



***Phragmites australis* (Common Reed Grass)**

What is Phragmites?

Phragmites is a tall, warm-season perennial grass with featherlike plumes at the top of its stems. It can reach heights of up to 12 feet. Although Phragmites is native to much of the world, highly aggressive strains that form dense stands are believed to be from somewhere other than Wisconsin. For more information on the biology and identification of Phragmites, please see the following websites:

<http://www.invasiveplants.net/phragmites/>

<http://tncweeds.ucdavis.edu/esadocs/phraaust.html>

<http://www.botany.wisc.edu/wisflora/>

Why should we be concerned?

Invasive, non-native stands can become so dense that diverse wetland plant communities are eliminated. Non-native plants do not provide valuable food and shelter for fish and wildlife that native plants provide. In addition, the tall stands can have visual impacts blocking the view of the water. Phragmites colonies spread mainly by rhizomes (underground root extensions) and to a much smaller degree, by seeds. The non-native Phragmites strain reproduces aggressively and forms large colonies while the native strain appears only to grow in small groups or individually.



Does the Department recommend controlling Phragmites?

Yes! A diverse native plant community provides the best habitat and offers a defense for the establishment of invasive species. Although complete eradication of Phragmites will probably never be achieved, it is recommended that you try to control or manage Phragmites as much as possible. As the technology of control evolves, the recommendations on how to do it may change. Currently, we recommend to use the 'bundle, cut, and chemically treat stems method' described below.

When is the best time to cut and treat Phragmites?

The best time to cut and treat phragmites is late July, August, and early September when the plant is pulling sugars down into its roots.

What is the best control method?

The 'bundle, cut, and chemically treat stems method' is currently the best method to control Phragmites. Here's how: Phragmites is effectively bundled with sisal twine, a fiber from agave plants. Sisal twine is readily available in spools (up to 2500' ft) and degrades in a year or so. Cut lengths of twine about 14-inches long. It works best to wrap twine from hand to elbow – as if coiling an extension cord - and then cut that coil in two, providing two handfuls of roughly forearm length twine pieces. Then hang a hand full of cut twine over a belt or belt loop and head out to the Phragmites.

Gather a handful of neighboring green canes (dead canes will not carry the herbicide down to the roots) of *Phragmites* and tie those firmly with a length of sisal twine. Tie the bundles at a convenient height (waist height or lower, though the height does not seem to matter).

Cut the bundle with a sharp hedge shears just above the twine, and immediately spray or paint the "stumps" with 18% (active ingredient) Rodeo® herbicide. Apply just enough herbicide to moisten the fresh cut edge of each stem. The shearing process will test the success of the knot - if it's too loose, the canes will spring back and have to be re-gathered for a lower knot. In areas where the stem densities are low and they cannot be bundled, just cut and treat individual stems. See section below for what to do with cut vegetation.

Wear proper personal protective equipment as described on the product label and use commercial dye (Hi Lite Blue works great) to keep track of progress. Do your best to leave all canes intact as it can take weeks for the herbicide to fully work its way down into the roots. Trampling the canes will inhibit herbicide movement. The sisal twine generally decays in a year or two and the remaining dead cut stems blend into next year's native growth.

Properly administered, the bundle, cut, and treat method can be very effective on *Phragmites*. Dense stands of *Phragmites* tend to show a greater percentage of kill, as the roots are more interconnected. Regardless of stand density, follow-up will be needed in subsequent years.

For large *Phragmites* populations, the bundle, cut and treat method will not be feasible. In these situations, we recommend that property owners contract with a certified pesticide applicator for broad-scale back-pack spray operations.

Are there restrictions on cutting?

All the *Phragmites* below the ordinary high water mark can be cut by hand or with non-vehicle means like a weed whacker or non-riding lawn mower without a DNR permit. [Note, however, that native plant removal is limited to a 30-foot wide path measured along the shoreline]. Chapter 30.29 State Statutes prohibits the driving of a motor vehicle in or on navigable water or the exposed lake bed of navigable water. However, the use of motorized equipment to remove *Phragmites* may be authorized by a dredging permit. Permit applications for using motor vehicles to control *Phragmites* must include a DNR approved invasive species control plan that promotes the restoration of the natural plant community. (Information and application materials can be found at <http://dnr.wi.gov/org/water/fhp/waterway/>). We recommend property owners organize with neighbors to obtain one permit for all of the properties if they wish to cut vegetation with motorized equipment. Mowing controls all vegetation including desirable native plant species, therefore, mowing alone is not recommended as a long-term management strategy. Mowing regulations apply to frozen exposed lakebed areas as well.

What can I do with cut vegetation?

Cut plants may not be allowed to float away. If removal of cut parts is desired, we recommend property owners separate and bag the cut *Phragmites* (seed heads and root parts) in clear garbage bags and label the bags "invasive plants - approved by Wis. DNR for landfilling" and take to a landfill. We do not recommend composting invasive plants and their seeds because of the likelihood that they will be spread through the distribution of the finished compost.

Is a permit needed to use chemicals?

A permit is always required if the proposed treatment area is wet at the time of treatment. This means that an individual would get their socks wet if you stood there without wearing shoes. No permit is needed if the area is dry. Regardless if wet or dry, a product with an aquatic label must

be used if you are treating below the ordinary high water mark. Habitat®, Rodeo®, and other glyphosate formulations have aquatic labels. Roundup® does not have an aquatic label, so it cannot be used even on dry exposed beach areas. Habitat® can only be used when the applicant has received a chemical control permit and can only be applied by an applicator certified by the Department of Agriculture, Trade and Consumer Protection (DATCP) in the aquatics and mosquito category 5. See the following website for information on how to become a certified applicator: <http://ipcm.wisc.edu/pat/Certification/tabid/94/Default.aspx>

The Department recommends property owners join together to control Phragmites on an area wide basis and hire a certified pesticide applicator. For a list of applicators for hire, please see the following website: <http://www.uwsp.edu/cnr/uwexlakes/lakelist/>

What Monitoring is recommended?

Yearly monitoring should be done to see if treatments are effective at controlling Phragmites and to see if any native species are coming back. The rhizomes of Phragmites should be pulled out before they have a chance to grow and spread.

For Additional Information

Contact your local Aquatic Plant Management Coordinator with the Department of Natural Resources. Contacts are listed at the following website: <http://dnr.wi.gov/org/water/wm/dsfm/shore/county.htm>.

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