

The role of conservation biology in the New Millennium

I OFFICIALLY take over as editor of *Pacific Conservation Biology* with the first issue of the third volume. Having the chance to write this editorial gives me an early opportunity to explain how I view the world and the role of conservation biologists in the coming millennium. It also gives me an opportunity to express my view of how I see the role of *Pacific Conservation Biology* in the struggle to conserve and protect the natural world from an expanding and all-consuming human population.

We manage an incredibly complex society that is embedded in an equally complex biological system. We do this with incomplete knowledge and understanding of our actions and their consequences. Our knowledge and understanding are incomplete because we lack some information, but as a society we ignore and suppress much of the information required for managing regional and global ecosystems. Whatever their discipline, scientists need to acknowledge their social responsibilities and, while working to increase human knowledge and understanding, they need to ensure that the information that is available is used, and used to best advantage. These goals can only be met by putting aside the traditional boundaries of science.

What is our individual role as scientists, ecologists or conservation biologists in this community of people that we live in? My own role is clear to me; science as a whole, and conservation biologists in particular, must be publicly involved in the decision making or political process. Too many of us acknowledge that the conservation of biodiversity is important, but too few of us take a public position to protect biodiversity against society's commitment to and idolization of growth and development. Many who describe themselves as conservation biologists appear to avoid, or even to argue against, public and political involvement in decision making. Whether we call ourselves ecologists or conservation biologists, we are uniquely trained to advise and direct the choices being made daily by people on environmental and conservation issues, but most of us appear to lack a professional sense of responsibility — an ethic to act as a guide to our behaviour as scientists.

It is no longer acceptable to be content with being classroom educators and researchers. This is not an ideal world and the threats to the global environment and the risks to the survival of many (if not most) of the world's other species do not give us time for inaction. If you think I am being a doomsayer, I travel in illustrious company; twice in 1993 the world's scientific academies and leading scientists issued public declarations of concern for the survival of humanity and the planet unless action was taken to reverse population growth and solve global environmental problems. Yet, neither petition by the world's scientific community received significant media attention. Involving the media is critical in getting messages to governments and people and requires individual or grassroots action.

If global biodiversity is to survive the next century, then ecology and conservation biologists must become

advocates of change. They must not only advocate ecologically sustainable development, but they must promote values outside the economic framework of traditional society. We need to be outspoken critics of society and its short-term aspirations for material wealth. A long-term and balanced approach to our use of resources must be argued. For resources that are already over-exploited, such as old growth eucalypt forests in Australia and coastal estuaries through most of the Pacific, a balanced approach does not mean sharing the residues between conservation and developers. It means accepting and arguing that the extent of past use often means that no further use is possible until systems recover. Criticism and argument must be based on research, but in the absence of data, conservation biologists must argue from theory and be prepared to make predictions. As Paul Ehrlich would say, we cannot stand aside while our laboratory and home is vandalized. Nor should we leave it to environmental organizations to set the agenda and present the arguments.

Environmentalists and environmental organizations commonly have a narrow agenda (e.g., saving wilderness, saving rainforests, stopping hunting). While environmental causes are often praiseworthy, they are not necessarily the most important issues and tend to drag political attention away from the more serious, but less charismatic, environmental problems (e.g., loss of woodlands, overexploitation of inland waters, inappropriate pastoral activities). The emphasis placed by environmental organizations on wilderness conservation and the creation of forest national parks may have made it impossible to achieve a mix of forest conservation and management that will actually ensure the survival of forest biodiversity and create an ecologically sustainable forest products industry. Science needed to have a more prominent role in these debates.

Science is supposed to be rational and value free, but to succeed, conservation biologists must step outside the bounds of the dominant scientific paradigm and embed themselves in the social, political and emotional milieu surrounding environmental issues. The world needs scientists who are prepared to work for conservation. This means becoming part of the community, of getting involved with and for people. It means devoting a significant portion of time and resources to solving environmental problems and communicating with the public. It means being an advocate for those who cannot speak for themselves.

These are the roles I see for *Pacific Conservation Biology*. I see *Pacific Conservation Biology* not only as an avenue for publishing the results of scientific studies, but as a vehicle for bringing new dimensions to the science of conservation. It is an opportunity to meld the ecological and biological sciences with our social, political and emotional surroundings to create an environment in which human society can find new directions for individual fulfillment. With directions that move away from exploitation and consumption to an ethic of sharing and responsibility with and for other species and future generations.

H. F. RECHER