LETTERS TO THE EDITORS

ARE SOME JELLYFISH TOXINS HEAT LABILE?

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2002/2/12

Dear Editor

Thank you for your donation to the Australian Venom Research Unit in memory of our friend, and my mentor, Struan Sutherland. As you know venom research is not well supported by the Commonwealth Government, who are prepared to leave almost all the costs to the Government of Victoria. All donations are very welcome.

I was aware that Struan was a Guest Speaker, with Carl Edmonds, at the 1984 South Pacific Underwater Medicine Society Annual Scientific Meeting held on Bandos Island in the Maldives. I remember being told that he talked about hydroponics as well as toxins.

Thank you for the reprint you sent me, *Are some jellyfish toxins heat labile?*[1] I enclose a copy of a paper published last year in the Hawaii Medical Journal by Craig S Thomas and others which investigated the effects of hot, cold and ambient temperature pack applied to box jellyfish stings.[2] The common box jellyfish in Hawaiian waters is *Carybdes alata*, some 75 to 100 mm in height and about 50 mm wide with tentacles which can be 0.75 m long. These jellyfish appear on the beach around the last quarter of the lunar cycle and sting many, many people, over 800 on 1997/7/29!!

While conditions are different in Australian waters it might be possible for SPUMS members to pursue a similar study. The Hawaiian study showed that hot packs did reduce the pain of the stings but not to a significant degree. However Dr Taylor's personal pain relief with hot water was very effective at relieving the severe pain from Tamoya stings.

If any SPUMS members are interested in such a study I would be happy to offer advice and guidance.

Ken Winkel, Director, AVRU

References

1 Taylor G. Are some jellyfish toxins heat labile?. *SPUMS J* 2000; 30 (2); 74-75

2 Thomas CS, Scott SA, Glanis DJ and Goto RS. Box jellyfish (*Carybdea alata*) in Waikiki: Their influx cycle plus the analgesic effect of hot and cold packs on their stings to swimmers at the beach: A randomized, placebo controlled, clinical trial. *Hawaii Med J* 2001

Key Words

Injuries, marine animals, toxins.

BOOK REVIEWS

MARINE CONSERVATION FOR THE 21ST CENTURY

Oceans of Facts for US Citizens

Hilary Viders
ISBN 0-9411332-46-2 (soft cover). 1995.
Illustrated. pp 350.
Best Publishing Company, P.O.Box 30100, Flagstaff, Arizona 86003-0100, U.S.A.
Price from the publishers $US 18.95. Postage and packing extra. Credit card orders may be placed by phone on +1-520-527-1055 or faxed to +1-520-526-0370. E-mail <divebooks@bestpub.com>.

The cover blurb calls this book "An essential guide", but the five pages of the contents list show it is encyclopaedic in scope. The author explains that she intends it to be a vehicle to teach marine ecology, as well as motivate people. There is certainly a large potential audience, worldwide, for an explanation of marine conservation issues in non-technical language, and obviously to understand these issues one needs to learn about the oceans and marine ecology. This book covers all this without assuming any prior knowledge of the reader. It is liberally sprinkled with good photographs that attract interest, and there are many excellent diagrams (by Ken Ibsen) that aid understanding of key issues. But what information and style is appropriate for such readers?

The six chapters on marine environments and ecological concepts, and the surprising chapter on fresh water ecosystems, present an eclectic flood of facts, from the information that water is made of hydrogen and oxygen to what acoustic tomography is, and the fact that sharks have extraordinary immune systems. Unfortunately numerous collectable facts, such as that there are 325 trillion gallons of water on our planet, appear to have displaced important issues such as the cyclic paths of major ocean currents. The style in some chapters is reminiscent of training manuals: subjects are presented as numbered lists. I find lists of "principles" such as: "Closely related to the life patterns principles is the principle of biotic communities", and "In ecology, the whole is more than the sum of its parts" is a misleading approach to teaching ecology. Technical concepts, such as "spring tides", "genus" and "photosynthesis" are printed in large capitals. Perhaps this assists in memorising and referring back to these terms, but bold type would have been less intrusive. The "environmental professionals" listed as part of the target audience will easily find gaps and errors, for example while the illustration of planetary air currents is correct the text explanation is not, and a picture of a sea anemone is described as a crinoid.

The chapters on natural and human induced stresses are comprehensive, and the 13 chapters on conservation