

**WRITTEN FINDINGS OF THE  
WASHINGTON STATE NOXIOUS WEED CONTROL BOARD**  
(January 1995)

Scientific Name:        *Phalaris arundinacea* L.

Common Name:        Reed canarygrass

Family:                Gramineae

Legal Status:         Class C

Description and Variation: A highly variable species, reed canarygrass is a rhizomatous perennial grass that can reach three to six feet in height. The sturdy, often hollow stems can be up to 1/2 inch in diameter, with some reddish coloration near the top. Leaf blades are flat and hairless, 1/4 to 3/4 of an inch wide. Flowers are borne in panicles on culms high above the leaves. Panicles are generally three to six inches in length. The species flowers in June and July (Weinmann et al. 1984; Hitchcock et al. 1969).

Economic Importance: *Detrimental* - Reed canarygrass forms dense, highly productive single species stands that pose a major threat to many wetland ecosystems. The species grows so vigorously that it is able to inhibit and eliminate competing species (Apfelbaum and Sams 1987). In addition, areas that have existed as reed canarygrass monocultures for extended periods may have seed banks that are devoid of native species (Apfelbaum and Sams 1987). Unlike native wetland vegetation, dense stands of reed canarygrass have little value for wildlife. Few species eat the grass, and the stems grow too densely to provide adequate cover for small mammals and waterfowl (Maia 1994). The species is considered a serious weed along irrigation banks and ditches because infestations can increase siltation (Marten and Heath 1973). When in flower, the species produces abundant pollen and chaff, which aggravate hay fever and allergies (Weinmann et al. 1984).

*Beneficial* - Frequently cultivated as a forage species, reed canarygrass is an important component of lowland hay from Montana to Wisconsin (Hitchcock 1950). In some areas, the grass has been used for erosion control. The variegated-leaved variety *picta* L. is sometimes grown as an ornamental under the common name "ribbon grass" or "gardener's garters" (Hitchcock 1950; Hitchcock et al. 1969).

Geographic Distribution: Reed canarygrass is a circumboreal species (Larson 1993). While possibly native to North America, European cultivars have been widely introduced for use as hay and forage on the continent; there are no easy traits known for differentiating between the native plants and European cultivars (White et al. 1993). The species is rather common throughout most of southern Alaska and Canada, as well as all but the southeastern portion of the U.S. (Hitchcock et al. 1969).

Habitat: A wetland plant, this species typically occurs in soils that are saturated or nearly saturated for most of the growing season, but where standing water does not persist for extended periods. However, established stands can tolerate extended periods of inundation. Ideal conditions typically

occur in roadside ditches, rights-of-way, river dikes and levees, shallow marshes, and meadows (Weinmann et al. 1984).

Growth and Development: Reed canarygrass is a perennial species.

Reproduction: Reed canarygrass can spread by seeds or by creeping rhizomes. The species will also produce roots and shoots from the nodes of freshly cut, well-jointed culms (Marten and Heath 1973).

Response to Herbicides: Glyphosate, Amitrol, Dalapon, and Paraquat have all been tried with some success. Maximum control depends on the timing of application (Apfelbaum and Sams 1987). These herbicides provide control for up to two years at the most. After this period, reed canarygrass recolonizes a treated area from adjacent stands or from seed bank recruitment (White et al. 1993). However, only glyphosate (Rodeo®) is licensed for use in aquatic systems in Washington. Rodeo® application, followed in two to three weeks by prescribed burning has also been effective. The use of fire helps to ensure mortality by killing resprouts and germinants (Apfelbaum 1993).

Response to Cultural Methods: Studies in the Midwest indicate that prescribed burning is effective in areas with an existing component of native plants, either aboveground or in the soil seed bank. To be effective, burns should be conducted in the late spring, early to mid-summer, or early to mid-fall. Early spring burning stimulates the production of shoots (Apfelbaum 1993).

Response to Mechanical Methods: Heavy equipment has been used unsuccessfully in reed canarygrass removal. Rapid regrowth occurs from rhizomes and seeds that remain in the soil even after mechanical removal. Clipping back plants at ground level and covering them with opaque black plastic tarps can reduce but not eliminate populations (Apfelbaum and Sams 1987). However, this method is not always effective because reed canarygrass shoots can grow up through most materials, and seasonal inundation may displace covering materials (Gillespie and Murn 1992). Mowing may be a valuable control method, since it removes seed heads before seed maturation and exposes the ground to light, which promotes the growth of native species. Studies in Wisconsin indicated that twice-yearly mowings (in early to mid-June and early October) led to increased numbers of native species in comparison to reed canarygrass-infested plots that were not mowed (Gillespie and Murn 1992).

Rationale for Listing: Although reed canarygrass is planted as a forage crop in some areas, the Board feels the species poses a significant threat to the state's wetlands. Reed canarygrass is extremely aggressive and often forms persistent, monocultures in wetlands and riparian areas. Infestations threaten the diversity of these areas, since the plant chokes out native plants and grows too densely to provide adequate cover for small mammals and waterfowl. The grass can also lead to increased siltation along drainage ditches and streams. Once established, reed canarygrass is difficult to control because it spreads rapidly by rhizomes.

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*\*References available from the Washington State Noxious Weed Control Board Office in Kent.*