

It was easy to see that the eggs were normal, for the embryo could be seen moving in them. In about seven days the eggs had hatched, the jelly-like cases lying flattened out on the sphagnum. After very close inspection of the sphagnum through the glass I saw a tiny frog not as large as a house fly seated on the moss. Its appearance was exactly that of the mature frog I had previously found so I knew that it was the young of that frog. I have found many nests since then, all made on the ground or close to it, in damp, shady places.

Having occasion to request some information from the Smithsonian Institution on another subject I casually mentioned my experience; Dr. Leonhard Stejneger kindly identified the specimens and suggested publication of this note.—GEO. H. SKERMER, *Tampa, Florida*.

REPTILES AND AMPHIBIANS FROM BARBADOS IN FIELD MUSEUM.—In drawing up a catalogue of the Lesser Antillean collections of amphibians and reptiles in Field Museum, undertaken at the request of Mr. Karl P. Schmidt, Curator of Reptiles, I find a small series of specimens from Barbados which it seems to be desirable to place on record. These specimens were collected and presented to Field Museum by Mr. Stuart J. Walpole, editor of the *American Field*, in 1935. The species are the following:

Bufo marinus, seven specimens, Nos. 21092-4.

Eleutherodactylus martinicensis, eleven specimens, No. 21095.

Hemidactylus mabouia, one specimen, No. 21096.

Anolis roquet extremus, four specimens, Nos. 21097-21100.

Gymnophthalmus laevicauda, four specimens, No. 21101.

Eleutherodactylus martinicensis and *Gymnophthalmus laevicauda* seem to be additions to the forms recorded from Barbados. The herpetological fauna of the island includes, in addition to the above list (according to Barbour's list of Antillean amphibians and reptiles, *Bull. Mus. Comp. Zool.*, 82, 1937: 77-166):

Phyllodactylus spatulatus Cope

Kentropyx intermedius Gray

Leptotyphlops bilineata (Schlegel)

Dromicus perfuscus Cope

In the specimens of *Gymnophthalmus laevicauda* the scales around the middle of the body are 13 in all; dorsals from interparietal to base of tail 33; lamellae beneath fourth toe 14 or 15. The largest specimen has narrow but clearly developed dorsolateral lines extending a little beyond the insertion of the arm.—ROBERT A. BURTON, *Evanston, Illinois*.

RECORDS OF THE SALAMANDER *TYPHLOTRITON*.—*Typhlotriton spelaeus* Stejneger has been reported from southwestern Missouri, northern Arkansas, and extreme southeastern Kansas. There seem to be no Oklahoma records with the exception of casual mention by Chase and Blair (1937, *Amer. Midl. Nat.*, 18:220). The present records extend the range westward to what is probably the limit of distribution in that direction in view of the strict ecological restriction of the species.

Of the four locality records, two are from caves and two from springs. The thirty-seven specimens collected are all larvae. The records are as follows:

Bat Cave, 5 miles south of Kansas, Adair Co., Okla. This cave has a small entrance so that comparatively little light enters. The cave stream is rock bottomed, but empties upon a bed of guano and sinks into the ground just inside the entrance; *Typhlotriton* is restricted to the rocky part of the stream.

Dec. 27, 1935. Two larvae: 70.9, 63.5 mm.

July 10, 1936. Four larvae: 74.3, 63.6, 60.8, 19.6 mm.

July 14, 1936. Four larvae: 52.0, 50.9, 28.3, 24.7 mm.

Aug. 30, 1936. Six larvae: 75.2, 70.0, 55.4, 40.5, 35.2, 25.5 mm.

July 4, 1937. Four larvae: 77.5, 73.1, 72.9, 67.7 mm.

Aug. 7, 1937. Three larvae: 58.2, 41.0, 36.3 mm.

Aug. 19, 1937. Five larvae: 59.0, 53.7, 48.5, 38.0, 32.1 mm.

July 19, 1938. Two larvae: 79.0, 61.1 mm.

Spring Cave: a small cave, entirely rock bottomed, about $\frac{1}{4}$ mile from Bat Cave; the cave stream sinks into the ground just outside the entrance.

July 13, 1936. One larva: 18.9 mm.

