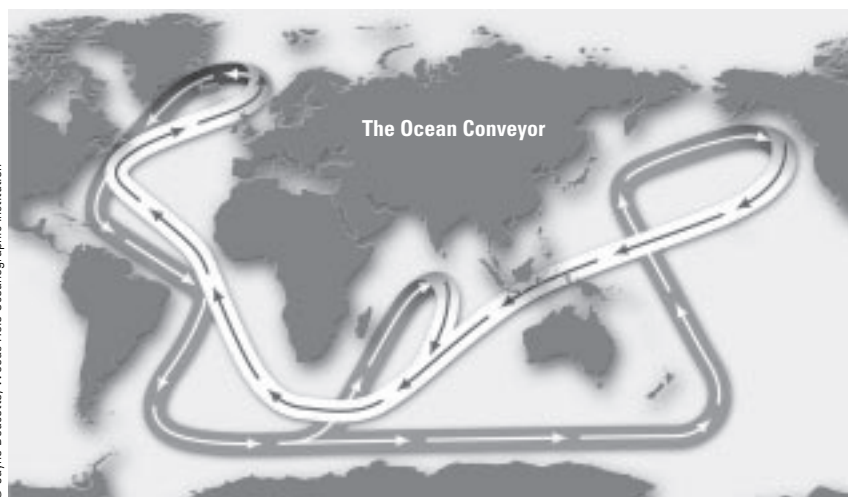


## Pentagon Report Suggests Global Warming Could Trigger Catastrophic Freezing

In January, the Pentagon shared with *Fortune Magazine* a report that had gathered the analyses of leading climate scientists to forecast possible political, social, and environmental scenarios if today's releases of greenhouse gases triggered "abrupt climate change"—a kind of disruption that could conceivably occur in as short a period as a decade. Abrupt climate change could

over increasingly taxed resources.

The report was primarily conducted as an analytical exercise in order to consider the effect abrupt climate change would have on US security. More importantly, it draws attention to how catastrophic climate change could be to human society—not just as average temperatures increase gradually and sea levels rise slowly, but in potentially



be triggered by an ice-melt-driven collapse or disruption of the "Ocean Conveyor," a global current that circulates warmer, saltier water from the equator to the colder polar regions. This "oceanic heat pump" (of which the Gulf Stream is a part) plays a key role in keeping Europe and North America warm, and significantly moderates winter temperatures.

The Pentagon report suggested that abrupt climate change could trigger a series of horrific destabilizing effects. A sudden drop of temperature in North America and Europe could disrupt agricultural production and increase already growing demand for fossil fuels. In addition, as the Ocean Conveyor plays a key role in the global hydrological cycle, its disruption could cause "megadroughts" in some areas, such as the southern United States, and violent storms in many others. Further, the authors forecast that these changes could trigger political instabilities, immense transfers of refugees in destabilized areas, and possibly even wars

triggering a new ice age.

The Pentagon report doesn't come entirely out of the blue. In January 2003, Woods Hole Oceanographic Institution president Robert Gagosian presented a briefing to the World Economic Forum in Davos, Switzerland showing evidence that the North Atlantic—the "Achilles' Heel" of the Ocean Conveyor system—is flooding with fresh water (due to changing precipitation patterns and increased melting of glaciers and Arctic sea ice). This transfusion of fresh water could disrupt or even shut down the Conveyor. According to the National Academy of Sciences report, "available evidence suggests that abrupt climate changes are not only possible but likely in the future, potentially with large impacts on ecosystems and societies." David King, the chief scientific advisor to the UK government, warned January that "climate change is the most severe problem that we are facing today—more serious than the threat of terrorism."

—Erik Assadourian

## WORLD • WATCH UPDATES

See "Risking Corn, Risking Culture," Nov/Dec 2002, p. 8

**GMO Corn in Mexico** A report written for the environmental branch of NAFTA emphatically confirms that genetically engineered corn threatens Mexico's ecosystems and traditional corn crops. Once released (as recounted in the *World Watch* article), says the report, the spread of the GMO corn cannot be confined.

See "Climate Business as Usual," and "Bush's Scientific Relativism," Jan/Feb 2003, pp. 2 and 3

**Twisting Science** On February 18, two major scientific groups released reports sharply criticizing the Bush administration for distorting scientific communications to support its ideological agenda. A report by the Union of Concerned Scientists, including 12 Nobel laureates, observed: "Across a broad range of issues, the administration has undermined the quality of the scientific advisory system." The report included 37 pages of examples of distortions or censorship. A similar complaint was issued by the National Research Council.

See "Blue Revolution," March/April 1998, p. 10

**A Little Antibiotic in Your Salmon?** Six years ago, we published an in-depth article on "the promises and pitfalls of fish farming." Last summer, *The Economist* magazine published a cover story with the same title, and with *almost* the same subtitle: "The promise of fish farming." The article left out most of the pitfalls (see also our article "Feedlots of the Sea," Sep/Oct 2003, p. 22)—providing yet another indication of how the dissemination of scientific information is being shaped by corporate and political demands.

See "The Fastest Mass Extinction in Earth's History," Sept/Oct 1998, p. 6.

**Mass Extinction** Six years ago, we reported on a survey finding that about 70 percent of biologists believe the Earth is now in the midst of the fastest mass extinction ever. In January, 2004, a global study by researchers at the University of Leeds and Conservation International confirmed that indeed, between 18 and 35 percent of all species on Earth could be extinguished within the next 50 years.



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