(op. cit., p. 85, pl. XXXII). His *Glyptotherium* n. sp. he called *Glyptotherium arizonae* (op. cit. p. 91, pls. XL-XLIV). He referred all of the species to the Upper Pliocene.

The birds of the collection were described by Dr. Alexander Wetmore (Proc. U. S. Nat. Mus., vol. LXIV, 1924, art. 5, pp. 1-18, figs. 1-9). *Kinosternon arizonense* was described by Charles Gilmore (Proc. U. S. Nat. Mus., vol. LXII, art. 5, pls. I-IV, text-figs. 1-7).

The following are the yet existing genera that are represented in the collection: *Equus, Lama, Odocoileus, Citellus, Geomys, Cratogeomys, Dipodomys, Peromyscus, Eligmodontia, Onychomys, Sigmodon, Neotoma, Neofiber, Lepus, Brachylagus, Testudo, Kinosternon, Rana* (or *Bufo*), and all the genera of birds. *Eligmodontia* and *Lama* no longer inhabit North America.

Doctor Gidley, in 1921, made a small collection of fossils at a point 5 miles west of Willcox. The species as determined are *Equus pacificus?, E. niobrarensis?, Camelops niobrarensis* and *Elephas boreus.* These animals are believed by the present writer to appertain to the first interglacial stage. The presence of the elephant appears to indicate the prevalence of a cool climate. This may have been near the end of the stage, on the approach of the Kansas glacial stage; or possibly the Kansan stage had already arrived.

In June 1926, Dr. Kirk Bryan and Dr. J. W. Gidley published a paper (Amer. Jour. Sci., ser. 5, pp. 477-488) on this collection entitled *Vertebrate Fossils and their Enclosing Deposits from the Shore of Pleistocene Lake Cochise.* The following list of species was determined by Doctor Gidley. Gidley's names if different are put in parentheses.

Equus pacificus? Leidy	**Elephas boreus Hay (E. primigenius?)**
Equus hatcheri? Hay	**Camelops niobrarenis (Leidy)**
Equus sp. indet.	**Bison sp. indet.**

Dr. Bryan concluded that the fossils were probably laid down in an ancient lake, at a depth of 8 feet. His articles closes thus:

Either these fossiliferous deposits do not belong to Lake Cochise or our estimates of the rate of erosion and sedimentation in Pleistocene time are faulty, or horses and camels lived on in southwestern United States to later times than has been supposed.

The present writer will not presume to indicate which of the options his friends shall accept.

THE GREAT BASIN (NEVADA AND UTAH)

In the study of the geology and the palaeontology of the Great Basin a consideration of the ancient Lake Bonneville and Lake Lahontan is of prime importance. This is not because the deposits of these lakes furnish any considerable number of fossil vertebrates, for these are few. Within the areas which were once occupied by these extinct lakes are now found old beaches, cliffs, terraces, tufas and lacustral deposits, all of which are believed to form records from which may be read the history of the lakes. From these records, their changing areas, their depths and the character of the waters at different times seem to be susceptible of determination. In a few places the old shore lines have come into relation with moraines which glaciers carried down from