

Reading Group Guide
Field Notes From a Catastrophe
By Elizabeth Kolbert
Published by Bloomsbury USA © 2006

Questions

1. In the Preface to *Field Notes From a Catastrophe*, the author Elizabeth Kolbert says the icebergs found along the west coast of Greenland are “a reminder of the immensity of nature and the smallness of man.” Today, however, the icebergs are getting smaller due to man’s influence on global warming and resulting climate change. Which is more powerful in the end, man or nature? Which do you think will ultimately master the other?
2. Kolbert says that we are approaching a critical threshold in terms of earth’s climate: “Crossing over it will be easy, crossing back quite likely impossible.” Based on what you’ve read in this book and elsewhere, do you think we will cross that threshold? Or do you think humanity’s collective ingenuity and spirit of cooperation will somehow be harnessed to find a solution to climate change and rising greenhouse gas emissions before catastrophe ensues? If, however, we cross the threshold, will that ingenuity allow us to adapt to the new conditions of life on earth?
3. The Inupiat people of Shishmaref, a native village on the Alaskan island of Sarichef, are being forced to move to the Alaskan mainland due to warming-driven rising ocean levels and sea surges. The Inupiat have lived in Shishmaref for at least several centuries. Can you imagine being forced to flee your home and relocate elsewhere as a result of global warming and climate change? Do you think you, your children, or your grandchildren are ever likely to confront such circumstances?
4. The first major report to definitively and unequivocally conclude that continued increases in carbon dioxide emissions would result in climate change was released by the National Academy of Sciences in 1979. Why do you think it has taken so long for politicians and the general public to become both aware and suitably alarmed about this issue? When did you first hear about global warming and climate change? When did you first start to really worry about it, if at all?
5. According to researchers quoted in the book, the Arctic Ocean could be ice-free by 2080, the total disintegration of the Greenland ice sheet could be set in motion in a matter of decades, and Iceland—where there have been glaciers for at least the last two million years—will be virtually ice-free by the next century. Based on what you’ve read here and elsewhere, do you think this is all part of a natural warming cycle—a normal oscillation between ice ages and more temperate periods? Or do you think these climate changes are largely being driven by human influence?
6. Elizabeth Kolbert describes an October 2000 global warming conference of representatives from the eight Arctic nations—the U.S., Russia, Canada, Denmark, Norway, Sweden, Finland, and Iceland. These officials, after hearing from almost 300 scientists and many residents of already affected areas, issued an

- official statement, concluding definitively that human beings had become the “dominant factor” influencing the climate. Do you think this has been the opinion expressed by our government and most politicians? Is human-driven climate change still a matter of debate? If so, which argument do you believe?
7. The nineteenth century Swedish chemist Svante Arrhenius was one of the first scientists to estimate how global temperatures would be affected by changing carbon dioxide levels. He believed the process would be more gradual than it has turned out to be and, as a Scandinavian, was actually cheered by the idea of warmer temperatures. Many people today also believe that warmer temperatures year-round would be both pleasant and economically beneficial. Do you agree? What are the dangers of an average increase of four or five degrees in global temperatures?
 8. Inuit who live on Banks Island in Canada’s Northwest Territories have begun to see robins, a bird for which their language does not even have a name and which did not use to be able travel so far north of the Arctic Circle. Have you begun to notice any evidence of global warming in your area, such as later frosts, later leaf fall or earlier spring buds, longer garden growing seasons, the appearance of new flora or fauna, or the disappearance of colder weather species?
 9. Kolbert reports on nineteen biologists from around the world who estimated the extinction risk posed by global warming to plants and animals. They concluded that if our current rate of temperature rise continued, as much as 37 percent of the sampled species would become extinct by the middle of this century. In order to prevent this large-scale and widespread extinction, do you think our society would be willing to sacrifice things that we have come to consider necessities or basic rights, such as gas-powered vehicles, relatively inexpensive energy costs, and air-conditioned office buildings?
 10. Kolbert describes the mysterious disappearance of the empire of Akkad around 2200 BC, an event now blamed on a sudden and devastating climate shift. Do you think this could happen to us, or will we always stay one step ahead of the changes and adapt as necessary?
 11. It is estimated that if greenhouse gases remain at today’s levels, it will take several decades for the full impact of rising global temperatures to be felt and the consequences to fully manifest themselves. How should we use this time? Should we try to reduce greenhouse emissions? Should we anticipate the coming climate change and prepare for a new kind of existence on earth? Should we wait and see what actually happens before taking a definite course of action?
 12. David Rind, a climate scientist, expresses skepticism that technology can save us from climate change. He fears that the changes will be so destructive and disruptive that they will lead to mass unrest, violence, warfare, and refugee situations around the world. By the year 2100, he speculates, “most things [could be] destroyed.” Do you agree with this viewpoint? Is it extreme or is it plausible?
 13. The Dutch town of Maasbommel is beginning to build “amphibious homes” in anticipation of increased flooding due to global warming. How do you think your community may be affected by the changes wrought by global warming? Do you live near the ocean or along a river? Do you live in a drought-prone region? Does your community depend upon snowfall and snowmelt for most of its water needs?

