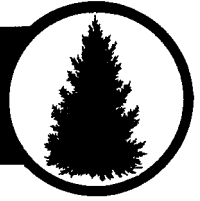


EASTERN WHITE PINE



(NORTHERN WHITE PINE)

Pinus strobus

IDENTIFYING CHARACTERISTICS:

- Needles:** In fascicles (groups) of fives; 3 to 5 inches long; bluish-green; very soft and flexible; persist for two years.
- Flowers:** Monoecious (male and female on same tree).
- Cones:** 4 to 8 inches (usually about 5 inches) long; slightly curved; unarmed; resin-coated scales; more flexible than cones of other pine species.
- Twigs:** Smooth, flexible, greenish-gray tinged with reddish-brown.
- Bark:** Thin, smooth, light gray or greenish-gray becoming darker gray and rougher (about 1 ½ inches thick) with age.

GROWTH HABITS:

- Rate:** Rapid.
- Maturity age:** 200 to 300+ years.
- Height:** 80 to 100 feet (tallest conifer in Minnesota).
- Crown spread:** 50 to 80 feet.
- Roots:** The "normal" root system has just a trace of taproot; several (usually three to five) large roots spread outward and downward in the soil giving the tree a firm anchor under most conditions.

RANGE: Native; see maps.

SHADE TOLERANCE: Intermediate (most tolerant pine).

SOILS:

- pH preference:** 4.5 to 6.5; prefers loam, silt loam, and loamy sand soils; will grow on a wide range of soils, but it is less common on clays.
- Drainage:** Prefers well-drained soil.
- Moisture:** Prefers moist soils.

SUSCEPTIBILITY:

- Insects:** Pine sawfly; white pine aphid; pine spittlebug; pine bark adelgid; pales weevil; white pine weevil.
- Diseases:** Very susceptible to white pine blister rust; tip blight; needle rust.
- Drought:** Intolerant.
- Salt spray:** Intolerant.

USES:

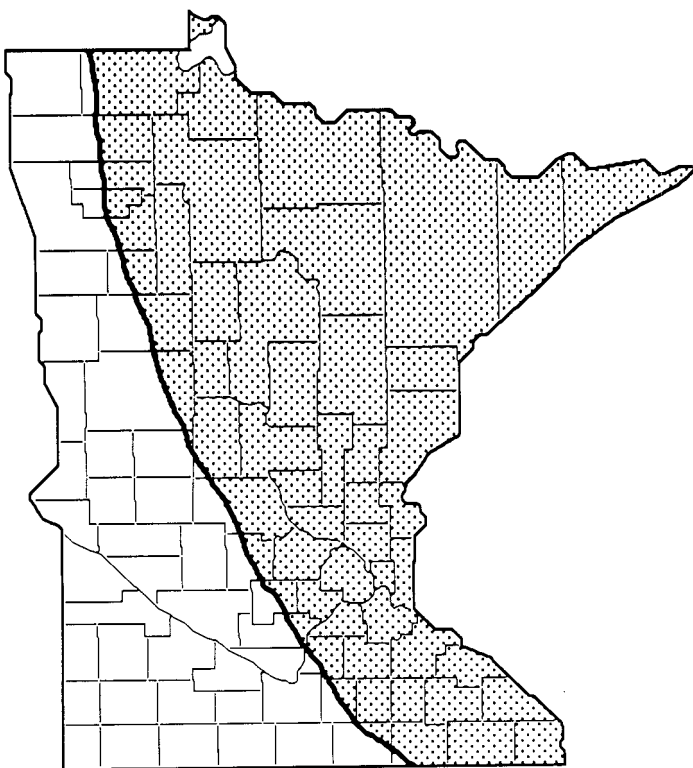
Shelterbelts and/or windbreaks: If pine are used in farmstead shelterbelts, white pine and ponderosa pine should receive first consideration; because of its spreading crown, spacing between trees should be well in excess of 20 feet; although the most shade tolerant pine, lower branches will eventually die from shading from upper branches leaving the "green-topped telephone pole" effect. Not recommended for field windbreaks.

Christmas trees: Rapidly gaining favor with consumers.

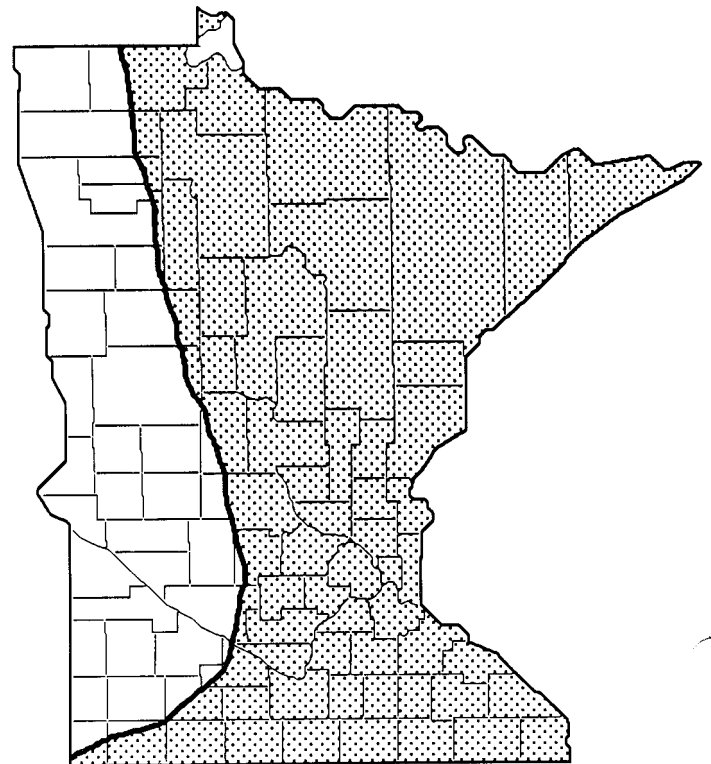
Wildlife: Fair to good; birds and mammals use as escape cover and severe weather cover during young age classes of plants; seed and browse value fair; average trees good for cavity users.

Products: Pulpwood; sawlogs; veneer; poles; piling.

Horticultural: Can be used as a specimen tree where there is sufficient space.



Eastern white pine native range.



Eastern white pine estimated planting range.