

Why so few environmental activists among environmental scientists?

Bill Menke, July 2015

“And you were going to mention this to us ... *when?*” The light conversation between my sister, my brother-in-law and me stumbled. We were sitting on the deck of their elegant Key West Florida home, sipping iced tea amid palms and orchids, and having a far-ranging discussion of current events, politics and the happenings in our lives. My brother-in-law had asked, “How seriously do you take global warming?” and I had replied, “Very seriously, and especially so the part about sea level rising as glaciers melt. Low lying region like southern Florida will be experience more and more flooding and will be underwater in two hundred years – maybe less.”

I had not considered that the two had lost all their garden shrubs to Hurricane Wilma, when its tidal surge briefly reduced the elevation of their backyard from three feet above sea level to one foot below. The prospect of a submerged Florida was shocking, even though I had portrayed it as far off. To be lost were favorite places and vistas that hitherto fore they might have imagined enduring for generations.

Our conversation could have happened a decade or more earlier. I, as an environmental scientist, have been well informed about global change research since the 1990's. Yet I seldom bring up this or any of the many other environmental issues about which I am well-versed in non-academic settings, or at least not without being prompted. I am not embarrassed by the subject. I do not fear the possibility of being disbelieved or ridiculed. And yet I am oddly quiet. I do not consider myself unusual among scientists in this respect.

This spring, I became fired up during the woods versus solar farm controversy at Lamont Doherty Earth Observatory and advocated very publicly for the wood's preservation. Afterward, when the Observatory decided not to clear-cut, I was invited to contribute a one page article for a community newsletter. The opinion piece that I penned focused on the tension experienced among environmentally-conscious people, both at the

Observatory and around the world, in the face of extremely complex problems, the solutions to which often work against one another. It included a paragraph that reflected on distance between environmental scientists and environmental activists:

We Observatory scientists are a curious breed of environmentalist. Almost none of us are activists. We don't attend rallies, write OpEd pieces, appear in TV nature shows or fund-raise for eco-organizations. Yet we understand the technical aspects of environmental issues better than 99.9% of humanity and believe that many pose very serious risks for society and world. This dichotomy may lead some of us to experience a sense of guilt and the desire to do something - anything - that contributes to a solution¹.

The first two sentences were considered unacceptably provocative by the newsletter's editorial staff and were struck. I far as I can recall, this is the only instance in my career where my writings have been *censored*. I was told by one of the editors, "It is quite possible that younger Lamonters are not as involved as they should be in relevant issues but it sounds as if the whole community is sitting in an ivory tower unconcerned, uninvolved and uninterested. For those who are ... this is an insult". The strong reaction astonished me. It points to unsettled feelings about scientists and especially about their talking about their own role in public discourse.

I would not characterize us scientists as *uninvolved*, for many of us contribute to the national debate on important issues by advising government agencies. Seventeen of my Columbia colleagues, for example, are listed as contributors to the *Fifth Assessment Report*² of the Intergovernmental Panel on Climate Change (IPCC, a United Nations sponsored organization), one of the most influential of global change-related documents. Yet important as the IPCC's work is, participation in it is not activism, because it does not involve a direct contact with ordinary *people*. Only a very few people outside of government circles have even heard of the *Fifth Assessment Report* and almost none have read it.

The international system of commissions and advisory panels has evolved to accommodate scientists by accepting several key elements of scientific culture. These include the use of a precise technical vocabulary, an extremely qualified and measured form of expression that emphasizes probabilities, not certainties, and the limiting of each scientist's contribution to his or her narrow area of specialization. A triumph of the *Fifth Assessment Report* is that it made definitive statements about the very broad subject of global climate change by stitching together the highly specific expertise of more than seven hundred scientist-contributors.

From many scientists' viewpoint, activism is *lying*, both in the sense of shading the truth and misrepresenting one's own credentials. If I were to say *Florida is gone*, I would be overstating the impact of global warming. Few scientists believe that all of Florida will disappear beneath the waves, or at least not in the next two hundred years, but only its low-lying parts, and then only if human beings are unable to stem the tide of rising atmospheric CO₂. Nevertheless, such rhetoric, however approximate, is absolutely necessary to convey the gravity of the situation to the public. Furthermore, even if I were to articulate my ideas in a more qualified fashion, people will hear me - and the press may well quote me - saying that *Florida is gone*, anyway. Most scientists, including me, are very disconcerted by the prospect of our concerns being sensationalized!

Furthermore, even though I am the first-author of a well-respected textbook devoted to the analysis and interpretation of environmental data, my making predictions about Florida is a stretch. I'm not an expert on the melting back of glaciers, or of observations of rising sea level, or of CO₂ emission forecasts, or the coastal geography of Florida. Actually, no single scientist is; that's why we have advisory panels. Yet the hearts of few people will be stirred through reading a report such as the one put out by the Florida Ocean and Coastal Council³, even though the six feet of sea level rise it cites as possible for this century exceeds the average elevation of Miami.

We scientists have a perspective on the environment that the public sorely needs. Furthermore, our participation now in the public debate will be much more effective now than if put off, for problems that are solvable today will

be much less tractable if left for the next generation and some will escalate into calamities. Yet our activism ought not to be limited to the occasional individual scientist speaking up. The scientific community as a whole needs to develop better pathways for connecting with the public and playing a more direct and active role in the ongoing debate on environmental policy.

¹ http://www.ldeo.columbia.edu/users/menke/talks/solar/menke_10964.pdf

² <https://www.ipcc.ch/report/ar5/wg1/>

³ http://seagrant.noaa.gov/Portals/0/Documents/what_we_do/climate/Florida%20Report%20on%20Climate%20Change%20and%20SLR.pdf