

Enhydrina schistosa

Aleisha Daniel, 2000 © 2001 James Cook University

Authority: Daudin, 1803

Common Name: Beaked Sea Snake

Description (Heatwole 1999; Cogger 1992): A snake with an average length of 1.2m with a slender body and rough scales. Pale to darkish grey dorsally, with a white belly, sometimes with dark bars or rings. This is especially common in Australian juveniles. It has projecting jaws and an overhanging snout. The eyes are black and beady, pointing upwards. Scales have a short, low keel, 49-66 rows at mid-body. Ventral scales are only slightly wider, 239-322 rows. Head shields are enlarged and regular, mental shield is greatly elongate and dagger like. There are 3-4 maxillary teeth following the fang. The throat region forms a concertina-like area due to the highly elastic skin.

Similar species (Heatwole 1999): *Enhydrina* is a monotypic genus, characterised by its head scales and upward pointing eyes. There are several species that also live in estuaries. *Hydrophis ornatus* also eats fish, lives in estuaries and reaches a similar length. *Enhydrina schistosa* is sometimes placed in the genus *Disteria*.

Range (Cogger 1992): Known only from a few places in waters between north-east Australia and New Guinea.

Ecology and Behaviour (Heatwole 1999; Voris and Jayne 1979; Voris *et al.* 1978): *Enhydrina schistosa* live in shallow bays and estuaries and frequently travel far up into the fresh-water reaches of large rivers. It is thought that they rarely visit Australian shores but when they do so it is often in large numbers. *E. schistosa* will eat a variety of fish and prawns, though experiments by Voris *et al.* show they have a strong preference for catfish. According to the lethal dose which kills 50% of test animals (conducted on mice) it is the most venomous snake known to man. It takes only 1.5mg of *E. schistosa* venom to kill a human and they are responsible for 90% of all human deaths resulting from sea snake bites. They are known to be very aggressive especially when removed from the water.

Breeding biology (Voris and Jayne 1979; Heatwole 1999): The beaked sea snake, like all sea snakes is viviparous, but the gestation period of this snake is shorter than that of most sea snakes. The 3-4 month gestation period is closer to that of a land snake. The average female will bear between 4-11 young, with the size of the clutch increasing with the size of the female. There are more females than males in a clutch however only about 6% of females will survive to sexual maturity. Young can grow at an average rate of 1.2 mm per day but this rate slows after the first 18 months. Sexual maturity is at 1.5 years in females and 2 years for males. Very few snakes survive pass their fourth year and the breeding population of females seems to be dominated by 2-3 year olds. Breeding takes place annually.

Literature cited:

Cogger, H.G. 1992. *Reptiles and Amphibians of Australia*. Reed Books, Chatswood, NSW.

Heatwole, H. 1999. *Sea Snakes*. UNSW Press, Sydney, NSW

Voris, H.K. and Jayne, B.C. 1979. Growth, Reproduction and Population Structure of a Marine Snake, *Enhydrina schistosa*. *Copeia* 2: 307-318

Voris, H.K., Voris H.H. and Liat. L.B. 1978 The Food and Feeding Behaviour of a Marine Snake, *Enhydrina schistosa*, *Copeia* 1: 134-145