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# Cupressaceae fossil remains from the Paleocene of Carneyville, Wyoming

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ABSTRACT

Conifer remains including petrified wood resembling *Sequoia*, and leafy shoots and seed cone scales of *Glyptostrobus* (Cupressaceae s.l.) were found in the late Paleocene Fort Union Formation (Tongue River Member) in the Powder River Basin of Wyoming, northwestern USA. These findings indicate either a wider distribution of both *Sequoia* and *Glyptostrobus* in the late Paleocene compared with narrow habitat of modern genera, or possibly that *Glyptostrobus*-like cones were borne on trees with wood resembling that of *Sequoia*. The well-preserved wood is assigned to the new species *Sequoioxylon carneyvillense* sp. n. while the cone fragments and foliage are assigned to *Glyptostrobus europaeus* (Brongniart) Unger. Wood anatomical features of extant cupressaceous genera including *Glyptostrobus, Metasequoia, Sequoia*, *Sequoiadendron* and *Taxodium* were studied to provide more information for the identification of fossils.

*Keywords*: late Paleocene, *Sequoioxylon*, *Glyptostrobus*, Wyoming, Cupressaceae, Fort Union Formation