BREEDING *ELAPHE GUTTATA GUTTATA* IN THE TERRARIUM.

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DISTRIBUTION

Elaphe guttata guttata is found from southern New Jersey to southern Florida and southern Louisiana. This snake is also found in some parts of Kentucky. These snakes are good climbers, but they are most frequently found in bushes, among piles of stone, in corn fields, between tree roots, in rodent burrows etc.
Their food consists of small rodents and birds, which are constricted or pressed against the ground and overpowered.
In the spring the species is mainly diurnal, whilst in the summer it becomes more nocturnal.

DESCRIPTION

This serpent has a long narrow head, which is hardly wider than the neck. It has a large eye with a round pupil. The muscular body has smooth or slightly keeled scales. The ground colour varies from orange to grey. Along the back and sides are red or orange blotches which are bordered in black. The belly is white and irregularly patterned with small black squares. There are stripes under the tail. Some specimens have vague stripes on their flanks running the length of their bodies. This is the case in my animals.
The average length for this species is 120 to 150 cm.

ELAPHE GUTTATA GUTTATA IN CAPTIVITY.

The cage or terrarium in which these snakes are to be kept does not have to be exceptionally large. My terrarium measures 120x50x75 cm (lxwxh). This species is not difficult to keep, as long as one keeps a few rules in mind:

1. there must be something to climb on;
2. there must be something to hide in or under;
3. there must be a water bowl with fresh water;
4. the cage must be kept clean (remove excrement as soon as possible);
5. the snakes must be fed with healthy, well-fed, food animals.

BREEDING

The rest of my report will be given in diary form.
Female: Length: about 135 cm; Age: unknown (wild-caught)
Male: Length: about 170 cm; Age: unknown (wild-caught); Weight: 1380 g (on 1 July 1985).

-1985-

20 March: Mating observed.
21 March: Female ate two mice.
23 March: Mating observed between 19.55 and 20.22 hours.
25 March: Mating observed. Female ate one mouse.
28 March: Mating observed. Female ate one mouse.
5 April: Female refused food.
18 April: Female shed skin, drank considerable quantities of water.
19 April: Female drank a lot.
20 April: Female drank more water and lay with her cloaca off the ground, supported by her tail.
21 April: Similar behaviour to the previous day.
22 April: Female drank a lot.
23 April: As above.

3 May: Female drank a lot and restlessly searched for a place to lay her eggs.
4 May: Female laid 37 eggs of which 3 were soft (these were lying on the heating cable and not in the 'nest' box).
5 May: Female very thirsty and also laid one egg.
6 May: Female laid one egg.
8 May: Female laid one egg. By now, one egg has gone bad.
12 May: Female shed skin and ate one mouse.
13 May: Another egg has gone bad.
14 May: Female ate one mouse.
18 May: Female ate four juvenile rats. Yet another egg has gone bad.
19 May: Female ate one juvenile rat.
25 May: Two more eggs have gone bad.
2 June: Yet another egg has gone bad.
7 June: Female laid one bad egg.
8 June: Three further eggs have decayed.
15 June: Female shed skin.
21 June: Female laid one bad egg.
24 June: A further infertile egg was laid.
27 June: Two more eggs have gone bad, but six eggs were laid!
28 June: Female laid three eggs of which one was infertile. One egg hatched
29 June: Female laid one bad egg. Five young hatched.
30 June: One snake hatched, but with a deformed head. This hatchling was humanely destroyed.
1 July: One egg went bad, but another hatched.
3 July: Two eggs went bad. One egg hatched.
4 July: Two eggs hatched.
5 July: One egg hatched
6 July: Two suspicious-looking eggs were opened. Inside were dead young with deformed heads. Female shed skin.
7 July: Five eggs hatched. Four of these were deformed and were put down.
8 July: One egg hatched.

9 July: Three eggs hatched. Female ate two mice and one gerbil.
10 July: Eight eggs went bad. These were found to contain dead young.
13 July: Female ate three juvenile rats.

In total, 54 eggs were laid, of which 9 were infertile to start with. In total 16 healthy young were born, of which unfortunately 2 died before their first slough. There are only 14 left now. This is a small number considering the number of eggs laid. The author still does not know the reason for this low hatching rate.
The eggs were artificially incubated in a mixture of peat dust and sphagnum moss at temperatures between 27 and 30^{0}C and a humidity level of 80%. The author's incubation method this year was slightly different from last year. Last year I incubated the eggs of *Elaphe obsoleta lindheimeri* in a different substrate: coarse sand. This stays warm longer and distributes the heat more evenly than the peat/sphagnum mixture used in 1985.