with small testes in late July and August. In two males with greatly enlarged testes in late August, sperm were much more numerous. Sperm were most abundant in epididymal smears of four males in April. The epididymides of these turtles were slightly distended and contained a milky fluid, presumably semen, whereas the epididymides of turtles in July and August lacked any noticeable fluid.

Of the four males lacking sperm in the epididymides, two were clearly subadult and probably immature (carapace lengths 85.1 and 89.2 mm), whereas two collected in the last week of July appeared to be adults on the basis of size (117.2 and 131.5 mm) and external appearance. Testes of the last two contained no sperm and were very small, with combined weights of trace and 0.08 g and volume displacements of 0.01 and 0.12 ml, respectively. Two additional adult-sized males (testes 0.07 and 0.15 g; 0.08 and 0.18 ml) caught at about the same time (26 July) had sperm in their epididymides. These individual differences may be explained by prior expenditures of sperm toward the end of the spring-early summer mating period at a time when the ensuing spermatogenic cycle may well be in its early stages before new sperm have matured. Mature spermatozoa were found in the epididymides of *T. c. carolina* throughout the year (Altland 1951) and in *T. o. ornata* throughout the activity season (Legler 1960b). Tinkle (1958b) discovered no sperm in the testes of 20 large male *Sternotherus carinatus* and concluded that they were "out of season" when collected, commenting: "The complete absence of spermatozoa was unusual, as a few generally may be found even in out of season males of other forms." Moll and Legler (1971) noted the presence of some epididymal sperm in *Pseudemys scripta* from Panamá in all months, with fewest numbers occuring in June and July.

Seasonal changes in testis size in turtles is generally coincident with the stage of spermatogenesis, the testes reaching maximum size at the height of the cycle before the spermatozoa enter the epididymides (Risley 1938; Altland 1951; Gibbons 1968c). Fluctuation in testis size is evident in *T. coahuila* (Table 2). The testes were small in specimens from April and July, but had increased dramatically by late August in two of four specimens. Available data on testis size and relative abundance of sperm indicate a spermatogenic cycle not greatly different from the north temperate pattern for turtles in which spermatogenesis takes place in summer and mature sperm overwinter in the sex accessories (Miller 1959; Moll and Legler 1971).

On the basis of observed matings of *T. coahuila* in nature and under semi-natural conditions, and because of its habitat in a southern, thermal-spring environment which permits a more extended period of sexual