

Plant Profiles: HORT 2242 Landscape Plants II

Botanical Name: *Pinus sylvestris*

Common Name: Scots pine, Scotch pine

Family Name: Pinaceae – pine family

General Description: *Pinus sylvestris* is considered to be the most widely distributed pine in the world. It is native from northern Europe to Siberia and from the Arctic Circle to Spain. Though not native in the Chicago area there are a few naturalized stands; however, it is not considered invasive. The common name “Scots pine” is the preferred choice over “Scotch pine”. At one time, Scots pine was a commonly planted ornamental but it, along with many pines, is less used today. *Pinus sylvestris* requires full sun and must have good drainage; otherwise it is tolerant of poor soils, drought and most urban conditions. It is susceptible to a number of pests and diseases. Despite these problems there are a wide variety of useful cultivars available in the trade mostly selected for needle color and form.

Zone: 3-7

Resources Consulted:

Davis, Becke. "ILCA Presents-Pines: A Perpetual Favorite." *Landscape Contractor* May 2003: 29-33. Print.

Dirr, Michael A. *Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation and Uses*. Champaign: Stipes, 2009. Print.


"The PLANTS Database." *USDA, NRCS*. National Plant Data Team, Greensboro, NC 27401-4901 USA, 2014. Web. 17 Mar. 2014.

Swink, Floyd, and Gerould Wilhelm. *Plants of the Chicago Region*. Indianapolis: Indiana Academy of Science, 1994. Print.

Creator: Julia Fitzpatrick-Cooper, Professor, College of DuPage

Creation Date: 2014

Keywords/Tags: Pinaceae, tree, conifer, cone, needle, evergreen, *Pinus sylvestris*, Scots pine, Scotch pine

	<p>Whole plant/Habit:</p> <ul style="list-style-type: none">• Description: At one time <i>Pinus sylvestris</i> was the number one most common species used as a Christmas tree. That dense pyramidal “Christmas tree” form of a young plant is probably the most familiar form. There is though, variation in habit.• Image Source: Howard F. Schwartz, Colorado State University, Bugwood.org• Image Date: Unknown• Image File Name: 5366068-SMPT.jpg
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**Whole plant/Habit:**

- Description: As Scots pine matures it takes on unique shapes. The shape can vary widely but is generally very picturesque. The irregular branching pattern and leaning habit as seen in this image is a common form. As with most pines it broadens out and becomes flat-topped with age.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: April 28, 2010
- Image File Name: scots_pine_1160864.png

**Whole plant/Habit:**

- Description: When grown in close proximity to each other it can form a tall straight trunk and narrow habit.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: November 8, 2010
- Image File Name: scots_pine_1220645.png

**Bark:**

- Description: The bark on *Pinus sylvestris* is highly ornamental and is a useful identification feature. As the tree matures the dark gray bark at the base thickens but on the upper trunk and branches the bark becomes thin and flaky exposing a beautiful orange inner bark.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: November 8, 2010
- Image File Name: scots_pine_1220643.png



Branch/Twig:

- Description: The young shoots are green changing to yellowish brown. This is not an identification feature but the larger branches that develop a flaky orange bark will serve as a reliable identification feature.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: June 1, 2008
- Image File Name: scots_pine_1212.png



Bud:

- Description: The buds are reddish brown and resinous. Buds are not an important identification feature.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: November 8, 2010
- Image File Name: scots_pine_1220732.png



Flower:

- Description: Though not true flowers the reproductive structures on pines are often referred to as such. Pines are monoecious; producing male pollen cones (on left) and separate female seed cones (on right) all on the same plant. Male pollen cones are clustered at the base of new growth. Female cones form near the tip of new growth. The color phases can vary according to species. Note: This photo is meant to show general images for “flowers”. The images are not from the same pine species and may not be of the same species referenced in this Plant Profile.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: Early June
- Image File Name: pinus_flower-00.png



Flower:

- Description: The structures clustered at the base of the new shoot in this image are the male pollen cones prior to opening and forming pollen.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: April 28, 2010
- Image File Name: scots_pine_7593.png



Cone:

- Description: The cones are variously described as brown, gray, light brown and tawny yellow. They are symmetrical, conical and approximately 3 inches long. The umbo has just a short “snout”, not a prickle. NOTE: The thickened exposed part of each cone scale is called the *apophysis*. The *umbo* is the terminal protuberance on the tip of the apophysis. The umbo may be prickled or just slightly raised or pointed.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: April 28, 2010
- Image File Name: scots_pine_7586.png



Cone:

- Description: Though the cone is symmetrical the bottom three scales are very narrow and splay out. It is not easy to describe this feature but once seen and understood it can be useful in identifying *Pinus sylvestris*.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: April 28, 2010
- Image File Name: scots_pine_7587.png



Leaf Number/Attachment:

- Description: *Pinus sylvestris* is a 2-needle pine. Variable in length and color the most distinguishing identification feature is the twist to each needle. The needles are retained on the tree for 2 to 4 years.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: November 8, 2010
- Image File Name: scots_pine_1220733.png



Leaf Number/Attachment:

- Description: Considered one of the only 2-needle pines with blue/green foliage this would be a great identification feature if there wasn't so much variation. Color varies from olive green, gray/green to blue/green. This image shows the most common form: 2-needles per bundle, blue/green color and the characteristic twist to each needle.
- Image Source: USDA-NRCS PLANTS Database / Herman, D.E., et al. 1996. *North Dakota tree handbook*. USDA NRCS ND State Soil Conservation Committee; NDSU Extension and Western Area Power Administration, Bismarck.
- Image Date: Unknown
- Image File Name: pisy_002_php.jpg



Leaf Number/Attachment:

- Description: Needle length can vary from 1 to 3(4) inches. The needles in this image are on the longer side.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: November 8, 2010
- Image File Name: scots_pine_1220642.png



5397648

Winter Interest:

- Description: Typical evergreen winter qualities with the additional beauty of the orange bark.
- Image Source: Robert Videki, Doronicum Kft., Bugwood.org
- Image Date: Unknown
- Image File Name: 5397648-SMPT.jpg



Karren Waisel © 2010

Special ID feature(s):

- Description: The 2-needles per bundle, each with a slight twist are useful identification features. This in conjunction with other features such as the beautiful flaky orange bark will aid in identification of *Pinus sylvestris*.
- Image Source: Karren Waisel, TreeTopics.com
- Image Date: November 8, 2010
- Image File Name: scots_pine_1220645s.png