

Value and Advocacy in Conservation Biology: Crisis Discipline or Discipline in Crisis?

Conservation biology is fraught with confusion and controversy about advocacy. Until we resolve the confusion over *how* we should advocate, controversy will prevail over *whether* we should advocate. Until then conservation biologists are likely to avoid even directing their expertise to policy decisions, even though many authors agree we are obliged to do this. No stance on advocacy can avoid criticism, but are all stances equally defensible? At stake is the very meaning of *conservation biology*: according to “objective scientists,” we should give up our commitment to the inherent value of biodiversity, and stop using terms such as *degradation*, *good*, and *healthy* (Lackey 2007). According to “scientist advocates,” we are obligated to step well beyond research and even recommend particular solutions to policy goals (Noss 2007).

The debate is enriched by the distinction between advocacy for conservation values and for conservation trade-offs. This crucial distinction has been blurred on both sides. Objective scientists argue that asserting a value is advocating a policy, which should be eschewed (Lackey 2007). And scientist advocates argue that everyone has values, so who better to recommend policy than those closest to the facts (Noss 2007)? Both sides make good points, but both gloss over the critical difference between values and tradeoffs.

Here I address all scientists who use natural and social sciences to advance the protection of biodiversity, including those in universities, government, NGOs, and other institutions.

Values, Policies, and Tradeoffs

A value does not imply a policy preference because all policies involve trade-offs between values (e.g., human well-being, justice). My commitment to the value of biodiversity does not imply that I prefer any particular policy in response because each policy affects many other values also. For conservation scientists who advocate, these unavoidable value tradeoffs produce 4 kinds of trouble:

biased science, a mixing of facts and values, dogmatism, and hidden agendas.

Biased Science

Our values may influence the rigor of our science. Of course our values influence our science, including the questions we ask and the kinds of evidence we consult. The scientific process—documenting our methods and assumptions and subjecting them to peer review and open discussion—is imperfect, but it is our best tool for ensuring that our values do not compromise our work. As Noss (2007) suggests, there are advocates and there are sloppy or dishonest scientists, and these groups differ. Biased science offers possible short-term gains for biodiversity at the expense of appropriate conduct and long-term protection (through degradation of collective credibility).

Mixing Facts and Values

We may mix facts (sought through science) and values (derived through morals). This includes suggesting that science dictates policy goals, which it does not, because goals necessarily depend on values that are beyond the scope of science. That a species is threatened with extinction does not demonstrate that a policy must be pursued because any policy involves many costs (Naidoo et al. 2006). Proclaiming the inherent value of biodiversity does not change matters because all the costs of conservation are also associated with values that must be traded off (see the section on “Dogmatism”). Mixing facts and values is similar to biased science: it offers possible short-term effects at the expense of appropriateness and long-term effectiveness.

Dogmatism

When we suggest that the threat to a species is reason enough for a particular response, we signal that we hold the inherent value of biodiversity as a “protected value” (Baron & Spranca 2005), one that cannot be traded off with other values such as well-being, human rights, or sovereignty. To others this signifies that we are irrational

crusaders, people haters, or ecofascists. This incurs the perception of biased science. And when we argue that science dictates a particular action, we suggest that values come from science and thus mix facts and values. Suggesting that other values do not matter incites stakeholder backlash that compromises short- and long-term effectiveness, and it risks inappropriateness (through biased science and mixing of facts and values).

Dogmatism is not merely theoretical. Protected values exist in our journal articles, for example, when—without considering the costs to people—scientists suggest that because a species is in danger a particular response should be pursued. This problem is documented by anthropologists writing about conservation. They reveal how perceived crusades for conservation can sour entire projects (e.g., Harper 2002; West 2006). It is unsurprising that many social scientists steer clear of conservation biologists, to our detriment. Through the alienation of potential allies among researchers and practitioners, dogmatism further compromises long-term effectiveness.

Hidden Agendas

We may fail to acknowledge our own interests when others' interests are at stake (e.g., by professing objectivity). If we encourage farmers or fishers to accept costs for the sake of biodiversity and the public good, they will suspect us of having a hidden agenda unless we openly acknowledge that we are among those who see value in biodiversity. We must be explicit about such conflicts of interest. Hidden agendas may yield short-term gains for biodiversity, but they compromise appropriateness and long-term effectiveness.

How Conservation Biologists Should Conduct Themselves

In light of these troubles, how should we, as conservation biologists, conduct ourselves? Should we advocate for policies, use only value-neutral language, advocate for values (e.g., biodiversity), and/or advocate for advocacy?

