

# AIIS

## Aquatic Invasive Species

### REED CANARY GRASS

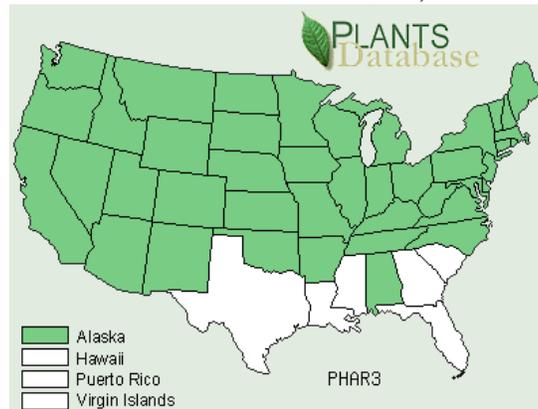


**COMMON NAMES:** Reed canary grass, ribbon grass, and gardener's garters

**SCIENTIFIC NAME:** *Phalaris arundinacea*

*Phalaris* is Greek for grass with shiny spikelets. In Latin 'arundo' is reed and the ending 'acea' is 'resemblance,' making *arundinacea* or 'reed-like.'

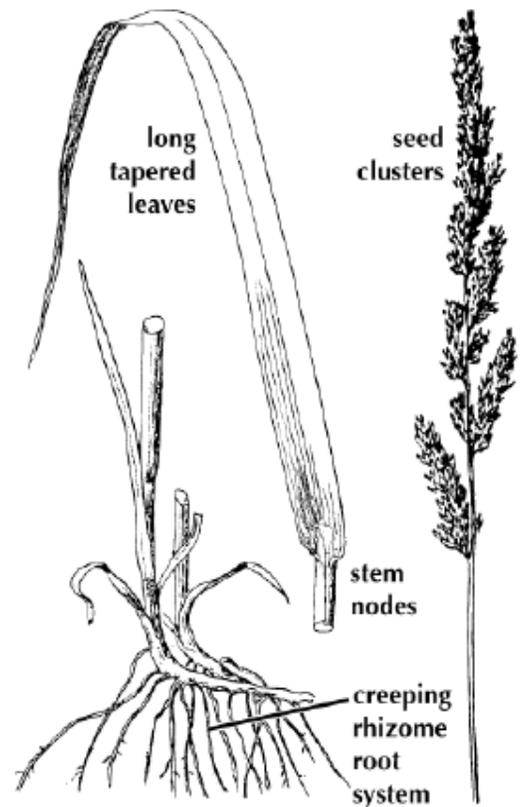
**DISTRIBUTION:** Native to Europe, reed canary grass has been speculated as being also indigenous to Asia and parts of North America. In the U.S., it is now present in 43 states.



**DESCRIPTION:** This cool season grass is large and coarse with erect, hairless stems that can reach up to nine feet in height. *P. arundinacea* has gradually tapering leaves that are 3½ to 10 inches long. The upper and lower surface of the leaves has a rough texture. This perennial species can range from a light green to a straw color.

**LIFE CYCLE BIOLOGY:** A wetland plant, this species frequents saturated soils, but cannot survive extended periods of standing water. Ideally, reed canary grass does well in ditches, levees, shallow marshes and meadows. A cool season, perennial grass, reed canary grass reproduces by seed or spreads by creeping rhizomes (underground rootstalks). Growth begins in early spring, growing vertically for 5-7 weeks and then expands horizontally. Flowering occurs in early summer.

**PATHWAYS/HISTORY:** Studies and analysis done on collections from the 1800s show *P. arundinacea* to be native to the northwestern U.S. The plant is also native to Eurasia. It is broadly felt that the Eurasian ecotype is far more aggressive than the native ecotype. Due to the fast growth and spread of the Eurasian ecotype, this strain was preferred to be planted in the U.S. in the past for erosion control and forage. Although no methods exist to tell the ecotypes apart, it is suspected that the majority of the reed canary grass now in the U.S. is the Eurasian type.



