

Information Crossfile*

BOOK REVIEWS

Beyond Naturalness: Rethinking Park and Wilderness Stewardship in an Era of Rapid Change

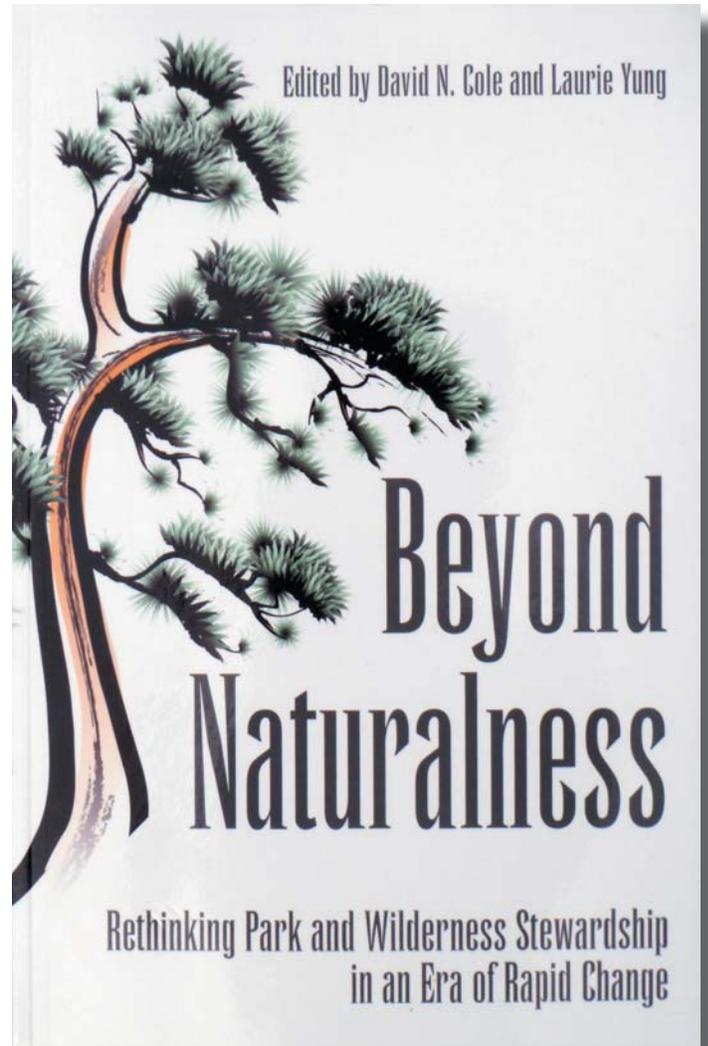
Edited by David N. Cole and Laurie Yung

TIMES ARE CHANGING, AND NOT THE WAY THEY USED TO, the editors of *Beyond Naturalness* explain. We used to think that the landscapes that we set aside to protect here in North America represented conditions that existed since the retreat of the last glaciers, virtually untouched by indigenous humans, and within a familiar range of variation caused by fluctuations in the weather and disturbances such as fire and flood. We believed an equilibrium would persist if only we saw to it that our industrial civilization did not interrupt and destroy it. That understanding guided our goals in managing the land.

We must realize, Cole and Yung tell us, that the changes besetting our landscapes today—climate change, invasions of exotic species, and anthropogenic air and water pollution—are directional. These variations will not swing back to the conditions that existed in the recent past. They are transforming our protected areas into landscapes that we no longer recognize as the old ones. They are leading to conditions that we cannot predict, and land managers must figure out how to think about managing their parks or refuges when the old mandate to protect and conserve is not going to leave the legacy to our posterity that it once promised. The essays in *Beyond Naturalness* were compiled to offer some frameworks to help managers and the agencies that oversee their lands to cope with this new world of uncertainty.

The authors describe four approaches to management, keeping in mind that what we choose to do, or not do, is based on the values that we, as humans, place on the land. The first approach is “autonomous nature,” leaving nature alone. Where protected areas are isolated and very remote, there may be no alternative, and these areas then provide an opportunity to observe what happens when we do nothing. Land protected to commemorate past events or periods is managed for “historical fidelity.” It may be impossible to maintain this fidelity in the future as weather regimes change and species migrate, so that only very small areas can be preserved with constant maintenance.

The approaches of “ecological integrity” and “resilience” both consider ecosystem structure, function, and composition, but focus on different aspects. To maintain ecological integrity, ecological indicators are selected and monitored (as in the National Park Service’s



“Vital Signs” monitoring program). Then management intervenes with specific objectives when the system’s integrity is determined to be threatened. The latter approach, resilience, focuses on ecosystem function, its ability to recover from disturbance.

Strategies for planning for uncertainty are offered in the last section of *Beyond Naturalness*. An interesting one is scenario planning, taking into account various scenarios that might describe what the future will look like at a particular park. In 2007, the National Park Service convened a group of experts to envision various scenarios for the future of Joshua Tree National Park in California. The three scenarios imagined at the workshop assume different but possible precipitation regimes and their effects on vegetation, wildlife, and fire. The common issues of each scenario were listed. In each case, some species will change their range, fire will increase, and nonnative plants will be problematic. With

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this much insight into the unknown future, managers can address these issues in their planning.

Cole and Yung complain that in terms of guidance in the age of uncertainty, current policy of land management agencies in the United States, developed to preserve “naturalness,” is inadequate to meet today’s challenges. The four approaches mentioned above offer some specific goals for management, for example, preserving ecosystem resilience. Cole and Yung recommend a review of current policy and a prioritization of goals, “clarity in purpose, approach, and outcome.” At the same time, there must be room for adaptive management as unanticipated situations arise. And they stress that collaboration among agencies is crucial so that ecosystems that reach beyond protected areas, and that may be vital to the survival of migrating species, are not destroyed. For the same reason, the public must be included in decision-making dialogue so that it will understand and support management actions.

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Although Parks Canada has begun to implement some of the kinds of planning presented here, much of the discussion in this volume is in the realm of abstractions because the examples and the outcomes of experiments have not occurred yet. Nonetheless, concepts and recommendations developed in these essays will support managers in thinking outside of the old and vague paradigm of “naturalness” and beginning to anticipate new ones.

Reference

Cole, D. N., and L. Yung, editors. 2010. Beyond naturalness: Rethinking park and wilderness stewardship in an era of rapid change. Island Press, Washington, D.C., USA.

—Betsie Blumberg