

Review: Global Climate Change: A Primer

By Orrin H Pilkey and Keith C. Pilkey

Reviewed by Jennifer Smith

Elon University, North Carolina, USA

Pilkey, Orrin H. and Pilkey, Keith C. *Global Climate Change: a primer*. Durham, NC: Duke University Press, 2011. 142pp. ISBN 978-0-8223-5109-2. US \$19.95, paperback.

Understanding the science of global climate change and the greenhouse effect can be daunting even for those that try to stay knowledgeable about the environment and our planet. In this book about global climate change, Orrin Pilkey, a professor emeritus of Geology from Duke University and his son, attorney Keith Pilkey, are able to explain the various aspects of global climate change and what it is doing to our earth in ways that help the reader understand the science and become an advocate for doing things in a better way.

The Pilkeys explain that the idea that the climate of the world has already changed is something that a thin majority of Americans believe. However, the idea that humans have had a part in this change is something that not everyone accepts or understands. A detailed description of how global climate change and the greenhouse effect were created and the different elements that add up to a global disaster are described throughout the chapters that explain such things as the changes in the earth's weather, ice, and the biosphere. The impact this has on the earth and its population is described in detail. Much of the book focuses on the conflict between science and those in politics and industry. An interesting comparison between the tactics of the tobacco industry and those that deny that the earth's climate is changing helps the reader to understand how strongly the deniers of the greenhouse effect will fight any changes to the way government and industries do business. Most of the chapters end with a section that lists popular myths about global change from the press and global climate change deniers and the Pilkeys give their rebuttal of the myth's validity.

The Pilkeys make a controversial point: "It should be noted that the most gigantic of floods, the greatest of earthquakes, the largest of storms would be no catastrophe at all if humans weren't present. These events would just be natural curiosities." (p. 25) The Pilkeys explain that as the globe heats up and the oceans rise that "Globally, all delta communities (with the possible exception of Holland) will be abandoned within the next century. New Orleans is a goner." (p. 29) The idea that entire populations will have to move to higher ground is certainly something few would like to accept, but in the end the Pilkeys explain that they may have no choice.

In the final chapter "Plan B: Geoengineering the Rescue" the Pilkeys describe different ways that science could be used to effect a change in the climate and how these ideas may or may not work. One example given is the idea of creating plankton blooms in the oceans because phytoplankton work as carbon sponges, cleaning the seas. An intriguing aspect of the book is that in order to illustrate the different areas of the globe explained by the text, instead of photographs, the authors chose to use the work of silk batik artist, Mary Edna Fraser. Fraser uses maps, satellite images, and photographs to create beautifully crafted images of areas of the globe. In a section of the book about the artist, detailed descriptions of the locations of each piece are given.

This book is a well-written and well-researched introduction to global climate change, the greenhouse effect, and the politics that surround these issues. Using understandable science and beautiful illustrations the Pilkeys and artist Fraser have created a primer that would be useful to reader's from college age on up.

Jennifer L. Smith <jsmith41@elon.edu>, Serials/Documents Specialist, Carol Grotnes Belk Library, Elon University, 2550 CB, Elon, NC 27244. USA.