

Goal: The Census of Marine Life (CoML) is an international program to assess and explain the diversity, distribution and abundance of life in the oceans. It is a global program, recognizing that climate effects on local ecosystems reflect global changes.

Objective: To increase understanding about our marine planet and to improve management of ocean resources. The oceans contain the majority of our planet's new resources – energy, food, pharmaceuticals – and demands will increase with population. To achieve these objectives, a global census is urgently required to establish a marine biodiversity baseline, relate it to historic changes and to predict, monitor and mitigate, as necessary, future changes.

History: The ocean is vast, encompassing 95% of the living volume of the planet. At present, less than 0.1% of the oceans volume has been scientifically sampled. Even this small sampling has made it clear that intense fishing, pollution and altered climate are changing the oceans physically, chemically and biologically.

In June 1999, an international Scientific Steering Committee (SSC) was formed to define the goals of the CoML. In 2000, the SSC met with the United Nations Intergovernmental Oceanographic Commission (IOC) and agreed that environmental change and increasing human access to the oceans made a census of present marine life crucial to monitor future changes. The IOC encouraged this census and its four initiatives to meet its goal:

- Assemble existing data in an internet-accessible information system.
- Use emerging technologies to discover species-level, geo-referenced ocean data.
- Develop analytic tools to use with the data to generate and test hypotheses.
- Establish a public education and outreach network.

Strategy: CoML projects will address: what did live in the oceans, what does live in the oceans and what will live in the oceans, with all data accessible on-line. National and regional implementation committees will ensure compliance with local requirements and integration within the overall CoML. The Ocean Biogeographic Information System (OBIS) is the portal to geo-referenced, species-level datasets,. To meet the United Nations objective of a Global Marine Assessment (GMA), it has been estimated that the CoML will require \$1 billion dollars, globally.

Milestones:

- -2007, OBIS operational for all known marine species
- -2010, Baseline data and tested sampling protocols published for all ocean realms to facilitate the UN Global Marine Assessment

For additional information: Visit websites; www.coml.org, www.COREocean.org