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Invasive Plants Fact Sheet


Common Reed Phragmites australis Grass Family (Gramineae or Poaceae)

Status: Common and invasive in Connecticut.

Description: Common reed is a tall perennial wetland grass, up to 15 feet in height, with a distinctive purplish-brown plume that appears in late July. The vertical stems (culms) arise from horizontal shoots that grow either above or below ground. This plant can spread ("run") over large areas.

Preferred habitat: Common reed thrives in sunny wetland habitats and prefers fresh or brackish water. Although it can tolerate salt water, growth is usually stunted. It cannot withstand strong wave action or running water because the vertical stems break easily. Common reed grows in drier elevated marsh areas, but can also be found along lakeshores, riverbanks, and almost any moist area. It is particularly prevalent in disturbed or polluted soils, and can tolerate highly acidic conditions.

Seasonal Cycle: Stands of common reed are established through dispersal of seeds or pieces of underground stems called rhizomes. Once established, stands grow predominately by sending up new shoots each spring from existing rhizomes, or from aboveground runners called stolons. If an aerial shoot is knocked over, it can act like a rhizome, taking root and producing new shoots. This invasive grass can return year after year, and some stands are believed to be 1,000 years old. The purplish flower head turns grey and fluffy as it goes to seed by August. Leaves die and fall off at the end of the season, leaving the familiar tan stalks and plumes that remain standing through winter and eventually decay.

Distribution: Common reed grows in temperate zones all over the world, and can be found in every state in the United States. It is common in the Northeast. Contrary to popular thought, common reed is native to America; remains of it have been found in 3,000-year-old peat deposits from Connecticut tidal marshes. However, a non-native strain of Phragmites australis may have been imported in the early 1900s. Other points of interest: The word phragmites comes from the Greek word phragma, which means fence. It refers to the impenetrable masses of common reed that often form continuous belts in roadside ditches and along upper borders of salt marshes. The largest known stand occupies 7,000 acres in the Hackensack Meadows adjacent to New York City. Although common reed was generally thought to have low wildlife value, preliminary research

indicates otherwise. Common reed is part of the diet for geese and muskrats that eat the rhizomes. It particularly attracts redwing blackbirds and sparrows that use it for cover and nesting.

Control: Common reed has become more widespread due to human-induced changes in nutrient and salinity levels. It grows at rapid rates, displacing more diverse marsh vegetation, and has come to symbolize marsh degradation. However, it must be understood that aggressive common reed growth is a symptom of environmental imbalance, and not the cause. Common reed can be a natural, non-invasive, part of the landscape in undisturbed areas. The first step in containing its spread is to minimize land disturbances (particularly those involving erosion and sedimentation), fluctuating water levels, nutrient loading (especially nitrates) and pollution. Often, reintroduction of tidal flow to coastal marshes helps to limit its growth. Although the role of seeds in establishing new colonies is uncertain, careful disposal of common reed plumes, as from decorative floral arrangements, is recommended. Herbicide control is a two-year, two-step process at the very least. Stands can be treated with Rodeo¨, the herbicide of choice for work in wetlands. It is most effective when applied in the early fall when nutrients are being displaced from the leaves and stems for storage in rhizomes. A permit from DEP (Department of Environmental Protection) is required to purchase and/or use Rodeo¨ in Connecticut wetlands. In the winter, dead culms can be cleared by controlled fire or cutting/mulching to open the area for desired species. The process usually needs to be repeated in the second year to reduce the number of remaining plants, and repeated every three to five years after that. Mechanical cutting may also contain it, and recent efforts with black plastic have had some success. In any case, there is no easy solution to the control of this aggressive species.
Additional information sources: A Field Guide to Coastal Wetland Plants of the Northeastern United States. Ralph W. Tiner, Jr. The University of Massachusetts Press, Amherst 1987. Wetlands -- Audubon Society Nature Guide. William A. Niering. Chanticleer Press, New York 1985. For more detailed information: Natural Areas Journal, 1994. Vol. 14, pp. 285-294. Phragmites australis (P. communis): Threats, Management and Monitoring. M. Marks, B. Lapin, and J. Randall. Diagnostic information: Flowers: dense, many branched terminal inflorescence (panicle 8-16 inches long) with silky hairs longer than lemmas; spreading and ascending branches are purplish when young, white or brown at maturity. Leaves: long, flat, and up to 2" wide, greyish-green, tapering, distinctly arranged in two ranks; sheaths open with ligule at junction of blade. Stems: round, hollow, and upright; persistent throughout fall and winter. This fact sheet has been prepared by The Nature Conservancy Connecticut Chapter in cooperation with The Natural Diversity Data Base of the Connecticut Department of Environmental Protection.

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