

Seashore Newsletter



ISSUE FOUR: JANUARY 2008

Welcome to "Seashore Newsletter" - Western Underwater Research Team's official newsletter which is published every six months to keep supporters and interested parties up to date with project news. In this and further newsletter issues we explain our aims, objectives and where we are at with the survey projects. Details at the back of this newsletter explain how you can help and where you can get more information.

The 'Western Underwater Research Team' (WURT) is an established (June 1993) marine environmental group consisting of voluntary supporters, who have an interest in an awareness of the marine environment and its preservation. WURT is a non-profit making group with the members giving freely of their time, skills and equipment. The personnel within the group are members of the community who are diverse in their interest, occupations and ages.

Such is the diversity of marine life around New Zealand there is plenty to interest everyone. Utmost is the understanding of coastal dynamics and the effect that human influences has had on these environments. There has been minimal research on species interrelationship within changing habitats and we invite you to be a part of our programme by contributing any interesting observations that you might have experienced whilst scuba diving, snorkeling or visiting the beach. We will also discuss how you can assist in the guardianship of our marine environment which, in some areas around New Zealand's coast, has fallen into an unacceptable state. Now we have the almost impossible task to somehow take into account climate change - do you have any comments or ideas to help us on this subject?

News Update

Hi All - in this issue we take a look at what is going on around the coasts of the United Kingdom (UK) with particular reference to projects similar to ours and look at how networking with other organizations can be beneficial to all parties in helping understand common marine issues. It can be said that New Zealand is not alone when dealing with the many problems facing the marine environment. When touring around parts of England last year I came across surprising similar issues as New Zealand - marine aliens, fishers up in arms over proposals for Marine Protected Areas (MPA), so what's new? We will review and compare the approaches being tried to bring awareness to the community both in New Zealand and the UK. - Mike Percy

Marine Biosecurity:

What does New Zealand have in common with the UK? Probably quite lot, but try *Undaira pinnatifida* (Wakame) or *Styela clava* (Leathery sea squirt). Both Wakame and the Leathery sea squirt were introduced from Asia. Wakame is found along the English south coast and Channel Islands in sheltered marinas. It is rarely found on sub tidal shores. The Leathery sea squirt also known as club tunicate, clubbed tunicate, Asian sea squirt, or Pacific rough sea squirt occurs along south and west coast of England as far north as Cumbria. Both species can be also found in New Zealand waters and others like *Eriocheir sinensis* (Chinese mitten crab) again introduced from Asia has established itself in the River Thames, Humber, Medway and Ouse. Although not established in New Zealand, it is a potential serious threat to New Zealand's estuaries. Not all of UK's marine non-native species originate from Asia, *Elminius modestus* (Darwin's barnacle) and *Asparagopsis armata* (Harpoon weed) originate from New Zealand and Australia. Nowadays there doesn't seem to be any barrier that can stop the advance of marine aliens. We could see a widening spread or even an explosion of unwanted marine exotics from established areas due to the effects of climate change. This is why it is so important to keep our coasts free of marine exotics. You can help by keeping alert when scuba diving, snorkeling or visiting the beach - be mindful to keep your gear clean and so prevent spreading any marine nasty around the country. We have New Zealand marine pest guide slates to give away - email your name and postal details to seahorse2000@xtra.co.nz. You can also get information on New Zealand's

marine threats by visiting either www.fish.govt.nz or www.biosecurity.govt.nz and to report any suspected exotic land, freshwater, and marine pest, call 0800 80 99 66 - store this number in your mobile phone.

During my visit to the UK I managed to arrange a tour around part of the Marine Biological Association (MBA) Laboratory in Plymouth, all thanks to Judy Walsby who arranged for me to see Keith Hiscock (MBA Programme Director).

