



Snakes of the Sea

words/pictures

WALT DEAS

Scottish diving legend Walt Deas files regular reports for SCOTTISH DIVER from his home in Australia. In this edition the underwater photographer and marine life expert provides a colourful account of an unusual type of marine life - sea snakes ...



Images this page: top - A close-up of Stoke's Sea Snake; above - Olive Sea Snake (*Aipysurus laevis*. Common in reefs in Papua New Guinea, Australia & the Coral Sea & left - extracting venom from a Olive Sea Snake

SEA SNAKES are cold-blooded reptiles consisting of some 70 species, and are found primarily in warm tropical waters of South Asia, Australia, and throughout the Indo-Pacific. One species, the pelagic Yellow-Bellied sea snake *Pelamis platurus* ranges across the Pacific to the western coasts of Central and South America and south to New Zealand and the Cape of Good Hope and Madagascar.

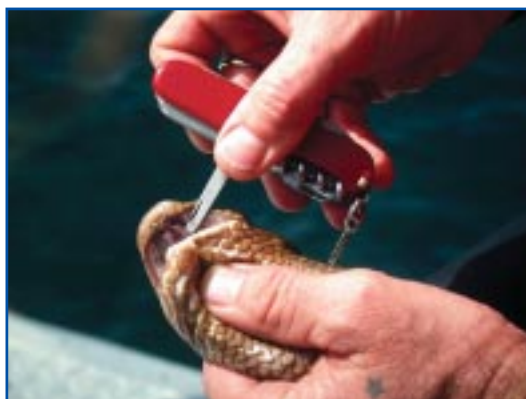
Pelamis platurus can sometimes be found swarming in the hundreds in the open ocean. During a trip between two reefs in my 21ft powerboat in the 1980s I saw what looked like a number of tree branches sticking out of the sea. I headed over and much to my consternation I found that it was a large number of sea snakes that bobbed up and down in the slight

swell. Not knowing much about sea snakes in those days I decided to leave when a few suddenly came over to the boat.

Sea snakes have specialised flattened tails for swimming and have valves over their nostrils which are closed underwater. Sea snakes belong to a group related to cobras and some are known to have venom 10 times as strong as a rattlesnake's. It is composed of powerful neurotoxins that have an effect on the nervous system and sometimes myotoxins that affect skeletal muscles.

Eels are sometimes confused with sea snakes; however, no sea snake has fins or gill openings, and none have smooth skin without scales. They feed on small fish and are preyed upon by sea birds, sharks, larger fish and humans. Their potent venom quickly immobilises their prey.

There are 31 species of sea snake in northern Australian waters alone; all are potentially dangerous to humans. They are generally mild mannered reptiles, although both individual and species variation exists with respect to this trait. Usually in open water they either seek to escape or remain indifferent to swimmers. Stranded on



We recently reviewed Walt and Jean Deas latest book *Coral Reefs Natures Wonders*. We are pleased to say the book now has a European distributor. The book is available at £22.50 from www.eurospanonline.com or email@edspubs.co.uk.



Dubois' Sea Snake, Aipysurus duboisii resting on the bottom. Aggressive individuals have been encountered.



David Ross with a large sea snake that wrapped itself around his arm. Saumarez Reef, depth 30 metres.

beaches, most species are totally helpless. Bites from sea snakes occur when they are kicked or trodden upon in shallow water or when they are being removed from nets, traps and other fishing gear.

Some can be aggressive during the mating season and the sea snake is usually very curious, they can become fascinated by drawn out items such as your high pressure or regulator hoses. Provoked snakes can become very aggressive and persistent, requiring repeated kicks from fins to ward them off.

On a trip out to Saumarez and Kenn Reef in the Coral Sea, sea snakes were very much in evidence and some were very aggressive. One scuba diver, the editor of a dive magazine was chased from 24 metres to the surface and then across the surface before reaching the safety of the charter vessel. A tale that never appeared in the magazine.

At odd times while absorbed in taking a photograph one would suddenly find a sea snake wrapped around a leg or arm - a most heart-disturbing event. Others would zoom up from the bottom, and dodge every attempt to keep them at bay. However

the majority were docile.

Regardless of the reputed docility of these creatures, it should be kept in mind that the venom is extremely potent and could prove fatal.

Persistent myths about sea snakes include the mistaken idea that they can't bite very effectively. The truth is that their short fangs are adequate to penetrate a wet suit. They can open their mouths to bite an arm as demonstrated to me one day when one bit into a 90cm round section of wood wrapped in an old wet suit arm. Remember that they can swallow a fish that is more than twice the diameter of their neck. They can dislocate their jaws in the same manner as terrestrial snakes.

The bite is usually felt and small marks are visible; pain and swelling from the site can be minimal. If symptoms do not occur within six to eight hours, then significant poisoning has not occurred. Symptoms can develop slowly, 'aching' and 'stiffness'. Then generalised paralysis. Pulse becomes weak and irregular; thirst, nausea, difficulty in speaking and vomiting develop. The symptoms become more intense; the skin be-

comes cold, blurred vision, drowsiness and finally respiratory paralysis.

Only a small proportion of bites are fatal. There is one thing - if recovery occurs, it's rapid and complete!

(more images on Page 26)

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Ben Cropp with Stoke's Sea Snake (Astrotia stokesii). Note the bite out of its tale. This sea snake was one of a number captured for scientific study and released.

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Snakes of the Sea



A juvenile Stoke's sea snake heads to the surface for a breath of air (Lady Elliot Island)



Dr. Harold Heatwole demonstrates the fang of an olive sea snake.

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Walt Deas videos a juvenile Stoke's sea snake at Lady Elliot Island (photo - Clint Hemsall)