Spring 5 miles south of Locust Grove, Mayes Co., Okla.

Mar. 6, 1936. One larva: 80.4 mm.

Spring at mouth of small cave 6 miles northeast of Tahlequah, Cherokee Co., Okla. The larvae from this locality are very noticeably darker than those from the other localities.

Aug. 19, 1937. Five larvae: 59.0, 53.7, 48.5, 38.0, 32.1 mm.

The author is indebted to Prof. H. D. Chase of the University of Tulsa and to his brother, P. F. Blair, Jr., for aid in collecting. The first individuals taken were identified

by Mr. Joseph E. Bailey of the University of Michigan; subsequently all have been checked with specimens from the type locality (Rock House Cave, Barry Co., Missouri).—ALBERT BLAIR, *University of Indiana, Bloomington, Indiana*.

MATING OF THE BOX-TURTLE ENDING IN DEATH TO THE MALE.—

During the past five years the writer has walked about 1500 miles over all the slopes and ridges of Bull Run Mountain in Virginia in a study of the flora of the region. The common eastern box-turtle, *Terrapene carolina*, is very abundant here and is frequently met with throughout the woods and fields. During this period a number of dead turtles have been encountered, practically all males found lying upon their backs. In nearly every instance these specimens have been found in woodland, reposing upon soft beds of leafage. The specimens which died in the reversed position seem to have been unable to right themselves in the soft, yielding leaf debris. One may ask why the males more than the females should be subjected to the hazard of falling upon their backs. This is easily accounted for as the aftermath of a successful mating.

In successful copulation, at least in the last stages of the act, the male turtle will be found to have a nearly vertical position, or even to lean far backward. In this position there is an insertion of the male's legs between the plastron and carapace of the female, and her legs are sometimes locked in a strong grip around his to hold him in position. Following relaxation, the male, leaning far backward, withdraws his legs with her cooperation, and he invariably, it would seem, falls back upon his back. Should this happen in beds of soft, yielding leafage, he may never be able to right himself, and will die of weakness and starvation.

To right itself, the turtle extends its head as far outward and downward as possible to pivot its snout upon the earth. Then with a twisting movement, using its head as a lever, it throws itself over to the normal position, using the legs to assist this movement. But in loose and soft leafage and ground debris its head may fail to function as a fulcrum and lifting agent and the legs can get no grip upon anything solid, so that the poor creature is doomed to die a lingering death from starvation, while the female moves away with no further concern regarding its unfortunate mate.—H. A. ALLARD, *Washington, D. C.*

THE EFFECT OF *CONIOPHANES* POISONING IN MAN.—In April, 1936, the author was bitten between the second and third finger of the left hand by a 15 cm. specimen of an opisthoglyph snake, *Coniophanes imperialis*. The bite caused an itching and burning sensation in the region of the punctures. A short time later the two fingers became numb and swollen, and a red discoloration was noticeable. The slight pain decreased in a short time, though the fingers remained swollen for nearly three days. No treatment or especial attention was given to the bite.

An average sized *Coniophanes* was made to bite the author between the first and second fingers of the left hand on April 7, 1938. The short fangs, 2.5 mm. long, could be felt as they entered the flesh. Almost immediately there was a sharp pain resembling that of a bee sting. Although the snake attempted to chew, the fangs entered only once. Within an hour the pain had extended up the arm to the elbow. The hand gradually became numb, swollen, and practically useless. There was red discoloration of the hand, particularly around the punctures. The entire hand perspired profusely, and a small amount of amber-colored fluid exuded from both punctures. Five hours after being bitten the pain decreased and was noticeable only in the hand, which remained swollen and discolored. Twenty-four hours after the bite the general pain was gone, though the hand remained swollen and numb, with a slight soreness in the area of the punctures.

Three days after being bitten a slight swelling still remained and there was still some lameness in the muscles. In three weeks the fang marks had disappeared. The only other effect attributed to this experience was a nervousness, perhaps due to the uncertainty of the outcome.

Young specimens of *Coniophanes* occasionally attempt to bite, but adults (which average about 45 cm.) will not bite unless forced to do so.—BRYCE C. BROWN, *Harlingen, Texas*.