The Untilled Garden

Natural History and the Spirit of Conservation in America, 1740–1840

This book traces the origins of conservation thinking in America to the naturalists who explored the middle-western frontier between 1740 and 1840. Their inquiries yielded a comprehensive natural history of America and inspired much of the conservation and ecological thinking we associate with later environmental and ecological philosophy. These explorers witnessed one of the great environmental transformations in American history, as the vast forests lying between the Appalachian Mountains and the Mississippi River gave way to a landscape of fields, meadows, and pastures. In debating these changes, naturalists translated classical ideas such as the balance of nature and the spiritual unity of all species into an American idiom. This book highlights the contributions made by the generation of natural historians who pioneered the utilitarian, ecological, and aesthetic arguments for protecting or preserving nature in America.

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Preface

The title of this book derived from John Winthrop's observation that "the whole earth is the lords Garden & he hath given it to the sonnes of men," but its beginnings are linked to a search for alternatives to the term *wilderness*, which had very different connotations in the early nineteenth century. The garden reference took on new meaning as I worked through the literature on continental exploration and discovered that scientists described nature as much as a process as a constellation of plants and animals – a process brought to consummation by the Western settler. *Wilderness*, when they used the term, described an expectation: a point in a trajectory that began with Native inhabitants and continued through stages of settlement to what they considered a higher form of civilization. This trajectory – from untilled to tilled – explained a great deal about how early naturalist-explorers thought about nature.

Yet there was, I noticed, a subtle shift in this expectation after the turn of the nineteenth century, by which the untilled garden – a state of becoming – became a Garden of Eden – a state of being. In this sense, the pages to follow explore ways in which nature gained intrinsic value. This shift in thinking took three forms. Scientists first learned that certain trees, plants, and animals provided practical benefits to humankind, and on these terms they should be conserved. Second, they learned that all aspects of nature are interconnected, and these ecological connections should be maintained – perhaps even celebrated. Finally, scientists contributed to the growing popular appreciation for natural beauty that came to fruition in the mid-nineteenth-century Romantic movement.

In tracing these conservation ideas, I also became interested in how these wandering scientists brought together a natural history of America.

To convey their enthusiasm for this epic endeavor, I have relied heavily on the language of the journals, field books, taxonomies, texts, and correspondence they themselves produced, because this faithfully represents the flavor, mood, and symbolic meaning of their work in progress. I trust this reproduction also preserves the conditional and tentative nature of their forays into a natural history of America.

I represent these excerpts as faithfully as possible, but on occasion I have modernized punctuation when archaic forms were confusing. In another sense, I have not been exactly true to the original texts: I use the terms *ecology* and *scientist*, as do many historians, to explain methods of thinking evident in the early nineteenth century, even though the terms were not coined until later. Less anachronistic alternatives are neither graceful nor economical. Likewise, *naturalist* is used expansively to include all those interested in nature from a professional or amateur point of view. This, as I explain in Chapter 2, covers a broad canvas. I have included scientific names in parentheses where local designation might be confusing. Finally, in conceiving this study, I made some arbitrary geographic, chronological, and topical demarcations. Although naturalists wrote voluminously about Native Americans, I resolved early on that I could not do justice to this aspect of their work while concentrating on the relation between science and conservation. Hence, I commend this largely unexplored body of knowledge to others. Also, I have made no attempt to follow these explorers beyond the Mississippi River, partly again for reasons of space and time and partly because I see the fundamental principles of American natural history already in place when these surveys moved beyond the Mississippi. And, for similar reasons, I have not ventured into or beyond the Darwinian revolution.

This book has been a relatively solitary quest, which may account for its faults. However, I would like to thank editors Adam Rome and Mark Cioc and their external readers for comments on a synopsis of this work published in *Environmental History* (Vol. 11, January 2006). Frank and Deborah Popper helped me put the relationship between agricultural decline and conservation in broader perspective. Don Worster and John McNeal commented on an earlier draft of this manuscript, and their valuable insights guided me through final revisions. I am especially indebted to the American Philosophical Society, the Library Company, and the Pennsylvania Historical Society, all in Philadelphia, for their generous financial assistance, and I owe thanks to Roy Goodman at the APS for his valuable and innumerable suggestions about research materials and his encouragement on the project. Valerie-Anne Lutz was

likewise helpful at the APS as was James Green at the Library Company. Scott See read and commented helpfully on portions of the text, and my colleagues at the University of Maine listened patiently to presentations of this material in various venues and asked good questions, as did colleagues at Bowdoin College and Colby College. Pat and Lily helped in numerous ways that would be difficult to specify in a brief acknowledgment, but I am especially thankful for Lily's help in surmounting the last few hurdles in this project.