

Common Reed *(Phragmites australis)*

Description: Common Reed (*Phragmites australis*) is a large, perennial grass or reed with creeping rhizomes. The woody, hollow stems can grow to 12 feet tall. Leaves are lanceolate, ranging from 8-16 inches long, and .5 to 1.5 inches wide. The sheath of the blade is smooth and loose, allowing it to twist in the wind, so the blades turn to one side. Dense, silky flowers develop in mid July through October. The densely flowered floral spikelets are feathery, tawny or purplish, 6 to 16 long, with the branches ascending.

Impacts: While both native and exotic strains of Common Reed are thought to be found in the United States, native strains are not problematic, occupying only small niches in relatively few areas. No populations of native strains of phragmites have been documented in Thurston County. On the other hand, exotic strains of phragmites can quickly take over a marsh community, crowding out native plants, changing marsh hydrology, altering wildlife habitat, and increasing fire potential. Its high biomass blocks light to other plants and occupies all the growing space so plant communities can turn into a Common Reed monoculture very quickly. In addition, it exudes from its roots an allelopathic compound that literally disintegrates the structural protein in the roots of neighboring plants, eliminating the competition. Common Reed can spread both by seed dispersal and by vegetative spread via fragments of rhizomes that break off and are transported elsewhere.

Control Options: Thurston County's Integrated Pest Management emphasizes cultural, biological, and manual control methods to keep pests and vegetation problems low enough to prevent damage. The goal of Thurston County's pesticide use policy is to minimize the use of pesticides by utilizing and providing information about the most effective control options that are available and practical.

► Cultural / Habitat

The use of ornamental grasses in landscaping has become very popular in recent years. Some of these grass varieties are invasive, including at least two strains of Common Reed: Variegated Phragmites (*P. australis aurea*), and Candy Stripe Reed (*P. karka*). Though these varieties can be found in nurseries, they come with a reputation for being invasive and all varieties labeled "phragmites australis" are listed noxious weeds in Washington State. Research the behavior and origin of ornamental grasses before planting.

► Manual / Mechanical

Cutting has been used successfully to control Common Reed. Since it is a grass, cutting several times during a season, at the wrong times, can actually increase the stand. However, if cut just before the end of July, most of the food reserves produced that season are removed with the aerial portion of the plant, reducing the plant's vigor. This regime may eliminate a colony if carried out annually for several years. Care must be taken to remove cut shoots to prevent their sprouting. Using this technique may be difficult due the issue of access to the site in aquatic and wetland areas.

► Biological

There are currently no biocontrols available for controlling Common Reed.

► Chemical Techniques

Aquatic / Riparian Applications: Common Reed often grows in wet areas along lakes, streams, and ditches. If there is a chance for your herbicide to get into a water body, the use of an herbicide formulated for aquatic settings is required. ***Aquatic herbicides are restricted for use in Washington State to licensed applicators only.*** Herbicides that have been shown to be effective in controlling Common Reed at aquatic infestation sites include ***glyphosate*** (Aquamaster™), and ***imazapyr*** (Habitat™). Because of the difficulty in controlling these sites, you may wish to contact a licensed applicator to develop a control plan.



Terrestrial Applications: Products containing the active ingredient glyphosate are also effective for controlling common reed in terrestrial (dry) environments. Several products containing glyphosate have been reviewed and are considered “low in hazard” by Thurston County’s pesticide review process.

Thurston County has observed that most ready-to-use, pre-mixed products do not contain sufficient active ingredients to be as effective as concentrated products that are then mixed with water to create a specific finished concentration. The following instructions are for products containing 41% glyphosate which will be mixed down to a specified dilution rate. Be sure to read your label carefully, and make adjustments to rates accordingly.

Foliar applications of glyphosate (ROUNDUP PRO™):

- Using a spot application, spray each plant thoroughly on the stems and leaves, enough to be wet but not dripping. Spot application means the herbicide is applied only to the Common Reed plants, and not on the surrounding plants or soil. A .75% glyphosate solution (after mixing for use) is necessary to control Common Reed. Follow label directions for mixing product to application strength.
- Glyphosate is non-selective, and will injure any plants that it comes in contact with, including grass.
- Keep people and pets off treated areas until spray solution has dried.

Products containing the active ingredient imazapyr (Habitat® and Arsenal®), are considered “moderate in hazard” by Thurston County’s pesticide review process for the potential for chemical mobility and persistence and are a second choice for chemical control.

Foliar applications of imazapyr (Habitat®), (Arsenal®)

- Licensed applicators are required to use this product.
- Spot applications with imazapyr products are effective.
- Imazapyr is non-selective, and will injure any plants that it comes in contact with, including grass.
- Keep people and pets off treated areas until spray solution has dried.
- Do not use on lawns, walks, driveways or similar areas where roots of desirable vegetation may extend and be exposed to potential injury.

Timing: Common Reed should be treated in early to late summer (June – September) using imazapyr, or late summer to early fall (August – September) using glyphosate, when plants are actively growing and in full bloom. Repeat treatments may be necessary to maintain control. Visual control symptoms will be slow to develop. Research trials indicate that fewer repeat applications are needed with imazapyr than with glyphosate in order to effect long-term control.

READ AND FOLLOW ALL LABEL DIRECTIONS AND RESTRICTIONS. Obey all label precautions and safety measures. Always use personal protective equipment that includes coveralls, waterproof gloves, shoes plus socks, and protective eyewear. Use of brand names does not connote endorsement and is for reference only; other formulations of the same herbicides may be available under other names. Information provided is current as of the date of the fact sheet. Pesticide product registration is renewed annually and product names and formulations may vary from year to year.

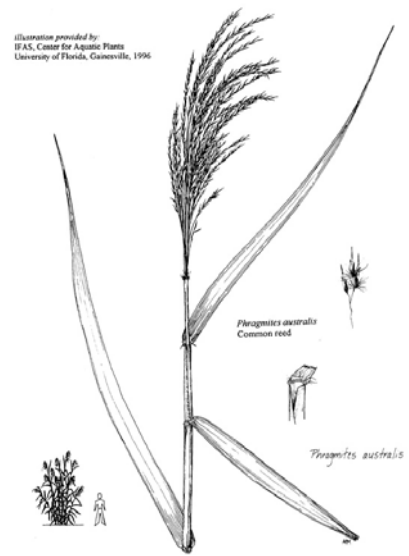
References:

Cornell University Department of Natural Resources 2008 <http://www.invasiveplants.net/phragmites/problem.htm>

A Landowner’s Guide to Phragmites Control; The Michigan Department of Environmental Quality, http://www.michigan.gov/documents/deq/deq-ogl-Guide-Phragmites_204659_7.pdf

Integrated Pest Management Plan for Freshwater Emergent Noxious and Quarantine Listed Weeds, WA State Departments of Agriculture and Ecology, Revised July 2004 (Pages A-3 through A-8)

WA State Noxious Weed Board Written Findings; http://www.nwcb.wa.gov/weed_info/Phragmites_australis.html



Thurston County Public Health & Social Services
 2000 Lakeridge Drive SW
 Olympia WA 98502
 Phone: 360-754- 4111
 T.D.D. 360-754-2933
www.co.thurston.wa.us

Thurston County Noxious Weed Control
 11834 Tilley Road S.
 Olympia, WA 9812
 Phone: 360-786-5576
 T.D.D. 360-754-2933
tcweeds@co.thurston.wa.us

Plant Conservation Alliance, Alien Plant Working Group;