- How do you think your community can address and adapt to likely climate changes?
14. Would you be willing to pay more for your energy and power if it meant the avoidance of fossil fuels? Would you consider switching to solar power or buying an electric car?
 15. Given that the burning of fossil fuels—coal, oil, gas—is the major contributor to rising carbon dioxide levels in the atmosphere, do you think it's time to revisit nuclear power? Do you think the technology has improved enough in the past twenty-five years to now make it a reasonably safe and clean source of renewable energy?
 16. Robert Socolow, Princeton University engineering professor and codirector of the Carbon Mitigation Initiative, expresses hope that as a society we will gather the collective will to solve the global warming problem just as in the past we eventually came to address and solve the problems of slavery and child labor. Do you share his hope? Do you see evidence of a gathering resolve or a growing ecological movement?
 17. In an interview with Kolbert, the Bush Administration's Under Secretary of State for Democracy and Global Affairs, Paula Dobriansky, repeatedly states that the administration takes climate change "very seriously" despite pulling out of the Kyoto Protocol and pursuing a "different approach." This approach is summarized as, "We act. We learn. We act again." Does this seem like an effective strategy to combat global warming? Or is it a form of B.A.U. ("business as usual")? Should the U.S. be going it alone and watching and waiting, while the other leading industrialized nations take more proactive steps to fight climate change?
 18. If the Bush Administration predicates its environmental policies on "sound science," as Paula Dobriansky claims, why do you think it has largely resisted the urgent warnings of the vast majority of mainstream climate scientists? Do you think the claims made by people like Oklahoma Senator James Inhofe that global warming is a hoax are more persuasive? Given the weight of scientific opinion cited by Kolbert, how do you feel about the Greening Earth Society's claim that carbon dioxide emissions from the burning of fossil fuels are actually beneficial to life on earth?
 19. The U.S. emits 25 percent of the world's greenhouse gases, and our emissions have risen by 20 percent since 1990. Given this, what is our measure of global responsibility for cutting emissions and reducing atmospheric greenhouse gas levels? How can we ask developing nations to limit their carbon dioxide emissions if we don't take aggressive measures to reduce our own much larger amount of emissions?
 20. How do you feel after reading Elizabeth Kolbert's *Field Notes From a Catastrophe*? Do you feel alarmed? Filled with despair? Did you find cause for optimism and reason for hope? Do you feel paralyzed by the magnitude of the crisis and the correspondingly small impact you can have on it? Do you feel inspired to act and get involved? Were you unconvinced about the reality or seriousness of global warming before reading the book? Has your opinion changed?

25 Easy Ways to Reduce Your Carbon Dioxide Emissions and Energy Use

1. Find out if your utility company offers green power—energy derived from solar, wind, geothermal, or biomass—in your area. Energy companies in forty-two states do offer green power.
2. Use energy-saving compact fluorescent light bulbs.
3. Insulate your home.
4. Use warm instead of hot water to wash your dishes and clothes.
5. Do not pre-rinse your dishes before putting them in the dishwasher.
6. Purchase appliances and electronics with Energy Star certification.
7. Dry laundry on a clothesline.
8. Turn off your computer and other electronics when not in use. Do not use the sleep mode, which still requires energy.
9. Recycle as much of your paper (including junk mail), plastic, and glass products as possible.
10. Set the thermostat no higher than 68 degrees Fahrenheit in winter and no lower than 75 degrees in summer.
11. Don't preheat your oven.
12. Avoid using plastic grocery bags. Instead buy a re-usable shopping bag.
13. Buy locally grown produce (most of the food purchased in supermarkets is shipped by truck over hundreds if not thousands of miles).
14. Use a manual or electric lawnmower.
15. Plant trees in your yard.
16. Plant hedges in place of fences.
17. When driving, don't do a lot of rapid accelerating and breaking, and stick to the speed limit. This will maximize your gas mileage.
18. Avoid using your car's air conditioner.
19. If you idle for more than ten seconds, turn the engine off and restart when you're ready to drive away.
20. Make your next car a hybrid.
21. Use carpools, public transportation, or your bike to get to work.
22. Explore your telecommuting options.
23. Ask your office manager about instituting a recycling program, energy efficiency and power reduction initiatives, and other green innovations.
24. Print double-sided.
25. Use reusable mesh coffee filters at home and work. Keep a mug at work to avoid using paper or styrofoam cups.

