xxii 🐌 The Multiple Values of Wilderness

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Chapter 1 The Multiple Values of Wilderness

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2 🌲 The Multiple Values of Wilderness



Gone are those of the 1950s and early 1960s who championed preserving wild lands and who influenced and saw through the birth of the National Wilderness Preservation System (NWPS). Gone too are myriad eager managers and proponents of wild land protection of the late 1960s and 1970s who helped rear the fledgling Wilderness¹ system and bring it into adolescence by adding management practices and policy interpretations. In this, the 40th year since the birth of the NWPS, this middle-age federal land system is surrounded by many new faces, as its childhood friends have moved on to other callings, have retired, or are no longer with us. The people who now make up this country's political leadership and the administrators of the federal land management system are all new. These new faces, for the most part, have little first-hand knowledge of the history of Wilderness protection in this country, nor do they have as much knowledge of the compelling reasons for the creation of our system to protect wildlands as did those who helped bring it into world. The 1960s "hype" of birthing an unprecedented new federal lands system has long since faded. Without some form of personal attachment to the Wilderness Act, however, the new players on the scene have little from which to draw in forming a personal

position on the National Wilderness Preservation System. The American public is increasingly detached from wild lands. Part of the reason is that as the country continues to experience economic growth and development, there are fewer wild lands that have escaped commercial and residential development. This includes second and vacation homes which are spreading further into formerly undeveloped rural areas and regions. Another part of the reason is that the vast majority of Americans live and choose to live in urban and suburban areas with little direct contact with wild lands, especially lands that might be considered wilderness. Hence, we cannot take for granted that the average American citizen understands and appreciates the multiple values of Wilderness that fueled public interest in the establishment of the NWPS 40 years ago. Younger generations in particular may need to be reminded, or perhaps even convinced, that the NWPS is not just their parents' or grandparents' Wilderness but theirs as well. The Wilderness values that seemed to be a priority to the general public in decades past may not have the same priority today. Also, the realm of relevant Wilderness values has likely changed over the past 40 years.

In 1964 the U.S. Congress established by law the National Wilderness Preservation System. The rich history and background of the Wilderness Act and the NWPS are discussed extensively in Chapters 2 and 3 of this book. At its birth, the NWPS included just 54 areas and a little over 9.1 million acres.² Congress has since added hundreds more areas and millions more acres,

increasing the NWPS to 662 areas and nearly 106 million acres of the wildest of federal lands. Most of these additions came early on. As the U.S. population and their elected government representatives and federal land management agency personnel have changed, additions are not only coming more slowly but also questions increasingly arise about the efficacy of the continued protection of federal lands as Wilderness. Increasingly voices are heard that advocate other, more commercial purposes and uses for these wild lands, such as oil exploration, tourism development, grazing, mining, and timbering. However, as illustrated in the recent national debate over allowing increased oil exploration in the Alaska National Wildlife Refuge, there are also strong advocates and public sentiments to protect wild lands and the multiple values these wild places provide to the nation as a whole. As domestic and global changes continue to put new and different pressures on the remaining natural lands in the United States, debates over how much new land to officially protect and how much existing, officially protected Wilderness should be opened up to some level of commercial use and development are likely to continue.

Needed in these new times is a clear, comprehensive articulation of the multiple values of Wilderness. This articulation needs to be factual, wideranging, and science-based. Thus, the overall purpose of this book is to tell fully what we know about the range of values Americans hold toward the NWPS. We attempt to clarify the meaning of different types of Wilderness values and to present replicable, science-based evidence of these values. Our intended audience is all those new faces who can and do have power over the future of the United States' National Wilderness Preservation System as well as all who seek to influence those who have this power. The book is also intended for teachers, students, and other inquisitive people involved in formal or informal learning and research programs. We hope as well to better inform interested and engaged members of the general public about the values of *their* public Wilderness areas. After all, it is the American citizen who is ultimately responsible and can influence public policy in the greatest measure through their individual and collective voices and actions.

Setting the Stage

To set the stage and provide a springboard for the inventory and description of Wilderness values provided in this book, a national workshop focusing on what research has shown about the values of the National Wilderness Preservation System was held in Washington, DC, on July 11 and 12, 2000. At this workshop,

Chapter 1—Introduction 🌲 3

¹ This book adopts the convention of capitalizing the word Wilderness when it refers to area or land designated into the National Wilderness Protection System.

² Wilderness acreage data in this chapter provided by the Bureau of Land Management, Fish and Wildlife Service, Forest Service, and National Park Service (February 2004).

Chapter 1—Introduction 🚴 5

4 🕭 The Multiple Values of Wilderness

invited national experts from the science and management communities explored the need for and approaches to assessing the values the NWPS adds to American landscapes and quality of life. From workshop participants came the conceptualization of the Framework of Wilderness Values, described in Chapter 4, and a call to inventory, assess, and communicate what we know about these values. The principal means for communicating our findings, it was decided, would be through a book unprecedented in its thoroughness in examining Wilderness values. Great care, too, would be taken to assure the book's contents are credible and its language simple and straightforward. Toward these ends, building the foundation for this book began immediately after the workshop.

