

# *Emydocephalus annulatus*

Tom Bowling, 1999 © 2001 James Cook University

Authority: Kreft, 1869

**Common Name:** Turtle Headed Sea Snake

**Description** (Cogger 1994; Voris 1966): Dark dorsally with some banding. The rostral shield can be used to distinguish the sexes as the males projects outward like a cone. The supralabials are reduced to 3 and the two second supralabials scales are extended to cover most of the upper labia. A unique feature of this sea snake is the complete lack of teeth on the dentary bone. Scales are imbricate and 15 – 17 rows at mid body. Ventral scales form a well developed median keel, they range from 125-145. Anal usually single, subcaudals 20 – 40 all single. Average length 75cm.

**Range** (Cogger 1994): Waters off Northern Australia including the Coral and Timor Seas.

**Ecology and Behaviour** (Voris 1966; Cogger 1994; Guinea 1996; pers obs. 1998): Usually found in large aggregations. Prefer inter lagoonal bommies which are protected and have high densities of demersal spawning fish (eg. Pomacentrids, Gobies and Blennies) whose eggs they feed upon. Feeding is accomplished by actively 'shaving' the eggs off the substrate with the second supra labial. These snakes appear to be mostly active during the day as I have personally observed dozens on several night dives in a state of 'sleep', only breaking to ascend for air then returning to within 1-2 meters of previous hide. Courtship was also observed at night, however the females appeared to be in a state of sleep, no nocturnal feeding was seen.

**Reproductive Biology** (Pers. obs.): The females seem to produce a stimulus that the males are very responsive to, often several may be seen at one time, chasing and attempting to corner a female. The male used the rostral shield with accuracy and traced the point of it between the scales along the nape and back of the female, whilst pinning her to the substrate. Intermediate spasm bursts was performed by the male while still pressing the rostrum into the dorsal surface of the female. It appeared to be stimulating the female as after an unknown period of this behaviour copulation began. Gives birth to few fully developed young.

## **References:**

Cogger, H.G. 1994. *Reptiles and Amphibians of Australia*. Reed Books, Chatswood Australia.

Guinea, M.G. 1996. Functions of the Cephalic Scales of the Sea Snake *Emydocephalus annulatus*. *Journal of Herpetology*, Vol.30, No.1 pp. 126-128.

Heatwole, H. 1999. *Sea Snakes* University of NSW Press, Australia.

Seigel, A.S. 1993. *Snakes Ecology and Behaviour*. McGraw Hill, USA.

Seigel, A.S. and Novak, S. 1987. *Snakes Ecology and Evolutionary Biology*, McGraw Hill, USA.

Voris, H.K. 1966. Fish eggs as the apparent sole food item for a genus of sea snake *Emydocephalus*. *Ecology*. 47: 152-154.