

HISTORICAL PERSPECTIVES

Snake Eats Snake¹

C.W. Kempton

Oro Blanco, Arizona

While walking over a dry mesa, yesterday, I noticed a small snake slowly crawling to the shelter of a mesquit bush. On capturing it, I found it to be of a very dark olive-green color, in large, square pattern, the lines between the plaids being of lighter green; underneath, white, with very dark-green blotches. Its head was very dark green, and rather small; it had small fangs. The length of the snake was nineteen inches. Noticing that the body seemed much distended, I opened it, and found, nicely

packed away inside, the body of an ordinary, brown, striped "grass snake," as we call them here, twenty-two inches long. This green snake may be a new species of snake-eating serpent. The grass snake is very swift, and I am puzzled to know how the green snake caught it; it was swallowed head-first.

¹ Originally published in *Science*, Vol. 20, No. 498 (19 August 1892), p. 107.

Snake Story²

Mrs. W.A. Kellerman

Columbus, Ohio

At propos of the interesting notes on snakes, lately published in your columns, I would like to relate the following:—

I think it was about the middle of last June that our little boy, who is interested in collecting various natural history objects, brought home a full-grown water-snake. He procured a box of generous dimensions, one whole side of which he covered with wire-screen, such as is used in windows. A small slide was made in the top of the box, so that the porcelain tray (such as photographers use for developing trays), which he placed within, could be kept filled with water, and also for the introduction of food.

This box was thenceforward "the snake den," and here the snake passed the remainder of its existence. A small frog, several grasshoppers, and various insects were dropped through the opening in the top of the box from time to time, but we are not sure whether the snake ever deigned to taste a morsel during her entire captivity; certain it is, however, that if she did finally taste the frog, she did not find it a very appetizing meal, for the little frog hopped about in the box for days and days without any food itself. It was just as apt to rest upon the body of the snake as anywhere else, each seemingly indifferent to the presence of the other. The grasshoppers also were entirely ignored. The snake was left in the box, in the back-yard, during the months of July and August, with no care whatever, we being absent during that time, and the little boy who had agreed to look after it having deserted it.

What was our surprise, after our return early in September, to find one day that Mrs. Snake had giv[en] birth to thirteen little ones. Such a little, writhing, squirming, snaky mass! The little snakes were about five inches long, and soon became quite active. In the course of a few weeks they were much more ready to take their own part than their mother seemed to be. She had

probably learned by experience that it was of little or no avail to "fight back," and contented herself with running out her forked tongue when irritated, and then trying to creep out of harm's way. The little ones, on the contrary, would crawl up the screen as far as possible, and when pushed off, with a straw or wire introduced through the screen, they would at once crawl up again, run out their little tongues, and show all the rashness of youth.

Wondering how far the maternal instincts were developed in the mother snake, whether she would try to defend or protect them, the young snakes were frequently irritated, in order to arouse, if possible, her defensive propensities; it was all to no purpose; she seemed a heartless mother, ignoring wholly that her offspring were in danger. A long wire was often thrust into the box, and under a little snake, which could thus be dangled before the old snake in a most irritating manner. But, whether from fear on her own part, or utter indifference to the welfare of her young, she paid no attention whatever to the provocation.

The mother snake lived until the middle of October, when she succumbed to the white frosts of autumn.

A few weeks later two of the young snakes fell asleep; one of them was given to a little schoolmate, who put it in his pocket and took it to school, when, lo! and behold! the warmth from his body resuscitated it, and the "bad boy" played with it in school. To the teacher's question as to what he had, he replied, "A shoestring!"

Learning thus that possibly the remaining little snakes might sleep (hibernate) through the winter, soil, small stones, dead leaves, etc., were placed in the box, and they crept away out

² Originally published in *Science*, Vol. 21, No. 520 (20 January 1893), pp. 36–37.

Editor's comments: Three Snake Stories

Those of us living in the age of the Internet often forget how fast and far science has come. The journal *Science* is published by the American Association for the Advancement of Science and was established in 1848. The journal has come out weekly since 1880, leaving a record of what was considered noteworthy for the past 130 years. Among other topics, the current issue (Vol. 320, No. 5877) discussed climate change, quantum dots, nanotubes, and DNA extracted from fossilized feces left by pre-Clovis humans — none of which would have made sense to the original authors and readers of the journal.

Organismal biology has been featured in *Science* throughout its existence. Here we feature three short pieces that discussed snake biology. The oldest and shortest, from 1892, described a snake found in the stomach of another snake. The descriptions of the animals are so vague that we have been unable to determine what species are described. We know a lot more about snake diets today, yet notes such as this still appear and convey new information. For example, a report due to be published soon in *Herpetological Review* describes, for the first time, cannibalism in *Alsophis portoricensis*. Although the lack of specific information would make the Kempton piece unacceptable in any journal today, we still need good natural history observations.

The second piece, published a year later, also is anecdotal: the author's son got a snake, which gave birth. The author, clearly a layperson, was astounded by how long it took the poor animals to die in the absence of food, and how lacking in maternal instincts the mother was in the face of continued harassment of her offspring. Today, none of this would be news. At the time, it was deemed worthy of publication.

The final piece, now just over 100 years old, is the only one penned by a scientist, albeit a geologist. Clinton Hart Merriam, named in the article, was one of the giants of natural history during his lifetime (1855–1942). Although his focus was on birds and mammals, his many contributions are still recognized in scientific names such as the Canyon Lizard (*Sceloporus merriami*), found in Texas and Mexico. The other professional mentioned, Leonhard Hess Stejneger, was Curator of Herpetology and later the Head Curator for Biology at the Smithsonian. In the late 1800s, another herpetological giant, Edward Drinker Cope, described in his honor *Zamenis stejnegerianus* (now included in *Coluber constrictor*, the Black Racer) and *Eleutherodactylus stejnegerianus*, Stejneger's Rain Frog, a name still recognized today.

Gad Perry



GAD PERRY



APRIL BATES

Apparent cannibalism in Puerto Rican Racers (*Alsophis portoricensis*). This snake (top) died in an effort to cannibalize another individual and this apparent effort to kill and consume another snake ended with humans “rescuing” the intended victim (bottom).

of sight. Whether they are dead, or only sleeping, we do not know. They lived, however, some seven or eight weeks, were active, seemed well and happy and, as far as we know, never ate a mouthful of anything during the entire time. I neglected to mention that the old snake shed her skin once during her cap-

tivity, unfortunately, it was during our absence, and we did not witness the operation.

It certainly seems strange that, with so much fasting, they none of them should look thin and poor, but should apparently grow and increase when having consumed nothing.