

Scientists: Less ice on Great Lakes during winter

March 23 2009

(AP) -- Ice cover on the Great Lakes has declined more than 30 percent since the 1970s, leaving the world's largest system of freshwater lakes open to evaporation and lower water levels, according to scientists associated with the National Oceanic and Atmospheric Administration.

They're concerned about how the milder winter freeze may affect the environment. But they're also trying to come to terms with a contradiction - the same climate factors that might keep lake [ice](#) from freezing might make freezing more likely if lake levels drop due to evaporation.

Scientists at the [Great Lakes Environmental Research](#) Laboratory in Ann Arbor, Mich., say [global climate change](#) can be at odds with regional climate patterns. Accurately measuring [ice cover](#) across a lake system that spans 94,000 square miles in two countries is no small task, they say.

Their studies show that although the amount of ice cover can vary substantially from year to year, the overall coverage on the world's largest system of freshwater lakes is diminishing, especially in the deepest, middle portions of Erie, Huron, Michigan, Ontario and Superior.

"The deeper the water, the greater the heat storage from summer, and it freezes later than the shallow areas," research Ray Assel told The Plain Dealer. "Now, increase the air temperature and the lake takes in more heat and stores it longer, to the point that many of the midlake areas are

freezing over less."

Assel's records indicate that ice formation at nearshore areas has decreased less than on the deepest parts.

Evaporation from open water can cause heavy lake-effect snow inland.

Researcher Jia Wang said ice loss can cause other problems, including the destruction of the eggs of fall-spawning fish by winter waves from an open lake, erosion of coastal areas unprotected by shore ice and less winter recreation on the lakes such as snowmobiling or ice fishing.

The Coast Guard has estimated it cost more than \$245,000 to rescue 134 fishermen from a huge ice floe off Ohio last month. The fishermen became stranded Feb. 7 when a miles-wide chunk of ice broke away in Lake Erie.

There might be one short-term advantage to decreased ice: Shipping may someday be more possible in the winter months. The locks at Sault Ste. Marie now close each year in mid-January and reopen in late March. But shipping companies might haul less cargo to pass through low-water areas.

On the Net

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Citation: Scientists: Less ice on Great Lakes during winter (2009, March 23) retrieved 3 May 2024 from <https://phys.org/news/2009-03-scientists-ice-great-lakes-winter.html>

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