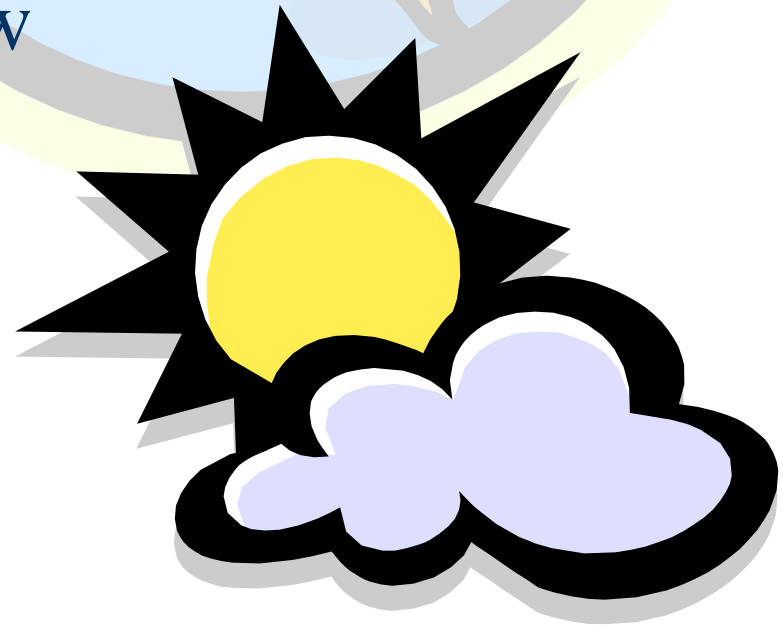


Global Warming and its Effects on the World

By Andrew



What Is Global Warming?



Polar bear forages on dry ground, Barrow, AK. © 2002 Braasch

Global warming is the warming of the earth through carbon dioxide (CO₂) being pumped into the atmosphere from tailpipes and smokestacks. Then the gases trap heat like the glass in a greenhouse. This is where the term the “greenhouse effect” came from.

What's Happening

Scientists say that the barrier insulating the continental ice caps is melting.

“The impacts of warming temperatures in Antarctica are likely to occur first in the northern sections of the continent, where summer temperatures approach the melting point of water, 32 degrees F (0 degrees C).”

<http://www.climatehotmap.org/antarctica.html>



What's Happening

As the ice melts, big chunks of glaciers will break off and become like ice cubes in a big glass of water. The ice chunks, known as icebergs, create mass in the ocean. The icebergs displace the water causing the ocean level to rise. Some of the shoreline in many places like Florida (where the land is at a low altitude) will go under water.



