PROBLEMS OF PYTHON CLASSIFICATION AND HYBRID PYTHONS.

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INTRODUCTION

Australasia's pythons attract disproportionate interest from herpetologists within Australia and elsewhere. There is also considerable debate in relation to the relationships between species, with various arrangements being proposed. Authors including Cogger (1986), Schmida (1985), and Stafford (1986), have tended to follow 'consensus opinion' when assigning generic names to Australasian pythons. References in relation to general and more specific aspects of Australian pythons can be found in Hoser (1981 a , 1981 b, 1981 c and 1982), and elsewhere. This short paper gives a summary of the problems facing Australian python taxonomists and gives details of an unusual captive breeding that resulted in hybrids between species being produced.

SUMMARY OF THE PROBLEMS IN CLASSIFYING AUSTRALIA'S PYTHONS

With the exception of the Black headed python and Woma (Genus *Aspidites*), all other Australian pythons have at various times been assigned to a number of different genera. Numerous schemes of

classification for the remaining Australian species of python have been proposed. These include Hoser (1982), McDowell (1975), and Stull (1935). The schemes range from the placing of all species in the genus *Python* shared with other non Australian species, to placing the species in question in up to seven genera. Namely *Bothrochilus, Chondropython, Liasis, Lisalia, Liasis, Morelia,* and *Python*. The assignment of given species within a particular genus is also a matter of conflict. For example within the last ten years the Scrub python *Morelia amethistina* has been placed in the following genera, *Liasis*, then *Python* and now *Morelia*. In reality all Australian python species excluding *Aspidites* are fairly closely related, and should perhaps be placed in a single genus with further placement in sub-genera. The conflict here is one between "Lumpers" who would agree with the above statement, and "Splitters" who would fear that by placing the pythons in question into a single genus, the relationships between species may be obscured.

HYBRIDS BETWEEN SPECIES

In the late 1970's, the Royal Melbourne Zoo had a male Carpet python *Morelia spilota* successfully breed with a female Scrub python *Morelia amethistina*, and Water python *Liasis fuscus*. The offspring produced were intermediate in characteristics between the parent snakes, and themselves appear to be fertile, although at the time of writing had not successfully bred. The snakes had however, produced eggs which failed to hatch. The snakes in question were held for some years by the Royal Melbourne Zoo before being transferred to Renmark Reptile Park (South Australia). The proprietor of this park, Joe Bredl Senior, allowed this author to photograph specimens resulting from

both hybridisations. The photos clearly show the intermediate appearances of the snakes and are reproduced here.
That the Scrub python and Water python can cross breed in captivity with a Carpet python indicates that all three species must be closely related, and should in all probability be placed in a single genus. The above indicates potential problems for the 'Darwinian' classification of 'species'.
Hybridisation and creation of 'new' species are two practices which conservationists generally condemn, for a number of reasons. However, the case cited above was probably of great benefit to Australian herpetology, and in the long term will probably assist in the conservation of Australian pythons.

ACKNOWLEDGEMENTS

Joe Bredl Senior and family for spending two days with the author when photographing reptiles at his park.
The reptile keepers at Royal Melbourne Zoo for supplying information in relation to the hybridisation cited above.
Len and Katrina Hoser for various assistances.

Photo 1 + 2. Hybrid between Carpet python *Morelia spilota* and Scrub python *Morelia amethistina*. Snake is poised to strike and is typical behaviour of these Carpet/Scrub python hybrids. Colouration is similar to *Morelia spilota*, scalation is typical of *Morelia amethistina*. Missing scale above mouth is a congenital defect.

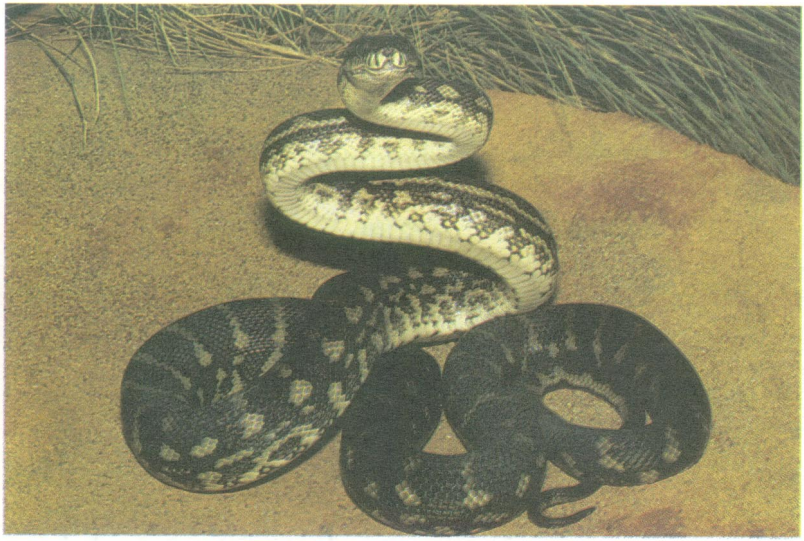

Foto 1. Hybride tussen/Hybrid between *Morelia spilotes macropsila* and *Morelia amethistina*. Foto: Hoser.

