

Invasive Species of the Month for February 2019

Siberian Elm (Ulmus pumila)

Origin: East Central Asia

Introduction: First introduced for windbreaks in the 1860s

Botanical Terminology:

Samara – a winged, dry fruit

Interesting Fact: Siberian Elm is resistant to Dutch Elm Disease and was planted widely as a replacement for American Elm (*Ulmus americana*) in the 1950s.

Description: Siberian Elm is a medium to large tree species that can grow up to around 60 ft. tall and has alternate, dark green leaves as well as grey bark with deep furrows.

Defining Characteristics:

- Small, alternate leaves that tend to be glossy on the upper surface
- Leaves will have singly serrated edges (instead of doubly serrated like other Elm species)
- Grey bark that develop deep furrows as it matures
- Circular shaped samaras without hairs



Left Image: The bark of a medium sized Siberian Elm

<u>Center Image</u>: Young leaves of Siberian Elm <u>Right Image</u>: A twig showing the buds

Habitat: Urban areas, open woodlands, woodland edges, roadsides, right-of-ways, riparian areas, grasslands, fence rows, other disturbed areas, etc.



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Above Image: A branch of Siberian with the samaras present (Photo from the USDA-NRCS PLANTS Database).

Ecological Threat: Siberian Elm is able to tolerate very poor soil conditions, allowing it to be a pioneer species and become established before native species. Siberian Elm is then able to create dense thickets and prevent native plants from growing. Siberian Elm reproduces primarily by its samaras, which are plentiful along the branches in late spring to early summer. The seeds can germinate rather quickly, within a week or two. In addition, Siberian Elm can hybridize with the native Slippery Elm (*Ulmus rubra*), which could be beneficial to increase tolerance to Dutch Elm Disease, but could also threaten the genetic integrity of the species.

Control Methods:

- Manual: Small individuals can be dug out. Girdling can be affective on large trees but do not cut
 too deeply into the bark as that will cause the tree to vigorously resprout from the base.
 Prescribed fire has also been demonstrated to be effective in killing young Siberian Elms in fire
 adapted communities.
- <u>Chemical</u>: A foliar applications of glyphosate* can be effective on young individuals. Cut stump applications of glyphosate* are effective on larger trees.

^{*}Always follow herbicide label instructions.



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References

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