

In the news

Artist to produce folio of Antarctic fish prints

The internationally acclaimed Japanese artist Boshu Nagase recently visited Hobart to work on a folio of prints of Antarctic fish. These fish prints will illustrate a large-format book on Antarctic fish being edited by Harvey Marchant of the Australian Antarctic Division and Mitsuo Fukuchi of the Japanese National Institute for Polar Research. The launch of the book is planned for the 25th anniversary of CCAMLR in October 2006.

Boshu Nagase has over 40 years' experience of a printing art known as *gyotaku* (*gyo* = fish; *taku* = print, impression, rubbing). *Gyotaku* is a distinctively Japanese way of illustrating nature. In its simplest form (the direct method) paint is applied to a fish, shell or plant and a print is taken from the object onto paper or cloth. The indirect method of *gyotaku* requires much greater skill. Fine paper, not much thicker than tissue paper, is moistened and pressed to the surface of a fish or plant. Coloured inks are then applied to the paper in layers to colour the imprint of the organism. The result is an anatomically exact copy of the organism and coloured either as it is in nature or as the artist chooses.



JAMES KERR, THE MERCURY

Boshu Nagase is perhaps the principal living exponent of the indirect method. He has produced folios of *gyotaku* of the fish of the Great Barrier Reef, the Mediterranean Sea and the marine and freshwater fish of Japan. He has had many exhibitions and his work is on permanent display at the Australian Institute of Marine Science near Townsville, Queensland, the Monaco Museum of Oceanography, the University of Maine and in various Japanese galleries.

Boshu Nagase's visit was sponsored by the Australian Antarctic Division and the Japanese National Institute of Polar Research.

HARVEY MARCHANT, BIOLOGY PROGRAM LEADER, AAD

AAD scientists win prestigious awards

Graham Robertson, a seabird ecologist with the Australian Antarctic Division, has been awarded a prestigious international research award for his work on by-catch mitigation during long-line fishing operations. The Pew Institute of Ocean Science, in conjunction with Miami University has awarded Graham US\$150,000 over three



KIERAN LAWTON

years to enable him to expand his work on environmentally safer long-line fishing in the Patagonian toothfish fishery. Announcing the award, Dr Sharman Stone said: 'Graham Robertson has long been recognised internationally for his seabird research and his inclusion as a Fellow of the prestigious Pew Institute for Ocean Science is confirmation of the great esteem in which he is held.' Working with the fishing industry Graham has developed a weighted long-line which sinks fast, quickly dragging the baited hooks to depths where surface-feeding sea birds cannot reach them. Experimental deployment of this gear in New Zealand fisheries over the past few years has demonstrated dramatic reductions in accidental bird deaths. If the method were to be taken up universally by the long-line fishing industry the reduction in the number of albatross and other sea birds drowned each year would be immense, and would be a major advance in marine conservation.

Karin Beaumont, a recent PhD graduate, has been awarded an Australian Academy of Science Young Researcher's Award for Scientific Visits to the USA. She will spend six weeks at the University of Massachusetts, Boston, undertaking collaborative research with Associate Professor Juanita Urban-Rich.

Karin's postgraduate research examined how much carbon the faecal pellets of grazers such as copepods and krill contained, and their fate in Antarctic waters. This topic is important



CHRISTIAN GALLAGHER

because faecal pellets are a major pathway of carbon from the surface to deep water and the seafloor. This carbon provides food for bottom-dwelling organisms and is recycled back to the atmosphere over long time periods.

The collaborative research to be undertaken in the USA will further this project, using technology and expertise at the University of Massachusetts to develop a faster, more accurate method to determine the carbon content of faecal pellets. The research will also examine the effect of different diets and degradation processes on faecal pellets produced by a range of zooplankton that are pivotal in oceanic food webs.

Web-based State of Environment reporting a winner

A web-based State of the Environment reporting system developed by the AAD won a prestigious Technology Productivity Award in September.

The computerised System for Indicator Management and Reporting (SIMR) has replaced a cumbersome paper-based procedure for reporting environmental parameters in the Australian Antarctic Territory. A large book for State of the Environment reporting has been replaced by a computer system that gives the current environmental status of one of the most pristine regions of the world – and is available to everyone via the public web site <<http://www.aad.gov.au/default.asp?casid=5612>>.

It also enables the AAD to more readily discover relationships between environmental indicators, more quickly interpret data, highlight unusual patterns and pick up any changes.