

**I'm from the west coast and I love the large trees that grow there. Why are there no large trees in northern New York, or on the east coast?**

It's largely a matter of species and climate. The large, native, west coast conifers such as redwood, sequoia, Douglas fir, Sitka spruce, and ponderosa pine, will grow in the east, but they will never reach the heights seen in the west. This is due to very specific climate conditions that exist on the west coast. In certain locations coastal fog combined with abundant winter rain, along with moderate temperatures, allow the trees to grow 2 to 3 feet per year. The Pacific temperate rain forest which extends from Prince William Sound in Alaska down to northern California is home to the largest trees in the world. Sitka spruce, Douglas fir, and ponderosa pine commonly grow to heights well over 100 feet. And of course, the redwoods and sequoias are the champions with average heights beyond 200 feet. A coast redwood with a height of 379 feet is the tallest tree in the world.

Our weather conditions just won't support this enormous type of growth. Plus, we get frequent ice storms that knock back tree crowns reducing their height. In addition, our native species just don't have the genetic capacity to grow into giants.

At one time the east coast did have very large trees. The eastern white pine is the tallest tree in eastern North America. Before colonization white pines with heights over 250 feet were common. But the original eastern forest was clear-cut by the mid- 19<sup>th</sup> century to fuel an expanding nation. Other large species that remained like American elm and chestnut succumbed to disease by the mid-1900's. What we see now is a second growth forest that is less than 200 years old - not long enough for the trees to grow beyond 100 feet in height.

There are some pockets of what is referred to as 'old growth' forest in the northeast (less than 1% of the pre-colonial forest remains). To be classified as old growth the trees must be over 200 years old and the forest should be untouched by human activity. Northern New York does not have significant old growth forests, but there are several locations that are home to old growth trees including the Pine Grove Boat Launch and Selkirk Shores State Park, both in Oswego County. In Jefferson County old growth trees can be found in Thousand Island Park, Lakeside Cemetery in Sackets Harbor, and 4-H Camp Wabasso in Redwood. These trees aren't giants, but they are very old.

In an on-going effort, Cornell Cooperative Extension is cataloging old and large trees in Jefferson County. If you know of a tree that is impressive in height, trunk diameter, or crown spread, please contact Sue Gwise at [sjg42@cornell.edu](mailto:sjg42@cornell.edu) We will visit the tree and take measurements and photographs.

By Sue Gwise, *Consumer Horticulture Educator & Master Gardener Coordinator*

October 30, 2021