

## **ON THE FERTILITY OF MALE STRIPED PHASE *ELAPHE GUTTATA GUTTATA***

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### **INTRODUCTION**

According to McEachern (1991), the striped phase of the common corn snake (*Elaphe guttata guttata*) appeared for the first time in England. These animals were bred from two juveniles that were offspring of a couple that was taken from the wild. After a while, the mutants and some of their offspring moved to Ernie Wagner in the United States and would become the ancestors of most, if not all striped corn snakes that ever existed.

According to McEachern, one of the problems that arise in this variety is the reduced fertility in male snakes. By cross-breeding the striped phase, these problems might be solved. Until recently (1993) new reports on fertility problems in male striped corn snakes, keep arriving from the United States.

### **MY ANIMALS**

This report is on three animals: a couple of striped corn snakes, captive bred specimens, born in 1991, from Vince Scheidt in California, and one amelanistic, normally patterned female ('missing black') whose father is a snowcorn animal (so it is amelanistic and anerythritic, 'missing red'). The latter animal was bred by Erwin van Gelderop in 1991. All snakes have been eating well from the start.

### **BREEDING**

All animals hibernated for two months, from December 1992 to January 1993. After the females shed they were placed with the male, one at a time. Copulations with the striped female occurred on the 6th of April and 12th of April, both late at night. Matings with the amelanistic female occurred on the 18th of April and 1st of May, both in the afternoon. After these copulations the females were kept separate from the male. The striped female produced fourteen eggs on the 15th of May. One of these went bad within one week. The other, missing black, female produced 10 eggs on the 17th of May 1993. Again, one of the eggs went bad within one week. The latter female produced another clutch of ten eggs on the 9th of July. However, six eggs turned out to be non-fertilized. Unfortunately, of the remaining four eggs from the latter clutch not a single one hatched.

## THE JUVENILES

The eggs of the striped female hatched during my vacation, between the 17th of July and the 3rd of August with Ton Steehouder. Of the thirteen fairly small juveniles, five had deformations in the spine. Additionally, all juveniles had to be forcefed in the beginning. Two good young that were not immediately sold, started eating cut open pinkies at the end of September.

The eggs of the albino female hatched between the 17th of July and the 3rd of August (also with Ton Steehouder). The nine juveniles were considerably larger and heavier than the striped ones. Except for two, they all started eating pinkies immediately after their first slough. The result thus was a total of eight good young of the striped phase, and nine heterozygote juveniles; these look like normal corn snakes but are carriers of their parents' genetic characteristics.

## DISCUSSION

Based on the aforementioned experiences, I am convinced that at least my striped corn snake male is not bothered by a reduced fertility. However, I think that the problems in the reproduction of the striped variety are an effect of inbreeding. Almost all (or even all) striped corn snakes are offspring of the same ancestors (which in their turn were also from the same parents). All striped juveniles were small and did not eat by themselves. Additionally, a relatively large number (five) of them suffered from spinal deformations. On the contrary, the heterozygote juveniles were large, healthy and strong. Almost all of them immediately started eating without problems.

In order to create a healthy blood line, heterozygoteous animals need to be cross-bred with striped specimens, a project that is being developed within the Tilburgse Terrarium Vereniging.

## REFERENCES

Micheal McEachern, *Keeping and breeding corn snakes*.

Micheal McEachern, *A color guide to corn snakes, captive bred in the United States*.

Ton Steehouder, *Korenslangen, of het kweken van natuurlijke kanaries*. *Het terrarium* 8(3).  
The latter article contains a number of references on corn snakes.



Foto 1: *Elaphe guttata guttata*. Gestreepte man. Striped male.  
Foto: Hans van der Eerden.



Foto 2: *Elaphe guttata guttata*. Missing black vrouwtje.  
Missing black female.  
Foto: Hans van der Eerden.