BOOK REVIEW

Energy Development and Wildlife Conservation in Western North America. Edited by David E. Naugle. 2011. Island Press, Washington, DC, USA. 357 p. US$90 hardcover; US$40 paperback. ISBN 9781597266581.

Despite its title, this interesting book is not as much about wildlife and energy development as it is about unifying conclusions drawn from an assortment of studies of wildlife population impacts from human encroachment. The collected essays and research summaries are credible evidence of the cumulative negative pressures on wildlife and habitats from the full panoply of human enterprise related to mining, ranching, residential development, and, more recently, energy exploration and development. Ultimately, while it is true that the latest pressures on open range and western forests come green-wrapped, as valleys and hilltops sprout wind towers and solar panels, renewable energy development is only the latest human endeavor to join the venerable army of projects to harvest, reap, graze, and pave the West.

I admire the book's theme—coordinated planning is needed to reduce cumulative effects on wildlife. If I had to pick a single concept from the book as a favorite, it would be that the scale of conservation must match that of total development. This alone is worth the read. The sad observation that caribou are listed as a threatened species, with more than 60 percent of identified herds in Canada declining because of some form of industrial human development, speaks volumes. Each scholarly and well-researched chapter supports the conclusion that cumulative impacts on vulnerable populations from energy development and related human disturbances in time, space, and persistence are pushing wildlife populations ever further from equilibrium and sustainability.

If we must focus on the latest crisis du jour, renewable energy development, to save the largest remaining habitats, so be it. Several discussions, including those on effects of energy development on songbirds and sage-grouse, greatly further the academic concepts that temporal and spatial scale are critical to measuring and understanding cumulative effects of energy development on bird populations. Part III in the book leads with the true observation that saving our most intact and productive landscapes will yield the greatest return for our efforts.

The book's metadata might well include the phrase "energy development in the West will proceed, it is a question of where." The reader is left saying: I get it—we need to focus on large, intact areas to save the most wildlife. But who will tackle the obvious follow-up questions from business leaders, policy makers, and regulators about identifying how and where to locate our energy development? Unfortunately, this book does not directly apply the body of knowledge and principles of conservation ecology it so ably discusses to produce discrete political, legal, regulatory, and business actions.

I almost wish this book had a different title, so its important message might be more widely received. It is a call for holistic assessment of cumulative impacts across both space and time, and it should not be pigeon-holed as only addressing energy-development impacts. Perhaps we may see a second book that distills conservation biology research into talking points, action lists, sequential action items, and specific goals for land-use planners, regulatory agencies, and business leaders to make more informed choices of where to site the drilling pads, blade the sagebrush, string the wires, and erect the wind towers. I am hopeful: the book abounds with promising hints of pragmatic mergers between research and results. And that is why this latest amalgamation of population and conservation studies, while academic and dense, bodes well for the overdue convergence of science and society in conserving our remaining open spaces and wildlife communities in the west.

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