

Reproduction: Biennial species that reproduces by seed in its second year.

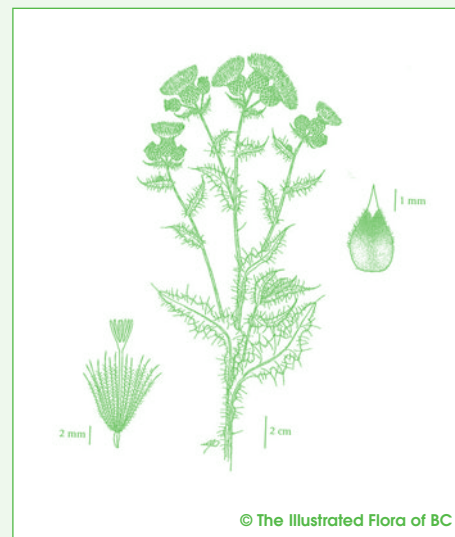
Dispersal: Seeds are spread by wind, water, and ingestion and deposit by birds.



Current Distribution in BC



Dots indicate species presence as recorded in IAPP (accessed March 15, 2007).



Impacts

Economic: As this species flourishes in moist-to-wet openings, it can form dense clumps in cut blocks, competing for moisture and nutrients with tree seedlings. Its tall stems can lead to snow press, permanently damaging tree seedlings.

Ecological: This species replaces native vegetation in open, undisturbed, natural areas including wet meadows, fields and riparian areas, thereby reducing native species and threatening natural diversity.

Integrated Pest Management

IPM is a decision-making process that includes identification and inventory of invasive plant populations, assessment of the risks that they pose, development of well-informed control options that may include a number of methods, site treatment, and monitoring.

Prevention

- Minimize soil disturbance and promptly re-vegetate disturbed areas.
- Ensure all equipment is cleaned of all soil, seeds, and plant parts prior to entering or exiting marsh plume thistle infested areas. This is especially important for track vehicles.
- Do not unload, store, or park vehicles or equipment in infested areas.

Mechanical Control

- Mechanical control can be effective, especially if done before flowering to prevent seed-set. In this case, plants can be hand-pulled or cut/mowed and left onsite to decompose.
- If mechanical treatment is performed while flowers are present on stems, the flowers must be bagged and removed from the site to prevent production of viable seeds. Other plant material can be left on site to decompose.
- Monitor treatment success over 3-5 successive years.

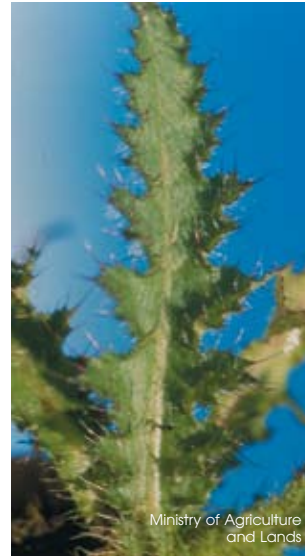
Biocontrol

- Currently no biocontrol agents are available; a seed-eating weevil is undergoing trials.

Chemical Control

Herbicide recommendations and use must consider site characteristics and be prescribed based on site goals and objectives. Herbicide labels and other sources of information must be reviewed before selecting and applying herbicides.

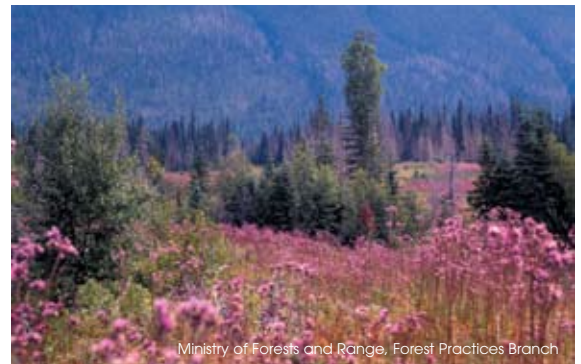
- There are no herbicides currently registered for use in Canada, but herbicide trials are on-going and showing potential with clopyralid and aminopyralid; further information pending.
- Application of herbicides on Crown land must be carried out following a confirmed Pest Management Plan



Ministry of Agriculture and Lands



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Ministry of Forests and Range, Forest Practices Branch

(*Integrated Pest Management Act*) and under the supervision of a certified pesticide applicator. www.env.gov.bc.ca/epd/epdpa/ipmp/index.html

References and Links to Further Information

- *A Guide to Weeds in British Columbia*. Marsh Plume Thistle. www.weedsbc.ca/weed_desc/marsh.html
- BC Ministry of Forests and Range, Invasive Alien Plant Program. <http://www.for.gov.bc.ca/hra/Plants/application.htm>
- E-Flora BC, Electronic Atlas of the Plants of BC. www.eflora.bc.ca
- *Field Guide to Noxious and other Selected Weeds of British Columbia*. BC Ministry of Agriculture and Lands. www.agf.gov.bc.ca/cropprot/weedguid/plumethist.htm
- Mahnoey, D., and McGuire, J. 2004. Marsh Plume Thistle Abundance and Potential in the Robson Valley T.S.A. www.for.gov.bc.ca/hfd/library/FIA/2004/FIA-04-05-0054.pdf