



ARCTIC COUNCIL

## Press release

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**Issued by:** The Arctic Monitoring and Assessment Programme (AMAP) ([amap@amap.no](mailto:amap@amap.no); [www.amap.no](http://www.amap.no))

**Subject: Scientific findings of new Arctic Ocean Acidification assessment released**

***The Arctic Ocean is rapidly accumulating carbon dioxide (CO<sub>2</sub>) leading to increased ocean acidification – a long-term decline in seawater pH. This ongoing change impacts Arctic marine ecosystems already affected by rising temperatures and melting sea ice.***

The Arctic Council's Arctic Monitoring and Assessment Programme (AMAP) commissioned an international group of scientists to undertake the first ever comprehensive assessment of Arctic Ocean Acidification (AOA). The results of their three-year assessment are now being released.

The assessment and its policy-relevant recommendations will be presented to the Arctic Council Ministers at their meeting in Kiruna, 15 May. The assessments scientific key findings will be discussed as part of an International Conference on Arctic Ocean Acidification that will take place 6-8 May in Bergen, Norway (see: [www.amap.no/Conferences/aoa2013/](http://www.amap.no/Conferences/aoa2013/)).

- Globally, oceans are being affected by ocean acidification. Ocean acidification is a result of oceans absorbing large quantities of CO<sub>2</sub> emitted to the air by human activities.
- Over the past 200 years, the average acidity of surface ocean waters worldwide has increased by about 30 percent.
- The Arctic Ocean is particularly sensitive. CO<sub>2</sub> is more readily absorbed into cold water and the increasing amounts of fresh water entering the Arctic Ocean from rivers and melting ice are reducing the Arctic Ocean's capacity to neutralize acidification.
- Widespread acidification is occurring in the central Arctic Ocean and its surrounding seas. Ocean acidification is being observed at monitoring sites across the region, especially in surface waters.
- Because Arctic marine food webs are relatively simple, Arctic marine ecosystems are vulnerable to change when key species are affected by external factors.
- Arctic marine ecosystems are highly likely to undergo significant change due to ocean acidification. Scientific studies in the Arctic are limited, however the studies that have been performed, together with knowledge gained from studies in other areas raises concern that Arctic marine organisms from plankton to fish can be directly or indirectly affected by ocean acidification.
- When marine ecosystems are impacted this also has consequences for people. Arctic Ocean acidification has the potential to affect both commercial fisheries that are important to northern economies, and marine resources that are used by Arctic indigenous people.



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The Arctic Monitoring and Assessment Programme (AMAP) is a working group of the Arctic Council. AMAP has a mandate to monitor and assess the status of the Arctic region with respect to pollution and climate change issues by documenting levels and trends, pathways and processes, and effects on ecosystems and humans, and by proposing actions to reduce associated threats for consideration by governments. AMAP’s aim is to provide sound science-based information to inform policy and decision-making processes.

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