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 roadides. 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**