**DISPERSAL/SPREAD:** The primary means of dispersion is wetland plant transfer. Ditching wetlands, stream channeling, swamp deforestation, sedimentation, overgrazing and intentional planting promote the spread and invasion of reed canary grass since it aggressively invades disturbed areas. There is a variegated cultivar of reed canary grass in the landscaping industry which is usually sold under the name “ribbon grass” or “gardener’s garters”. Seeds from this plant are occasionally used in bird seed mixtures.

**RISKS/IMPACTS:** Much like most invasive species, reed canary grass competes with native species for limited resources. Described as an aggressive invader, it forces out other grasses, reduces biodiversity, and can quickly form monotypic stands. Reed canary grass also requires much of the soil moisture for its metabolic processes. The dense growth of this plant can affect hydraulic characteristics by clogging shallow streams and ditches. Reed canary grass grows in such dense stands in wetland areas that it provides little value as wildlife cover and poor nesting habitat for waterfowl and other native birds. Few wildlife species eat this grass.

Reed canary grass was evaluated by the Invasive Plant Species Assessment Working Group (IPSAWG). IPSAWG found this species to rank very high in terms of impacting natural areas and disturbing native vegetation, it has a high potential for expansion in the state, and its difficulty of management is high. Fortunately though, reed canary grass does not have much commercial value and is not extensively sold in the state. The full species assessment can be viewed at <http://www.in.gov/dnr/files/rcgresults03.pdf>

**MANAGEMENT/PREVENTION:** Reed canary grass can be hand pulled, mowed, burned, or chemically treated to control spread. A combination of these methods over a couple of years may be necessary to fully eliminate a stand. Chemical application may require several years of

dutiful treatment to eliminate the species due to an abundant seed bank. When chemically treating areas near water, an approved aquatic herbicide labeled for reed canary grass must be used. In areas where the native seed bank may be depleted, reseeded of beneficial native plants may be necessary following the elimination of reed canarygrass.

Like most nuisance or invasive species, the best strategy to manage reed canary grass is prevention. By learning about reed canary grass and educating yourself on the ecological and economical impacts is a start to help stop its spread. You can help by practicing a few good techniques for stopping the spread of this plant and other aquatic invasive plants.

- ✓ Rinse any mud and/or debris from equipment and wading gear as this is a likely transport method for seeds.
- ✓ Remove all plant material from your boat, trailer, and propeller before leaving the launch area.
- ✓ Never transfer plant species from one area to another.
- ✓ Learn to identify reed canary grass and other aquatic invasive plants and eliminate them at the first sign of infestation.
- ✓ Due to its high invasiveness, reed canary grass is not recommended for use in Indiana: <http://www.in.gov/dnr/files/rcgrecommendations.pdf>

## REFERENCES:

Anttieu, C.J. 1998. Biology and Management of Reed Canarygrass, and Implications for Ecological Restoration. Washington State Department of Transportation. 13pp.

King County Natural Resources and Parks. Reed Canary Grass (*Phalaris arundinacea*). <http://your.kingcounty.gov/dnrp/library/water-and-land/weeds/Brochures/Reed-Canarygrass-factsheet.pdf>

Technical Information about *Phalaris arundinacea* (Reed Canarygrass). [www.ecy.wa.gov/programs/wq/plants/weeds/aqua011.html](http://www.ecy.wa.gov/programs/wq/plants/weeds/aqua011.html)

USDA – Natural Resource Conservation Service. Plants database: (*Phalaris arundinacea*.) <http://plants.usda.gov/>

Vegetation Management Guideline: Reed canary grass (*Phalaris arundinacea*). <http://www.inhs.uiuc.edu/research/VMG/rcanarygr.html>

Wisconsin Department of Natural Resources. Reed Canary Grass (*Phalaris arundinacea*). [http://dnr.wi.gov/invasives/fact/reed\\_canary.htm](http://dnr.wi.gov/invasives/fact/reed_canary.htm)