

## Crab community indicators of Mangrove management

Dr Liz Ashton

On December 1st Estuaries published an article "A comparison of brachyuran crab community structure at four mangrove locations under different management systems along the Melaka Straits-Andaman Sea Coast of Malaysia and Thailand" by Liz Ashton, Peter Hogarth and Don Macintosh (Ashton et al., 2003).

This publication was the culmination of studies over five years in Malaysia and Thailand.

The findings show that management history plays an important role in moderating the crab community structure. The crab community structure also changes with the age of the mangrove forest stand. Sesamid crabs consistently dominated in mature forests, whereas young plantations were colonized mainly by ocypodid crabs. Heavily managed mangrove areas e.g. disused tin mining areas, former

concession forests, and abandoned shrimp ponds can be rehabilitated by planting mangroves and the crab community is a useful ecological indicator of habitat status.

The Coastal and Estuarine Science News Volume 1 Number 2 will also publish an abstract of this article for local managers to learn and understand and possibly use as a habitat restoration assessment tool. Simple ecological indicators are important tools for States and local managers to assess and monitor mangrove restoration, rehabilitation and management.

Dr Ashton and Dr Macintosh have been compiling for the past two years "Principles for a Code of Conduct for Sustainable Mangrove Management". The specific objective in developing these principles is to provide a tool for the effective management of mangrove ecosystems for local and national governments, resource managers, NGOs, traditional authorities and communities, donors and development agencies, and conservation groups.

Formulation of these principles for a Code of Conduct is based on existing knowledge, experience and needs. The articles presented identify key linkages and co-ordination needs among government departments, NGOs, nearby communities, researchers or research institutions and entrepreneurs who have an interest in the conservation of mangrove ecosystems and sustainable use of mangrove resources. It recommends key legislation and enforcement mechanisms (e.g., governmental and/or community-based) considered necessary to ensure the effective conservation, protection and sustainable use of mangroves. The draft Code can be found at the website (<http://www.biology.au.dk/cenTER>); please send any comments or suggestions to [eca1@stir.ac.uk](mailto:eca1@stir.ac.uk) by 01 April 2004. This document will be published in June 2004 and will be explained in more detail in the next Aquaculture News article.

Ashton, E.C., Hogarth, P.J. and Macintosh, D.J., 2003. A comparison of crab community structure at four mangrove locations under different management systems along the Melaka Straits-Andaman Sea coast of Malaysia and Thailand. *Estuaries* 26(6).

## DFID

### An Engineer Abroad

**Brian Howie, the Institute's Engineer shares the emotional and physical ups and downs of his recent trip to Bangladesh ... his first time outside of Europe.**

Earlier this year I was asked by James Muir if I would like to go out to Bangladesh to deliver a practical course on the construction of a portable field laboratory. The course would involve staff from the Faculty of Fisheries BAU Mymensingh and technicians from Bangladesh Fisheries Research Institute and the Department of Fisheries. As I had never been farther than Majorca it was an opportunity I could not pass up and so it was arranged for the 22<sup>nd</sup> of August. So it was with great excitement I flew out of



Back to basics.

Edinburgh on the first leg of my overseas adventure. After a brief stop in Birmingham it was on to Dubai and then on to Dhaka. I was met at the airport by Chris Morrice and whisked through customs by my facilitator and into a waiting Land Rover and out into the busy early morning traffic.

The road from Dhaka to Mymensingh is something to behold, it is the scariest drive I have ever had. Buses, lorries, rickshaws, people and animals everywhere but as you leave the mayhem of Dhaka the countryside starts to open out and the traffic gets slightly less scary. Along the sides of the road were rice fields and fish ponds and as it was the end of the monsoon everywhere was lush and green. On arriving at the BAU (Bangladesh Agricultural University) I was taken to the Faculty of Fisheries where I met up with Doctors Wahab, Raphiquil and Molla. It was great to meet them all again and they were all very interested to hear news about their friends back in the Institute at Stirling. I was then taken to the guesthouse that was to be home for the next ten days. It is a lovely building set in lush gardens and has coconut palms and banana trees on one side and the Brahmaputra river on the other. My room