

Dr Pat Hutchings

Pat graduated from London University and her PhD at Newcastle upon Tyne in the UK and then migrated to the Sydney taking up a position at the Australian Museum where she is still employed currently as a Senior Principal Research Scientist. Subsequently she was awarded a DSc from the University of Newcastle upon Tyne for her contribution to polychaete studies.



Since her undergraduate days she has been fascinated by polychaete seaworms, initially working on the reproductive biology of a benthic species off the coast of Northumberland. On arrival at the AM, it became very evident that little was known about the diversity of Australian polychaetes and she began an intensive sampling program to collect and describe the polychaete fauna. Habitats which were targetted included estuarine wetlands and coral reefs. Apart from describing a large number of species predominantly belonging to the Terebellida, she also collaborated with Don Colgan of the AM to investigate the higher classification of the polychaetes using molecular techniques and their studies confirmed that polychaetes are far more closely related to molluscs than to the arthropods as previously thought.

In addition to her systematic studies she has undertaken extensive studies on rates and agents of bioerosion on coral reefs both in Australia and in French Polynesia. These studies demonstrated the role of eutrophication in modifying these rates and agents and clearly show that as reefs become increasingly stressed by climate change, rates of bioerosion increase significantly with potentially severe impacts on reef framework.

Pat has been heavily involved in marine conservation and, with Winston Ponder and Rebecca Chapman, summarised the conservation status of Australian marine invertebrates (http://malsocaus.org/marine_invert/contents.html). She has worked with local community groups to try and conserve estuarine wetlands, particularly in the Sydney region. With her colleagues at the AM, Pat undertook some of the earliest surveys to highlight the introduction of non native species via ballast water and as hull fouling organisms into Australian marine coastal waters. Finally she has mentored many students and co-supervised several students on various aspects of polychaete biology some of whom she now regards as her colleagues and by this has hopefully increased the awareness of the significant role which polychaetes play in marine and estuarine ecosystems.

Having such diverse interests, although all focussing on polychaetes, has allowed Pat to collaborate with many people from all around the world and has ensured that she is still enjoying working on this diverse group of animals.