What Will Happen

Global Warming



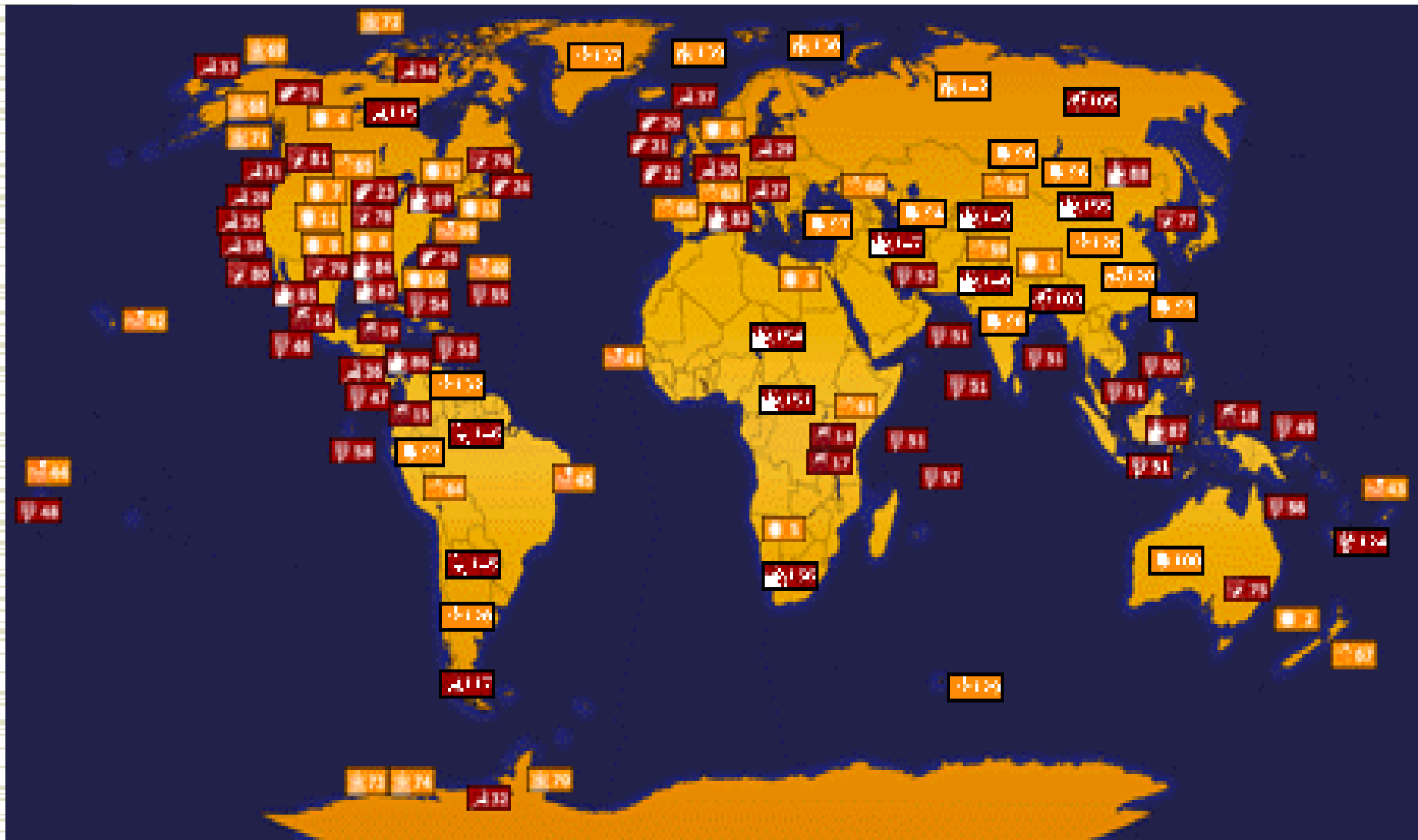
<http://www.nrdc.org/globalWarming/default.asp>

“Rising global temperatures are expected to raise sea level, and change precipitation and other local climate conditions. Changing regional climate could alter forests, crop yields, and water supplies. It could also affect human health, animals, and many types of ecosystems. Deserts may expand into existing rangelands, and features of some of our national parks may be permanently altered.”
<http://yosemite.epa.gov/oar/globalwarming.nsf/content/impacts.html>

Where Has It Been Happening

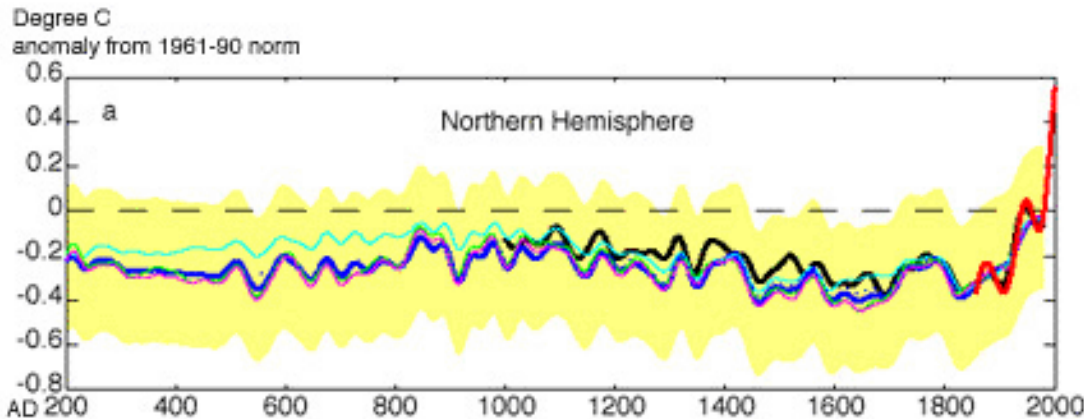


This is where temperatures have risen in the world.
<http://www.worldviewofglobalwarming.org/pages/warmingmap.html>



