

Glenn Nice
Bill Johnson
Tom Jordan
Tom Bauman

*Purdue Extension Weed
Science*

**Weed Control
Guide for Ohio
and Indiana**

**Corn
Popcorn
Grain Sorghum
Small Grains
Soybean
Legumes
Grass Pastures
Problematic weeds**

Click Here

Created: 6/25/2009

Purdue Extension

Knowledge to Go

1-888-EXT-INFO

Reed Canarygrass Explosion in Indiana



You may have seen patches of a tall grass growing in the ditches of many of Indiana's roads. It appears to be more prevalent this year than normal. This is reed canarygrass (*Phalaris arundinacea* L.). Figure 1 was taken along a drainage canal in Pulaski County, but reed canarygrass can easily be found along lakes and in the ditches throughout the state.

Description

Reed Canarygrass is a North American/Eurasian perennial that prefers wet-soils and can spread by underground rhizomes. It can grow 2 to 5 feet tall, although some report it up to 9 feet tall. Leaves are 3.5 to 10 inches long and 0.5 to 1.25 inches wide with the sheaths shorter than the internodes. The small membrane at the base of the leaf blade, the ligule, is 0.1 to

0.25 inches long, membranous and obtuse. In the publication "Reed canary grass (*Phalaris arundinacea*)" the Minnesota Department of Natural Resources points out that Reed canarygrass can be confused with bluejoint grass (*Calamagrostis Canadensis* (Michx.) Beauv.). This web publication reports that the two can be told apart by the fact that reed canarygrass has a highly transparent ligule. The inflorescence can be slightly variable, sometimes spreading or narrow often green then turning a straw color (Figure 2). The narrowing of the inflorescence might be a result of dry down occurring after seed have been released or as the soils become dry. The panicle is 3 to 8 inches long and dense with 0.5 to 1.5 inch long branches. Blooming generally occurs early summer.



Figure 2. Reed canarygrass seed head, post seed release.

Aggressive Nature

Reed Canarygrass is no stranger to Indiana. A survey of the Purdue University herbarium revealed 21 specimens from Indiana counties dating as far back as 1933. One specimen from New York State was submitted in 1877. Reed canarygrass has been used for pastures that have experienced flooding or are predominantly wet soils; it has also been used in landscaping. In landscaping it is known as “ribbon

grass” or “gardener’s garters.” It is speculated that the introduction of Eurasian biotypes or hybrids of the native and Eurasian biotypes may have lead to increased aggressiveness. It is known to spread quickly and produce monocultures in wetland areas.

Control

Cultural control includes limiting nutrient inputs and sedimentation in wet land environments. Small



Information listed here is based on research and outreach extension programming at Purdue University and elsewhere. The use of trade names is for clarity to readers of this site, does not imply endorsement of a particular brand nor does exclusion imply non-approval. Always consult the herbicide label for the most current and update precautions and restrictions. Copies, reproductions, or transcriptions of this document or its information must bear the statement ‘Produced and prepared by Purdue University Extension Weed Science’ unless approval is given by the author.

patches can be dug up. Care should be taken to excise all of the plant for small portions of rhizomes can resprout and form new colonies. Bag and remove plant material to avoid spread. Flooding has been reported to drown colonies. Noah et al. (2008) reported an overall reed canarygrass cover decrease of 41% to 44%. Mowing and burning have been reported to be inconsistent; however, in a study conducted in Washington State, mowing reed canarygrass close to ground level (approx 0.5 inch) two to three times in a year provided 72% and 73% up to 17 months after planting of two native tree species. In the same study, spot spraying with glyphosate provided 94% and 96% control. Chemical control includes glyphosate products such as Rodeo and Accord. Products with glyphosate are considered to be

non-selective and will injure other desired species; however, in a heavy monoculture situation broadcast applications are often required. There are many glyphosate products on the market, thus it is important to use a product that is labeled for wetland areas.

Habitat (2 lb ai imazapyr) or Arsenal (2 lb ai imazapyr) at 3 to 4 pt/A can control reed canarygrass; however. Arsenal does not allow applications directly to water. Habitat can be used on private property with "...waters that are still, such as ponds, lakes and drainage ditches where there is minimal or not outflow to public waters [Habitat label, 2009, BASF]." Application on public waters will require permits within your state.

References:

1. "An Illustrated Flora of the Northern United State and Canada" N. Britton and A. Brown. 1970. Vol. 1 p. 170. Dover Publications Inc., New York.
2. Aquatic Invasive Species: Reed Canary Grass. Anonymous. 2005. Indiana Department of Natural Resources. Accessed 6/24/09. [http://www.in.gov/dnr/files/REED_CANARY_GRASS.pdf]
3. Reed canary grass (*Phalaris arundinacea*). C. Reinhardt and S. Galatowitsch. 2000. Minnesota Department of Natural Resources. Accessed 6/24/09. [<http://www.dnr.state.mn.us/invasives/terrestrialplants/grasses/reedcanarygrass.html>]
4. Ornamental Grasses: Ribbon Grass *Phalaris arundinacea*. Anonymous. University of Illinois Extension. Accessed 6/24/09. [http://urbanext.illinois.edu/grasses/ribbon_grass.cfm].
5. Vegetation management guideline: reed canary grass (*Phalaris arundinacea*). Max Hutchison. 1990. Illinois Nature Preserves Commission. Accessed 6/24/09. [<http://www.inhs.uiuc.edu/chf/outreach/VMG/rcanarygr.html>]
6. The Replacement of Wetland Vegetation by Reed Canarygrass (*Phalaris arundinacea*). D.A. Maurer, R. Lindig-Cisneros, K.J. Werner, S. Kercher, R. Miller, and J.B. Zedler. 2003. *Ecological Restoration*. 21:116-119.
7. First-year responses to managed flooding of lower Columbia river bottomland vegetation dominated by *Phalaris arundinacea*. J.J. Noah, J.A. Yeakley, and E.M. Stewart. 2008 *Wetlands* volume 28.
8. Managing Reed Canarygrass (*Phalaris arundinacea*) to Aid in Revegetation of Riparian Buffers. T.W. Miller, L.P. Martin, and C.B. MacConnell. 2008. *Weed Technology* 22:507-513.

PURDUE EXTENSION

It is the policy of the Purdue University Cooperative Extension Service that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran. Purdue University is an Affirmative Action institution. This material may be available in alternative formats.