



Caspian biodiversity information system

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Long-term variability of water budget causing drastic sea level rises and drops, regional climate and thermohaline structure changes, intensive exploration of natural resources have considerable impact on the Caspian ecosystem. Lack of observational data, variety in methods and sampling technique leads to controversy on the ecosystem evolution tendency. To promote more reliable estimates of the basin vulnerability Caspian biodiversity information system is now being developed under the auspices of Caspian Environmental Programme UNDP. The general objectives of the information system are: biological and environmental data storage; on-line data access and input; spatial and temporal data visualization; changes and trends estimation. The system is intended both for archive data and for Caspian monitoring programme being developed. A distinctive feature of the system is interdisciplinary approach. In preference to biodiversity orientation it brings together biological, geographical, chemical, oceanographic and meteorological data. Searchable and browsable taxonomy tree of the Caspian Sea organisms serves as reliable reference for all biological data records. All necessary information is included such a methods (observing, analytical and processing), instruments, calibrations as well as available attendant documents. In addition to raw data the system provides following calculated variables and estimates: biomass, population structure, average yearly and monthly values, basic biodiversity indices, age/size distribution. Data queries can be represented as time series or spatial distributions for a particular taxonomic group for a particular site or area for a particular parameter, method, agency, country for a particular time period and others. Web-based software for this project is developed by means of Microsoft Solutions (Windows Server and ASP.NET) and provides rapid access to the database, easy and user-friendly interface.