Advocacy for Policies

We should advocate for policies *as conservation biologists* only when the policy difference is not a value difference. Noss (2007) described cases in which conservation biologists can recommend the best ways to meet a given goal. And Shrader-Frechette (1996, p. 913) claimed that scientists practice bias if they “fail to be advocates and if they treat positions of different merit the same.” When the difference in merit stems from science (e.g., different estimated probabilities of extinction), scientists should be unabashed in their communication. But this is really technical interpretation plus advocacy *for science*, not advocacy for trade-offs.

Policies have multiple impacts and so usually represent trade-offs between values (e.g., concerns of equity, justice, and autonomy). Trade-offs can yield policy preferences through weights on the competing values, but such weights are “outside the bounds of science” (Noss 2007; 19) and they should be determined by society, in which our votes count equally with other citizens' (Lackey 2007; 16). Thus, when policies differ in values (e.g., different permissible risk of extinction), we should not suggest that science can recommend policy. We should not claim, for example, that conservation biology specifies that native populations *must* be maintained. This claim surreptitiously folds a protected value (the moral value of native populations) into a scientific claim, which mixes facts and values, is dogmatic, and reveals a hidden agenda.

Great care is necessary when scientists or professional societies act sometimes as scientists and sometimes as advocates (for trade-offs). Then we must clearly distinguish where science ends and where personal and institutional values and value rankings begin. Otherwise, we effectively leverage respect for scientists to promote a trade-off between values, which abuses the public goodwill toward science.

Value-Neutral Language

We should not restrict ourselves to the use of only value-neutral language. Lackey (2007) rightly points out that terms such as *degradation*, *good*, and *healthy* convey values. There is no objective definition of ecosystem health, so our chosen baseline reveals our preferences and worldview. And these decisions may covertly suggest policy preferences, which Lackey (2007; 13, 14) argues should be avoided due to conflicts of interest. But we will always have preferences for population and ecosystem states, even if the definition of *conservation biology* did not assume certain preferences (the “normative postulates” of Soulé 1985). Given these unavoidable preferences there will always be conflicts of interest. We are forced to choose between stated conflicts of interest (value-laden language, risking the mixing of facts and values) and unstated conflicts of interest (a hidden agenda). Surely stated conflicts are more appropriate.

We can minimize the mixing of facts and values by explicitly distinguishing them. For example, we can justify chosen baselines for ecosystem health through a combination of science and values. There is also merit in using political processes to structure our baselines (Lackey 2007), but this incurs considerable costs of effort, expense, and time. Accordingly, it seems appropriate to use terms such as *habitat degradation* in ways consistent with our values (e.g., to favor forest-interior species over human-associated species), but to note this value judgment when defining the term. Insofar as our language conveys our values, we must justify both (see below).

Advocacy for Values

We should advocate for values (e.g., biodiversity), and we must justify our advocacy. Conservation biologists have long proclaimed the inherent value of biodiversity, and we should continue to hold that value explicitly rather than implicitly (to avoid hidden agendas). Actively promoting these values incurs a risk that people will perceive bias and fanaticism, but we can mitigate this by openly acknowledging the importance of other values like equity and human autonomy. We may annoy others, but at least we will not represent value judgments as technical judgments to obscure a hidden agenda. The appreciation of biodiversity is not shared universally, even if the roots for that appreciation are (Wilson 1984). If we want others to share this appreciation, we should promote it explicitly; knowledge of biodiversity does not seem to increase concern for it (Hunter & Rinner 2004).

If there is inherent value in biodiversity, we are obligated to advocate on its behalf. Nonhuman beings cannot do it for themselves. We know best what the future holds for biodiversity, so we must proudly promote biodiversity protection. And yet, such advocacy will be toothless unless we can explain and justify our stance, and this requires that we be interdisciplinary as individuals, not only as a field. Rare is the conservation biologist who can defend the inherent value of biodiversity philosophically and be a true ambassador of conservation. If conservation biology is to succeed as a “mission-driven discipline,” it must become an integrated interdisciplinary field that includes social sciences and humanities, in which all conservation biologists are conversant in the ethical underpinnings of their work.

Advocacy for Advocacy

The Society for Conservation Biology should advocate for advocacy. Conservation biology grew out of sciences that are not mission driven and inherited many of the cultural and institutional obstacles facing scientist engagement. Academic jobs leave little time for public education or policy engagement; scientists are still trained almost entirely in research methods, not public communication or policy intervention; and scientists still fear that such engagement will reduce their credibility. If conservation is

to affect the world, conservation biologists must advocate for the cultural and institutional changes that will encourage advocacy (Chan et al. 2005).

In sum, the question is not *whether* we should advocate but *how*. We must advocate for biodiversity without simultaneously advocating against other values. To do so, we must defend our values, which will require that we be interdisciplinary individuals conversant in ethics. And foremost, we must begin our advocacy in-house, promoting institutional changes that facilitate the needed engagement and interdisciplinarity.

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