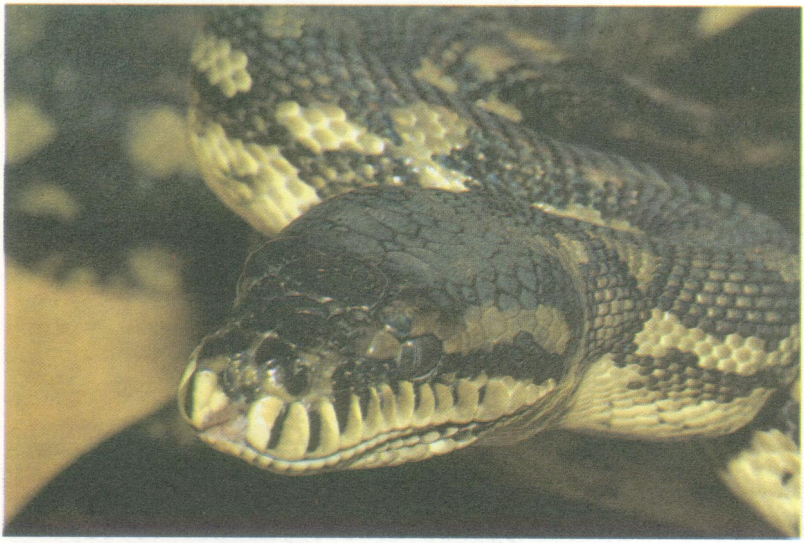

Foto 2. Hybride tussen/Hybrid between *Morelia spilotes macropsila* and *Morelia amethistina*. Foto: Hoser.

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Photo 3 + 4. Hybrid between Carpet python *Morelia spilota* and Water python *Liasis fuscus*. Colouration is intermediate between the two species, whilst scalation is more like *Liasis fuscus*.

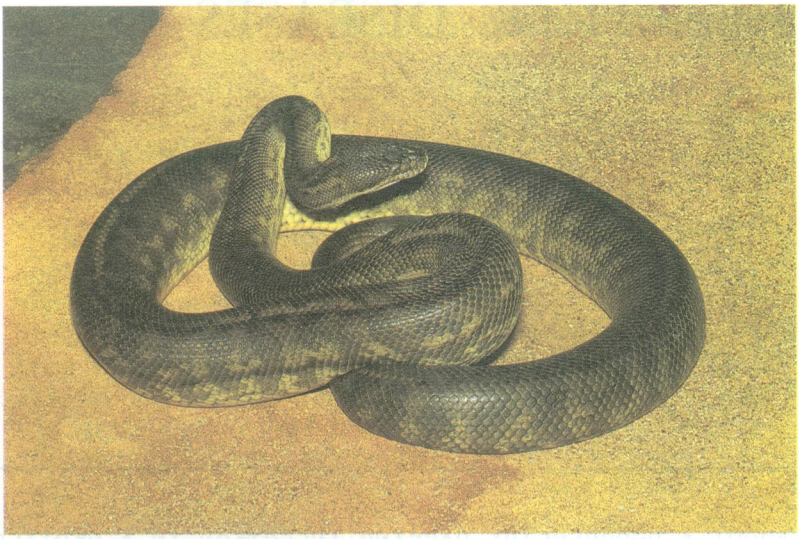

Foto 3. Hybride tussen/Hybrid between *Morelia spilotes macropsila* and *Liasis fuscus*. Foto: R. Hoser.

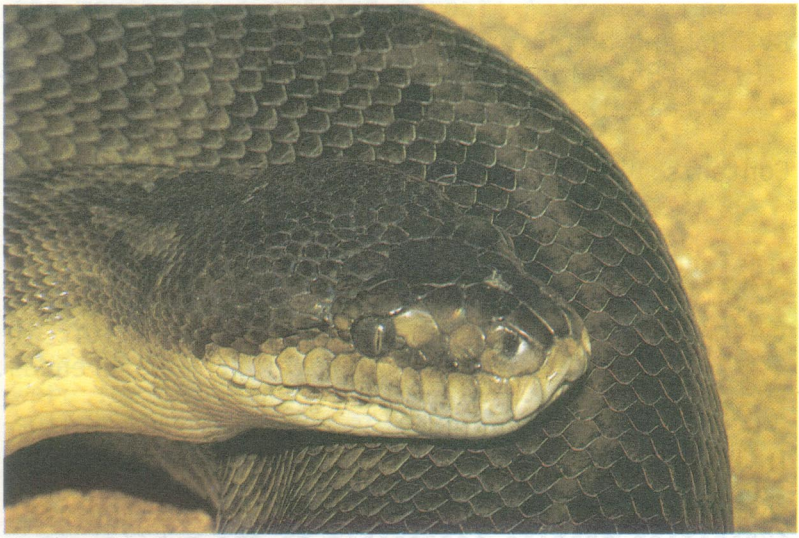

Foto 4. Hybride tussen/Hybrid between *Morelia spilotes macropsila* and *Liasis fuscus*. Foto: R. Hoser.