

# OUR ARCTIC ISSUE

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## From Us to the Arctic Back to Us

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### OUR POLLUTION AFFECTS THE ARCTIC, BUT CAN THE ARCTIC AFFECT US?

### Global Warming and Us

Ever think New York City or Los Angeles can be under water by the end of the century? Well recent studies show that due to global warming they can be. Global warming has an effect on many things. Ice caps are melting; it also affects some wildlife and oceans. But did you ever think it might impact you? If global warming affects the Antarctic how can it affect New York City all the way across the world from there? NYC resident Jamie Brenner, and the mother of this author, never thought global warming would have a large impact on her.

"If I could stop global warming I would," she said.

"I take global warming seriously, but I don't know what the solution is," Jamie added. Jamie thinks big companies and corporations that pollute are to blame for global warming. Factories spew greenhouse gases into the air.

"If studies are correct about global warming, it can be disastrous!" Brenner thinks.

Will it be a disaster to us? Most people associate global warming disasters with the high rate of melting ice in the Antarctic. That can't affect us right? Or can it? Well it can, and critically at that. And it all starts at the frozen continent at the bottom of the world known as Antarctica.

The Antarctic ice is melting due to global warming. Because of the atmosphere being very thin, pollution was able to change it. The sun heats the earth, but then the heat leaves the earth. Because of pollution the atmosphere is thicker, so less heat gets out and the earth gets warmer than it used to before. Those are the basics of global warming.

Due to global warming, Arctic and Antarctic temperatures are rising. Actually Arctic and Antarctic temperatures are rising twice as fast as anywhere on the globe, causing the ice to melt. The largest single ice chunk in the world, the Ward Hunt Ice Shelf, was around for 3,000 of years, before eleven years ago, in 2000 when it started cracking. Within a two year period of time it cracked completely and is now splitting into pieces.

National Aeronautics and Space Administration (NASA), a

company who owns and operates most of America's satellites and space crafts, has satellite images that show 9 % of permanent ice covering is lost each decade. If this trend continues, Arctic summers can be ice free by the end of the century! The melting ice also affects Arctic and Antarctic natives and wildlife. When the Ward Hunt Ice Shelf cracked, a freshwater lake (very rare for the Arctic) that it enclosed filtered into the ocean, along with its ecosystem. Polar bears, walruses and seals had to change feeding and migration, causing the natives trouble with hunting. But did you ever think it might affect NY, LA, Rio de Janeiro, Sao Paulo, Bombay, Tokyo, Kobe, London, Shang Hai or other countries that are distant from the Arctic or Antarctic? Maybe even your city? No? If that's what you thought, you might want to think twice!



# The Disaster We Caused for Ourselves

Global warming can affect you, and majorly, at that. Here's how. Because global warming warms the earth, it very slowly melts the Arctic and Antarctic ice caps.

Because ice melts into water, the melted ice joined into the ocean and raised sea levels. The higher ocean is threatening many coastal cities like NYC, LA and many other cities.

"Melting ice in the west Antarctic alone can cause sea levels to rise around the world up to eighteen feet. It can have a severe impact on coastal cities," warns the article, "Arctic Ice Melting Due To Global Warming" by Doyle Rice.

Another article "Ice Caps Melting," from February of 2010 cautioned, "Thousands of islands can disappear and it would be hard to evacuate poor counties. Most of Earth's coastal farm land will be drowned and that will cause huge food shortages around the world. Our world can get even more overcrowded."

According to Robin Bell from Columbia University's Earth Institute, if the west Antarctic melted, sea levels can rise around 19 ft. The east ice sheet can add another 170 ft. Greenland's ice sheet can add yet another 24 ft. The 213 ft total can land the Statue of Liberty under water in just decades! The ice can be gone by 2030. The Intergovernmental Panel on Climate Change says sea levels have risen 3.1 millimeters per year since 1993. The World Wildlife Fund (WWF) reports that low-lying islands, especially near the equator, have suffered the most. Some of the islands may disappear totally. Two islands in the south pacific have

## THE PROBLEM

\* This graph shows how much the Polar Ice Caps have melted since 1979



Due to global warming this village was flooded, and many homes were destroyed.

already been swallowed by the ocean. On an island called Samoa, thousands of people have moved to higher ground, as coasts and sea lines have been retreated by as much as 160 ft. On Tuvalu, people needed to find new homes because salt water contaminated the ground water, and hurricanes and floods destroyed shoreline homes.

But who's to blame for this? Remember what Jamie Brenner said. Big companies and corporations that have factories that pollute are to blame for these global warming disasters.

"If the worst case scenarios come true, global warming can be, and will be very destructive. If studies become come true it will be very disastrous," says Jamie. But what can we do about it? Go Green. Turn off a lamp when you're not using it. Don't leave the water running while you're brushing your teeth. Most importantly reduce, reuse and recycle!

