

The astragalus of the Haile XV A *D. bellus*, along with other specimens of *D. bellus* from Florida Pleistocene sites, differs little from Recent specimens of *D. novemcinctus*, except for size. A comparison of the astragali of *Dasypus* from various stages of the Pleistocene reveals a progressive size increase similar to that of the chlamytheres.

The dermal plates of UF 16698 do not differ from any other specimens of *Dasypus*, except for size. Martin (1974:41) measured samples of plates from several Florida sites and showed little overlap in plate size between *D. bellus* and *D. novemcinctus*. His measurements indicate that the size of the plates does not follow the trend through the Pleistocene that is evident in other parts of the *D. bellus* skeleton. The Coleman IIA plates are notably small and overlap slightly in size with those of *D. novemcinctus*. However, this is probably a function of the small sample size used; there are approximately 2500 plates of diverse sizes in a single armadillo carapace, and there is no satisfactory method for determining from which parts of the shell the sample may have come. Size trends based on plates thus should involve large samples in order to insure accuracy.

The morphological differences between the Haile XV A material and later *D. bellus* material are very slight and presumably have a variational basis. Consequently, the Haile sample is referred to *Dasypus bellus*.

*Dasypus bellus* has been considered a southern North American species of Rancholabrean age. However, Martin (1974) extended the temporal range of the species back into Irvingtonian time, and the present study places the earliest record in the Blancan.

A question arises regarding the relationship between *D. bellus* and *D. novemcinctus*. These animals are clearly more closely related to each other than to any other armadillos (Auffenberg 1957), and it is uncertain whether *D. novemcinctus* was derived from *D. bellus* or existed allopatrically with that species during the Pleistocene, replacing it during the last few thousand years. If *D. novemcinctus* did evolve from *D. bellus*, it appears to have done so quite rapidly. In Miller's Cave (Patton 1963) a date of ca 8000 BP was given for the Travertine stratum bearing *D. bellus* remains, as compared to ca 3000 BP for the overlying Brown Clay deposits containing *D. novemcinctus*. Thus, the change occurred in that area within a span of only 5000 years. Another possibility is that *D. novemcinctus* existed somewhere else during the Pleistocene and replaced *D. bellus* very late in the Pleistocene. If so, it would be expected earlier in some Central or South American Pleistocene deposits. To date, the only fossil record of *D. novemcinctus* is from Miller's Cave, and the only Late Pleistocene armadillos from Mexico are referable to