

COMMONS FORUM *RESPONSE*

Response to: Knowledge for Commons Management: A Commons for the Commons, by Doug Wilson

The Scientist as Facilitator or Adaptive Co- Manager?

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Doug Wilson's commentary addresses the crucial problem of building the *knowledge commons* we need to be able to care for the environment. The example he uses is the fishery, he commons with which he is most familiar. But he could easily have used other commons such as wildlife, forests, or rangelands. In building the argument, he discusses different forms of knowledge, and analyzes the reasons why certain kinds of knowledge sway more power, while making the important point that there are, in fact, many different *knowledge cultures* (and not just the two kinds, Western scientific vs. informal local knowledge).

His concluding point carries significant implications: Perhaps we should be asking (fishery) scientists to become *facilitators* rather than answer-providers — facilitators of interactions among stakeholders, to help build a shared understanding of the marine environment. My take on this question is a little different. Scientists are highly trained people, but they are trained to specialize. They may specialize by species, by fishing gear, by ecosystem type, and/or by discipline, such as ecology, genetics, toxicology, and so on. A fishery scientist may be an expert on the population dynamics of, say, groundfish species, with little knowledge or interest in the feeding ecology of pelagic species, and even less in the affairs of fishers. Of course there is much variation among individual scientists and among countries. Scientists in smaller countries and developing nations tend to be less specialized and have wider skill sets.

However, I think it is fair to say that in most places in the world, facilitating stakeholders is not in the *repertoire* of skills that scientists normally hold, except perhaps for the rare (very rare) fishery sociologist or fishery anthropologist. Government fishery agencies in many Western countries make a distinction between fishery research scientists and fishery managers. The scientists do the research and provide advice to the managers. It is the managers (some of whom were originally scientists) who have the job of dealing with stakeholders, different interests and different kinds of knowledge.

I see two possible ways to proceed with the suggestion of asking scientists to become facilitators rather than answer providers. One possible approach would be to go back to the drawing board in the education of scientists and include in the curriculum (fisheries curriculum in this case) the study of epistemology, cross-cultural relations, conflict management and facilitation. A second approach might be to redefine "science" and "management" to merge them. This is not such a radical view, given that the *adaptive management* approach has always argued that learning-by-doing ultimately eliminates the duality of science and management (Lee 1993).

I see a third option as well. (The options are not mutually exclusive.) On and off over the last 15 years, I have been working in the area of co-management, the sharing of management power and responsibility between the government and resource users. One of the main findings of the vast literature that has accumulated on co-management (fisheries, forestry, wildlife, protected areas) is that scientists engaging in joint problem-solving with resource users, results in better informed users, more humble scientists, and the development of trust and cooperation. For example, comanagement researchers in Alaska found that,

contrary to expectation, direct user involvement in joint management boards did not increase the likelihood of cooperation. Rather, the key was the frequent and continued presence of government biologists in native communities that established trust and cooperation (Kruse et al. 1998). Such co-management, I think, is the most effective way to alter the role of scientists from “The Experts who tell the other stakeholders how it is” to co-generators of knowledge and the facilitators of a common vision. I am guessing that my modest third option is already anticipated by Doug Wilson, the wily editor that he is, not only of the *CPR Digest* but also of the excellent book, *The Fisheries Comanagement Experience* (Wilson et al. 2003).

However, one of the other findings of the co-management literature is that such trust, cooperation, and mutual respect and learning develop oh-so-slowly, at time scale of about a decade (Kendrick 2003). Developing co-management institutions requires attention to time and scale issues, and to iterative feedback learning from the management experience as it unfolds. So there is an adaptive dimension to collaboration, and this realization has brought in the concept of *adaptive co-management*

We need scientists and managers who are willing to work with resource users in a hands-on fashion, to share knowledge and decision-making. We need a policy environment that fosters learning networks and rewards scientists and managers who participate in them. Perhaps the agenda of the next phase of commons research and action could include such adaptive co-management for building institutions for knowledge commons that we need, as Doug Wilson would put it, to care for the commons we share in nature.

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