DIVERSITAS

What is DIVERSITAS?

DIVERSITAS is an international global environmental change programme dedicated to the science of biodiversity. It is placed under the auspices of ICSU, IUBS, IUMS, SCOPE and UNESCO.

Its overall goals are:

- to promote an integrative biodiversity science, linking biological, ecological and social disciplines in an effort to produce socially relevant new knowledge; and
- to provide the scientific bases for the conservation and sustainable use of biodiversity.

DIVERSITAS recognises that many of the questions addressed in biodiversity science need collaborative research. DIVERSITAS contributes to producing new knowledge by synthesising existing scientific knowledge, identifying gaps and emerging issues of global importance, promoting new research initiatives, building bridges across countries and disciplines, investigating policy implications of biodiversity science, and communicating these to policy makers and international conventions.

There are 3 core projects within the overall science plan. These link biodiversity to ecosystem functioning and service provision and thereby on to conservation and management.

- Core Project 1, *bioDiscovery*, “Discovering biodiversity and predicting its changes”,
- Core Project 2, *ecoServices*, “Assessing impacts of biodiversity changes on ecosystem functioning and services”,
- Core Project 3, *bioSustainability*, “Developing the science of conservation and sustainable use of biodiversity”.

Each core project has two co-chairs, each from a different discipline (e.g. ecology and economics), and an international office. There is also a main DIVERSITAS secretariat office in Paris. The core project offices are charged with enacting the science plan for their core project by arranging workshops that may have one-off deliverables, provide a springboard for a major funding application to national and international agencies and foundations or apply for funds on behalf of the DIVERSITAS community to such agencies and foundations. The core project offices and the main Paris secretariat thus work to ensure that the science plan is delivered.

DIVERSITAS and Marine issues

The level of activities on marine biodiversity in DIVERSITAS is presently low. There is no obvious reason for this and it must appear odd to the wider community. Most of the planet is blue, most people live in coastal areas and the oceans largely control the world's climate. There is a need therefore to raise the profile of marine biodiversity research within DIVERSITAS. Carlo Heip, Dave Raffaelli and Meryl Williams were asked by DIVERSITAS as to how this might best be achieved and they recommended that an effective way would be to link up with existing marine initiatives. There is no point in re-inventing wheels or competing for limited funds, and the inter-disciplinary research community assembled by DIVERSITAS has much to offer such initiatives. The three core programmes of DIVERSITAS (see above) have major points of contact with such initiatives.

EcoSERVICES strives to expand the science of biodiversity and ecosystem functioning to larger scales and over a greater breadth of the biological hierarchy, to develop an effective means for linking changes in ecosystem structure and functioning to changes in ecosystem services, to assess human response to ecosystem services changes, and feedbacks onto ecological systems; and to examine the impacts of biodiversity change on human health. Of the ecological goods and services provided by the marine environment, two stand out as key elements: the provision of food (fish and shellfish), and global-scale climate regulation by the oceans.

BioSUSTAINABILITY aims to develop new knowledge to guide policy and decision making. Its main objectives are to evaluate the effectiveness of current measures for the conservation and sustainable use of biodiversity; to formally analyse the social, political and economic drivers of biodiversity loss; to investigate social choice and decision making, and to understand the interactions between humans and biodiversity in ecosystems. Collectively, these activities comprise a cycle of discovery, analysis and information sharing that supports the application of socially relevant knowledge.

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