



Press Release

The Census of Antarctic Marine Life (CAML) An Initiative for the International Polar Year (IPY) 2007/08.

- *How is the distribution and abundance of Antarctica's marine biodiversity affected by climate change?*
- *How will the nature of ecosystem services provided by the ocean that currently benefit humankind be altered by climate change?*
- *How can the effects of future change be measured?*

Find out more about the answers to these fascinating questions through the Census of Antarctic Marine Life (CAML) Program.

The Scientific Committee on Antarctic Research (SCAR) proposed that CAML be undertaken as a major activity during the International Polar Year (IPY) of 2007/08, as part of its "*Evolution and Biodiversity in Antarctica*" Program.

CAML is a five-year International Program and is more than just a census as it will prioritise the Antarctic marine taxa in terms of what they can tell us about the known and as yet unknown aspects of marine biodiversity and ocean change.

The Southern Ocean surrounding Antarctica is cold and inhospitable to human beings. It contains a rich and diverse flora and fauna. This evolved during the past 40 million years at which time the super-continent Gondwana broke up and Antarctica became isolated at the South Pole.

The Antarctic Circumpolar Current wraps around Antarctica and acts as the mixing bath and circulatory pump for the circulation of the Earth's great oceans. On its return to Antarctica from the northern hemisphere, the water rises to the surface and nourishes the uniquely Antarctic plant and animal biomass.

The Antarctic Ocean environment is changing and scientific observations over the past 12 years suggest that the Southern Ocean may be the most vulnerable part of the global marine system with a potential to disrupt the world's ocean circulation. This would have dramatic biological and economic impacts.

The global marine ecosystem provides significant benefits to humankind in the form of food, biological products, atmospheric carbon absorption as well as recreational, spiritual and aesthetic resources.

CAML will collaborate with environmental oceanographers to conduct research on marine biodiversity via an integrated field and laboratory program of study through the three major divisions of time:

- *The Past* – Extinct Species
- *The Present* – Known and New Species
- *The Future* – Species Evolution

The knowledge gained by CAML looking at the biodiversity, distribution and abundance of species in the Southern Ocean is of *global significance*.

The fascinating images of the Southern Ocean and its rich biodiversity produced via remote sensing techniques will be transmitted to a wide audience via a vigorous Public Outreach Program.

CAML's biodiversity data will be made available through the Scientific Committee for Antarctic Research Marine Biodiversity Information Network (SCAR-MarBIN) which provides information to governments and others concerned with ocean management.

After CAML has finished, the effects of future change will be able to be measured by continued sampling of the sites left as a legacy of the Program.

CAML is supported by the Alfred P Sloan Foundation of New York, USA.

Further information is available at:

- The CAML Website: <http://www.caml.aq/>
- The Census of Marine Life (COML) International Web Portal: <http://www.coml.org/>
- The IPY Website: <http://www.ipy.org/>

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