

POSSIBLE COMMUNICATION BETWEEN EGGS OF THE AMERICAN ALLIGATOR.—On 24 July 1966, I collected two clutches of alligator eggs from a small cypress swamp near Lehigh Acres, Lee County, Florida. The eggs, 47 from nest A and 24 from nest B, were removed and placed in styrofoam boxes. Later the boxes were filled with organic debris closely simulating natural nesting material. A series of temperature readings indicated that the slow decay of this moist humus produced a uniform temperature of 87 F. Forty eggs from nest A and eight from nest B were closely packed in box #1; 15 eggs from nest B were similarly arranged in box #2. Six additional eggs from both nests were separately distributed in other containers; the remaining eggs, being rotten, were discarded.

Approximately two weeks before the eggs were to hatch, the young alligators could be felt moving inside the eggs. Movement increased in frequency and intensity as hatching approached. On the morning of August 25, faint grunting could be heard from within the eggs (box #1). The sound increased to a climax several hours later as the first young emerged. Within the next half hour all of the young had begun to hatch, although several remained within the eggs with only their heads protruding. The alligators from nest B appeared with large quantities of unabsorbed yolk and died within a few hours. Several, also from this nest, remained in their shells with only their heads exposed and were dead the next morning. The eggs incubating in box #2 did not hatch until two weeks later; the six individual eggs hatched independently as much as three days apart from their siblings.

In view of this preliminary information, I believe that there is communication between the eggs of this reptile. The evolutionary significance of such behavior is obvious. Young alligators emerging long before the mother opens the nest might suffocate. Individuals remaining within the egg, even for a few hours after the nest is opened, would be subject to attack by predators.

Communication among the siblings may not be restricted to the grunting of the hatchlings. The movements of the forming embryos would appear to be involved, for it seems that as these movements become more frequent and louder they stimulate others in the nest, perhaps even regulating their growth.—DAVID S. LEE, *Department of Biology, Florida Southern College, Lakeland, Florida.*