SUCCESSFUL BREEDING WITH *ELAPHE SCALARIS*.

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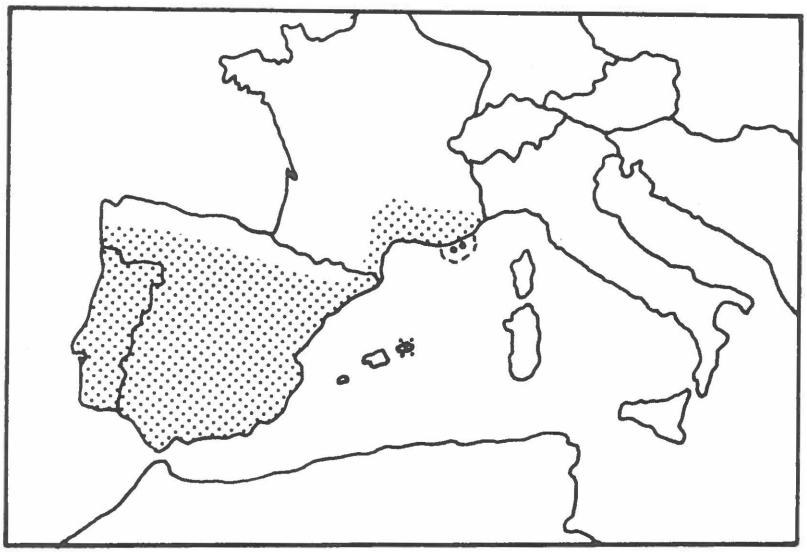
INTRODUCTION

The distribution of *Elaphe scalaris* covers the mediterranean coast of France, most of the Iberian peninsula and the island of Menorca.
It is a relatively big, robust built snake, with a maximum length of 150 cm. Striking is the pointed overhanging snout. Adult animals are predominantly uniform brown with a couple of dark-brown stripes on the sides while some animals are light-brown with beautiful orange sides. The belly is usually yellow-white/grey coloured. Juveniles are, in contrast with the adults, heavily marked. On the yellow, yellow-brown primary colour of the back are black spots that often form a ladder design. On the sides are irregular vertical stripe patterns.
This species lives mainly in a sunny, rocky biotope where rocky slopes are mostly covered with some brushwood. I found this species near corn fields where it stays in/on small stone walls. *Elaphe scalaris* is active during the day-time as well as far into the night. It feeds mainly on mammals and birds.

THE BREEDING COUPLE

Since May 1986 I have had a male who originates from an area north of Leida (north Spain). It



Map 1. Distribution of *Elaphe scalaris*.

measures about 1 meter. The female I bought from Jan Lamberts and originates from Bracanca (north Portugal) and measures about 110 cm.

HOUSING CONDITIONS

The animals are housed in a tank (140x40x60 cm, lxwxh) with the floor covered with wood shavings. Also in the tank are small birch trunks, pieces of cork bark and a drinking trough. As water is only sprinkled when the snakes are in a peeling period this results in a fairly dry environment with a relative humidity of 40 to 60%.
The tank is heated and lighted by two spots with 60 Watt bulbs. The temperature varies during the day from 25°C in the corners to up to more than 45°C right under the lights. At night the temperature drops to 17-20°C.
The animals are fed on laboratory mice and one-

day-old chickens.
At mid-August both animals stopped feeding. The lights were turned off on the first of November after which the temperature dropped to 14-19^{0}C. On the first of December the animals were separated and housed in refrigerator boxes. These boxes were partly filled with peat litter and leaves. The temperature was further lowered to 9-10^{0}C. As from the first of January 1987 the temperature varied between 0 and 6^{0}C (mostly 2^{0}C). The temperature was raised on 24 January to 12^{0}C and on the 26th of that same month both snakes were put together in a normally heated tank.

COPULATION, EGGS AND JUVENILES

The female ate again on 29 January and shed on 29 February. The male refused all food and did not show any interest in the female. On the first of March the animals were separated again. On 7 April the male had milk-blue eyes. Three days later the eyes were clear again. From this moment on the male was restless. That same day I put him at 21.15 hours in the tank with the female. At 22.18 hours he crowled to the female who was hiding under a piece of cork bark. The male tried to manoeuvre the female's tail in the right position. The female opposed up to 22.40 hours by constantly hiding her tail in between her coils. At 22.50 hours copulation took place lasting up to 23.15 hours. The day after the animals were separated. After shedding on 13 April the male was put back in with the female and copulation again took place. After 13 April the female refused all food and shed on 9 May. On 11 May a perspex box filled with a combination of peat litter and leaves was offered. The box which was covered with a lid had one small opening. As far as I know the female never inspected the box. Because of that the box

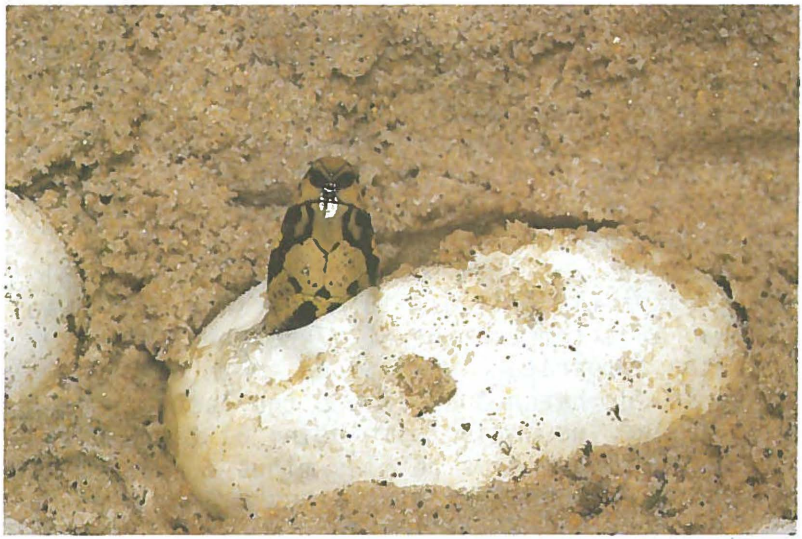


Foto 1. *Elaphe scalaris*. Foto: Hans van der Rijst.

Foto 2. *Elaphe scalaris*. Foto: Hans van der Rijst.

was removed and a corner of the tank was lined with bricks. The space in between was filled with peat litter and leaves and partly covered with a piece of cork bark. Within the hour the female was lying under the piece of cork bark.
The first egg was laid the morning of 17 May at 7.30 hours the last one at 21.00 hours. The eggs weighed about 24 g. The last egg laid weighed 13.2 g and was very soft and of a yellow colour. The eggs were put in a box of 18x12x6 cm (lxwxh) which was partly filled with moist sand. This was put away at a temperature of 27^{0}C. The last two weeks the temperature was raised to 28^{0}C.
The first egg hatched on 18 and the last one on 26 July. The incubation time being 61 to 69 days. The average length was 36 plus/minus 1 cm, and the average weight was 18.5 plus/minus 0.6 g.
Most probably all juveniles are females. The first born juvenile shed on 30 July and ate a baby mouse on its own on the first of August.

Translation: René van Marle.