This study confirmed that reptiles are not "cold-blooded" and that they can maintain their body temperature at high levels by behavior. Yet it also showed that temperature, tropical, alpine, desert, shade-dwelling, and burrowing reptiles have a diversity of thermal requirements and abilities to regulate body temperature. It introduced the notion of physiological control of temperature regulation in some species. [The SC^3 indicates that this paper has been cited in over 260 publications, making it the most-cited paper for this journal.]

All Reptiles Are Not Alike

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The classical R.B. Cowles and C.M. Bogert^1 paper on body temperature of desert reptiles showed that reptiles were not cold-blooded but behaviorally thermoregulated largely by the absorption of solar radiation as to maintain a desired or "noose-em and goose-em" school of thought in body temperatures above ambient. These studies had been on desert reptiles only, yet they opened the door to the notion of physiological thermoregulation. From behavioral regulation to physiological regulation has been one of the major achievements in modern biology.

Besides, it is fun晴 temperature in hand, up to an aquatic turtle basking on a log, but perhaps not so fun being kicked in the face with sand as a female green sea turtle covers her eggs while I take her body temperature (female sea turtles generate about 28 C of heat in the process of egg-laying). It is fun plucking frogs and salamanders from briné-liads or ponds, but perhaps less so when it is night and it is a 4 C Oregon stream. Perhaps it is not fun taking the temperature of a warm rattlesnake at one end while holding the beast down at the other end. But to see new and different species and to see them behave and thermoregulate in diverse ways, there is the fun of it all.

My major concern now is that many of the places to which I traveled in the 1950s-1960s are now destroyed or degraded. So, while I continue my studies on temperature, behavior, and ecology, I spend much more time working on habitat conservation and other environmental concerns. We have so little time to save habitats and organisms for the next dozen generations of scientists to study and enjoy.


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