




ON THIN ICE

THE EFFECTS OF GLOBAL WARMING ON SEA ICE IN THE CANADIAN ARCTIC

SEA ICE

- Frozen ocean water
- Typically forms during the winter months and melts during the summer months, but some may persist year-round
- Area ranges from 7-15 million km² throughout the year in the Arctic (7-15 times the size of Ontario) [6]

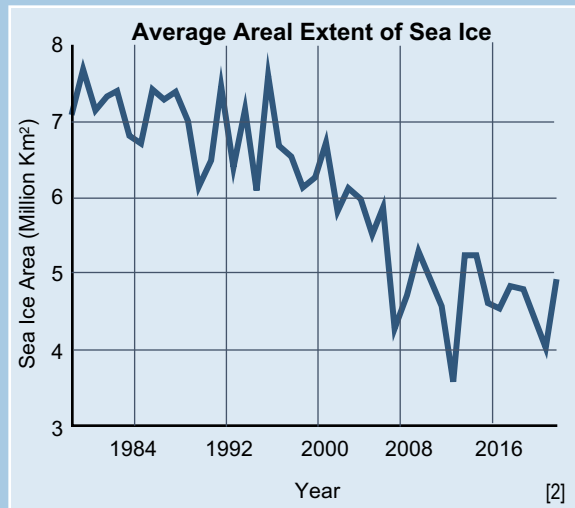
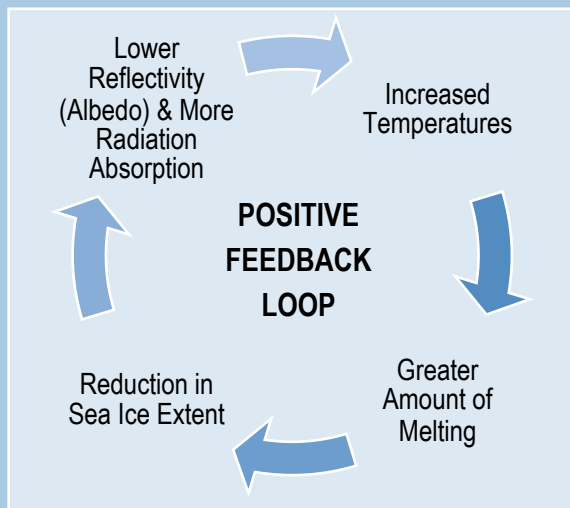
IMPORTANCE OF SEA ICE

Reflects Solar Energy 	Keeps Climate Cool 	Provides Habitat for Organisms 
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WHAT IS HAPPENING TO ARCTIC SEA ICE?



65% LOSS OF SEA ICE THICKNESS FROM 1975-2012 [1]



SUMMER SEA ICE EXPECTED TO DISAPPEAR BY THE EARLY 2030s [1] **13% ANNUAL DECREASE OF SEA ICE** [5]

ARCTIC WARMING AT 2x THE SPEED AS REST OF THE WORLD [1]

IMPLICATIONS OF MELTING SEA ICE [6]

Wildlife

- Various living organisms depend on sea ice for survival
- Polar bears depend on thick ice to walk/hunt on; they require an icy habitat as they're incapable of swimming long distances

Global Warming

- Due to the positive feedback loop, temperatures will continue to rise and sea ice will diminish, exacerbating climate change

Canada's Indigenous Peoples

- Forced to change how they hunt (limited availability due to habitat destruction)
- Slower freeze-up isolates communities
- Coastal erosion and thin ice force communities to relocate

Transportation

- Extended open-water period requires boats as transportation
- Less sea ice enables travelling by ship from Europe to Asia

WHAT CAN YOU DO TO HELP? [7]

- Reduce your carbon footprint by being more eco-friendly, decreasing your dependence on fossil fuels
- Contact your government officials, urging for strengthened climate change policies
 - Call for action which encourages reductions in carbon emissions, protects wildlife and ecosystems in the Arctic, and prevents pollution and the deposition of waste

Scan for References

