

(air 23.5°C). A female found resting in a horse path 4 August 1965 at 6:25 AM had a cloacal temperature of 22.4°C (air 21.1°C). The morning was cloudy, cool, and damp, with a brisk easterly wind. On the afternoon of another overcast day, 12 July 1965, a turtle in grass near a marsh, shaded and on a cool substrate, had a cloacal temperature of 28.8°C (air 31.6°C). The highest cloacal temperature recorded during this study was 34.5°C in a male on 23 August 1965 at 5:25 PM in grass about 50 m from the nearest marsh. The weather was clear, air temperature 32.9°C. This body temperature was approaching the upper critical voluntary thermal level for the species (see below).

Although Heath (1964) has stressed that thermoregulation cannot be definitely ascribed to an animal whose activities prior to measurement are not fully known, field evidence suggests that *T. coahuila* does exhibit basking behavior. The most convincing data for elevation of body temperatures by basking were obtained on 21 December 1965. Air temperatures at midday varied between 17.0 and 19.1°C under a clear, sunny sky with a moderate southerly breeze. Three turtles caught on land had cloacal temperatures considerably higher than air temperatures (mean difference 10.8°C; range 6.5–14.0°C). The mean cloacal temperature for these three turtles was 29.2°C, while three other individuals in water at the same time had cloacal temperatures 5.0 to 9.0°C lower, corresponding to the water temperatures.

In April 1965 and 1966, mean air temperature at times of turtle captures was 27.2°C (slightly, but not significantly greater than marsh water temperatures) (Fig. 9). All but 2 of 6 days during April 1966 were sunny and clear, probably contributing to the mean cloacal temperature being slightly above that of the water. On the morning of 7 April 1966, three of five turtles captured had cloacal temperatures from 0.2 to 1.7°C higher than the water, despite a completely overcast sky and light precipitation.

Data obtained in summer, like those from April, are less strongly indicative of basking, but appear pertinent. Cloacal temperatures of *T. coahuila* on a dry substrate in summer were raised at most only 2.4°C above air temperatures. On 31 July 1965 at 8:05 AM, cloacal temperature of a female on dry ground at a marsh edge was 25.3°C, 2.1° above the air temperature (23.2°C). The morning was hazy, with a slight easterly breeze. Cloacal temperatures of two turtles also found on land during the morning 2 days later were near the high prevailing air temperatures. One had a cloacal temperature of 31.9°C (air 34.3°C), and the other registered 33.3°C (air 32.9°C). These observations further indicate that *T. coahuila* are capable of achieving elevated body temperatures, even under overcast skies. Changes in body temperature of *T.*