The yellow represents warming, melting glaciers, flooding and rising of sea level. The red represents the spread of disease, earlier springs, plant and animal shifts and population changes, coral reef bleaching, downpours, heavy snowfalls, and flooding, droughts and fires. <http://www.climatehotmap.org/>

How Long Has It Been Going On

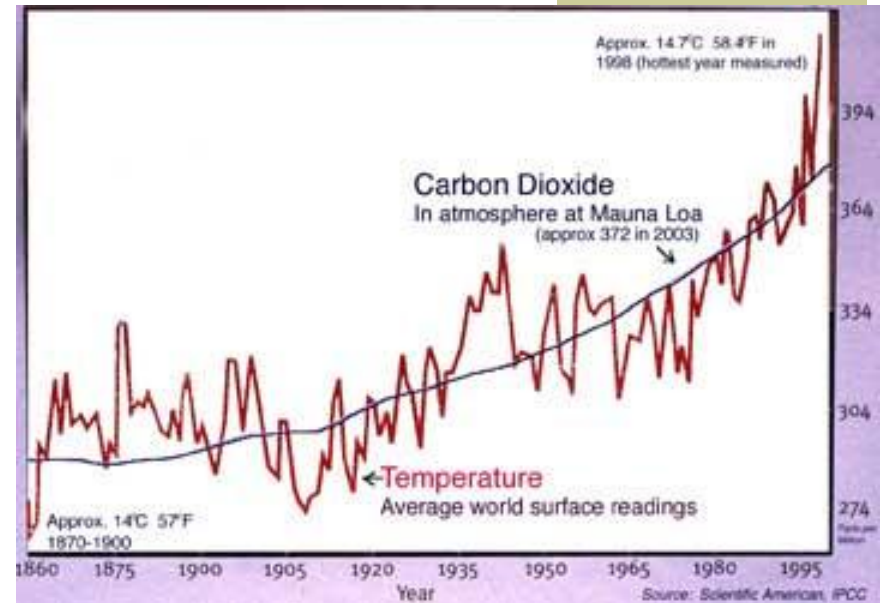


Temperatures AD 200-2000, from proxy temperature indicators and direct measurement (red), showing rise from long-term cooling trend. Mann & Jones, *Geophys. Research Letters*, 2003.

The reason the temperature has risen so much in the past 150 years is because of how much more we have used fossil fuels, which gives off carbon dioxide. “According to NOAA, the global warming rate in the last 25 years has risen to 3.6 degrees F per century, which tends to confirm the predictions of temperature increases made by international panels of climate scientists (IPCC).” <http://www.worldviewofglobalwarming.org/>

How Long Has It Been Going On

- ◆ The earth has had highs and lows, droughts and floods, but nothing has been like the past 150 years.



<http://www.worldviewofglobalwarming.org/>

What's Happening to the Animals

- ◆ "Penguin population decline. Adelie penguin populations have shrunk by 33 percent during the past 25 years in response to declines in their winter sea ice habitat."

