

SEVEN HABITS FOR SUCCESSFUL COLLABORATION WITH LOCAL GOVERNMENTS

N. Thompson Hobbs

Some of the most notable successes in conservation and environmental protection in the United States have occurred as a result of actions taken by high levels of government. Examples include the establishment of national parks and wilderness areas and legislation designed to protect the environment, including the Clean Air, Clean Water, and Endangered Species acts. While there is no doubt that the nation is better for these achievements, it remains true that the vast majority of decisions affecting land in this nation are, in fact, not made by the federal government. There is a long-standing tradition manifest in culture and law giving authority for relegating land use to the lowest levels of our government, counties and municipalities. Hence, it is arguable that the future of conservation in the U.S. depends in a fundamental way on influencing decisions about land at the local level.

SCB's Distinguished Service Award recognized the Natural Diversity Information Source (NDIS), a site on the worldwide web (www.ndis.nrel.colostate.edu) that displays maps and data on wildlife habitat and natural communities in Colorado. The site was built to improve access to habitat data by citizens and government officials who were making decisions on land use. Our project was germinated via collaborative design, a process that assembled a variety of people who both had an interest in conservation planning and might be affected by it. These people included developers, landowners, citizen advocates, planners, and elected officials. They worked with us over the course of several months to develop and refine the design of our project. During the process and during subsequent involvement with local boards and commissions, my colleagues and I learned some things about working at the local level. Here, I offer some ideas about working effectively with citizens and local governments to develop conservation plans.

First, I ought to be little more clear about what I mean by "conservation plans." I use the term broadly to include all planning for development that affects habitat for species, rather than narrowly to mean the specific process used to implement regulations under the Endangered Species Act. At the local level, these activities tend to fall into two broad

categories—development review and master planning. Development review includes all processes that are set up to approve or disapprove a specific development plan, while master planning is a larger-scale process designed to set broad goals for population density, commerce, infrastructure, parks, open space, and environmental protection. In our experience, the participation of conservation biologists and others with technical expertise about the environment is highly valued in these planning processes.

Collaboration is the very essence of conservation planning. A diversity of expertise and viewpoints is needed simply because conservation plans deal with unusually complicated stuff. We deal with the interaction of human and natural systems with all their attendant political, biological, and cultural complexity. So, it's not surprising that success depends on people with different backgrounds working together successfully. What I want to do in this essay is share with you some ideas on how you can work more effectively with local planning processes to increase the likelihood that your participation will produce meaningful conservation results. Some of these ideas are as follows.

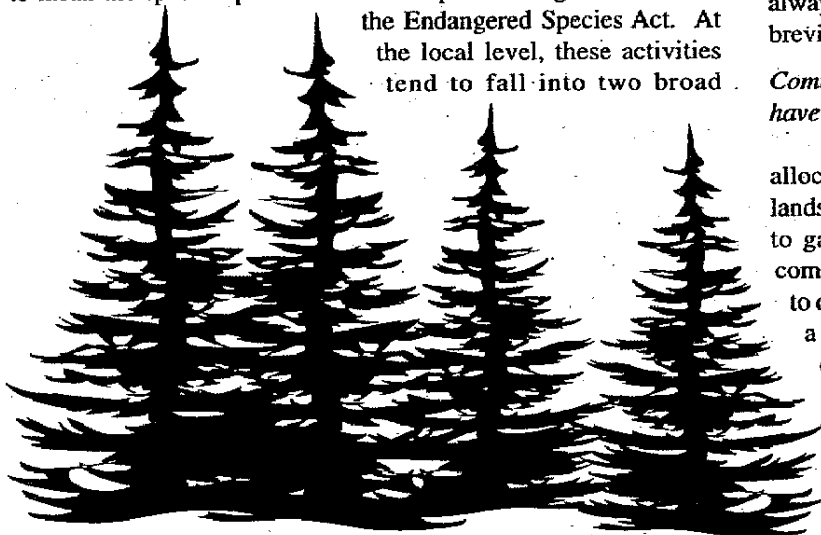
Many of your collaborators have day jobs.

Boards and commissions form a fundamentally important part of local planning. Examples include environmental review boards, planning commissions, and open space councils. Although many of these groups have only advisory authority, they nonetheless play a critical role in shaping decisions and policy. Given their importance, it is easy to forget that they are, by and large, composed of citizens who are volunteering their time.

Many environmental professionals, by definition I suppose, are paid to provide input to these groups. Remember that your input is taking time from people who are not getting paid to listen to you. Be well prepared, to the point, and brief. Distill your information to a few key points and provide written (again, brief) supporting material. Provide your contact information for more details. You always will be forgiven for being concise and erring on the side of brevity. You never will be forgiven for erring in the other direction.

Communicate the idea that complex environmental problems do not have a single, scientific solution founded on "truth."

Very often, conservation problems reduce to the best way to allocate scarce fiscal or political capital to protect areas of the landscape. Deciding what areas of landscapes should be protected to gain the greatest benefits for biodiversity conservation is a complex environmental problem. If your collaborators expect you to deliver a crisp solution akin to estimating flow rates of water in a pipe delivered from a reservoir, they are bound to be disappointed. There are many examples in the physical sciences where precisely stated problems can be solved unambiguously, but ambiguity is inherent in most ecological problems. This is because they can neither be stated nor solved precisely. In



addition, although ecologists may like to think they are like physicists, we don't enjoy the benefits of engineers.

