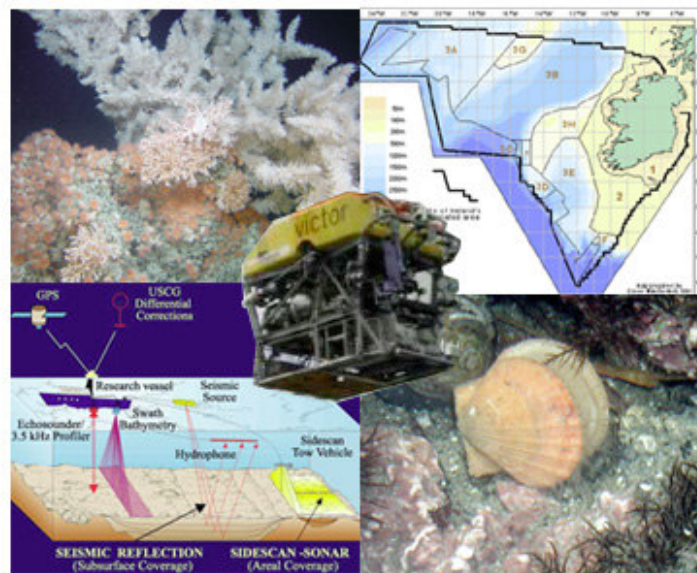




GEOHAB

**Marine Geological and Biological
Habitat Mapping**

Fifth International Symposium *May 5th to 7th, 2004* *Galway, Ireland*



Agenda and Abstracts



Earth and Ocean Sciences Department
NUI, Galway



Benthic Habitat Mapping on the Scotian Shelf

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Department of Fisheries and Oceans together with Natural Resources Canada are making a significant progress in understanding ecology and structure of seafloor habitats of Eastern Canada. Cooperative habitat mapping effort is applied through interdepartmental agreements as well as through informal horizontal linkages between scientists.

In this interdisciplinary framework on habitat mapping we are addressing the following key questions: Which areas of the seafloor are the most sensitive to human impacts and how to balance resource exploration and fisheries with available ecosystem services? These questions are answered through detailed mapping and classification of seafloor environment.

Our approach integrates interdisciplinary information on geology, biology and oceanography in digital maps and provides models of the effects of geological and oceanographic controls on benthic fauna. We define naturally disturbed or stable environments, as well as areas of high or low productivity, thus providing ecologically sound and spatially accurate information for decision makers. Ecological framework of the developed habitat model provides key information required for the achievement of conservation goals, namely prediction of ecosystem properties, diversity and life history traits of benthic fauna. Habitat stability and complexity is described on the basis of detailed geological mapping of seafloor structure and texture based on compilation of existing images, samples, geophysical maps, reports and publications.