

Reed Canary Grass

Phalaris arundinacea

Ecological Impact

- Tenaciously invades disturbed areas
- Produces a heavy layer of thatch which suppresses other vegetation
- Reduces diversity of native plants and insects
- Provides little shelter or food for wildlife

Characteristics

Reed canary grass is a perennial Eurasian grass originally planted for forage and erosion control. It grows from extensive rhizomes to form dense monocultures. The leaves are broad—as much as 0.4 inches—and are flat and rough. They are 3½" to 10" long. Plants can reach to over 6-feet tall. A cool season grass, reed canary is one of the first grasses to sprout in spring.

The plant produces leaves and flower stalks for 5 to 7 weeks after germination in early spring, then spreads laterally. Growth peaks in mid-June and declines in mid-August. A second growth spurt occurs in the fall. The shoots collapse in mid to late summer, forming a dense, impenetrable mat of stems and leaves. The seeds ripen in late June and shatter when ripe. Seeds may be dispersed from one wetland to another by waterways, animals, humans, or machines.



Broad leaves and rhizome structure of reed canary grass.



Reed canary grass infestation along Flint Creek in Lake Barrington.

Habitat

Reed canary grass is found in dense stands along roadsides, in wetlands, ditches, stream and pond banks, moist fields, and wet meadows. It can grow on dry upland soil and in wooded areas, but it grows best on fertile, moist, organic soils in full sun, especially in disturbed wetlands.



Late-season seed head: tan, closed.



Large, thin, membranous ligules protrude from the nodes where the leaves are attached to the stem.

Similar Species

Non-native

- Orchard grass (*Dactylis glomerata*) is an alien with narrow leaves (<0.1 to 3 inch) and a wider, less pointed seed head with short, stiff side branches at the bottom.

Native

- Blue joint grass (*Calamagrostis canadensis*) is a native that is shorter than reed canary grass and more draping rather than upright. It is not invasive.

Control Methods for Reed Canary Grass

Reed canary grass reproduces primarily through spreading rhizomes. It is much easier to control small populations than to try to remove large, established infestations. Reed canary grass can also spread by seed. Any control method requires 5-10 years of monitoring and follow-up treatment to deplete the seed bank. Re-infestation is likely unless there is a population or seed bank of native species to provide competition. Use care to protect native species.

Large Populations

Prescribed burning in late spring should be followed by mowing or herbicide treatment to prevent seed production. It might be necessary to apply herbicide both in spring and in fall. Burning can enhance growth of reed canary grass if there are no native species present to provide competition. In wet conditions, first top kill reed canary grass with 1.5% active ingredient glyphosate, then burn.

Mowing in early/mid-June and in early October removes seed heads and exposes the ground to light to encourage growth of natives (if present).

Herbicide (glyphosate) applied in spring and fall (when other species are dormant) may be sprayed or wicked. In wet areas, be sure to use glyphosate which has been formulated for use near water. Use caution to protect native species. Cut back last year's dead leaves in spring to improve effectiveness of herbicide.

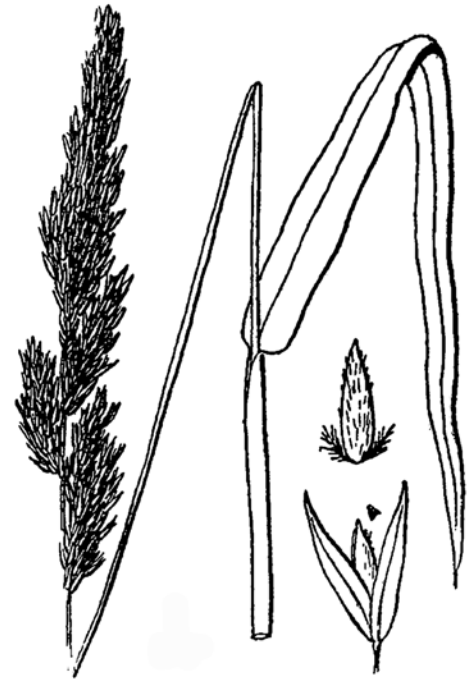
In the absence of native species or a native seedbank, remove severe infestations of reed canary grass 12-18" deep with a bulldozer. Reseed with native species.

Small Populations

In early stages of invasion, hand-pulling or digging may be successful. Remove new plants before they can reproduce vegetatively.

Cover small patches with black plastic for at least one growing season. Be sure rhizomes don't spread beyond the plastic. Remove plastic; then seed the area with appropriate native species.

In July and August, tie large clumps of reed canary grass; then cut stems and immediately spray with glyphosate. Follow up with burning or mowing. Monitor for resprouting.



Phalaris arundinacea. USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. 3 vols. Charles Scribner's Sons, New York. Vol. 1: 170.

Wetland Protection

Careful monitoring of wetlands, especially following disturbance, can prevent major infestations. Reduce infestation from seeds from surrounding slopes by using erosion control on hillsides or by using catch-basins. New plants are easiest to spot in spring. Protect native species when removing reed canary grass.

Sources

<http://www.invasive.org>

http://dnr.wi.gov/invasives/fact/reed_canary.htm

<http://www.dnr.state.oh.us/Portals/3/invasive/pdf/invasivefact-sheet6.pdf>

<http://www.misin.msu.edu>

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CITIZENS FOR CONSERVATION
459 West Highway 22
Barrington IL 60010

847-382-SAVE (7383)

www.citizensforconservation.org

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