

MARSH PLUME THISTLE

Cirsium palustre (L.) Scop.

Family: Asteraceae (Sunflower)

Other Scientific Names: None.

Other Common Names: Marsh thistle.

Legal Status: Regional Noxious: Bulkley-Nechako, Fraser-Fort George.



Identification

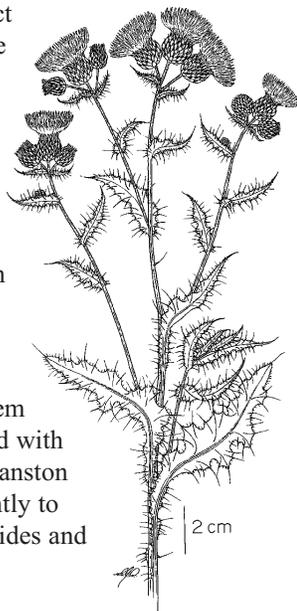
Growth form: Biennial forb.

Flower: Compact clusters of purple

flowers form at the tip of the stems. Bracts at the base of the flowers are sticky and tipped with a long spine.

Seeds/Fruit: Seeds are straw-coloured, 2.5–3.5 mm long, with a 9–10 mm long tawny pappus (Douglas et al. 1998).

Leaves: Spiny basal and stem leaves are deeply segmented with prominent woody veins (Cranston et al. 2000). Leaves are lightly to densely hairy on the undersides and have winged bases.



Stems: Slender, erect stems are usually unbranched and grow 0.3–2.0 m tall. Stems have spiny wings arising from the winged leaf-bases.

Roots: Fibrous.

Seedling: No information available.

Similar Species

Exotics: The prominent spiny wings of the stems separate marsh plume thistle from most thistles (*Cirsium* sp.). Bull thistle (*Cirsium vulgare*) is a stout, branched biennial whose leaves bear stout, long spines at the tip of the lobes.

Natives: No native species have stems with spiny wings.



Impacts

Agricultural: Does not invade cultivated areas but can spread in moist pastures. This unpalatable plant replaces desirable forage plants, thereby reducing carrying capacity.

Ecological: Can colonize undisturbed riparian habitats, moist fields, and meadows, where it may replace native

vegetation, reducing wildlife and livestock forage values. Colonizes cut-blocks after harvesting and forms dense stands that compete with tree seedlings. Tall, persistent stems can cause snow press and other forms of mechanical injury to tree seedlings.

Human: No information available.

Habitat and Ecology

General requirements: Well adapted to moist-to-wet openings, including pastures, bog and fen communities, cut-blocks, and roadsides. Grows in a range of soil types, including forest floor and even gravel, provided seepage is present. Although generally shade-intolerant, it will germinate under the forest canopy.

Distribution: Present in the Cariboo, Vancouver Island, and Omineca agricultural regions. Most common in the Robson Valley between McBride and Prince George.

Historical: Introduced from Europe.

Life cycle: A biennial that germinates in the first year,

overwinters as a rosette, then sets seed and dies the following year.

Mode of reproduction: By seed.

Seed production: No information available.

Seed bank: No information available.

Dispersal: Wind and water disperse the light, parachute-like pappus. Ingestion of seeds by birds may also disperse seeds.

Hybridization: None known.

Management

Biocontrol: No specific agents available. A seed-eating weevil (*Rhinocyllus conicus*) has successfully established on marsh plume thistle in the Robson Valley Forest District and experimental trials are currently underway.

Mechanical: In areas that are suitable for use of mowing equipment, mowing before flowering will prevent seed-set.

Fire: Effect not known.

Herbicides: Research is required to develop a herbicide prescription for this species.

Cultural/Preventive: On small infestations, hand-pull seedlings, rosettes, and mature plants before they set seed.

Integrated Management Summary

Learn to identify this weed. Early detection is important to limit establishment of mature plants, seed banks, and large infestations. On small infestations, hand-pull seedlings, rosettes, and mature plants before they set seed. Where practical, seed disturbed areas to perennial grasses and forbs to provide cover and competition against this weed.

References

Cranston, R., D. Ralph, and B. Wikeem. 2000. *Field Guide to Noxious and Other Selected Weeds of British Columbia*. BC Ministry of Agriculture, Food and Fisheries and Ministry of Forests.

Douglas, G. W., G. B. Straley, D. Meidinger, and J. Pojar, eds. 1998. *Illustrated Flora of British Columbia*. Vol. 1: *Gymnosperms and Dicotyledons (Aceraceae through Asteraceae)*. Province of British Columbia.

