

## Case 61

### Biodiversity Protection

*John D. and Catherine T. MacArthur Foundation, 1986*

Scott Kohler

*Background.* The enormous diversity of species, populations, and ecosystems found on Earth has been the subject of serious research for only a short time—about twenty years. Among the findings of this research has been an extremely high proportion of plant and animal species concentrated in a comparatively tiny fraction of the planet. Scientists now tell us that some two-thirds of all terrestrial species inhabit lowland humid tropical forests.<sup>96</sup> Indeed, biological hotspots, stretching over just 1.4 percent of the Earth’s surface, contain 44 percent of all species of higher plants and 35 percent of all land vertebrate animals.<sup>97</sup> We also know that these hotspots are fragile ecosystems, many of which are constantly threatened by humans. Most of them lie in developing countries, where the pressures of poverty and rapidly expanding populations put them at especially high risk of degradation and destruction.

*Strategy.* One of the first organizations to begin working to preserve species diversity<sup>98</sup> was the John D. and Catherine T. MacArthur Foundation. In 1982, the Foundation had established the World Resources Institute, its first foray into environmental grantmaking. After making several grants for conservation in 1985, the Foundation decided in 1986 to establish the World Environment and Resources Program<sup>99</sup> as a major arm of its operations. Biodiversity protection was chosen as the Program’s exclusive focus for several reasons. Unlike other environmental crises, such as pollution, ozone depletion, and global warming, the loss of biodiversity is a threat both fast-moving and irreversible.<sup>99</sup> It is also highly concentrated in a few hot, tropical regions and warm, shallow tropical waters.<sup>99</sup> So the Foundation would be able to focus its efforts and funds tightly,<sup>99</sup> and thereby, it was hoped, achieve significant impact.

The Foundation chose to work in nine biodiversity hotspots: the Southern Tropical Andes, the Northern Tropical Andes, the Insular Caribbean, the Eastern Himalayas, the Lower Mekong, Indo-Melanesia, Madagascar, the Lower Guinean Forest, and the Albertine Rift. Its grants were organized by four themes: conservation science, law and policy, sustainable economic development, and environmental economics. The Foundation employed a “moving spotlight” approach, whereby it focused on specific regions, from among the list of nine, in rotating years. So, while MacArthur support has been continuous, Foundation staff have not needed to keep up with grant requests for each separate area all at once. In a strategic review conducted by the Foundation in 2000, this approach was credited with lowering the program’s administrative costs; enabling the Foundation to give its grantees the freedom they need to have impact; and, most importantly, producing a series of converging effects that would not have been possible with one linear approach to each hotspot.<sup>99</sup> By the time that review was conducted, the MacArthur Foundation had given 1,114 grants totaling over \$207 million.

*Outcomes.* The MacArthur Foundation led the way in establishing biodiversity protection as a major field of activity. The range of outcomes it has produced is enormous. In Brazil, for example, MacArthur support brought significant attention—as well as funds from USAID and the World Bank—to the Atlantic Forest, which is threatened by the encroachment of several cities, but has generally received far less attention than its larger, less endangered neighbor, the Amazon. In Madagascar, the Foundation has supported the “training of local scientists and conservationists,” to enable the country to better manage the flow of foreign capital that has resulted from increasing global attention to Madagascar’s unique and fragile ecosystem, the most diverse in the world. Working across national lines, the Foundation has contributed to the development of civil societies.

For instance, it has given major support to Fundacion Pro-Sierra Nevada, which has become “one of the most effective NGOs in Latin America” working for both conservation and peace.<sup>924</sup> In the United States, MacArthur planning and research helped establish the Florida Keys National Marine Sanctuary.<sup>925</sup>

*Impact.* The MacArthur Foundation was the first organization to protect biodiversity on a global scale. Until very recently, it was the only private funder to do so.<sup>926</sup> Along the way, MacArthur has been very successful in attracting other donors to support various biodiversity projects. These have included other foundations, NGOs and major international organizations. The Foundation was a major supporter, for instance, of the U.N. Conference on Environment and Development, which generated landmark global treaties on biodiversity and climate change. And in 2001, the Foundation, in partnership with the World Bank, Conservation International, and the Global Environmental Facility, established the Critical Ecosystems Partnership Fund, a \$100 million commitment to protect biodiversity.<sup>927</sup> By taking biodiversity as its cause long before it had received major support or recognition, the MacArthur Foundation has played a major role in building the field up to what it is today.

## Notes

916. *Environmental Literacy Council*, <http://www.enviroliteracy.org/subcategory.php/202.html>.

917. *Ibid.*

918. Species diversity—the variety of individual species—is one of three facets of biodiversity. The other two are genetic diversity (within an individual species) and ecosystem diversity, the range of community types. The MacArthur Foundation chose to focus on species diversity because its concentration—in a few tropical areas—would enable the Foundation to “rank locations and make sharp choices about concentrating [its] resources along the basic dimension of geography.” Ecosystem diversity would have been too big a focus, while genetic diversity “would have led to a focus on the variations in [a] very small number of plants and animals” and would offered the Foundation “no comparative advantage” or niche. “Strategic Review of Conservation Grantmaking,” John D. and Catherine T. MacArthur Foundation, 2000.

919. This is now the Conservation and Sustainable Development arm of the Foundation’s Global Security and Sustainability Program. It remains a major part of the MacArthur Foundation’s grantmaking. In 2004, the Foundation spent \$18 million on biodiversity protection. *Ibid.*

920. *Ibid.*

921. *Ibid.*

922. The total area of the Foundation’s nine program sites amounts to less than 3 percent of the Earth’s land surface, an area roughly one-third the size of the United States. *Ibid.*

923. *Ibid.*

924. *Ibid.*

925. *Ibid.*

926. The Gordon and Betty Moore Foundation, created in 2000, is now the world’s largest private supporter of biodiversity protection.

927. This collaboration was joined in 2004 by the government of Japan.