Get Involved!

American Council for an Energy-Efficient Economy

1001 Connecticut Avenue, NW, Suite 801

Washington, DC 20036

Phone: (202) 429-8873

Email: info@aceee.org

Web site: <http://www.aceee.org/>

The Conservation Fund
National Office
1655 N. Fort Myer Drive, Suite 1300
Arlington, VA 22209-2156
Phone: (703) 525-6300
Email: postmaster@conservationfund.org
Web site: <http://www.conservationfund.org/>
The Conservation Fund's "Go Zero" Carbon Emmission page:
<http://www.gocarbonzero.org/>

Environmental Defense
Membership and Public Information
1875 Connecticut Ave, NW, Suite 600
Washington, DC 20009
Phone: (800) 684-3322
Email: members@environmentaldefense.org
Web site: <http://www.environmentaldefense.org/home.cfm>

Friends of the Earth
1717 Massachusetts Avenue, NW, 600
Washington, DC 20036-2002
Phone: (877) 843-8687
E-mail: foe@foe.org
Web site: <http://www.foe.org/>

National Audubon Society
700 Broadway
New York, NY 10003
Phone: (212) 979-3000
Web site: <http://www.audubon.org/>

Natural Resources Defense Council
40 West 20th Street
New York, NY 10011
Phone: (212) 727-2700
Web site: <http://www.nrdc.org/>

The Nature Conservancy
4245 North Fairfax Drive, Suite 100
Arlington, VA 22203-1606
Phone: (703) 841-5300
Web site: <http://www.nature.org/>

Sierra Club
National Headquarters
85 Second Street, 2nd Floor

San Francisco, CA 94105
Phone: (415) 977-5500
Web site: <http://www.sierraclub.org/>

Stop Global Warming
15332 Antioch Street #168
Pacific Palisades, CA 90272
Web site: <http://www.stopglobalwarming.org/default.asp>

For Further Reading

Brower, Michael, Ph.D., and Warren Leon, Ph.D. *The Consumer's Guide to Effective Environmental Choices: Practical Advice From the Union of Concerned Scientists*. New York, NY: Three Rivers Press, 1999.

Dow, Kirstin, and Thomas Downing. *The Atlas of Climate Change: Mapping the World's Greatest Challenge*. Berkeley, CA: University of California Press, 2006.

Flannery, Tim. *The Weather Makers: How Man Is Changing the Climate and What It Means for Life on Earth*. New York, NY: Atlantic Monthly Press, 2006.

Gore, Al. *An Inconvenient Truth*. New York, NY: Rodale Books, 2006.

Heinberg, Richard. *Powerdown: Options and Actions for a Post-Carbon World*. Gabriola Island, BC, Canada: New Society Publishers, 2004.

Houghton, John. *Global Warming: The Complete Briefing*. New York, NY: Cambridge University Press, 2004.

Langholz, Jeffrey, Ph.D., and Kelly Turner. *You Can Prevent Global Warming (and Save Money!): 51 Easy Ways*. Kansas City, MO: Andrews McMeel Publishing, 2003.

Linden, Eugene. *The Winds of Change: Climate, Weather, and the Destruction of Civilizations*. New York, NY: Simon & Schuster, 2006.

Schellnhuber, Hans Joachim, et al., eds. *Avoiding Dangerous Climate Change*. New York, NY: Cambridge University Press, 2006.

Spence, Chris. *Global Warming: Personal Solutions for a Healthy Planet*. New York, NY: Palgrave Macmillan, 2005.