

Common Reed: An Invasive Wetland Plant

Phragmites australis

Common Name: Common Reed

Biology

Common reed is a wetland perennial grass, which can grow to lengths 16 feet. It has an extremely long root system that may grow up to 2 ft. to access groundwater. The stem is smooth, hollow, and cane-like and serves as a central-axis to long (up to 2 ft.), grayish-green leaves. The long, tapered leaves are arranged in an alternating pattern around the stem. Situated at the top of the stem is a silky inflorescent comprised of numerous spikelets. Each spikelet can hold between 3-7 flowers. Initially, the inflorescent is stiff and purplish-brown in color, but as it matures, it will turn white and fluffy. Flowering occurs from July to September. Fertilized flowers produce small (0.3in.), brown, lightweight seeds.

Reproduction

Common reed can reproduce asexually by vegetative reproduction and asexually by seed formation. Of the two, vegetative reproduction is the main method of dispersal. The vegetative reproduction occurs by stem (rhizome) fragmentation. Although less common, seed formation produces viable seeds, which are dispersed by wind, water, and animals.

Habitat

Historically, this plant species is native to the US. It is currently found in every US state excluding Hawaii and Alaska. Common reed has a wide range of environmental tolerances and usually is the first species to invade disturbed habitats. It is commonly found in marshes, swamps, and bogs. It tolerates a range of pH and salinity conditions. Also, due to the presence of air spaces between its roots and its stem, this species can tolerate stagnant and poorly aerated waters.

Impacts and Threats Posed by Common reed

Common reed invasions severely alter ecosystems. The extremely dense monostands formed by Common reed displaces native plant species. Additionally, Common reed does not provide ideal habitat or food for native wildlife. Therefore, the native wildlife is forced to relocate or perish. Ultimately, this event diminishes biodiversity. Furthermore, the dense monostands clog wetlands and water bodies by reducing flow and collecting sediment. Thereby, impacting flood retention and the residential and commercial use of invaded habitats.

Management Methods

General management methods include:

- Burning
- Mowing
- Altering water tables
- Altering salinity
- Herbicides

Literature Cited

1. <http://nbii-nin.ciesin.columbia.edu/ipane/icat/browse.do?specieId=85>
2. <http://www.mass.gov/dcr/watersupply/lakepond/factsheet/Phragmites.pdf>
3. http://aquaplant.tamu.edu/database/emergent_plants/common_reed.htm