

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 strategy of Thurston County's IPM policy is to minimize the use of pesticides.

► 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. Hand digging can be effective for seedlings, small, isolated plants (6-10 or more if easily managed), or as a follow-up to prior large scale control measures. Be sure to collect, bag and properly dispose of all roots, rhizomes and flower spikes.

► Biological

There are currently no biocontrols available for controlling common reed.



► Chemical Techniques

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.** Because of the difficulty in controlling these sites, you may wish to contact a licensed applicator to develop a control plan.

Products containing **imazapyr (examples: Habitat[®], Polaris[®], Arsenal[®], or Alligare[™] Imazapyr 2SL)** have been shown to be effective in controlling common reed at both aquatic and terrestrial (dry land) infestation sites, however, products used **must have a label intended for those specific sites.** Products containing the active ingredient imazapyr are considered “moderate in hazard” by Thurston County’s pesticide review process for the potential for chemical mobility and persistence.

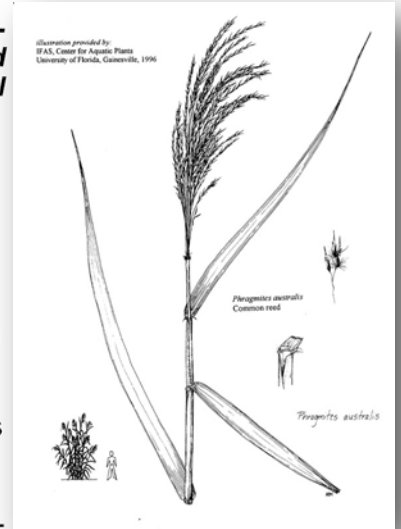
The following instructions are for products containing from 27.7 to 28.7% imazapyr which will be mixed down to a specified dilution rate. Similarly named products may be significantly different in strength. Be sure to read your label carefully, and make adjustments to rates accordingly.

Foliar applications of imazapyr:

- 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 target plants, and not on the surrounding plants or soil.
- A 1-2% imazapyr solution (after mixing for use) is necessary to control Common Reed. Follow label directions for mixing product to application strength. Higher rate should be used for large, mature plants.
- Imazapyr is non-selective, and will injure any plants that it comes in contact with, including grass. Do not use on lawns, walks, driveways or similar areas where roots of desirable vegetation may extend and be exposed to potential injury.
- Keep people and pets off treated areas until spray solution has dried.

Timing: Common reed should be treated in early to late summer (June – September), when plants are actively growing. Treat plants prior to blooming if possible. Removal and bagging of flower spikes is recommended to prevent further spread of seeds, though this may not be an option for large populations or those difficult to access. Repeat treatments may be necessary to maintain control. Visual control symptoms will be slow to develop.

Pollinator Protection: Common reed is wind pollinated, and though it may be an important host plant to some insects in other areas, the risk to pollinators of treating local populations is minimal. Be aware of the presence of bees and other pollinators in adjacent vegetation and avoid them if possible.



Product/Method	Rates	Mix (1 oz = 2 Tablespoons or 29.6 ml)
Aquatic Label Licensed applicator only <i>Habitat[®]</i>	1-2%	Add 1.3 to 2.6 oz concentrated product per gallon of water. Higher rate should be used for large, mature plants, lower rate for younger, less dense regrowth in subsequent seasons. The addition of methylated seed oil or a non-ionic surfactant is recommended to aid in the adherence and penetration of these products. Follow the label for specific recommendations. Spray plants thoroughly until they are wet but not dripping.
Flexible Purpose Label <i>Polaris[®]</i> <i>Arsenal[®]</i>		
Terrestrial Sites Only <i>Alligare[™] Imazapyr 2SL[®]</i>		

READ AND FOLLOW ALL LABEL DIRECTIONS AND RESTRICTIONS. Obey all label precautions including site specific and safety measures. Always use personal protective equipment that includes coveralls, chemical resistant 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. 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-ogI-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 / A-8)

Plant Conservation Alliance, Alien Plant Working Group; <http://www.nps.gov/plants/alien/fact/phau1.htm>

WA State Noxious Weed Board Written Findings;



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