

L/Plastral L \bar{X} =2.57; *flavomarginatus* 2.99; *agassizi* 2.77; *berlandieri* 2.67) (Fig. 33, IX).

11. The entoplastron is very often narrow and long in *berlandieri* (Entoplastral L/Entopl. W \bar{X} =0.89), with the lateral apices of the pentagonally-shaped bone often in the anterior half. In the remaining species these apices are always in the posterior half. The element is usually widest in *polyphemus* (1.11), and intermediate in *flavomarginatus* (0.95) and *agassizi* (1.03) (Fig. 33, X).

12. In all adult tortoises, the periphero-pleural articulation is completely fused, whereas in subadults this is not so. This fusion occurs at different sizes in each of the *Gopherus* species, and is obviously directly correlated with adult size attained by each of the species. In *berlandieri* fusion occurs at a shell length of about 130 mm, in *agassizi* about 180 mm, in *polyphemus* about 225 mm, and in *flavomarginatus* about 240 mm (Fig. 33, XI).

13. From the front, the anterior opening of the shell is more concave dorsally in *berlandieri* than in the remaining three species (Fig. 33, XII).

14. In adult males the epiplastral projection is narrowest and longest in *berlandieri*, and is often quite bifurcated. In *agassizi* it is quite variable, ranging from this extreme to a wide, medium-length process with a shallow notch. The projection in *polyphemus* is proportionately widest and shortest, is never bifurcate, and often lacks even the median anterior notch. *G. flavomarginatus* broadly overlaps the lower end of the range of variation in *agassizi* and overlaps almost the entire range of variation of *polyphemus* (Fig. 33, XIII).

LITERATURE CITED

- Auffenberg, W. 1961. A correction concerning the phalangeal formula of the turtle *Styemys nebrascensis* Leidy. *Copeia* 1961(4): 496-498.
- . 1963. A redefinition of the fossil tortoise genus *Styemys* Leidy. *J. Paleontol.* 38(2): 316-324.
- . 1966a. The carpus of land tortoises (Testudinata). *Bull. Florida State Mus., Biol. Sci.* 10(5): 159-191.
- . 1966b. On the courtship of *Gopherus polyphemus*. *Herpetologica* 22(2): 113-117.
- Bogert, C. M., and J. Oliver. 1945. A preliminary analysis of the herpetofauna of Sonora. *Bull. Amer. Mus. Nat. Hist.* 83(6): 297-426.
- Bramble, D. M. 1974. Occurrence and significance of the os transiliens in gopher tortoises. *Copeia* 1974(1): 102-109.
- Brattstrom, B. 1961. Some new fossil tortoises from western North America, with remarks on the zoogeography and paleoecology of tortoises. *J. Paleontol.* 35(3): 543-560.
- Carr, A. F., Jr. 1957. *Handbook of turtles*. New York: Constock Publ. Assoc. 542 p.