The MBA was founded in 1884 and the laboratory on Citadel Hill was opened in 1888. From there it ran public aquarium until 1998 when the National Marine Aquarium was opened. The old aquarium has now been transformed into the Marine Life and Environment Sciences Resource Centre. The MBA undertakes independent research and hosts the National Marine Biological Library. The one initiative of the MBA that impressed me is the Marine Life Information Network (MarLIN). The MarLIN programme was developed in March 1998, in association with organizations responsible for marine environmental management, protection and education. To give you an idea of their communication scope; 15,000 visitors a month from 180 different countries visit the MBA website - www.marlin.ac.uk

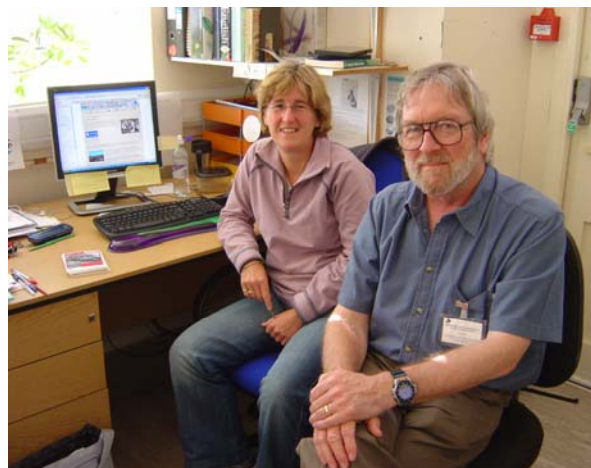
Keith introduced to me a number of the MBA staff: Fiona Crouch (Shore Thing Project), Jack Sewell (Marine Aliens) and Guy Baker (Communications and Outreach Officer). In talking over a broad range of issues, for example the impact of marine aliens on the environment, there was so much we could all identify with - our circumstances were almost identical. I was very impressed with the community awareness resources, especially awareness of marine aliens - 'Shore Thing Project'.

The key component of the 'Shore Thing' survey is a 20 minute search of the shore looking for non-native species and more importantly, climate change indicators. I was very pleased to see that the probable effects of climate change were being taken into account in a format that is understandable to all. Each species image has been colour coded to indicate the habitat in which these species can be found - rock pools (blue), boulders/crevices/overhangs (red), open rock (green). This is a great project and well resourced, particularly for schools. Students and volunteers have been surveying shores in Devon, Cornwall, North and South Wales, Yorkshire, Northumberland and the east coast of Scotland - for more information on 'Shore Thing' visit www.marlin.ac.uk/shore_thing

The data from such projects is verified and progressed to the Data Archive for Seabed Species and Habitats (DASSH) that has taken over the data access and collation role of MarLIN. One example is that, since 2005, there has been an increase in the abundance of the Pacific oyster *Crassostrea gigas* found at Mothecomb in South Devon. For more information on DASSH visit www.dassh.ac.uk



Keith Hiscock - formally MBA Programme Director, now retired but continues to support MarLIN projects.



Left to Right - Fiona Crouch (Shore Thing Project) and Mike Percy (WURT).



Mike Percy

Another MarLIN initiative is 'Sealife Signpost' which supports UK marine life by asking anyone who visits the sea to record what they see. Sightings can then be sent by text or picture message. People are asked to provide name and contact details, what was seen, and where, plus when the sighting was made. Sightings are then forwarded to the appropriate recording scheme e.g. marine mammals, sharks and so on - don't forget seahorses. For more information about 'Sealife Signpost' visit www.sealifesignpost.org

This is a great project - anyone keen to get involved to start something similar here in New Zealand - email Mike Percy at seahorse2000@xtra.co.nz Finally, I would like thank Keith and the MBA Team for a great day - much appreciated.

Projects Update

Survey Seahorse 2000:

Although the official three year survey has finished we are still open for business of collecting data. We support research into the seahorse which also includes its habitat. Although New Zealand has one recognised species of seahorse *Hippocampus abdominalis* there is strong support that maybe there is more than one (sub) species. Since 'Survey Seahorse 2000' first started in 2000, two more species have been added to the list of 34 known species. The identification and taxonomy (classification) of seahorse species in early times was a bit hit and miss and about a 120 or so species were noted to exist. Due to the relatively slow development of the seahorse into adulthood and the ability to frequently change colour in a matter of minutes, early observers (19th century) were often mistaken and kept adding new species names to the list. Hence in taxonomy we get the term 'synonym', which is simply defined as a new species name that represents a species that has already been described i.e. duplication of naming. To add to the confusion, in some literature, mis-spellings have occurred prompting a long overdue, comprehensive revision of the group. The only sure way to check out a species is through its genetics. Very little research has been done in New Zealand into whether *abdominalis* shows any strong genetic differences and so we were more than pleased to support Waikato University student Jennifer Nickel investigation to define the species and dispersal ranges of seahorses around the North Island of New Zealand. Jennifer's field research begins this year and involves sample collecting. If you have a dried seahorse specimen (North Island) that you would like to donate to research - email Jennifer at jen2@waikato.ac.nz



