THE GENUS THAMNOPHIS, PART V THAMNOPHIS (RADIX)
BUTLER!

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## DISTRIBUTION

Thamnophis butleri is found in the extreme southern part of Ontario, eastern Michigan, eastern Indiana, western Ohio and eastern Wisconsin (see Map 1). Its habitat consists chiefly of open, prairie-like areas, and of marshes. It is almost always found in the immediate vicinity of water. Carpenter found that the presence of a dense growth of grasses and sedges in an area devoid of bushes, but near water, was the type of habitat preferred by this snake.

#### DESCRIPTION

The length of this rather small snake varies from 38 to 69 cm for adults. Its dorsal ground color is olive-brown to black with a double row of black spots between the dorsal and the lateral stripes. The stripes are yellow to orange. The lateral stripes are on the third and the adjacent halves of row 2 and 4. The anal scale is single. This snake could be confused with Thamnophis brachystoma, but Thamnophis brachystoma normally has 17 mid-dorsal scale rows, Thamnophis butleri 19. Its behaviour is very gentle. It is not very fast moving, is readily caught and when captured offers little or no resistance. It is not

defensive and normally will not bite.

#### THE VIVARIUM

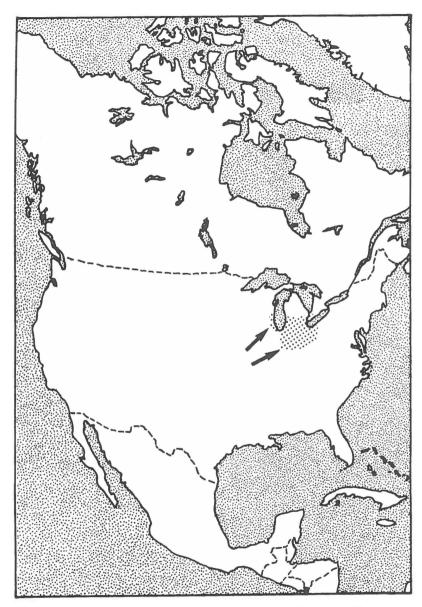
The vivarium in which I keep these snakes, is  $40 \times 40 \times 40$  cm (lwh), with a 15 Watt light bulb for light and heat. The temperature is between 30 degrees and 40 degrees C during summer, about 22 degrees C during winter. As Thamnophis butleri is a water loving snake, a water basin is necessary. I use a small tank with a diameter of 14 cm. As substrate I prefer peat. I decorated the cage with plastic plants, which prove to be more lasting than real ones. The animals are able to hide in and under some stumps on which they also can climb.

### FOOD

In the wild, these snakes live on a diet of earthworms, frogs, insects (?), field mice (probably nestlings), leeches and salamanders. Earthworms make up the largest part of their diet, as has been proven by field studies. In captivity they also take food items like small fish, while insects are refused. I mainly offer them smelt, sprinkled with vitamins. As not all of them are fond of this food, I also offer them whiting and earthworms sometimes. On this diet, they do not feed extremly well.

#### BREEDING

The mating ritual is the same as with other species of *Thamnophis*: the male crawls over the back of the female, tongueflicking and trying to stimulate the female. He tries to curl his tail



Map 1. Distribution area of *Thamnophis radix* butleri.

around that of the female to introduce his hemipenis in her cloaca. In nature, mating usually occurs in April and May, young are born in summer or early autumn. Litters are not very large: according to Wright & Wright from 4 to 16, with an average of 8-10. Young measure about 17 cm. I have not been able to breed this snake myself, but I have been told that the young don't eat very well and consequently dont't grow very fast either. Of course, this is a rather small snake, but it may also be possible that this poor food acceptance is caused by the difference between the offered food items (probably fish) and their natural food preference (chiefly earthworms and leeches).

# CONCLUSION

Thamnophis radix butleri is a rather small species that is very suited for a small vivarium. When fed on earthworms, they eat well and don't smell. They are easy to handle and tame well.

### LITERATURE

- Carpenter, C. C., 1952, Comparative Ecology of the Common Garter Snake (*Thamnophis s. sirtalis*), the Ribbon Snake (*Thamnophis s, sauritus*), and Butler's Garter Snake (*Thamnophis butleri*) in mixed populations. Ecological Monographs Vol. 22 (4): 235-258.
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