

Invasive Plants in Pennsylvania

Siberian Elm

Ulmus pumila L.



Photo: Patrick Breen, Oregon State U.,
www.invasive.org

Background:

This native to northern Asia was introduced into North America in the 1860s as a windbreak, for lumber and as a street tree that is resistant to Dutch elm disease.

Range:

Siberian elm is widely distributed throughout the Midwest and Great Plains states as well as the west coast. On the east coast it is less common but can be found in parts of the Mid-Atlantic and New England states.

Description:

This tree can grow to heights of 70 feet. The crown is open and rounded with slender, spreading branches. The leaves are less than three inches long, alternate along the branch, are dark-green in color with serrated edges. The bark is light gray with irregular furrows.

Inconspicuous flowers develop in drooping clusters during the spring. Fruits are flat, circular and under 1/2 inch wide – *see photo below*.



Photo: Steve Hurst, USDA NRCS,
www.invasive.org



Photo: Richard Old, XID Services,
www.invasive.org

Habitat:

Siberian elm can be found in meadows as well as along roads. The trees are very drought and cold resistant so they will grow where other trees cannot.

Biology and Spread:

Each tree produces abundant, wind-dispersed seeds that allow dense thickets to form far from the parent tree. Seedlings grow very quickly.

Ecological Threat:

The dense thickets formed by these trees can close open areas and displace native vegetation, thereby reducing forage for wild animals.

How to Control this Species:

Girdling trees in late spring to midsummer is the preferred management technique. Seedlings can be hand pulled or girdled during the growing season. Prescribed burns will also kill seedlings.

Several systemic herbicides such as glyphosate and triclopyr can also be used. Cut the tree and immediately apply the herbicide to the stump, or use the basal bark treatment method.

Look-A-Likes:

Other species of elms (*Ulmus* spp.) look similar to Siberian elm. Our native slippery elm (*U. rubra*) and American elm (*U. americana*) typically have leaves that are greater than three inches long, with unequal heart-shaped leaf bases and leaf margins with double teeth. These are good native alternatives for the landscape.

Some may also confuse young Siberian elms with our native choke-cherry (*Prunus serotina*) and hackberry (*Celtis* sp.).



Photo: Paul Wray, Iowa State U.,
www.forestryimages.org



Photo: Tom DeGomez, U. of Arizona,
www.forestryimages.org

References:

US Forest Service Weed of the Week:

http://www.na.fs.fed.us/fhp/invasive_plants/weeds/siberian-elm.pdf

Center for Invasive Species and Ecosystem Health:

<http://www.invasive.org/browse/subinfo.cfm?sub=3479#images>

Plant Conservation Alliance's Least Wanted:

<http://www.nps.gov/plants/alien/fact/ulpu1.htm>

For More Information:

To learn more about invasive plants in Pennsylvania and the northeast, here are some useful resources:

Plant Invaders of Mid-Atlantic Natural Areas, National Park Service:

<http://www.nps.gov/plants/alien/pubs/midatlantic/midatlantic.pdf>

Invasive Plants Field and Reference Guide, U.S. Forest Service:

http://na.fs.fed.us/pubs/misc/ip/ip_field_guide.pdf