Jennifer Nickel



Left to Right - Mike Percy and Ivan Zabak

"It's not every day that we get such a great donation and one that we can readily use" said Mike Percy (Survey Seahorse 2000 National co-ordinator). All thanks to Donald Cronkite (Seahorse Protective Equipment Cases - Sales Manager USA) who contacted 'Survey Seahorse 2000' with the offer outlined below.



"Seahorse Protective Equipment Cases' manufacturer watertight, airtight, dustproof, crush resistant carry cases. I would like to make a few of these cases available to your organisation FREE of charge, no strings attached. I like the idea of the seahorse name for your group and it sounds like a group worthwhile to help support in some way".

The presentation of three cases was done at the 'Western Underwater Dive Club' by Ivan Zabak of 'Apix Photographic Supplies', who are a New Zealand sales outlet for 'Seahorse Protective Equipment Cases'. For more information on either visit www.seahorse.net and www.apix.co.nz

As part of mutual networking 'Survey Seahorse 2000' has recognized other organisations - Project Seahorse (Canada) and Dragon Search (Australia). Last year we made contact with the British Seahorse Survey - Neil Garrick-Maidment. The survey has been running since 1994 and was set up to look for and monitor the populations of seahorses around the British Isles and Ireland. This information will be used to form the basis of legal protection and conservation strategies for these highly vulnerable and environmentally sensitive animals. For more information about the British Seahorse Survey visit www.britishseahorsesurvey.org

An opportunity arose last year to visit Hong Kong and as the world centre of trading of Traditional Chinese Medicines (TCM) I could only imagine the amount of trade in seahorse product that goes on daily. A walk along Nathan Road (Kowloon) exposed me to many shops selling herbal and animal product associated with TCM. Hong Kong consumers buy seahorses primarily for respiratory disorders while Taiwanese and mainland Chinese often rely on them to treat sexual disorders and as an aphrodisiac. I had a mixed reception to my questions and at times it became impossible to communicate due to language problems. I did however manage to take a few photographs

and can now understand the importance of using particular species in TCM. Seahorses that have been farm reared (aquaculture) and bleached are viewed as inferior to those collected from the wild. They are primarily used in soup preparations for kidney complaints. I wasn't able to establish whether the seahorses being sold came from the wild. Species that dried naturally white and free from blemishes were more valued.

Mike Percy



Maui's dolphin 'Extinction lasts forever':

Last year at the 'Hutchwilco New Zealand Boat Show' the Research Team launched its Maui's dolphin 'Extinction lasts forever' poster (funded by the Mazda Foundation). During the boat show the team rolled up and gave away over 600 (A2) posters. The Research Team also donated posters in support of an Auckland Regional Council (ARC) Maui's dolphin campaign, initiated by ARC Councilor Christine Rose. A second reprint has been done for 2008 (funded by the ARC).

To further support awareness and research, Antics Marketing Ltd was approached to produce a Hector / Maui's soft toy. The promotion will also be supported by a new Research Team web site, www.maui's_dolphin.co.nz (launch date June 2008).


The cost for one Hector / Maui's dolphin soft toy is \$18 (price includes postage anywhere in New Zealand). When ordering, please make cheques payable to the 'Western Underwater Research Team' and send it with your name and postal address to PO Box 20 296, Glen Eden, Waitakere 0641. To get a price when ordering more than one dolphin, please email your purchase enquiry to seahorse2000@xtra.co.nz - thanks for your support.




Left to Right – David Williams (Antics Marketing Manager) and Mike Percy (WURT)

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