

6 and 7) and *P. cristatus* (fig. 8 and 9) are almost identical in form, differing only in size. Both are normally straight and excavated longitudinally in the bark and surface of the wood, while those of *P. punctatus* (figs. 3 to 5) are seldom straight and are excavated obliquely or transversely through the bark and wood, and are often found with one wing of the nuptial chamber extended to accommodate a second female, agreeing almost exactly in this respect with that of the interglacial species.

The genus *Phloeosinus* is represented by three or four described species from Europe, one from the Himalayas, seven from Japan, one from Mexico, one from Guatemala and four or five from America north of Mexico. There are also several undescribed species that I have observed, in collections, recorded from Texas, Colorado and Canada. I consider this genus one of the oldest survivors of the Hylesinides group. It is not improbable that it reached its maximum development during the Cretaceous period, and that its representatives were then common enemies of the several species of *Sequoia*, *Juniperus*, *Librocedrus*, etc., having descended probably with little change in habit or structure, and shared with their surviving host plants the vicissitudes of the great and minor surface disturbances and climatic changes from the Mesozoic to and through the Cenozoic to the present.

Therefore, the exclusive association of the surviving species of this ancient genus of beetles with the survivors of a number of ancient genera of Cupressaceae and Taxodiaceae is of especial interest, since it seems to present some evidence of a closer natural relationship between these groups than has heretofore been recognized. Especially is this indicated in the fact that one or more species infest the *Sequoia*, one of the oldest representatives of the Taxodiaceae, and that so far none have been found to infest *Pinus*, *Picea* or *Abies*, with which the Taxodiaceae are thought by botanists to be more closely allied than to the Cupressaceae.

It seems quite important that an effort should be made to obtain more material from the buried interglacial and other forests and fossil wood, showing the work of insects, since it would lead to the determination of some interesting and important facts regarding the habits of prehistoric forms and their relation to primeval forest trees.