

AGGRESSIVE BEHAVIOUR OF SNAKES OF THE FAMILY BOIDAE.

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PREFACE

Competition fights between males competing for females occur within many animal species. The function of such fights is natural selection: the weaker male will always lose and thus the chances of a strong offspring are increased. In some species of animal (e.g. mountangoats) these fights can be so fierce that they can lead to the death of one of the males. In different types of reptiles these fights also occur. The so-called "mating dances" of the adder and rattlesnake-species are well known to most. Far less known are the competition fights in some species of the family *Boidae*. In this article some cases are mentioned, some of which had a fatal ending. Maybe these cases will act as a warning for keepers or potential keepers of these species.

COMPETITION BEHAVIOUR

Most notorious for its aggressive competition behaviour in *Boidae* must be *Chondropython viridis*. Jan Timmer wrote to me about a case in which two males and a female of *Chondropython viridis* were housed together for 5 months. One morning both males were found badly wounded. The snakes had wounded each other in such a way that they both died - after one and six days respectively. Stef Albers and Walter Getreuer also witnessed competition fights between males of *Chondropython viridis*. In these cases the results were less



Foto 1. *Chondropython viridis* met littekens ten gevolge van paringsgevechten / with scars because of male combat. Foto: Peter Hiss.

dramatic and the wounds of the male of Stef Albers healed by using cod-liver oil ointment and iodine ointment ("Betadine"). The wounds of the male of Walter Getreuer healed without any treatment. That extreme aggressive competition behaviour is not restricted to adult males of *Chondropython viridis* is shown by the case of Peter Hiss. One of his juvenile animals whose colour had not yet changed was badly wounded by an adult male during the mating season. *Corallus enydris enydris* can also show fanatical competition behaviour. Hans Swaak introduced an adult male of this species to two males and two females. It is worth mentioning that one of the males had mated with one of the females only days before. The morning after introduction all snakes were found wrapped together in one big ball. The introduced male had wrapped itself very tightly around this ball. When the snakes were separated it was found that one of the females was so badly wounded that she died shortly afterwards.

She had a deep wound of about 10 cm across her body and because of the very tight constriction a small branch was stuck in her side. One of the males had, probably due to the constriction, some of its ribs pressed deeply into its body. I myself observed aggressive behaviour with a male *Corallus enydris enydris* that, after mating with a female, was housed with a male of the same species. The first male tried to mate several times with its new companion. This one reacted with fierce trembling motions. Apart from this they did not bite or try to constrict one another. In Houston Zoo it was observed that two males of *Python reticulatus*, who were housed with a female of this species, started fighting with one another. The subordinate male was bitten several times by the dominant male and wounded due to this. After this the subordinate male was removed and the dominant male continued its courtship with a female of this species. All of a sudden one of the males bit the other one in the head and wrapped itself around it. After a couple of minutes the male let the other one go after which this one fled and disappeared into the sand. Here after the dominant male resumed its mating efforts. Dr. Bulian wrote to me about a case of aggressive competition behaviour in *Python timorensis*. This case concerned a group of one male and two females. To stimulate their sexual behaviour a new pair of this species was introduced to them. This resulted in mating efforts by both males. Aggressive competition behaviour was not observed. But after the mating season both males showed superficial wounds. A very extensive description about aggressive mating behaviour of *Python molurus* was given in an article of David G. Barker, James B. Murphy and Kenneth W. Smith (1979). This case described one male of *Python molurus molurus*, three males of *Python molurus bivittatus* and a female of *Python molurus bivittatus*. Interesting in this case was the fact that the hierarchy was determined by age: the eldest male proved to be dominant; measure-

ments did not prove to be important. They mainly bit and used their spurs on each other. Serious wounds did not occur.

REFERENCES

- Baker, David G., James B. Murphy & Kenneth W. Smith, 1979. Behaviour in a captive group of Indian pythons, *Python molurus* (Serpentes, Boidae) with formation of a linear social hierarchy. *Copeia*, 1979 (3): 466-471