

in allometric skull growth, although the skulls of *G. polyphemus* and *G. flavomarginatus* are considerably wider than those of *G. agassizi* and *G. berlandieri*.

**INTRASPECIFIC POPULATION COMPARISONS.**—Only in *G. polyphemus* is there sufficient material to make population comparisons. Two populations were compared, of which one comprised a sample of 44 specimens (from north-central Florida and the east coast of the Florida peninsula) and the other 23 specimens (from the Florida panhandle, southeastern Georgia, southern Alabama, and Mississippi). Specimens in the western sample have slightly wider heads than those in the eastern (peninsula) sample, a situation already suggested by Legler (1959) (greatest width of skull as percentage of condylobasilar length: western  $\bar{X}=0.88$ , eastern  $\bar{X} 0.95$ ;  $P=0.08$ ). The alveolar angle is wider in the eastern ( $\bar{X} 82.5$ ) than in the western ( $\bar{X} 67.5$ ) sample. When the series of *berlandieri* is separated into two samples (one north of the Rio Grande and another south of that river), the northern specimens seem to have a wider interorbital area, although the difference is not statistically significant ( $P=0.42$ ). It is reasonable to assume that when more specimens are examined the character will be found to be geographically variable in *berlandieri*, perhaps even clinal.

**INTERSPECIFIC DIFFERENCES.**—It is shown in Table I that many structural skull features are shared by *G. polyphemus* and *G. flavomarginatus* on the one hand, and by *G. agassizi* and *G. berlandieri* on the other. The most obvious of these is the proportionate width of the skull, as measured at the widest point (across the postorbital bridge). *Gopherus polyphemus* and *G. flavomarginatus* have wide skulls, whereas *G. agassizi* and *G. berlandieri* have relatively narrow skulls. Mean proportional measurements (greatest skull width/condylobasilar length) of the four species are as follows: *polyphemus*, 0.88; *flavomarginatus*, 0.82; *agassizi*, 0.75; and *berlandieri*, 0.76. The difference between the means of *polyphemus* and *flavomarginatus* is not significant ( $P=0.32$ ), as is also true in means of *agassizi* and *berlandieri* ( $P=0.71$ ). When the data for both species in each group is grouped (*polyphemus*+*flavomarginatus* versus *agassizi*+*berlandieri*), however, the differences in combined means is highly significant ( $P=0.01$ ). There is no significant difference in the interorbital width of these four species (Table 1).

Skull height is not significantly different in the four Recent species (Table 1), although Mexican specimens of *G. berlandieri* have proportionately higher skulls than those from Texas.

The postorbital bar shows considerable variation with regard to the shape of its constituent elements. To a certain extent, some variational