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OBSERVATIONS ON A LARGE LITTER OF THE SNAKE STORERIA DEKAYI

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Various authors have given the maximum number of young per brood for the brown snake, Storeria dekayi, as 24 Wright and Wright (1957), although Fitch (1970) records a brood of 27. On 31 July 1973 a large S. d. wrightorum (488 mm. total length, 390 mm. snout-vent length), collected 30 June 1973 about 3 mi. W Paxton, Ford County, Illinois, gave birth to 41 young. Notes on behavior, parturition, and brood variation of this litter were made. Since this information may be of interest to workers investigating the biology of the species, the detailed data are presented herein.

The specimen ate an earthworm on 13 July, which was the last time the snake accepted food until after parturition. On 28 July the snake was continuously probing about the cage. Any movement outside the enclosure caused the snake to coil and flatten its head and anterior body. The snake struck, with open mouth, at the observer on 30 July.

Several new-born snakes were observed in the cage at about 8:30 a.m. on 31 July. Parturition took place between 8:58 and 10:52 a.m. for the remaining snakes. Expulsion occurred in a few seconds to 1 minute. The female rested from 1 to 10 minutes between young. Frequently the snake would expel 2 or 3 young snakes with one contraction. These snakes were usually in separate membranes; at least one instance of twinning did occur however, the young snakes being born in 1 membrane and attached to the same yolk sack. This is apparently the first recorded instance of twinning in viviparous or ovoviviparous reptiles. One snake had already broken from the membrane before birth, and could be seen pushing against the inside of the mother's body wall.

As Smith (1961) did not comment on ontogenetic variation in brown snakes, it seems worthy to report that the juveniles under question have relatively longer tails than the adults (Smith, 1961: 240, Table 73). The ratios of tail length to total length ranged from .202 to .283. No effort was made to distinguish the sexes except in the case of the twins, which were both males; presumably the male snakes had the longest tails. The snakes measured 95 - 108 mm., mean 102.4 mm., total length, and 71 - 85 mm., mean 77.5 mm., s-v length. The twins mentioned above were 101 and 95 mm. total length, 75 and 70 mm. s-v length.

There was a 26.9 per cent mortality of the litter in the first 5 days; 12. 2 per cent died on 31 July. Only 1 snake was born dead.

The young appeared very emaciated; this may have been an important factor in the high mortality rate.

The baby snakes began feeding on small earthworms on 3 August. The mother of the brood began feeding again on 1 August. A partially digested snake was regurgitated by the adult; this instance of cannibalism was assumed to be accidental, since Storeria dekayi has not been known to prey upon other snakes.

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