Environmental History, July 2005:

Nature's Experts: Science, Politics, and the Environment. By Stephen Bocking. New Brunswick, N.J.: Rutgers University Press, 2004. x + 298 pp. Notes, bibliography, index. $24.95.

The science underlying many environmental management decisions has come under attack from proponents and opponents of environmental regulation. Many scientists and environmental managers attribute the decline in environmental science's authority to the politicization of science and subsequent skepticism about its claims as a source of neutral knowledge. Many scientists, managers, and activists also advocate greater reliance on scientific models to determine appropriate courses of environmental action. In *Nature's Experts*, Stephen Bocking provides a compelling argument that neither depoliticizing environmental science nor more reliance on scientific models in environmental decision-making are likely to resolve the impasses that hinder effective environmental action. Instead, he builds a strong case that constructing an effective environmental science requires explicit recognition of the political nature of science and willingness on the part of scientists to acknowledge the validity of experiential knowledge.

In Chapter 1, Bocking asserts that the central problem of environmental science consists of reconciling democratic values with the technical nature of environmental issues. Chapter 2 describes the origins of science as an authoritative source of knowledge in environmental policy, as well as factors that undermined science's claims to political neutrality during the late twentieth century. Chapter 3 outlines Bocking's thesis that science cannot provide the basis for constructing environmental values due to its own political nature. Chapters 4, 5, and 6 provide evidence from three environmental arenas— natural resource management, global climate change, and environmental risk assessment—illustrating the political nature of science. Bocking asserts that managing resources in conditions of uncertainty constitutes the core environmental management problem. Historically, scientists, managers, and activists have called for more science as the solution to uncertainty. However, Bocking notes that scientific uncertainty is "framed in the language of science, but shaped by political preferences and values" (pp. 126–

27). He concludes that, "developing a strictly scientific basis for action will be insufficient, even counterproductive" (p. 128). In Chapter 7, Bocking describes an alternative approach to uncertainty that recognizes that science is embedded in politics and acknowledges that how non-scientists define environmental problems is important. He ends with a call for constructing a pluralistic environmental science in which scientists engage in trust building and two-way communication with non-scientists.

2

Nature's Experts covers a wide gamut of research in environmental policy, providing illustrative examples with sufficient details to make them understandable to a reader unfamiliar with the cases. Bocking also weaves into the narrative definitions of many key environmental policy concepts, such as technical and cultural rationality and the notion of wicked problems. The natural resource management discussion focuses primarily on the United States and Canada; the climate change and risk assessment discussions, however, draw upon environmental policy debates from Europe and Great Britain, as well as from North America.

3

Nature's Experts is likely to be of interest to a broad audience, ranging from environmental policy scholars to ecologists to environmental managers, activists, and the general public. It would make an excellent text for upper-level undergraduate or graduate courses in environmental policy, science, or history.

4

Rebecca McLain *is a senior policy analyst and cofounder of the Institute for Culture and Ecology in Portland, Oregon*