

Invasive Plants in Pennsylvania

Norway Maple

Acer platanoides



Photo: Leslie Mehrhoff, U. of Connecticut,
www.forestryimages.org

Background:

Norway maple was originally introduced into North America by John Bartram of Philadelphia, who received seedlings from London in 1756. Bartram began offering this plant to nurseries and Norway maple subsequently became a popular tree for city plantings. This species is naturalized throughout the state, but is more common in the southern half.

Range:

Norway maple is the most widespread maple in Europe where it occurs from Norway and Sweden to Turkey and northern Iran. Norway maples are widely planted in the U.S., from the Canadian border south to the Carolinas.

Description:

Norway maple is a large, deciduous tree with a broad, rounded crown. It can readily be distinguished from other maples because the leaves and twigs ooze milky sap when cut or torn; however, this may be difficult to detect late in the season. This species grows up to 65 feet in height with up to a seven foot trunk diameter. Norway maple leaves are dark green and are about six inches wide and five inches long, with five to seven lobes. The bark is smooth and gray-brown, twigs are stout, brown with green buds with overlapping bud scales (*see photo on right*).



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

Habitat:

Norway maple is usually planted in urban and suburban settings but commonly invades deciduous forests adjacent to suburban areas.

Biology and Spread:

Norway maple reproduces by seed, which each tree produces in large amounts. The winged fruits are spread by the wind. The seeds germinate readily, even in dense shade, and grow quickly when young.



Photo: John Randall, The Nature Conservancy,
www.forestryimages.com

Ecological Threat:

This species is a frequent invader of urban and suburban forests. Its extreme shade tolerance allows it to penetrate deep within an intact forest canopy. Recent research has shown that forests invaded by Norway maple have less wildflower diversity compared with forests dominated by native Sugar maple (*Acer saccharum*).

How to Control this Species:

Manual and Mechanical

Norway maple seedlings are easy to pull when the soil is moist. For larger plants, dig them out, making sure to get all the roots. Cut down large trees and grind out the stump, or clip off re-growth. Girdle the tree by cutting through the bark and growing layer (cambium) all around the trunk. Girdling is most effective in spring.

Look-A-Likes:

Norway maple is similar to the native sugar maple. However, Norway maple can be readily distinguished from other maples because the leaves and twigs ooze milky sap when cut or torn. It is the only maple in our region with that characteristic.



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

Chemical

Norway maple can be controlled effectively by using an herbicide such as glyphosate or triclopyr. Trees up to four inches in diameter can be controlled by applying triclopyr mixed with a horticultural oil to the bark, a foot from the base of the trunk. This can be done in early spring or from June 1 to September 30. The cut stump method may also be used – cut the tree and immediately apply the herbicide around the outer ring of the stump.

Native Alternatives:

There are many native trees that make great alternatives. Sugar maple (*Acer saccharum*), red maple (*Acer rubrum*), American basswood (*Tilia americana*), red oak (*Quercus rubra*), white ash (*Fraxinus americana*) and tuliptree (*Liriodendron tulipifera*) are just a few examples.



Photo: Bill Cook, Michigan State U.,
www.forestryimages.org

References:

Center for Invasive Species and Ecosystem Health:

<http://www.invasive.org/browse/subinfo.cfm?sub=3002>

U.S. Forest Service Weed of the Week: http://www.na.fs.fed.us/fhp/invasive_plants/weeds/norway-maple.pdf

Invasive Exotic Plant Tutorial for Natural Lands Managers:

http://www.dcnr.state.pa.us/forestry/invasivetutorial/norway_maple_M_C.htm

For More Information:

Plant Invaders of Mid-Atlantic Natural Areas:

<http://www.invasive.org/eastern/midatlantic/acpl.html>

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

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