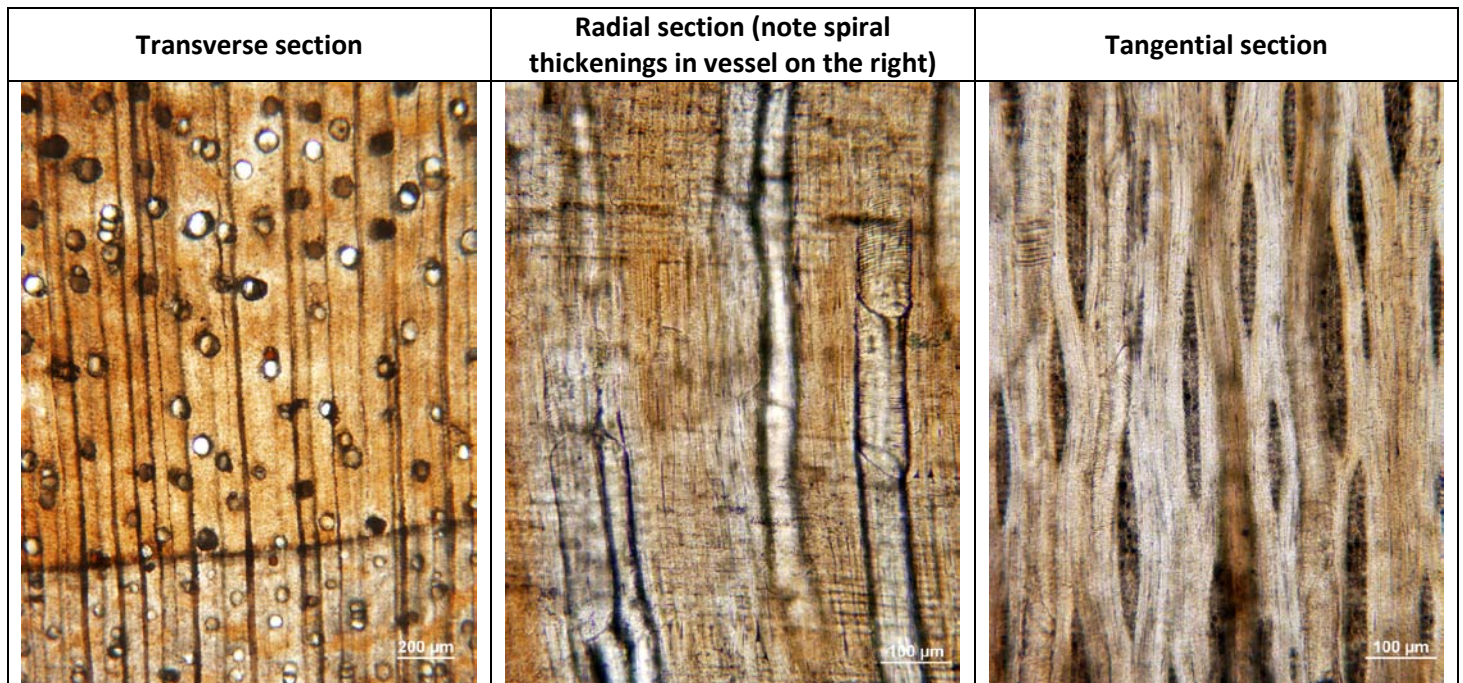


***Acer beckianum* (maple)**

Family: Sapindaceae

Naming reference: Prakash, U. & E.S. Barghoorn. 1961. Miocene fossil woods from the Columbia basalts of central Washington, I. Journal of the Arnold Arboretum XLII, 165-199

Other reference: Wheeler, E.A. & T.A. Dillhoff. 2009. The Middle Miocene wood flora of Vantage, Washington, USA. IAWA Journal, Supplement 7. 101p.



Photos courtesy Dr. E.A. Wheeler

Diagnostic features: Distinct growth rings and diffuse porous vessel arrangement. Approximately 60% of vessels are solitary, plus there are some short radial multiples. Solitary vessels are typically round in outline. Perforation plates simple with helical thickenings along the length of vessel elements (faintly visible in radial section photo above). Rays 1-3 seriate, mostly 3, homocellular, tending toward fusiform shape. Axial parenchyma are rare. Crystals are present in some axial parenchyma strands.

Discussion: Four different species of fossil maple have been described from wood deposits of the Columbia River Basalts. This particular species is one of three that fall into the 'soft maple' group with narrower rays. This species is separated from the other two soft maples by its high proportion of rounded solitary vessels, narrow rays that tend towards fusiform shape, and the presence of crystals in some axial parenchyma strands.

Beck (1945) listed maple as a common element of the Umtanum, Yakima Canyon, and Vantage wood assemblages. It has also been reported from Yakima Ridge and Squaw Creek/Badger Pocket. Fossilized maple leaves and seeds are commonly found in Cenozoic floras throughout the Pacific Northwest, and there are still several species native to the area today.



Acer osmonti – a fossil maple fruit (samara) from the Oligocene of Oregon