In most cases there will be multiple approaches to analyzing the problem of what areas to protect, a variety of data that could be brought to bear on that problem, and a range of legitimate scientific viewpoints. Which are best for a given conservation plan depends upon two things: the goals of the plan, and the ability of the ecologist to make his or her approach to the plan understandable and credible to the people who will be affected by it.

Begin all conservation plans with clearly stated, specific goals for biodiversity protection.

One the more important steps in conservation planning is establishing clear goals. The need to set goals is obvious, but the operative words here are *clear* and *specific*. For example, consider two goals for protecting wildlife habitat:

Murky: "Land uses should be harmonious with wildlife habitat within the county."

Clear: "One of the goals of the master plan is to maintain sufficient habitat to reasonably assure viability of all native vertebrates and plants within the county."

The "murky" goal is taken verbatim from a master plan of a Colorado county. It is so broad as to be impossible to disagree with. From the perspective of a peregrine falcon, downtown Cleveland is a perfectly harmonious environment as long as the pigeon supply holds up. Because goals are needed to choose an appropriate analytical approach for setting conservation priorities, excessively broad goals make all approaches equally worthwhile.

In contrast, the second goal gives an ecologist something to work with. The goal specifies what we are trying to achieve by identifying three crucial elements: a focus on habitat rather than populations, a set of species we are concerned about (native vertebrates), and a criterion for success, viability. These three elements' emphasis on habitat or populations, specification of taxa, and criteria for success should be found in all goals for conservation plans.

Insist that any analytical procedure for setting conservation priorities must be understood by everyone affected by it.

"State of the art science," no matter how much it is admired by academics, should often be dispensed with in favor of science that can be understood and believed by the people who will use it. This is heresy and I've been thoroughly beat around the ears for saying it, but I am thoroughly convinced of its truth. The reason is that all decisions in democracy must be explainable to be credible. If planners refer to the technical blessing of an ecologist like some sort of holy water, they are not likely to be credible with the citizens they serve. I think it is part of our culture to be skeptical of highly technical, obtuse analyses, particularly when they affect our lives. Conservation biology is not rocket science, and if the analysis offered by an ecologist is unclear, people will not trust it.

Be willing to use rules of thumb and "truths" that may someday prove to be false.

I appreciate the reluctance of my academic colleagues to make recommendations that extend beyond their confidence in the data. However, all science has some uncertainties, and, reasonable doubt notwithstanding, science usually offers a prevailing wisdom or opinion that is useful. We should insist that such wisdom be used

in supporting decisions, knowing full well that our "rules" may be revised as science matures and improves.

For example, most conservation biologists would agree that, all other things being equal, large patches of habitat are more valuable than small ones, and patches that are interconnected by dispersal are more valuable than isolated patches. There is no reason to be apologetic about using rules of thumb in conservation planning. Urge that planners use the best current truth they have to solve current conservation problems.

A corollary of this idea is that although all models are wrong, some are useful, and model predictions are temporary and subject to revision. Setting conservation priorities will almost always involve some sort of an ecological model, and as G.E.P. Box reminds us, no model is accurate because all are abstractions of the real world. The value and utility of a model should be measured in terms of your ability to make and communicate the basis for a decision, not its ability to make accurate predictions of the future.

Plan at multiple scales to avoid the tyranny of many small decisions

Last year, the Colorado Division of Wildlife responded to over 2000 requests for comments on land use. These comments focused on human impacts on wildlife at the site level (should a development proceed as planned and, if not, what should be changed?). We could make every one of those 2000 decisions correctly and fail to preserve significant habitat because we failed to think about how those choices add up over time and space. The only way we can avoid the tyranny of many small decisions in conservation planning is to plan and act at a variety of scales—at the site level, at the municipality or county level, and regionally.

Make plans adaptive by evaluating actions.

It has been wisely said that the planning process is analogous to the scientific method as long as we build into our plans a way to evaluate their effectiveness. This is where an ecologist can be a tremendous resource to planners. Human actions represent perturbations of natural systems. Ecologists are trained to understand the effects of such perturbations. How does housing density affect wildlife communities? How does infrastructure affect the movement of animals across landscapes? What is the impact of trail use on nesting success of forest birds? If we commit ourselves in planning effort to answering just one or two unanswered questions, we constantly improve our ability to develop and implement strategies for conservation. Planning then becomes a tool for continuous improvement in our actions.

Other points would be useful, but a to-do list of 7 items seems to be about right (in light of Stephen Covey's success). I emphasize that collaboration with stakeholders in conservation efforts is well worth the investment of time and effort. This is not to say that the investment is small, rather that the rewards are large. I have absolutely no doubt that the NDIS would look vastly different were it not for the valuable help of many non-scientific collaborators. Our success can be traced in a very meaningful way to our willingness to work with people who had a stake in what we were doing, and who had viewpoints vastly different from ours.

N. Thompson Hobbs received a 1999 Distinguished Service Award for his role in developing the Colorado Natural Diversity Information Source. This system, which provides data and analysis to enhance decisions on land use affecting Colorado's natural communities, is a model for other states and nations.