

# Knox County Cooperative Invasive Species Management Area

### Invasive Species of the Month for September 2018

### Ravenna Grass (Saccharum ravennae)

Origin: Southern Europe, Northern Africa and Asia

**Interesting Fact:** Ravenna Grass has not yet been assessed by the Indiana Invasive Plant Advisory Committee, but it is spreading widely in Knox County and Southern Indiana in general. It will be officially assessed soon.

**Description**: Ravenna Grass is a clumping perennial grass that can grow up to 13 ft. tall. It has long leaves with a white midrib and a long plume-like inflorescence.

#### **Botanical Terminology:**

Glabrous – free from hair, smooth

Inflorescence – a group of flowers arranged on the stem of a plant

Ligule – a narrow band where the leaf blade connects to the leaf sheath

#### **Defining characteristics:**

- Long leaves with a white midrib
- Densely hairy ligules
- Leaf sheaths that range from glabrous near the top of culm to densely hairy near the base
- Plume-like inflorescence that develops in early fall



Left Image: A tall clump of Ravenna Grass with its inflorescence present

<u>Center Image</u>: The hairy ligule of Ravenna Grass <u>Right Image</u>: Close up of plume-like inflorescence



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Habitat: Roadsides, old fields, prairie plantings, pond/lake edges and other disturbed areas



Above Image: Ravenna Grass invading the edge of Mirror Lake in Vincennes.

**Ecological threat:** Ravenna Grass is expected to cause similar problems like other more studied large-structured invasive grass, such as Common Reed (*Phragmites australis*) and Giant Reed (*Arundo donax*). These species tend to spread prolifically via seed production and rhizomatous offshoots. With their tall stature and dense form, these grasses are able to outcompete native vegetation and can alter ecosystem's structure and function. Ravenna Grass specifically has been shown to produce over 10,000 seeds per inflorescence with an 80% or higher germination rate.

#### **Control Methods:**

- Manual: Continuous mowing could be effective but has not been studied.
- <u>Chemical</u>: While there are not any studies to give a recommended herbicide control method, a foliar application of glyphosate\* should be effective. Ravenna Grass should be targeted early when it is only 1 to 2 ft. in height for herbicide control.

#### References

"Invasive Plants in Pennsylvania: Ravenna Grass." Pennsylvania Department of Conservation and Natural Resources.

http://www.docs.dcnr.pa.gov/cs/groups/public/documents/document/dcnr\_010233.pdf. Accessed 18 Sept. 2018.

Springer, T.L. and J.J. Goldman. 2016. Germination of *Saccharum ravennae* (L.) L. (Poaceae) Caryopses and Intact Spikelets. Crop Sci. 56:682–688 (2016).

Vincent, M.A. and R.L. Gardner. 2016. Spread of the invasive Ravenna grass (Tripidium ravennae, Poaceae) in Ohio. Phytoneuron 2016-78: 1–9. Published 29 November 2016.

<sup>\*</sup>Always follow herbicide label instructions.