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Genetic composition of Death Adders *(Acanthophis antarticus; Serpentes: Elapidae)* in the West Head area

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The West Head/Kurringoi Chase area of Sydney, Australia (Lat. 33° 32' S:, Long. 151° 15' E) has habitat and wildlife typical for the area; the Death Adder *(Acanthophis antarticus)* occurs here in two colour morphs, Red and Grey.

Whilst the two forms occur together and interbreed they remain distinct and intermediate forms do not occur; Red is apparently the dominant morph.

In a sample of thirty six snakes from the West Head area ten were grey. This suggests the following genetic makeup, based on the Hardy-Weinberg Law (eg, Keeton 1980).

Homozygous	Red	22%
Heterozygous	Red	50%
Homozygous	Grey	28%

The persistence of the recessive gene (grey) would suggest it enjoys some survival advantage over the dominant red. Although these animals may represent a biased sample that does not reflect uniformly on the entire population, *A. antarticus* is not unique in having these two distinct colour forms. For example the Anthill Python *(Lialis perthensis)*, Burton's Legless Lizard *(Lialis burtonis)* and the Common Froglet *(Ranidela siguifora)* all show the same phenomenon. As the evolution of red and grey morphs has occurred on a number of occasions and in different taxa it presumably reflects conditions imposed by local habitat.

See Hoser this issue.

References

Keeton, W T (1980)
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