

Plant Profiles: HORT 2242 Landscape Plants II

Botanical Name: *Pinus cembra*

Common Name: Swiss stone pine

Family Name: Pinaceae – pine family

General Description: *Pinus cembra* is a handsome evergreen tree well suited for the home landscape due to its slow growth and dense narrow habit. It is native to high subalpine elevations in Europe and southern Asia but adaptable to conditions in the Chicago area. Rich Eyre of Rich's Foxwillow Pine Nursery, Inc. suggests that, while most pines require full sun, Swiss stone pine will thrive in 3- 4 hours of sun and still maintain its beauty. This is an overlooked evergreen that should be utilized more in the landscape.

Zone: 3-7

Resources Consulted:

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.

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

Creation Date: 2014

Keywords/Tags: Pinaceae, tree, conifer, cone, needle, evergreen, *Pinus cembra*, Swiss stone pine



Whole plant/Habit:

- **Description:** The dense, low-branched, narrow pyramidal form of *Pinus cembra* is distinctive. Typical of pines it will lose apical dominance and become more broad and flat-topped with age. However, these specimens planted at The Morton Arboretum are approximately 60-75 years old and still strongly pyramidal.
- **Image Source:** Karren Wcisel, TreeTopics.com
- **Image Date:** September 7, 2008
- **Image File Name:** swiss_stone_pine_1040474.png

**Bark:**

- Description: Bark is not a distinctive feature on this plant.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: September 21, 2008
- Image File Name: swiss_stone_pine_1040637.png

**Branch/Twig:**

- Description: First year *Pinus cembra* stems are covered with dense orange-brown pubescence. In the second year stems turn dark gray or brown but remain pubescent. This can be useful for identification when used in combination with other features.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: September 21, 2008
- Image File Name: swiss_stone_pine_4058.png

**Bud:**

- Description: The resinous buds are gray-brown. They are not a useful identification feature. Notice the stem coloration difference between new growth and old growth that was described in the Branch/Twig category. One can also see how little growth this stem put on that season which would be typical of the slow-growing Swiss stone pine.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: March 11, 2011
- Image File Name: swiss_stone_pine_1260664.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



Cone:

- Description: The cones of *Pinus cembra* are unique among pines. The 3-inch cones are almost round in shape and have a purplish color until maturity.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: May 10, 2009
- Image File Name: swiss_stone_pine_1915.png



Cone:

- Description: The cones mature in 3 years (most pine cones take 18-24 months) and remain closed until they fall to the ground. The cone scales decompose allowing the large edible seeds to be disseminated by birds.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: September 21, 2008
- Image File Name: swiss_stone_pine_4059.png



Leaf Number/Attachment:

- Description: *Pinus cembra* has 5-needles per bundle. The 2-3 inch needles are stiff, dark green with white stomatal lines on the underside creating a bluish green cast to that side of the needle. The densely set foliage remains on the stem for 4 to 5 years.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: March 11, 2011
- Image File Name: swiss_stone_pine_1260663.png



Winter interest:

- Description: The dark green color and dense pyramidal habit looks especially beautiful in the winter landscape.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: January 25, 2014
- Image File Name: swiss_stone_pine_5579.png



Special ID feature(s):

- Description: The dark, dense, narrow habit with branches to the ground and the almost round cone falling at maturity with scales still closed will confirm the identification of *Pinus cembra*.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: March 11, 2011
- Image File Name: swiss_stone_pine_1260666s.png