

BOG RUSH

Juncus effusus L.

Family: *Juncaceae* (Rush).

Other Scientific Names: None.

Other Common Names: Common rush, soft rush, swamp grass.

Legal Status: Not categorized.



Identification

Growth form: Densely tufted perennial, 30–60 cm in diameter.

Flower: Numerous small, non-showy flowers are produced in clusters 3–12 cm long along one side of the stem.

Seeds/Fruit: Egg-shaped capsule 2.0–2.5 mm long. The capsules contain numerous minute (0.5 mm) seeds (Douglas et al. 2001).

Leaves: The true leaves are basal and are reduced to short sheaths at the base of the stem.

Stems: The stems, often mistaken for leaves, grow 0.3–1.3 m tall. They are



usually hollow, round, and smooth, but occasionally they are lined with many fine ridges.

Roots: Stout, spreading rhizomes.

Seedling: No information available.



Similar Species

Exotics: None known.

Natives: Bog rush is a native plant that may be difficult to tell apart from other native rushes. Distinguishing characteristics of bog rush are its large size, its habit of forming dense clumps, and the position of the inflorescence at the side of the stem.

Impacts

Agricultural: Troublesome on lowland pastures. This unpalatable plant for livestock can compete with hay and pasture crops, reducing pasture yields and carrying capacity.

Ecological: Spreads and replaces other native species in disturbed, wet, poorly drained areas. It can become

dominant on overgrazed riparian sites.

Human: Used as a landscape ornamental for water gardens, where it is usually grown in submerged tubs to prevent invasive spread (Perry. Undated).

Habitat and Ecology

General requirements: Well adapted to wet, poorly drained conditions, especially on muck soils and on river shores that are periodically flooded. It tolerates 8–13 cm of standing water, is adapted to acidic conditions, and requires open sunlight (Perry. Undated). In undisturbed conditions, it is found in shallow marshes, fresh meadows, and along the edges of bogs. In disturbed conditions, it will disperse into wet to moist sites in pastures, fields, ditches, clearings, and forest margins. It is found at low- to mid-elevations in BC.

Distribution: Common in coastal areas of the province, but it also occurs in the southern Interior. It grows in temperate regions of North America and Eurasia.

Historical: Native to BC.

Life cycle: A perennial plant that spreads outward along its rootstocks each growing season. It flowers in midsummer.

Mode of reproduction: Spreads by seeds and rhizomes.

Seed production: No information available.

Seed bank: Seeds remain viable a long time, resulting in a large, persistent seed bank (Leck et al. 1989).

Dispersal: Seeds drop from the plant, but others are dispersed by water, wildlife, and livestock.

Hybridization: No information available.

Management

Biocontrol: None.

Mechanical: Tussocks can be grubbed out and then deeply buried, or dried and burned. Once bog rush is removed, the land should be cultivated for 1–2 years and then seeded to grass (Muenscher 1980).

Fire: Deeply buried rhizomes are not affected by fire.

Herbicides: Glyphosate and 2,4-D are effective applied as either a wipe-on or a broadcast treatment. Use a surfactant with 2,4-D to help the herbicide adhere to the leaves. Consult the most recent edition of BC Ministry of Agriculture, Food and Fisheries Crop Production Guides for specific recommendations.

Before applying herbicides, read the label for full use and precautionary instructions.

Cultural/Preventive: Drainage favours grasses and reduces bog rush on pastures. Maintain hay and grass crops in high vigour to minimize bog rush invasion.

Avoid disturbance and graze riparian areas moderately to promote vigorous stands of sedges and other desirable vegetation.

Integrated Management Summary

Try to control water levels in pastures and hayfields to low levels that will reduce invasion of bog rush. Manage pastures to maintain a vigorous cover of perennial grasses and forbs that can compete with bog rush. Minimize disturbance and graze wet areas moderately to promote vigorous stands of native or introduced vegetation that can compete with bog rush.

References

Douglas, G. W., D. Meidinger, and J. Pojar. 2001. *Illustrated Flora of British Columbia*. Vol. 6: *Monocotyledons (Acoraceae through Najadaceae)*. Province of British Columbia.

Leck, M. A., V. T. Parker, R. L. Simpson. 1989. *Ecology of Soil Seed Banks*. San Diego, CA: Academic Press.

Muenscher, W. C. 1980. *Weeds*. 2d ed. Ithaca, NY: Cornell University Press.

Perry, L. Undated. *Juncus effusus*. University of Vermont. <http://pss.uvm.edu/pss123/adjunc.html>

