



## A Nobel Cause

BY ELIZABETH CRISFIELD

Lenny Bernstein is a chemical engineer, whose 30-year career in the oil industry saw him develop improvements to automobile emissions control systems, manage research projects, and finally serve as a climate change expert for Mobil Corporation. Since leaving Mobil nine years ago, he has continued working on climate change as a consultant and as the program coordinator for the development of a new masters degree program called Climate Change and Society at the University of North Carolina at Asheville.

He is also an ATC volunteer.

Chances are you aren't surprised. People who spend a lot of time on the Trail know that it is loved by an extremely diverse crowd. The wilderness setting of the A.T. is so foreign to modern American life that it provides every American with a "time-out," and this is probably just one of the things that makes so many people crave their time on the Trail.

Lenny and his wife, Danny (Danielle), began recording A.T. hikes in 1974. Twenty-four years later, “thanks to a love of hiking and a proclivity for goals,” said Lenny, they claimed their completions. Living with a 2,175 mile goal for almost a quarter of a century definitely makes the A.T. a permanent part of your life, so the Bernsteins satisfied their instinct to give back to the Trail by focusing on Trail maintenance. In 1988 they began maintaining a section in New York and they are currently responsible for a 5-mile section near their home in North Carolina.

Lenny was introduced to the structure of the Appalachian Trail Conservancy (ATC) through his membership in and leadership of the Carolina Mountain Club. “Don Walton and Howard MacDonald, brought updates from ATC back to Carolina Mountain Club meetings,” said Bernstein, “I could see my interest in the over-arching organization growing because it represented a level of contribution beyond Trail maintenance.” At the 2005 ATC Biennial Conference in Johnson City, Tennessee, Lenny discovered that his professional background also was in demand

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**T**he science of climate change has been building longer than these negotiations. I asked Lenny if he could remember when he became convinced that human-generated greenhouse gases could change the global climate. “As a chemical engineer, I always knew that carbon dioxide and other greenhouse gases could affect the way heat cycles within the atmosphere. The developing science of climate change was just helping me understand the extent of the potential climate change and the pace of that change,” said Bernstein.

Lenny says that in the early 90s he wasn’t worried about whether greenhouse gas emissions had already changed the climate, “but I saw the climate change associated with projected future emissions as a serious threat to societies worldwide,” he said. He showed me the latest estimates of current and projected emissions levels and compared them with estimates of the amount of climate change that

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as the ATC contemplated a new policy statement on wind energy. (The wind energy policy was adopted by ATC’s Board of Directors in the fall of 2007.) In fact, Lenny’s expertise in climate change science and policy is increasingly relevant as the ATC develops a conservation mission to accompany and support its recreational focus.

Lenny has been involved in domestic and international climate change policy negotiations for almost two decades. “I remember 1989 as the beginning of the oil industry’s attention to the issue of climate change leading up to the 1992 Rio treaty on climate change,” said Bernstein. Lenny has been an industry observer at the international climate change negotiations. In fact, he attended every single negotiating session from 1995 to 2007, “...a streak I was happy to end this spring,” he said.

Alongside these intensive negotiations, Lenny served as a Lead Author for Working Group III’s contribution to the United Nations Intergovernmental Panel on Climate Change Third Assessment Report in 2001 and as a Convening Lead Author for the recent Fourth Assessment Report in 2007 and a member of the Core Writing Team for the Report’s Synthesis Report.

would begin to cause noticeable impacts. It’s pretty clear that the future he was worried about back in the 90’s is fast approaching. Fortunately, Lenny reports that the results of last December’s UN negotiations in Bali, Indonesia were encouraging, “in part because targets for emission reduction were approached in a realistic way, with an emphasis on what each country is capable of achieving given their fiscal, technological, social, and political resources,” he said. His experience in these negotiations has given him considerable, practical understanding of what will work and what won’t in the global quest to reduce greenhouse gas emissions. “I believe very strongly in the need for quantitative, measurable, and verifiably targets that are technologically feasible,” said Bernstein.

**B**ut it’s a long way from Bali to the Appalachian Trail, and Lenny has been spending considerable time linking the science and solutions debated on the international level to the opportunities and responsibilities of ATC. Though ATC’s mission is historically based in the recreational opportunities of a 2,175-mile footpath, it’s very obvious

that the wilderness experience of the Trail is fundamental to its value. Protecting the A.T.’s wild character has many implications for ATC’s day-to-day workload. Lenny has been helping the organization evaluate its options for a proactive response to the threat of climate change.

“Clearly, the ATC and its members can take steps to reduce their carbon dioxide emissions, wherever practical, in an effort to minimize the long-term impacts of global climate change,” said Bernstein, “But the A.T. also offers a unique opportunity to study the impacts of climate change. The A.T. MEGA-Transect project, which ATC and its partners initiated in 2007, will document long-term environmental changes over the length of the Trail. If, as scientists predict, climate change leads to large scale ecosystem changes, the data from the A.T. MEGA-Transect should be one of the first indicators of these changes.”

This is because plants and animals are predicted to migrate north following their preferred climate conditions.

In the eastern mountains of the United States, this migration roughly follows the Trail. Benton MacKaye foresaw the possibility that citizens could contribute to the understanding of Trail ecology, but he couldn’t have predicted how perfectly positioned his footpath was to monitor a global-scale, ecological shift. Lenny said he hopes that the first impacts of climate change can be shown early enough to convince the world to take the actions necessary to

avoid still more serious impacts. “I believe the A.T. can serve as one of the ‘canaries in the coal mine’ to warn the world about the dangers of uncontrolled human-induced climate change,” he said.

Through the A.T. MEGA-Transect program and other outreach opportunities, the ATC is powerfully positioned to help the public understand local impacts of global climate change. Located in close proximity to major population centers of the East Coast, the Trail is a familiar icon in American geography—providing the public with a concrete example of what is at stake in this race to reduce emissions and control the extent of global warming.

The ATC finds itself with stewardship responsibilities for a natural corridor that may provide one of the best places to monitor global change in the eastern United States. Yet, as a small non-profit organization, the workload associated with accepting this substantial challenge is daunting. Fortunately, to meet this new challenge like many before it, the A.T. can depend on talented volunteers like Lenny Bernstein.

Elizabeth Crisfield is currently working toward a PhD in Geography at Penn State where she will be investigating climate change impacts along the A.T. She recently co-edited a report for ATC describing a new ecological monitoring program called the A.T. MEGA-Transect.

**For more information on the MEGA-Transect Program visit:**

[www.appalachiantrail.org/MEGA](http://www.appalachiantrail.org/MEGA)



Lenny Bernstein attending to the five-mile section of Trail he and his wife maintain.