

Biodiversity Data Management Training Course

Scientific content

Data management has been identified, amongst others during the 'Colour of Ocean Data Symposium' (Brussels, 2002), as a gap in the curricula of many academic institutions. To try and fill this gap, this course on data management is proposed jointly by the IOC Project Office for IODE (Intergovernmental Oceanographic Commission of UNESCO Project Office for International Oceanographic Data and Information Exchange Committee) and VLIZ (Flanders Marine Institute). The course will be specific for biodiversity data management, going into details on specific data needs for taxonomy and geography. The course will be a combination of lectures and hands-on activities. The final sessions will be devoted to development of a pilot application, and reporting and analysis based on this application.

Being a joint IODE/MarBEF training course, the participants to the course will be not only from EU countries. IODE-sponsored participants will be invited from non-EU countries, both from developing countries and from Eastern Europe.

Time and location

The course will be held from 19 to 24 March 2007, at the IOC Project Office for IODE in Oostende, adjacent to the offices of VLIZ:

Wandelaarkaai 7
8400 Oostende
Belgium

Lecturers

Main lecturer will be Edward Vanden Berghe, with input from other members of the MarBEF data management team. Three recognised international experts will be invited to give guest lectures.

List of topics

Introduction
Importance of biodiversity and conservation
Importance of biodiversity databases
Demonstrator projects

Data management
Documentation
Quality control
Back up
Exchange
Archive

Biology:
Systematics
Classification and Nomenclature
Taxonomic hierarchy
Authority
Typification
Synonymy

Existing data systems

BIOSIS, URMO, ITIS, ERMS, FishBase...
OBIS

SQL/Access

Building database
Different possibilities to represent taxonomic hierarchy
Different possibilities to search open hierarchies
Demonstrator application
Identifying the problem
Locating the resources
Entering/Importing data from different sources
Reporting: Lists, Maps

Quality control

Checking taxonomy
Detecting outliers in geographical space
Detecting outliers in ecological space

Analysis

Measures of diversity
Diversity coefficients (including taxonomic distinctness)
Expected number of species
Indicators of environmental health
Measuring effects of natural & man-made disasters
Monitoring system recovery
Classification
Ordination

Contact address

Dr. Vladimir Vladymyrov
IOC Project Office for IODE
Wandelaarkaai 7
8400 Oostende
Belgium

e-mail: v.vladymyrov@iode.org

Dr. Edward Vanden Berghe
VLIZ/MarBEF Data Management
Wandelaarkaai 7
8400 Oostende
Belgium

e-mail: wardvdb@vliz.be

Tentative audience

The course is in the first place directed at junior biodiversity/biogeography scientists. But everyone with an interest in biodiversity data management is welcome. Being familiar with computers (Office applications, Windows operating system, installing applications) is a prerequisite.

Standard capacity of the training room is 16. It is expected that about half of the available spaces will be for MarBEF participants (from EU), half for IODE-sponsored participants