
16 **The Global Warming 101 Expedition in Baffin Island was sponsored in part by ethanol — both Fagen, Inc. and the Ethanol Promotion and Information Council.**

**Ethanol, as a transitional fuel source, provides one solution for the global warming problem.**

17 Will Steger with Global Warming 101 Expedition Members and Inuit Hunters, Simon Qamariq and Lukie Airut. Both Inuit hunters are in their 60s and are respected hunters, dog mushers, carvers and elders in their culture. They were the ears and eyes on the expedition for the Inuit experience with global warming.

18 Members of the Global Warming 101 Expedition. The special Eskimo-Husky breed thrive in Arctic temperatures and howl when they are

19 Global Warming 101 Expedition in action — Guest Expedition Member, Ed Viesturs (high altitude mountaineer) and Expedition Manager/Dog Trainer, John Stetson manage a sled across Baffin Island.

20 Sir Richard Branson learns the art of setting up a tent in Clyde River while participating in the Global Warming 101 Expedition in Baffin Island.

21 The Global Warming 101 Expedition travels through Pangnirtung Pass — a valley of ice fjords and mountain ranges provide spectacular views and tough terrain.

22 Global Warming 101 Education Coordinators Abby Fenton (seen here) and Elizabeth Andre sent daily trail dispatches back to basecamp so that schools and educators could follow the Team's progress and experiences with global warming.

23 While visiting each remote Inuit village, the Global Warming 101 Expedition gave school presentations as a way to share the goals of the expedition with the Inuit community, collect stories, and build excitement and enthusiasm for the expedition.

24 The Global Warming 101 Expedition traveled 1200 miles over four months, reaching some of the most remote Inuit villages in the world. Expedition videos, podcasts, images, audio and trail dispatches can all be found at www.globalwarming101.com. Hear interviews with Inuit elders and follow the expedition in concert with the Global Warming 101 Lesson Plans. Learn about solutions, like renewable energy and ethanol, and ways you can reduce global warming pollution.

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# Global Warming...

## Finding Solutions

August 2007

the MINNESOTA PROJECT
working for strong local economies, vibrant communities, and a healthy environment
www.mnproject.org

Global Warming 101
an initiative of the Will Steger Foundation
www.globalwarming101.com

Fresh Energy
www.fresh-energy.org

Union of Concerned Scientists
Citizens and Scientists for Environmental Solutions
www.ucsusa.org

Environmental Defense
www.environmentaldefense.org

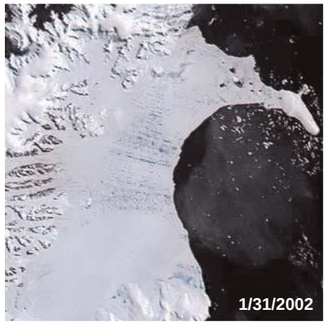
# Global Warming 101

an initiative of the Will Steger Foundation

**Established in January 2006 by renowned polar explorer Will Steger, the Will Steger Foundation (WSF) is promoting change through education and advocacy. We are dedicated to creating programs which foster leadership and international cooperation through environmental education and policy. The Foundation's first initiative, Global Warming101(www.globalwarming101.com), raises broad public awareness about global warming as witnessed through Will Steger's polar expeditions.**

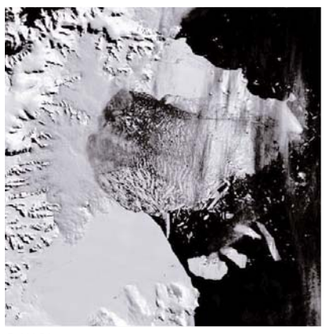
10 On Will Steger's International Arctic Project Expedition in 1995, the Team crossed the entire Arctic Ocean. This was the first doglsed traverse of the Arctic Ocean from Russia to Ellesmere Island in Canada.

