Common Reed

Background, Life History

Common reed (*Phragmites australis australis*) is a perennial, wetland grass with subspecies both native to the United States and introduced in origin. The native subspecies (*Phragmites australis americanus*) is widespread throughout the United States. It was historically used by Native Americans to make arrow shafts, musical instruments, cigarettes and to construct mats. The native common reed is not invasive and does not cause problems for other wetland plants native to Missouri. Therefore, the remainder of this factsheet addresses the introduced, invasive common reed subspecies (*Phragmites australis australis*).

European common reed occurs throughout Europe, Asia, Africa and Australia. The invasive common reed was most likely introduced to North America by accident in ballast material during the 1800s. Unfortunately, the invasive subspecies of common reed is currently being promoted and used for constructed wetlands as a treatment for municipal sewage in at least four Missouri municipalities.

Common reed occurs in disturbed or pristine wet areas, including wetlands, shores of ponds and lakes, marshes, springs, riverbanks, roadsides and ditches. Common reed grows best in areas with slow or stagnant water. It is able to tolerate frequent, prolonged flooding, seasonal drying and moderate salinities. It prefers full sun and it is generally shade intolerant.

Producing tall, hollow stems, common reed can reach heights of up to 15 feet. Long, flat leaves spread out widely from the stem, growing 4 to 20 inches long and 1 to 1.5 inches wide, with rough leaf margins and a fine tip. The ligule, a small outgrowth where the stem and leaf join, is a ring with dense, stiff hairs. Tawny, purplish flowers have long silky hairs and occur in a large, plume-like panicle 6 to 20 inches long in midsummer, with seed set by late September.

Common reed usually spreads vegetatively by above-ground stolons (lateral shoots that root to form new plants) and below-ground rhizomes. Dense clones can form with eight to 20 stems per square foot. Stolon growth and seed germination occur within exposed moist soils during times of low water. New populations also establish from small rhizome fragments. While viable seed production is variable, seeds also can disperse by wind and water, enabling it to colonize new areas.
Impacts
Common reed’s vigorous rhizomatous growth frequently results in dense and often impenetrable stands. This alters the diversity of natural wetland communities. The thick litter accumulation and dense vegetative growth prevents native plant species from growing, and can alter the area’s hydrology. Wetland wildlife habitat is substantially degraded.

Control
The most effective control for common reed is the use of foliar-applied herbicides. Imazapyr and glyphosate, alone or in combination, are effective at a 1.5 to 2 percent solution. These systemic herbicides are absorbed by the foliage and translocated to the rhizomes. Herbicide treatment can occur from June to September, when plants are actively growing.

For small infestations, utilize the cut-stem method from mid-summer until fall. Individual stems should be cut below the lowest leaf, with a 25 percent glyphosate solution applied into the stem and around the cut edge. If applying near or in water, use a glyphosate formulation that is approved for aquatic use.

Due to vigorous re-sprouting, mechanical control methods, such as cutting, mowing and fire are often ineffective when used alone, but can be used in conjunction with herbicide application. Exposed rhizome fragments may freeze and dry out over the winter, reducing the density of the stand. Retreatment over several years may be necessary due to the extensive root system.

Native Look-Alike
The native common reed has leaves that are lighter and yellowish-green, and stems that are often red or maroon. The native common reed subspecies is found more commonly in undisturbed sites, while the invasive subspecies occurs within both disturbed and undisturbed habitats.

Identifying Common Reed (non-native subspecies)
The subspecies of common reed are difficult to distinguish using physical features alone. However, the following characteristics of the invasive common reed subspecies (*Phragmites australis australis*) can help to identify it:

- robust wetland grass up to 15 feet tall, somewhat rough to touch
- numerous long, flat leaves that exhibit a darker gray-green color
- stems more green and without the red coloration
- leaf sheath is retained and wrapped around stems in winter
- flowers in large, bushy panicles, purple to golden in color

For Additional Information
www.invasivespeciesinfo.gov/aquatics/commonreed.shtml
www.fs.fed.us/database/feis/plants/graminoid/phraus/all.html