

unless they are being sent to a CITES Party, which Sri Lanka is.] Since the majority of the demand for tortoiseshell comes from tourists, we have been engaging the support of tour operators in the European Union to boycott hotels and resorts where tortoiseshell is available and to educate tourists about the implications of buying tortoiseshell products. The campaign has already generated a great deal of publicity in Sri Lanka and we are now awaiting concrete action to end the trade.

Our complete findings from this international investigation are documented in a new report, "Report on an Investigation into Threats to Marine Turtles in Sri Lanka and the Maldives", available from EIA at the address below.

Milliken, T. and H. Tokunaga. 1987. The Japanese Sea Turtle Trade 1970-1986. Prepared by TRAFFIC(JAPAN) for the Center for Environmental Education, Washington D. C.

* *Update:* I am pleased to report that since we submitted this article to the Marine Turtle Newsletter, and in direct response to the EIA investigation, on 24 June the Government of the Maldives imposed a total ban on the catching of turtles in the Maldives as well as the sale, import and export of all turtle products. In addition, the Government has formulated new endangered species legislation, established sea turtle sanctuaries, and presented conservation awards. Finally, it has launched a public information campaign to increase public awareness about the need for turtle conservation and fragile marine ecosystems. EIA was informed by the Office of the President of the Maldives last month that the incidents filmed in the Maldives have been investigated by the police. Already, two people have been arrested and legal action has been promised. -- S. Fisher, *in litt.* 10 July 1995.

SUE FISHER, Environmental Investigation Agency, 15 Bowling Green Lane, London EC1R 0BD, U. K.

"LAST CHANCE LOST?" OR IS IT? A BOOK REVIEW

In three different decades I have had separate generations of red-faced, frustrated turtle farmers scream in my face, "Why won't you conservationists let us farm these turtles so we can save them?" Actually, several well known conservationists including Leo Brongersma, John Hendrickson, Henri Reichart and Joop Schulz have supported the concept of turtle farming. As an inexperienced fisheries development specialist with the Peace Corps in Fiji in 1969, I myself became enthralled (and still am) with the idea that green turtles might be farmed or ranched as a resource for food protein, as well as to sell to foreign tourists and developed countries. In 1970, after reading Archie Carr's captivating book "So Excellent a Fishe", my fate was sealed. In the final chapter of this book he made the case for farming sea turtles as a practical way to help save these endangered species. By 1972, I found myself working under John Hendrickson on reproductive physiology using "Mariculture, Ltd." green turtles at the farm on Grand Cayman island. As a bit player in the continuing turtle farming saga, I have had an interesting vantage point to observe this continuing debate. The question is, "So why aren't there lots of turtle farms in developing countries like there are crocodile farms?"

The answer to this question is clearly outlined in "Last Chance Lost? Can and should farming save the green sea turtle? The story of Mariculture, Ltd., --Cayman Turtle Farm." by Peggy and Sam Fosdick [see MTN 67:31]. Actually, for the sea turtle person, the Fosdicks provide an illuminating history book! In an overly simplistic sense, it is the history of the 15

year battle which mostly simmered and occasionally raged between Archie Carr and his U. S. conservationist proteges on one side of the fence and several well-heeled business people on the other side, as to whether farming the green sea turtle should happen at all. "But wait, Dave, I thought you said Archie supported turtle farming." He did at first, but by 1972 a new question emerged from the reptile group centered in Gainesville, Florida. What if farming turtles actually increased demand for their products, a demand which the farmers could not cover? Would illegal exploitation of wild turtles surge, further endangering the remaining wild populations? The powerful Gainesville group emphatically thought it would, and Archie did a 180 degree about-face in an article published in Audubon magazine in 1972. The line in the sand was drawn and the battle was on.

Presented largely from the point of view of Irvin Naylor, founder of Mariculture Ltd. and publisher of this book, science journalists Peggy and Sam Fosdick researched and wrote the text with surprising thoroughness and accuracy. The attractive book also makes good reading, with an interesting story line, real life adventures, great sex scenes, two knights of the British empire, and lots of historically important correspondence relative to reptilian conservation. On the other hand, the scientific contributions of the turtle farmers, while an underlying theme of the book, are not covered well enough. The scientific legacy of Bob Schroeder, Glenn Ulrich, Jim Wood and Fern Wood is one of "hard nosed" refereed journal-style science like no other little business on earth has ever or probably will ever do again. Working with dozens of collaborators, significant firsts were realized at the Cayman Turtle Farm in areas such as dietary requirements, blood sampling techniques, temperature dependent sex determination, laparoscopy, sexing techniques, living tags, sea turtle hybrids, specific protein radioimmunoassays, fibropapillomas and captive breeding of two endangered species; just to name a few.

Did the turtle farm on Grand Cayman get the shaft? Have sea turtles benefited from the Cayman experiment? Will there ever be other turtle farms? Should turtle farms be used in lieu of habitat protection? One Texan's opinions are yep, yep, you bet and no way, respectively, respectfully!

DAVID WM. OWENS, Department of Biology, Texas A&M University, College Station, Texas 77843-3258 USA.

USING SEA TURTLES FOR TOURISM MARKETING

Since the beginning of the 1990's, Dutch tour operators have increasingly used sea turtles in their descriptions of destinations in travel brochures. In the Netherlands, travel brochures are the most important -- but by no means the only -- tool applied by tour operators to seduce people into buying their travel product. The colorful brochures are instrumental in convincing the public to make bookings and, apparently, sea turtles play a role in luring people to specific destinations. Since travel brochures create expectations in the mind of the tourist regarding sea turtles, we believe that they can be effective venues for sensitizing visitors to "turtle friendly beach etiquette".

Two specific destinations (Zakynthos in Greece, Dalyan in Turkey) were chosen to evaluate the impact of travel brochures on people's awareness of sea turtles and their habitat (for the full results of the study, please see Cosijn, 1995). In the late 1980's, only these two destinations in Europe were regularly marketed in travel brochures for their sea turtle nesting beaches. The other European turtle nesting beaches were virtually never mentioned explicitly in such brochures. In contrast, we found 141 citations (from a survey of hundreds of brochures)