

Reed Canary Grass (*Phalaris arundinacea*)

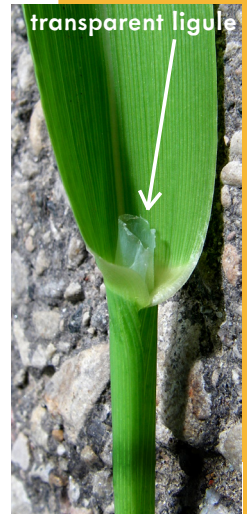
 WI NR-40:
 Restricted

DESCRIPTION:

Reed canary grass (RCG) is the one of the most pervasive and destructive invasive plant in the Midwest. This aggressive cool-season perennial grass was introduced in the early 1900's for forage and is still used today for "marsh hay". Though it is planted for erosion control, its coarse and shallow roots do a poor job of holding the soil and are easily undercut along streams and lakeshores.

Most wetlands are polluted by silt, pesticides and fertilizer inputs from lawns, construction sites and crop fields. These conditions weaken, or even smother native vegetation, but encourage RCG, allowing it to dominate. It can also be found in upland sites such as old fields, pastures and roadsides. Growing in clumps and spreading masses, it typically forms pure monocultures, choking out all other plant life and severely degrading habitat for wildlife. It reproduces both from seed and by creeping rhizomes. Dormant underground buds allow RCG to recover quickly after burns or even herbicide application. Seeds can remain in the soil for several years so follow-up monitoring and control is necessary.

This grass is among the first wetland plants to emerge in the spring. The leaves are often pale or yellowish green compared to other plants, reaching 1.5'-3' in height. The flower heads, appearing in late-May or early-June are green or slightly purple, erect or slightly spreading, compact panicles, that become tan as the seeds mature by late June to early July. A key feature for identification is the ligule, a prominent translucent membrane where the leaf blade meets the stem. The gradually tapering leaf blades are 6-12" long and about 1/2" wide. The dead vegetation has a unique light-tan color, making it easy to pick out patches of RCG, even in satellite images.

**-5
Highly
Invasive**


CONTROL METHODS:

Controlling RCG requires an integrative and adaptive management strategy. You will need to use several of the below control techniques in combination over the course of 1-2 growing season in order to eliminate the RCG completely. Resolving the underlying water pollution issues is a critical step that must be addressed for long-term success.

Hand Tools: For small patches the entire root mass can be dug out.

Prescribed Fire: A prescribed burn in late-spring after the RCG has begun sprouting to a height of 6-12" will top-kill and weaken RCG, forcing them to send up new shoots.

Mowing: RCG should be mowed low early in the flowering period in late-May to prevent reproduction and weaken the plants.

Herbicide: Glyphosate (Round-Up®, etc) is the most effective herbicide for controlling RCG. In or near wetlands, use an aquatic approved formulation of glyphosate (such as Rodeo®, AquaNeat® or Accord®). Application is most effective when the temperature is below 70 F. and when RCG is 6-10" in height, in the spring or after mowing. Treatment during the early-flowering stage is also effective. A late-fall application (November) after native plants have gone dormant but RCG is still green and growing can avoid damaging neighboring plants. Otherwise, if desirable broadleaf plants remain within the RCG treatment area, try a grass-specific, sethoxydim-based herbicide such as Vantage® or Poast®. These herbicides break down rapidly in sunlight; do not apply them on a sunny day.

Tilling: In RCG monocultures, tilling can break up the root system. However, the plants will resprout from dormant buds. Repeated tilling is therefore necessary. Tilling followed by herbicide application to resprouting plants is particularly effective.

Topsoil Removal: For highly disturbed sites with significant silt deposits, consider using heavy equipment to remove the RCG and the top 10" of soil from the site.

NATIVE ALTERNATIVES:

Once RCG has been weakened by the above treatments, native species should be established to provide competition. In wet areas, cordgrass (*Spartina pectinata*), hairy-fruited sedge (*Carex trichocarpa*), river bulrush (*Scirpus fluviatilis*) and bur reed (*Sparganium eurycarpum*) have proven themselves to be good competitors against reed canary grass weakened by the above control methods. Additional wetland species should be introduced later.



A wetland overrun by reed canary grass