



Klamath Network Featured Creature

September 2009

Port Orford cedar (*Chamaecyparis lawsoniana*)

FIELD NOTES:

General Description:

The Port Orford cedar is not a true cedar and is commonly called the Lawson cypress or Lawson false cypress. The trees can live more than 600 years and grow up to 200 feet tall with 4-6 foot diameter trunks. Leaves are scale-like, blue-green, and have obvious white X's on the underside. The species is listed as "Vulnerable" on the IUCN Red List of Threatened Species.

Habitat and Distribution:

The Port Orford cedar is native only in southwestern Oregon and northwestern California and is restricted to a small range that covers only 220 miles from north to south. However, within its small range, it occupies many vegetation zones, soil types, and elevations. It is commonly found associated with other trees, such as Sitka spruce, western hemlock, white fir, red fir, redwood, Douglas-fir, grand fir, lodgepole pine, western red cedar, and Pacific yew. Within each forest, Port Orford cedar is primarily restricted to moist locations such as benches, drainages, or some area that has a constant seepage of water.

Interesting Uses:

This tree is particularly admired as an ornamental and is widely planted in temperate regions worldwide. One is quite likely to run into a planted Port Orford cedar or one of its 500+ varieties from the Pacific Northwest to Europe. The wood of Port Orford cedar is light and durable and was originally used in ship building, electrical storage battery separators, venetian blinds, and airplane fuselages. Now, it is used for arrow shafts. It is highly valued in East Asia, particularly Japan, as it is very similar to a rare Japanese cedar. It can fetch upwards of \$10,000 per log for specialty uses such as shrine or temple architecture.

The historical chalet at Oregon Caves is also sided with Port Orford cedar. A lovely architectural detail, but one we would not repeat today!



<http://www.cnr.vt.edu/dendro>



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Reproduction:

The primary method of natural reproduction is via seed. Trees start producing seed between 5 and 9 years of age. Male and female flowers are on the same branch, but on different branchlets. Pollination occurs in the spring and seeds become fully developed by September or October. The seeds are borne in small cones that are from ¼ to ½ inches in diameter. Dispersal distance is generally short unless seeds fall into water where they float well and can travel farther. Dispersal by water (hydrochory) may be important for streamside habitats.

Disease:

Port Orford cedar is extremely susceptible to a fatal root rot caused by two soil-borne fungi, *Phytophthora lateralis* and *P. cinnamomi*. The crown of infected trees changes color from blue-green to gold, reddish brown, and then a dull brown. Roots turn black and rot away within a few months.

The fungus is carried through water-borne spores transported by natural water flow or in mud carried by animals or machinery. The spread of disease has been greatly accelerated by road construction and maintenance, logging, and house building. Limiting activities to the dry season reduces the risk of spread.

There is no known cure for trees infected with root rot and management generally consists of restricting or regulating human activities. Work is being conducted to find a genetic source resistant to root rot.

Where to see in the Network:

Port Orford cedars can be found in Redwood National and State Parks and at Oregon Caves National Monument.

References:

Conifer Specialist Group 2000.

Chamaecyparis lawsoniana. in IUCN 2009. IUCN Red List of Threatened Species. Version 2009.1. Available online. (www.iucnredlist.org). Accessed 25 September 2009.

Uchytel, Ronald J. 1990. *Chamaecyparis lawsoniana*. in Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available online. (www.fs.fed.us/database/feis/). Accessed 25 September 2009.