Monitoring Biodiversity: Lessons From a Trans-Andean Megaproject/Monitoreo de Biodiversidad: Lecciones de un Megaproyecto Transandino

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Monitoring Biodiversity: Lessons From a Trans-Andean Megaproject/ Monitoreo de Biodiversidad: Lecciones de un Megaproyecto Transandino

Edited by Alfonso Alonso, Francisco Dallmeier, and Grace P. Servat. Washington, DC: Smithsonian Institution Scholarly Press, 2013. xxvii + 429 pp. US$ 49.95. ISBN 978-1-935623-20-5.

How can people collaborate with industry in the interest of conservation? Is it possible to do this on an equitable basis? These are questions that people with an awareness of the environmental impacts of human activities and with concern for the long-term ecological sustainability of Earth face in their daily activities. This consideration becomes accentuated when it invokes the memory of Ken Saro-Wiwa or Nicole Bricque's short-term government service.

With this baggage, I started to read this book, commencing with the foreword by Thomas Lovejoy, which immediately seduced me into accepting that it is possible (as well as necessary) to work with industry if we want to preserve what remains of Earth's natural heritage. Having worked on a project that evaluated the effectiveness of the ecological aspects of environmental reinstatement by another oil company in another part of the world, having a keen interest in monitoring as part of adaptive management, and with the Altiplano being one of my spiritual homes, I read with great interest this account of the development and implementation of a biodiversity monitoring program to assess the impacts of a large-scale pipeline-laying project that crossed Peru from the Amazon basin through the Altiplano to its terminal at the Pacific coast.

The book was published, in both English and Spanish, to report the design and implementation of a biodiversity monitoring (and perhaps assessment) program in relation to laying a gas pipeline of about 400 km. The first part establishes the background for the work reported: Besides an overview of institutional and legislative considerations, as well as spatial units (ecological landscape units) for assessment, it offers an introduction to the monitoring and assessment framework. The remaining chapters report case studies of various groups of organisms. The final chapter evaluates the program.

Overall, the book is a commendable effort that reflects a great number of hours spent at the drawing board and in the field. Without a doubt, the program, as it was implemented, resulted in improved knowledge of the plant and animal life of the landscape units and contributed substantially to the training of local personnel.

However, readers will it find difficult to establish the relationship of biodiversity monitoring to adaptive management. I would be unable to tell my students what this biodiversity monitoring plan set out to monitor, how it intended to do so, with what exact aim, or how any results will be used for adaptive management. I find equally it difficult to relate the individual studies to a monitoring program. What is the role of these studies in the context of monitoring? What is the baseline for monitoring? What does the monitoring plan have, in terms of methods, to measure compliance or deviation from stated aims or desirable future states? How is one to take corrective management actions? What is the timeline for monitoring? What is the statistical basis for comparison between repeat recordings? Despite an upbeat closing chapter by the editors on accomplishments and limitations, I remain doubtful of the usefulness of this book as a resource for designing and implementing biodiversity monitoring. Nonetheless, I will use it in teaching biodiversity and biogeography and as yet another example of monitoring gone awry.

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