Reference: Fraser, W. 1998. Antarctic biology and medicine program, University of Montana, personal communication.
<http://www.climatehotmap.org/antarctica.html>



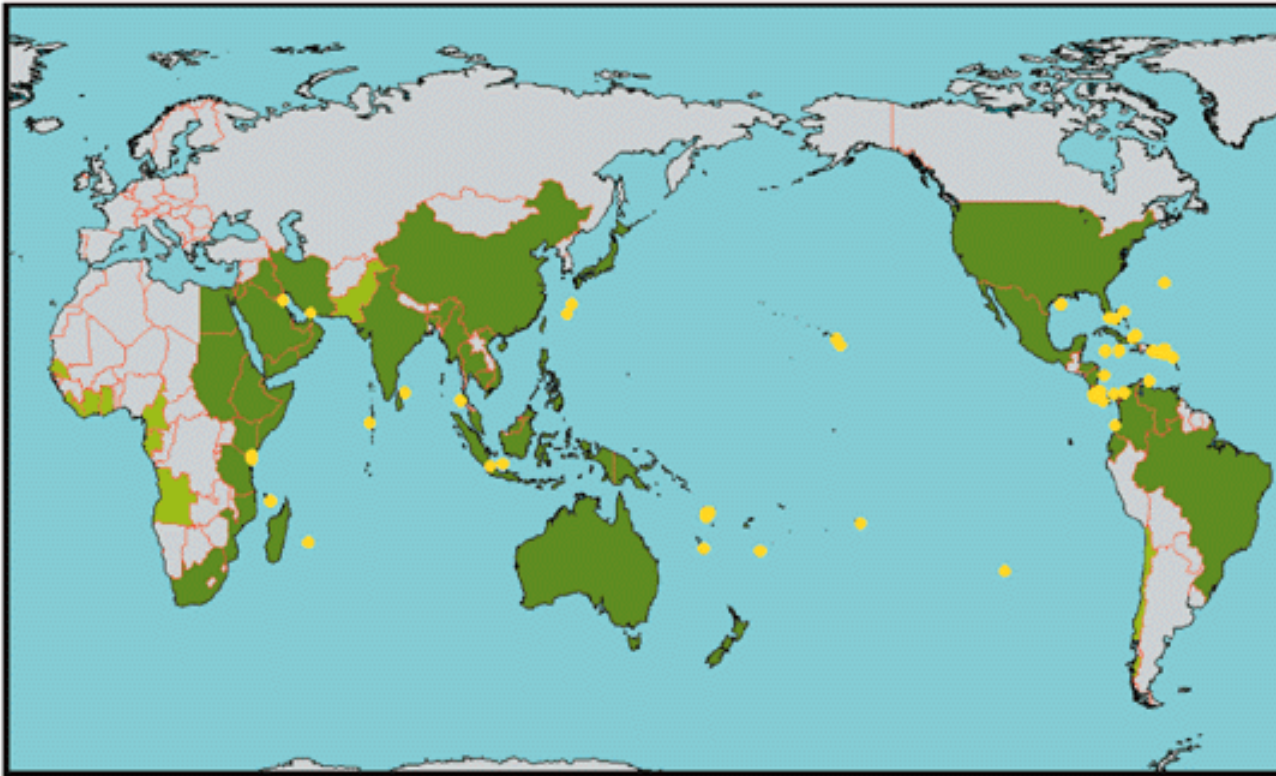
What's Happening to the Animals

“Coral reef bleaching, the whitening of diverse invertebrate taxa, results from the loss of symbiotic zooxanthellae and/or a reduction in photosynthetic pigment concentrations in zooxanthellae residing within scleractinian corals. Coral reef bleaching is caused by various anthropogenic and natural variations in the reef environment including sea temperature, solar irradiance, sedimentation, xenobiotics, subaerial exposure, inorganic nutrients, freshwater dilution, and epizootics. Coral bleaching events have been increasing in both frequency and extent worldwide in the past 20 years. Global climate change may play a role in the increase in coral bleaching events, and could cause the destruction of major reef tracts and the extinction of many coral species.”

<http://www.marinebiology.org/coralbleaching.htm>



What's Happening to the Animals



Regions where major coral reef bleaching events have taken place during the past 15 years

Yellow spots indicate major bleaching events.

<http://www.marinebiology.org/coralbleaching.htm>



Conclusion



Global warming is affecting plants, animals, humans and the earth. We need to learn how to conserve our use of fossil fuels to minimize carbon dioxide production. This will slow down the effects of global warming.

The End