As a national assessment of values provided by Wilderness currently under federal government protection, the fundamental question this book is meant to help answer is: "To what degrees and in what ways does the National Wilderness Preservation System add value in 21st century America?" This book inventories and discusses the social, economic, ecological, and ethical value perspectives of Wilderness. Considering the broad spectrum of the values of Wilderness, it was acknowledged early in the development of this book that the NWPS contributes to the welfare of both humans and nonhumans; that benefits accrue within the boundaries of NWPS areas; and that benefits accrue to people, nonhumans, and landscapes outside designated Wilderness areas. It was also acknowledged that development of the story of the broad spectrum of Wilderness values would require the work of a highly qualified, multidisciplinary team to look fully at the range of values and measures.

Multiple Values and Multiple Perspectives

To do the heavy lifting involved in assessing the multiple values provided by the NWPS, a national multidisciplinary team of experts was assembled to address each of the major value perspectives as outlined in the general Wilderness values framework (i.e., social, economic, ecological, and ethical; see Chapter 4). Authors of this book represent the members of this team. As follow-up to the national workshop held in 2000, the values team and key agency and organizational leaders held two additional national meetings, both in Athens, Georgia—one in April 2002, the other in November 2002. The purposes of these meetings were to discuss each of the major Wilderness value perspectives and to detail and map how to integrate these perspectives into the overall values framework. At these meetings and in subsequent interactions to develop this book, the values team followed a multidisciplinary approach to assess the values of the NWPS.

A multidisciplinary approach (rather than an interdisciplinary approach) seeks to better understand Wilderness values by using the best available science-

based knowledge and information from the disciplinary fields most closely aligned with each of the framework's four value perspectives. An interdisciplinary approach to assessing Wilderness values seeks to blend perspectives and theories across disciplines to examine each identifiable Wilderness value. Although the values team assembled to produce this book supports future efforts to assess Wilderness values using interdisciplinary approaches, such interdisciplinary assessments of Wilderness values are not currently available. Since the goal of this book is to report on what is currently known about Wilderness values, we attempt to assess state-of-the-art existing knowledge and literature related to each of the major value perspectives described in Chapter 4 in an integrated, multidisciplinary manner.

Multiple Values and Book Organization

The framers of the Wilderness Act and the subsequent establishment of the National Wilderness Preservation System were influenced by early recognition of the special values "untrammeled" wild lands provide the United States. To better understand and appreciate the multiple values of the NWPS in 21st century America, it is useful to first look back, as done in Chapters 2 and 3. These chapters offer historical and institutional perspectives about why the United States was the first nation in the world to demonstrate by legislative action that wild lands are important enough to receive special designation and protection. Although the Wilderness Act mentions specific types of Wilderness values and hints at others, this Act and other Wilderness literature written over the past 40 years fail to provide an integrated, multidisciplinary framework for inventorying and assessing the multiple values of Wilderness. The values framework presented in Chapter 4 provides an overview of social, economic, ecologic, and ethical perspectives of the values of Wilderness. These perspectives are described in detail in later chapters. The Wilderness values framework shows that social, economic, ecologic, and ethical value perspectives ultimately depend upon the various measurable characteristics or attributes that describe the makeup of the NWPS and what can be found there. Chapter 5 describes the objective physical and biological attributes or characteristics of the NWPS, and Chapter 6 surveys the more subjective attributes or characteristics of "wildness."

As outlined by the values framework, Wilderness attributes support its functions, such as preserving wild natural places. In turn, these preserved wild natural places support Wilderness services, such as animal and plant habitat, which then support specific types of Wilderness values, such as existence values of rare and endangered animals and plants. Specific types of Wilderness values, such as existence values of rare and endangered animals and plants, can be described and assessed from social, economic, ecologic, and philosophical

6 🔈 The Multiple Values of Wilderness

disciplinary perspectives. Chapter 7 discusses Wilderness values from a broad social value perspective. Chapter 8 provides a closer look at how the social and cultural backgrounds of people influence Wilderness perceptions and values. Personal values from the perspective of economics are examined in Chapter 9, while Chapter 10 explores local economic development benefits at a community level. Chapter 11 discusses Wilderness values from an ecological perspective, focusing on ecosystem health and life support. Chapter 12 explores intrinsic values from the perspective of philosophers, including tracking down the ethical or moral basis for intrinsic values. Chapter 13 summarizes key messages and implications from the national assessment of Wilderness values this book represents. It also integrates and summarizes what we understand to be known about how and how much Wilderness adds value to 21st century America and discusses the implications of this knowledge for the future of the National Wilderness Preservation System.

Chapter 2 Origins of the National Wilderness Preservation System

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The Multiple Values of Wilderness

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