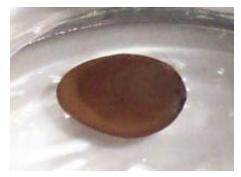
Issues arising related to ocean conservation

 sale of vent invertebrates on e-Bay at exorbitant prices – "THERMAL VENT LIMPET FROM 8639 FT, LEPETODRILUS SPECIES. 5MM, EAST PACIFIC RISE. THIS IS A VERY PRESTIGIOUS SHELL TO HAVE IN A PRIVATE COLLECTION. IT WAS COLLECTED BY SUBMERSIBLE AT 13 DEGREES N ON EAST PACIFIC RISE." In Mark Price: US \$49.00



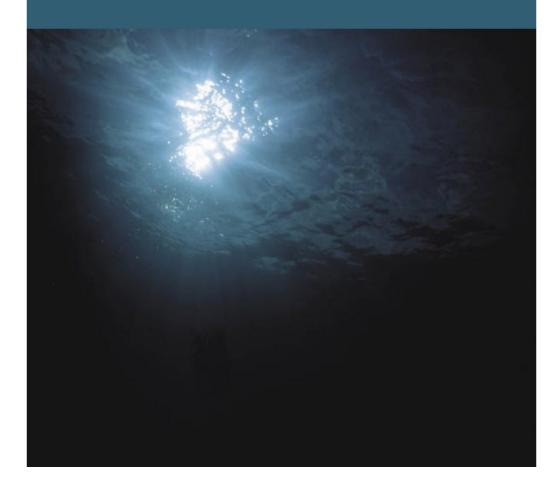
- submersible ballast waters and other issues of transport of deep-sea organisms around the globe
- 2005 Nature letter on impact of scientific research on vent environments Nature 433, 105 (13 Jan 2005) "Oceans need protection from scientists too" Nature 434, 18 (03 Mar 2005) "Biologists do not pose a threat to deep-sea vents"
- reports from the UN on impacts of scientific research on the marine environment
 - growing interest in regulating oceanic bio-prospecting, resource extraction
 - International Seabed Authority
 - various international biodiversity conventions, instruments, activities



Institute of Advanced Studie

UNU-IAS Report

Bioprospecting of Genetic Resources in the Deep Seabed: Scientific, Legal and Policy Aspects



Issues:

• the lack of knowledge about deep sea ecosystems

• <u>the need to identify impacts that marine</u> <u>scientific research</u> and other activities, including fishing practices, <u>have on these</u> <u>ecosystems</u>

• the need to ensure the sharing of benefits arising from utilizing deep seabed genetic resources

 is the recovery of deep seabed genetic resources and subsequent development of commercial products subject to an international legal regime, and if so, to which regime and how

(extracted from the text of the document)



The Perception:

"marine scientific research represents a source of potential and actual adverse impacts on deep seabed ecosystems"

Marine scientific research may entail

- physical disturbance or disruption
- alteration of environmental conditions
 - *in situ* experiments aimed at clarifying the reproductive biology of some organisms, bringing changes in water temperature
 - introducing light and noise in an environment that is naturally deprived of the former, and in which characteristic patterns of noise are very different from those induced by human activities
 - entail pollution in the form of debris or biological contamination due to disposal of biological material in areas different from the sampling area
- frequency of research expeditions is a source of negative impact.

(extracted from the text of the document)

"Soft Laws"

• engage participants in a mindset of conservation and responsible stewardship

InterRIDGE Code of Conduct:

viewed as an "interim measure while awaiting the development of regulations or management plans"

i.e., if we don't establish codes of conduct, others will do so (and are doing so) for us

Code of Conduct for the Scientific Study of Marine Hydrothermal Vent Sites

- minimal impact
- maximal efficiency of necessary research
- applicable to organizations and affiliated individuals undertaking marine scientific research and submarine-based tourism activities at hydrothermal vents located within and beyond the limits of national jurisdiction

• reduce the impact of sampling at heavy use sites by encouraging the development of micro-analytical procedures, and alternatives to sampling

Commitment to:

- identify and comply with international, national and sub-national laws and policies
- minimize or eliminate adverse environmental impacts through all stages of an activity
- minimize or eliminate actual or potential conflicts or interference with existing or planned marine scientific research activities
- monitor, evaluate, report on activities