



Pinus strobus 'Pendula' 'Pendula' Eastern White Pine¹

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INTRODUCTION

'Pendula' or Weeping Eastern White Pine has soft blue-green needles borne in groups of five although foliage color varies greatly from one tree to the next (Fig. 1). Some specimens keep the bluish color throughout the winter, others lose it. It is typically seen from 6 to 12 feet tall in landscapes growing slowly, with long weeping branches which touch the ground. Once on the ground, branches grow along the ground like a creeping ground cover. Trees must be trained to develop a central trunk, otherwise the plant simply forms a sprawling shrub about two to three feet tall. Several branches on young trees normally are trained to originate from the same point on top of the trunk forming a fountain of foliage. The gray bark on the trunk and large branches remains unusually smooth through middle age, breaking up into elongated blocks in old age but this is usually not seen, as foliage usually fills the tree to the ground.

GENERAL INFORMATION

Scientific name: *Pinus strobus* 'Pendula'

Pronunciation: PIE-nus STROE-bus

Common name(s): 'Pendula' Eastern White Pine

Family: *Pinaceae*

USDA hardiness zones: 3B through 7 (Fig. 2)

Origin: native to North America

Uses: Bonsai; hedge; recommended for buffer strips around parking lots or for median strip plantings in the highway; screen; specimen; no proven urban tolerance

Availability: somewhat available, may have to go out of the region to find the tree

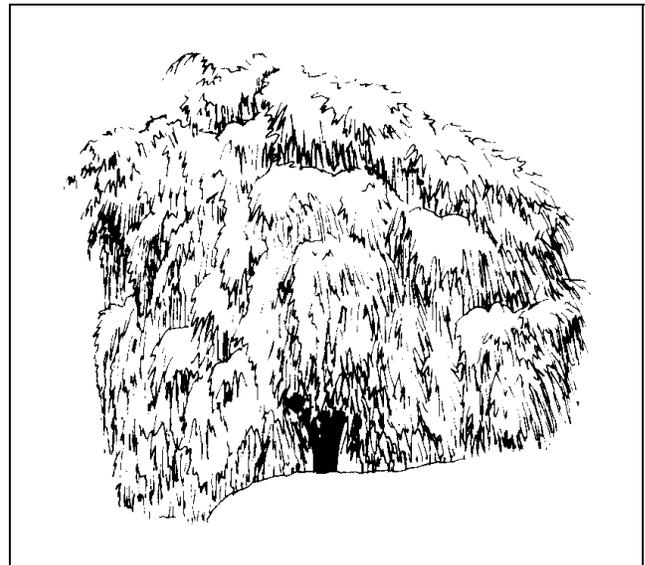


Figure 1. Mature 'Pendula' Eastern White Pine.

DESCRIPTION

Height: 6 to 12 feet

Spread: 25 to 35 feet

Crown uniformity: irregular outline or silhouette

Crown shape: weeping

Crown density: dense

Growth rate: slow

Texture: fine

Foliage

Leaf arrangement: alternate; spiral (Fig. 3)

Leaf type: simple

Leaf margin: entire

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Figure 2. Shaded area represents potential planting range.

Leaf shape: needle-like (filiform)

Leaf venation: parallel

Leaf type and persistence: evergreen; fragrant;
needle leaf evergreen

Leaf blade length: 2 to 4 inches

Leaf color: blue or blue-green; green

Fall color: no fall color change

Fall characteristic: not showy

Flower

Flower color: pink; yellow

Flower characteristics: inconspicuous and not
showy; spring flowering

Fruit

Fruit shape: elongated

Fruit length: 6 to 12 inches

Fruit covering: dry or hard

Fruit color: brown

Fruit characteristics: does not attract wildlife; fruit,
twigs, or foliage cause significant litter; persistent on
the tree; showy

Trunk and Branches

Trunk/bark/branches: bark is thin and easily
damaged from mechanical impact; droop as the tree
grows, and will require pruning for vehicular or
pedestrian clearance beneath the canopy; not
particularly showy; should be grown with a single
leader; no thorns

