



Invasive Species Fact Sheet

Phragmites (*Phragmites australis*)

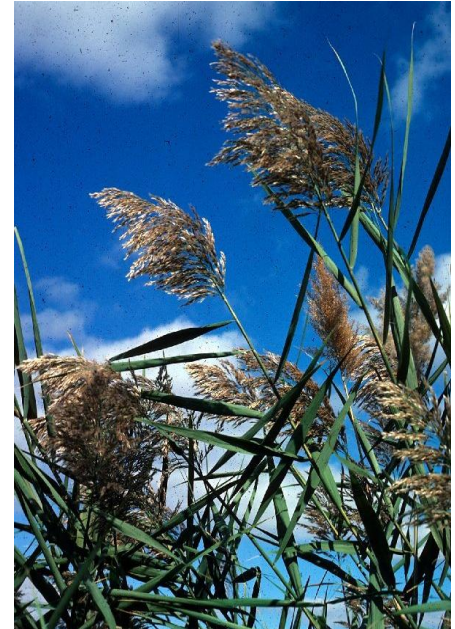
Introduction

Phragmites, also known as common reed, is a perennial wetland grass. While it is native to Michigan, there is a non-native, invasive variety of phragmites that is threatening and overtaking wetlands and coastal areas. Phragmites creates tall, dense stands that essentially make it impossible for native vegetation to survive. The monoculture that is created also crowds out animals and blocks shoreline access to swimmers, fishermen, and hunters. A dangerous fire hazard can also be produced by the dead, dry plant material left behind each fall by the plant.

Identification

Phragmites plants can grow 6 – 15 feet high, but 80 percent of the plant's mass is underground. The huge accumulation of roots and rhizomes can penetrate six feet of soil or more. In summer leaves are attached alternately along tan and rough, dull and rigid stalks. Leaves are grey-green and 2 – 2.5 inches wide and 8 – 15 inches long. Distinctive purple-brown plumes form at the end of stalks, appearing by late July. The plumes are 6 – 20 inches long and 8 inches wide with multiple branches. In fall leaves turn brown and most fall to the ground which leaves the stalk and plumes through most of the winter. Each mature plant can produce 2000 seeds annually. While new stands can form from seed, it is a much slower process than with rhizomes.

Native phragmites stalks are reddish in spring and summer and are smooth, shiny and flexible. The leaves are a lighter yellow-green color. Rhizomes are a smaller diameter and are yellow, as opposed to the white to light yellow color of invasive phragmites. Native phragmites also coexists with other native plants, not as a monoculture.



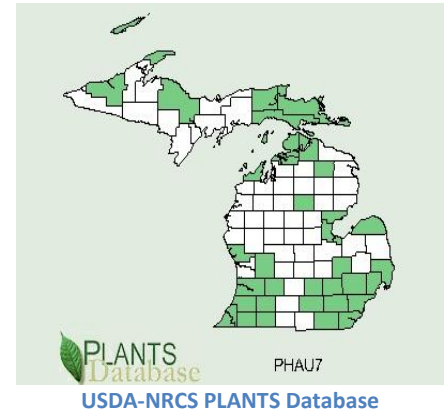
R.A. Howard @ USDA-NRCS PLANTS Database



Distribution

Phragmites for the most part is found in coastal and wetland areas. It can also be found along lake margins and road ditches. Any low lying, moist area has the potential for a phragmites population to appear.

The rapid pace at which phragmites spread is a direct result of rhizomes. Each rhizome can exceed 60 feet in length and has the potential to grow six feet or more yearly. When fragmented, rhizomes can develop into new plants. Rhizomes can be broken by natural actions such as waves, as well as human actions like dredging. After being transported to a new location, the rhizomes waste no time and quickly take root. Other disturbances such as discharged nutrients and fire suppression cause rapid expansion.



Control/Removal

It is important to identify phragmites before starting any kind of control, assuring that they are not the native type. Controlling phragmites is essential to restoration of native plant communities in wetlands and shorelines. Field work has shown that an initial herbicide treatment followed up by mechanical removal is the best method followed by annual maintenance.

Chemical

Herbicide application is recommended as the first step in control of phragmites. Glyphosate and imazapyr have proven to be effective herbicides. While both are nonselective, if used in accordance with the manufacturer's instruction impact to native plants, animals, and fish can be minimized. When using imazapyr treatment should be done from early to late summer (June – September). If using glyphosate or a combination of the two, application should occur in late summer (August – September). Small stands of plants can be treated by injecting stems, hand swiping leaves, or selectively spraying plants. Large dense stands may require professional equipment.

Mechanical

Mechanical removal of dead plant material after herbicide application is a very important step in controlling phragmites. It allows native plants to grow and eases the process of identifying remaining phragmites plants. Small seedlings and shoots can be pulled by hand, ensuring that all of the roots are removed. Individual plants or small stands can be cut down with hand tools or weed whips. If the ground is dry a small mower could be used. Dense areas that are accessible can be mowed down with a brush cutter. Be sure to clean any machinery or tools

used before transporting them from the site. Any type of mowing or cutting should be done two weeks after the herbicide application. Use of any type of machinery is dependant upon the wetness of the soil, size of the site and density of plants. All stalks and debris must be collected, bagged and disposed of properly to prevent any spreading.

Prescribed Burning

Some sites may allow for prescribed burns. This is a cost- effective and ecologically beneficial practice that should only be used in large dense stands of phragmites. Burns should be performed the year following herbicide application in late summer (mid- July – August) or winter (January – spring thaw). Late summer application is more beneficial; destroying seed heads, removing dead stems and allowing native plants to green before first frost. All burning is dependent on weather conditions and moisture levels.

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