Mangrove ecosystems dominate sheltered coasts and estuaries throughout the tropics, and are disappearing or being degraded world-wide at rates exceeding 1% per year. As the four papers in this special feature illustrate, there are unique challenges and opportunities associated with conservation, management, and restoration of these coastal forests. On the challenge side of the ledger, global population pressures are the most severe on tropical coasts, where nearly half of the world's population lives. Use and abuse of mangrove forest products have been occurring for centuries, and in many parts of the world these wetlands are still viewed as wastelands. In the introductory paper, I review the history of mangrove use and management, and illustrate that despite significant advances in basic research and understanding of mangrove ecosystems, there has been little evolution of mangrove management techniques this century. Inhabitants and users of mangroves do not often appreciate the diversity of mangroves, and, as Brad Walters points out in his paper describing small-scale mangrove management in the Philippines, may even manipulate the system to favor monocultures.

Like other wetlands, though, functioning of mangrove ecosystems is controlled by only a few key variables, notably hydrology and soil factors, and given the appropriate physical conditions, restoration and recovery can proceed fairly rapidly. Karen McKee and Patricia Faulkner describe such a rapid recovery of biogeochemical and ecosystem-level parameters in a restored Florida mangrove. Daniel Imbert and Alain Rousteau use results from mangroves disturbed by hurricanes and oil spills to suggest replanting and restoration practices for mangroves in the Caribbean. The long history of mangrove forest management, especially in southeast Asia, and the large number of individuals engaged in active research of mangroves, provide a strong basis from which to develop scientifically based restoration programs for these ecosystems.

The papers in this special feature were presented at a symposium on mangrove restoration, as a part of the international conference "Tropical Restoration for the New Millennium," held May 23–29, 1999, in San Juan, Puerto Rico. This conference, sponsored by the Society for Ecological Restoration, the International Institute of Tropical Forestry, the University of Puerto Rico, and the International Union of Forestry Research Organizations, was attended by several hundred restoration scientists, managers, and ecologists from around the world. The presentations in the mangrove restoration symposium echoed many of the themes heard during the conference, notably the need for: research targeted at identifying best strategies for restoration; integration of existing, but widely dispersed and poorly available data on the ecology and management of tropical forests; and better communication among diverse groups of stakeholders, researchers, managers, restorationists, governments, and the people who use forests. The conference also presented an opportunity for mangrove scientists and managers to learn about restoration programs in other forest types (and vice versa), an opportunity rarely found in conferences focused on a particular ecosystem type.

Finally, in addition to organizing a superb conference, Jess Zimmerman and John Parrotta encouraged the development of this symposium, and found funds (from the U.S. Army Corps of Engineers) to help with travel expenses for symposium participants from developing countries. The late Bill Niering encouraged the publication of the symposium papers in Restoration Ecology, many anonymous
referees reviewed and edited the manuscripts, and Edie Allen and Sheila Kee shepherded the manuscripts through to press. I hope that this symposium, and others like it around the world, will lead to better management, and more effective restoration of mangrove ecosystems.

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