EASTERN CANADIAN ARCTIC – MARINE PRODUCTIVITY

SCIENCE BRIEF



RECOMMENDATIONS

- Support the development of a network of Marine Protected Areas that will enhance ecological resilience to anthropogenic disturbance and increase social and economic benefits for communities and sustainable fisheries.
- Protect important habitats such as wetlands and polynyas at scales that preserve functional connectivity, ecosystem resilience and facilitate adaptation to climate change.
- Support Inuit-led management and include traditional knowledge in conservation initiatives.
- Adopt proactive planning approaches which support community environmental stewardship.

Key Findings

The location of the Eastern Canadian Arctic with respect to ocean currents and remote oceanic processes strongly limits marine biological productivity in the area.

The potential and realized yield of commercial fisheries in eastern Baffin Bay is limited by a combination of environmental, social and economical factors.

Greater summer stratification from increased freshwater input and seaice melt may limit marine productivity.

In the future, marine productivity seems unlikely to increase with rising temperature, acidity and freshwater loading.

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