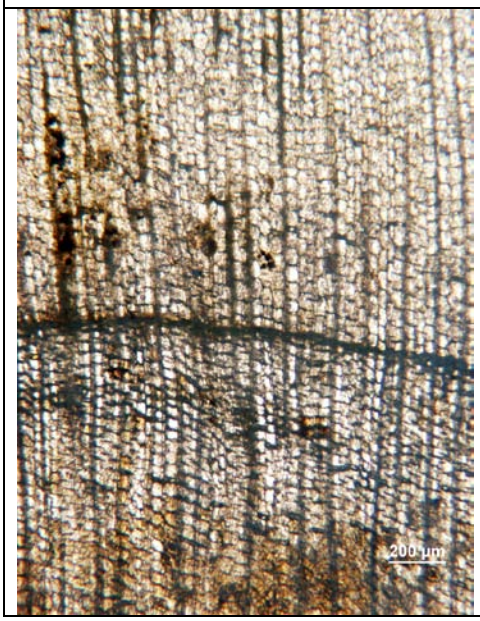
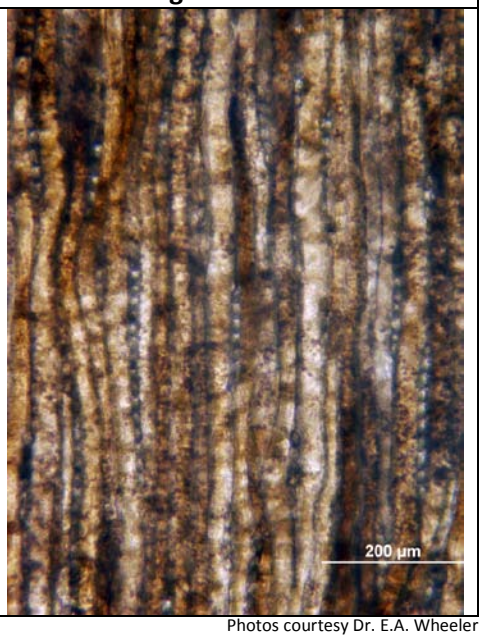
Taxodioxylon antiquum **(cypress, bald cypress, dawn redwood, redwood, sequoia)**

Family: Cupressaceae

Naming reference: Prakash, U. 1968. Miocene fossil woods from the Columbia basalts of central Washington, III. Palaeontographica Bd. 122, 183-200.

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

Transverse section	Radial section	Tangential section
		

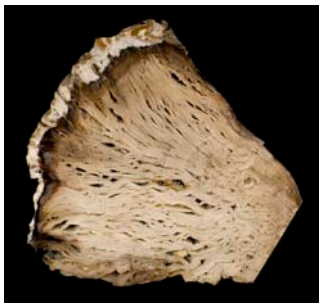
Photos courtesy Dr. E.A. Wheeler

Diagnostic features: Growth rings distinct. Tracheids angular, approximately equal in size. Gradual transition to latewood zone, which consists of radially compressed tracheids. Horizontal and axial resin canals lacking. Rays uniseriate, 2-24 cells high. Cross-field pits taxodioid. Axial parenchyma often visible in cross section as dark colored cells.

Discussion: Even in modern woods, it is very difficult to separate different genera within the cedar family based on wood anatomy. Identifications often rely on features which are not preserved in fossils, such as odor or heartwood color. Fossil specimens of the wood type featured on this page may actually represent several different genera such as *Taxodium* (bald cypress), *Sequoia* (redwood), *Metasequoia* (dawn redwood), and *Glyptostrobus* (Chinese water fir), all of which have been reported from the Tertiary of the Pacific Northwest.

This wood is superficially similar to *Cupressinoxylon* spp. and can be difficult to differentiate. In cross section, *Taxodioxylon* is often coarser grained with axial parenchyma visible as dark cells within the growth ring. This doesn't always hold true, however. Thin sections of well preserved specimens which show cross field pitting usually are necessary to definitively identify the wood type.

Taxodioxylon is known from most localities in the Columbia River Basalts. It is dominant in some areas, such as the upper levels of Saddle Mountains and some of the deposits near Sunnyside. Cypress 'knees' with characteristic void spaces are known from Sunnyside, Yakima Canyon, and Saddle Mountain. Quality slices of this type are sought after by collectors.



Sliced cypress 'knee' from the Columbia River Basalts.