

snakes were found dead on the prairies; all, apparently, headed for Stony Mountain. In spite of this destruction, thousands of Gartersnakes were yet to be seen at Stony Mountain and Balmoral, till they were destroyed for nuisances, although all were of the same harmless, even beneficent, species.

In June, 1902, at Shoal Lake, I got a female Gartersnake with 26 eggs ready for hatching; they were in one column of 21 and a short parallel column of 5. The stomach of this snake was examined by Dr. S. D. Judd, of the Biological Survey, Washington, D.C. He reported its contents as follows:—"Hind legs and pieces of stomach of *Rana pipiens*, one *Agonoderus pallipes* and another small carabid beetle, one tenebrionid beetle, one caterpillar (*Agrotis*), two flies, one ichneumon fly (Hymenoptera), one aculeate hymenopter (*Pompilus*), eight spiders, one ragweed (*Ambrosia*), two seeds of *Polygonum*. The insects were in a finely comminuted state." Whether they were originally swallowed by the frog or the snake is not clear. A case in which the tables were turned, so that a small Gartersnake was even devoured by a Wood-frog is recorded by John J. Schoonhoven, in *Guide to Nature*, April, 1910, p. 400.

In late summer, as with all Gartersnakes, the young of the species are born alive. According to H. A. Surface (*Serpents of Perna*, 1906, p. 145), the young in Pennsylvania are born between July 25th and August 25th. The mother "lives near the young and guards them during the fall. They pass the winter in rubbish, in the earth, beneath stones, or in hollow logs; and in spring the young shift for themselves."

#### THE PLAINS GARTERSNAKE,

*Thamnophis radix* (Baird and Gerard).

This species is much like *sirtalis*; but it has the light side-stripes on the third and fourth row of scales; whereas, *sirtalis* has them on the second and third.

A specimen that I took at Carberry, in 1883, was identified by Dr. J. H. Garnier as *radix*. Donald Gunn took another at Lake Winnipeg.

Dr. Stejneger gave this name to one I sent him from Winnipeg; and Dr. E. Coues reported it along the boundary at Pembina, Turtle Mountain and Souris River; so that it is probably of general distribution in southwestern or prairie Manitoba.

#### THE GREEN-SNAKE OR GRASS-SNAKE, *Liopeltis vernalis* (Harlan).

This brilliant little creature is abundant along the Assiniboine river, south of Carberry. During August, Green-snakes can be seen in numbers where the hot, sunny banks of the river valley rise near any

grassy thickets, affording basking-places near coverts of safety. It is also reported from Winnipeg and Shoal Lake and Boissevain. Unfortunately, its exquisite green is lost in alcohol, being replaced very soon by a pale-blue. The species is perfectly harmless.

An individual that I caught on the banks of the Assiniboine, July 14, 1884, and kept captive at Carberry, produced six eggs on July 27th; it refused all food and died July 31st.

#### RED-BELLIED SNAKE OR COPPER SNAKE,

*Storeria occipito-maculata* (Storer).

This species is rare, compared with the foregoing. I had heard of it several times before seeing it or securing a specimen. The one in my collection was captured at Carberry by Frank Dickie, in 1904; and it has been observed occasionally as far north as Shoal Lake. A. S. Barton reports it rare at Boissevain; but John S. Charleson says it is common at Blythe, near Little Souris river. Like the other snakes found in Manitoba, this species is perfectly harmless. Its food is chiefly insects, and its range seems to be the south-western part of the province.

#### MUD-PUPPY OR SPOTTED SALAMANDER,

*Necturus maculosus* (Rafinesque).

The two specimens in my collection were taken by E. W. Darbey at Winnipeg.

#### WATER-LIZARD OR PRAIRIE SALAMANDER,

*Ambystoma tigrinum* (Green).

This species is generally distributed in south-western Manitoba, that is, all the prairie region. It is not a lizard at all, but a cousin to the frogs. It is well-known in two different stages; first, as a big, soft water-creature in the ponds and in the ditches along the railways; second, as a yellow-and-black spotted land-animal like a lizard; but it is not generally known that these are one and the same animal; the Water-lizard being the tadpole stage, the land-animal is the stage corresponding with the frog.

It is a remarkable fact that the species occasionally breeds in the tadpole as well as the adult stage.

In the autumn, when they are seeking a winter den, the crawlers are found in cellars and post-holes in numbers. I found them exceedingly numerous at Boissevain in September, 1904. I have several times found them in gopher holes where they had denned up for the winter. Notwithstanding their appearance, they are perfectly harmless.

#### WOODLAND SALAMANDER,

*Ambystoma jeffersonianum* (Green).

Among some alcoholic specimens sent me from Beausejour, Whitemouth river, eastern Manitoba,