## 2002 Larsen B Ice Shelf Collapse 2-4

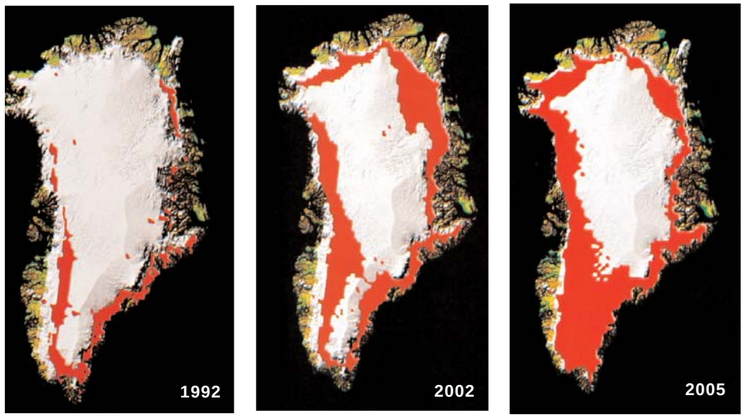



This picture shows the Western Antarctic Ice Shelf — a close up view of the Larsen B which collapsed in 2002 to scientists' surprise. Will Steger traveled across the entire Larsen Ice Shelf during his Trans-Antarctica Expedition in 1989–90.

This shows satellite images of the Larsen B ice shelf collapse — the broken ice sheets are the size of small New England states.



© NASA




© NASA

## Greenland Sea Ice Thaws 5-7

(left) This image displays the summer sea ice thaw in 1992. The red area demonstrates where the summer sea ice thaws on Greenland. Steger traversed Greenland in 1988 in preparation for his Trans-Antarctica expedition.

(middle) This image shows Greenland's summer thaw in 2002.

(right) Notice how much the summer sea ice has grown by 2005.

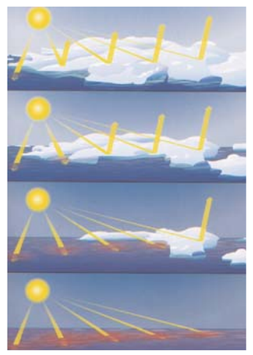
8-9 The picture above demonstrates what is happening when the summer sea ice thaws — as the ice thaws it creates rivers on the uppermost layer of ice which lubricates the surface underneath, causing the glaciers and ice to slip into the ocean (right).

© ArcticNet

13 The summer sea ice threatens to hurt not only the Inuit or Eskimo culture but the wildlife communities that depend on the ice — from the polar bear to the walrus to the seal. While polar bear populations vary across the Arctic region, they are certainly a species that is threatened to extinction if they entire summer sea ice disappears as scientists are now predicting.

## Albedo Affect 14

The diagram (right) describes the albedo affect. As the summer sea ice disappears, more energy from the sun is absorbed into the ocean's water and less is reflected back into the atmosphere.

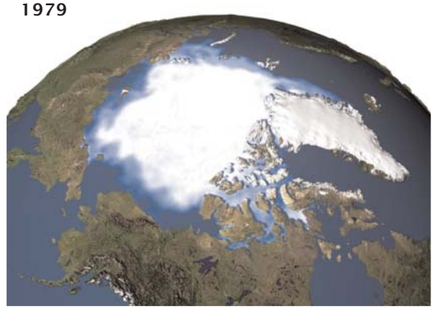


## Summer Sea Ice 11-12

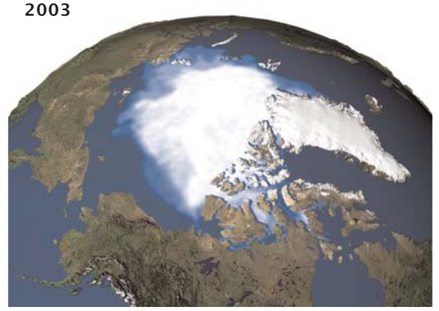
(right top) This is a NASA satellite image of the summer sea ice over the North Pole overtime. This image was taken in 1979.

(right bottom) Notice how much the summer sea ice has receded by 2003.

1979



2003



© NASA

## Temperature and $CO_2$ Similarities 15

The graph below was taken from the Vostok ice core in Antarctica. It clearly shows the similarity between temperature and carbon dioxide pollution over time. Current carbon dioxide emissions are well over 300 ppm and looming closer to 400 pp — a huge increase over thousands of years of cyclical patterns.