

Retiring Cassandra

Cassandra, the daughter of the Trojan King Priam, was given the gift of prophecy by Apollo. When she deceived him, he turned this into a curse by causing her prophecies, though true, to be disbelieved. Having prophesied the death of Agamemnon, she was killed with him, by Clytemnestra (Knowles 2000).

Our discipline, conservation biology, was founded over 20 years ago out of a sense of despair felt by a group of visionary scientists deeply concerned about the destructive impact of human beings on the natural world. These founding fathers, coming mostly from the biological sciences, were driven by what they saw as the failures of the field to halt environmental degradation, or indeed even to maintain the very subjects they had spent much of their lives studying. To raise the consciousness of an uninterested world preoccupied with famine, the cold war, and a global recession, they framed their position in stark terms. They used powerful phrasing to describe the dismantling of nature, such as “the sixth extinction,” “the population bomb,” “the end of nature,” and “the extinction vortex.” It was in this forge of despair, using the fire of public attention, that conservation biology was wrought as a crisis discipline.

The oft-repeated definition of conservation biology as a crisis discipline has outlived its usefulness. It is currently constraining the growth and success of conservation biology and the achievements of tangible conservation results worldwide. This conclusion is in no way meant to denigrate the accomplishments of the visionary founders of the discipline who were essential and remain so. Their persistence paid off and can be assessed by the success of this journal, the number of students studying to become conservation biologists, and the explosive growth seen in conservation NGOs during the 1980s and 1990s. The early momentum generated by this approach has carried us far.

Yet the founding vision, tone, and language of conservation biology, so crucial in the infancy of the field, is now casting long shadows. And it is precisely in these shadows that many of us spent our formative years. This experience influences the way we choose to do our research, teach our students, write our books and papers, and develop conservation strategies. In short, our visionary fathers and mothers did what good parents do: they provided a set of tenets that color the way we view the world

so thoroughly that it is difficult for us to see conservation biology in any other way. Yet we must see differently, for though they were correct at the time in highlighting the problem, a crisis attitude has not proven effective in bringing about the changes society must make.

Instead of seeking wise or workable solutions we have performed as we were taught, articulating the problems of human impacts on the natural world as a means of drawing the attention of humanity. We have spent our careers pointing the finger of blame at the human race and decrying the demise of the things we love. Ours has virtually become an accounting approach to conservation: how many, where located, how many gone, how many almost gone, and under whose name each entry of responsibility should be placed.

It is difficult to escape this atmosphere of loss and blame. We are marooned in a world of “minima.” Our textbooks and talks discuss minimum population sizes and minimum critical sizes and minimum areas necessary for conservation. Our leaders argue that we must identify minimum defensible areas, draw up our forces around these areas, and prepare to defend ourselves and our chosen minima from the rushing onslaught of the human juggernaut. All too often we seem to have been accepted on our own terms: we wanted minima, and if we got anything from society, it was the minima we requested.

Lost in our own view of a world in crisis, we must now acknowledge responsibility for the responses that our attitude has generated. Lomborg’s book, *The Skeptical Environmentalist*, with its hollow, facile dismissal of conservation and what he calls its “litany of our ever deteriorating environment” is an unwanted child of our efforts. The points Lomborg makes should not be dismissed as the rhetoric of a Pollyanna, nor should his central thesis be thrown out in our headlong rush to document the myriad factual faults. Rather, his points should be interpreted as an example of our society’s rejection of our institutionalization of crisis.

Our focus on crisis has hampered conservation biology in achieving a scale of action required to match the world’s environmental problems. Despite our best efforts to launch our cause into the mainstream culture, the world is suffering from crisis fatigue. Indeed, we are now slipping backward. Conservation has been eclipsed on the list of top world concerns, and today we have to

fight to keep conservation issues from disappearing altogether. Global institutions, governments, and citizens have new agendas that are more easily perceptible as urgent than ours, such as poverty, health, equity, education, terrorism, and free trade. It is hard to argue against the world's demands, as laid out in the Millennium Development Goals of the United Nations, for more development, less poverty, less disease, fewer inequities, greater education, and greater technological transference. Virtually the only place for conservation in these goals is a call for the reduction, *not* elimination, of the loss rate of biodiversity. And to argue for a stronger role for biodiversity conservation makes us seem to be blocking a populist agenda. We were applauded and lauded in Rio, but a decade later conservationists were not even invited to the World Summit on Sustainable Development's party in Johannesburg. This must be seen as a wakeup call for change. We have gained the world's attention with the focus on crisis but have lost the world's support because we have not moved beyond our own culture of emergency and conflict. After almost two decades we are still a "crisis discipline."

To truly begin to solve the problems we have identified, we must learn to offer feasible solutions, measure our successes, and garner the support of social and economic forces mightier than ourselves. We must pursue our cause from a position of inspiration, not blame. Most important, we must offer humans the means to envision a positive and achievable vision of the future—one that details how the world should look for their children and all children to come. And this vision must be understood by real people not trained as scientists and communicated to them in terms they understand, terms of value, legacy, and equality. We must develop a world of coalitions based on this positive vision. We must regain center stage for biodiversity to allow it to play its starring role in the global

vision of the future. We must gain the hearts, minds, and—most important—the actions of the world's people by redefining conservation biology. To change the fate of the world, conservation biology must provide scenarios balancing human well-being and a world rich in nature, as well as the scientific basis for evaluating the trade-offs inherent in these scenarios. But this is not enough; we must also convince society to choose options that increase the conservation of nature in all its splendor.

We must also redefine ourselves as the practitioners of this visionary science based on the conviction that we can achieve a world in which humans thrive in the company of a resplendent natural world. Pioneers have begun this work, but we must move the whole discipline if we are to move the world. Cassandra carried the curse of being correct in her prophecies but never being able to make people believe her. Conservation biology has shouldered a similar burden. To get what we want, and what humanity needs, we must move conservation biology quickly from crisis to informed inspiration.

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