We identified four gymnosperm genera: *Abies* sp. (fir), *Pseudotsuga menziesii* (Douglas fir), *Picea* sp. (spruce), and a fourth distinct but unidentified genus. Of these, *Abies* sp. is most common (46 samples identified), followed by *Pseudotsuga menziesii* (Douglas fir) and then *Picea* sp. (spruce). The unidentified genus is least common.

We used a suite of characters to identify the samples. *Abies* sp. was identified on the basis of possessing nodular end walls on the parenchyma, and taxodioid cross-field pitting, while lacking fusiform rays. *Pseudotsuga menziesii* was identified on the basis of possessing nodular end walls of the parenchyma, piceoid cross-field pitting, fusiform rays, and spiral thickenings of the longitudinal tracheids. This unique set of characters is exclusive to *Pseudotsuga menziesii*, allowing species level identification. *Picea* sp. was identified on the basis of possessing nodular end walls of the parenchyma, piceoid cross-field pitting, and fusiform rays, while lacking spiral thickenings of the longitudinal tracheids. The fourth genera possesses nodular end walls of the parenchyma, piceoid and cupressoid cross-field pitting, while lacking fusiform rays. Work to identify this genus is ongoing at the present time. Our preliminary assessment indicates that it may be either *Juniperus* sp. (cedar) or *Tsuga* sp. (hemlock).

We have primarily focused on identifying wood from the “Beach Area”. This setting was a shoreline at the time of deposition along the east edge of the lake. Large concentrations of logs, including whole trees, were intermixed with mastodon bones at this horizon. Thirty-five wood specimens were analyzed from the Beach Area. *Abies* sp. dominated the samples with thirty-one specimens, along with three instances of *Pseudotsuga menziesii*, and a single occurrence of *Picea* sp. Preliminary analysis of the other stratigraphic horizons in the lake yielded the same genera, but at a more uniform distribution. *Abies* sp. was slightly more prevalent than the other genera, but it did not overwhelmingly dominate the sample as it does at the Beach Area.

Work is ongoing to identify all specimens to genus and species level, to survey the maximum diameter of all samples, and to tie the taxonomic identifications to the stratigraphic column and time.

### The Dung Beetles of Snowmastodon

Frank-Thorsten Krell

With large mammals come dung beetles. When North America hosted a diverse mammal megafauna, the presence of a rich dung beetle fauna is expected. It comes to no surprise that amongst the insect remains from the Snowmastodon site, we found fragments of at least 18 specimens of Aphodiinae dung beetles (Coleoptera: Scarabaeidae), mainly heads and parts of elytra. These specimens were sorted to eight parataxonomic units which might represent six to eight species which is richer than most Pleistocene sites. The limited set of characters preserved together with the limited knowledge of the dung beetle fauna of the American West requires more time to assign the specimens to extant species and to determine extinctions with certainty.

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