Pruning requirement: requires pruning to develop
strong structure

Breakage: resistant

Current year twig color: brown; green

Current year twig thickness: thin

Wood specific gravity: 0.35

Culture

Light requirement: tree grows in part shade/part sun;
tree grows in full sun

Soil tolerances: loam; sand; acidic; well-drained

Drought tolerance: moderate

Aerosol salt tolerance: none

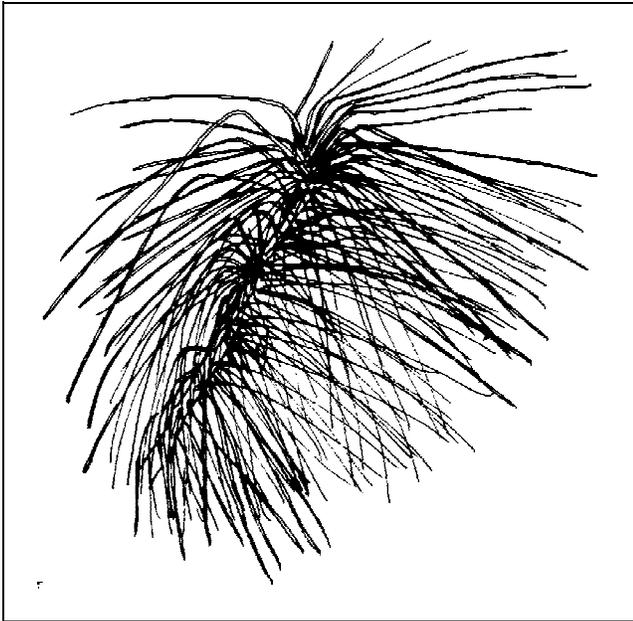


Figure 3. Foliage of 'Pendula' Eastern White Pine.

Other

Roots: surface roots are usually not a problem

Winter interest: no special winter interest

Outstanding tree: not particularly outstanding

Invasive potential: little, if any, potential at this time

Verticillium wilt susceptibility: not known to be susceptible

Pest resistance: very sensitive to one or more pests or diseases which can affect tree health or aesthetics

USE AND MANAGEMENT

'Pendula' White Pine has a very distinctive appearance and is best suited as an occasional specimen in a special small garden or landscape. An interesting plant looking its best growing in a lawn with mulch covering all the area beneath the canopy. This allows the unique form to contrast with other elements of the landscape.

Root systems are usually shallow and highly branched with many fine roots close to the surface of the soil. Trees transplant well balled and burlapped or from containers.

Young White Pines are quite tolerant of half-day shade while mature White Pines prefer a sunny location and tolerate most moist, well-drained soils. They do not grow well and often decline on clay or on soil with a pH above 7. Trees appear to have little tolerance for drought and heat and should be used in the cooler climates. Eastern White Pine is susceptible

to salt injury from roads or drain fields and is sensitive to air pollution (particularly ozone and sulfur dioxide).

Propagation is from seed.

Pests

Some adelgids will appear as white cottony growths on the bark. All types produce honeydew which may support sooty mold. European Pine shoot moth causes young shoots to fall over. Infested shoots may exude resin. The insects can be found in the shoots in spring. Pesticides are only effective when caterpillars are moving from overwintering sites to new shoots. This occurs when needle growth is about half developed.

Bark beetles bore into trunks making small holes scattered up and down the trunk. The holes look like shotholes. Stressed trees are more susceptible to attack. Keep trees healthy.

Sawfly larvae caterpillars are variously colored but generally feed in groups on the needles. Some sawfly larvae will flex or rear back in unison when disturbed. Sawflies can cause rapid defoliation of branches if left unchecked.

Pine needle miner larvae feed inside needles causing them to turn yellow and dry up.

Pine needle scale is a white, elongated scale found on the needles. Pine tortoise scale is brown and found on twigs. Depending on the scale, horticultural oil may control overwintering stages.

Pine spittle bug lives and hides in a foamy mass.

Spruce mites cause damage to older needles, and are usually active in the spring and fall. Mites cause older needles to become yellowed or stippled.

Zimmerman Pine moth larvae bore into the trunk. The only outward symptoms may be death of parts of the tree or masses of hardened pitch on the branches.

The larvae of Pine weevils feed on the sapwood of the leaders. The leader is killed and the shoots replacing it are distorted. First symptoms are pearl white drops of resin on the leaders. The leaders die when the shoot is girdled as adults emerge in August. Prune out and burn infested terminals before July 15.

Diseases

White Pine blister rust attacks White Pine and uses the currant plant as an alternate host. European Black Currant, the favored alternate host, may be banned from certain areas. Other Currants, particularly Red Currant should not be grown within 300 feet of Pines. Infected branches may be pruned off the Pine.

Canker diseases occasionally cause dieback of landscape Pines. Keep trees healthy and prune out the infected branches.

Needle cast is common on small trees and plantation or forest trees. Infected needles yellow and fall off.