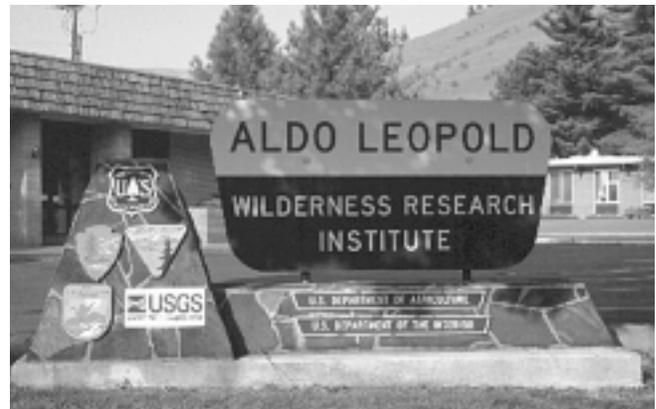


# An Outside Assessment of Wilderness Research in the Forest Service

BY DAVID J. PARSONS

In February 2007 the U.S. Forest Service (FS) hosted an external peer review of the agency's wilderness research program area. In response to Office of Management and Budget (OMB) and Office of Science and Technology direction to review all federal research programs, the FS has been systematically conducting external peer reviews of its various research program areas. Wilderness was identified as a candidate for such review due to its crosscutting nature; both across disciplines and its applicability and importance to the five federal agencies with management and science responsibilities for the National Wilderness Preservation System (Bureau of Land Management, Fish and Wildlife Service, National Park Service [NPS], U.S. Geological Survey [USGS], and FS). Monica Turner, a respected landscape ecologist and professor in the Department of Zoology at the University of Wisconsin, served as chair of the review panel. The six other panel members included three university faculty (Dorothy Anderson, Chad Dawson, Barry Noon) as well as representatives of the USGS (Jack Waide), NPS (John Dennis), and The Wilderness Society (Greg Aplet). The charge to the panel was to review the FS wilderness research program area, to assess the capacity of that program to address future needs, and to provide guidance for the future direction of wilderness research activities in the FS.

The review panel was provided background information on the organization and conduct of the FS's overall research program, including how wilderness research fits



into the overall program. They were also provided an overview of interagency efforts to coordinate wilderness management and research activities through the Interagency Wilderness Policy Council, Interagency Wilderness Steering Committee, and the Arthur Carhart Wilderness Training Center and Aldo Leopold Wilderness Research Institute (ALWRI), both of which are managed by the FS, but receive support and oversight from all five federal agencies with wilderness responsibilities. The panel heard from each of these agencies regarding how FS research contributes to their overall wilderness programs. In addition to detailed written summaries of all wilderness-related research supported by the FS, the panel heard from, and questioned, FS scientists about the breadth and depth of the program.

The FS manages approximately 35 million acres (14.1 million ha) of congressionally designated wilderness,

representing about 18% of all FS lands. The panel explicitly recognized the unique contribution of wilderness to the American landscape, including the multiple values it provides and the statutory responsibility of the agency to maintain the wilderness character of these lands. The panel further recognized that “sound stewardship requires a detailed knowledge base from which to manage,” and that the FS “is well positioned to have a well-defined, meaningful and high profile wilderness research program and to continue its leadership role among the federal wilderness management agen-

cies.” Whereas the primary focus of the ALWRI has traditionally been on science to support wilderness stewardship, recent efforts have expanded into areas related to the role of wilderness in larger social and ecological systems as well as understanding relationships and values people place on wilderness. The panel, although recognizing this work, identified a need for a more coordinated and comprehensive wilderness research agenda that includes work conducted across all FS Research Stations. They recommended that a comprehensive wilderness research program should include three

complementary components:

1. **Science for wilderness:** science that informs effective stewardship and management of wilderness, including the status and trends of ecological conditions
2. **Wilderness for landscape sustainability:** science that improves understanding of the contributions of wilderness to the ecological processes, services, and integrity of larger landscapes
3. **Wilderness for science:** science that uses wilderness and similarly managed lands as laboratories to understand the causes and consequences of environmental change, minimally confounded by other influences

In noting the crosscutting nature of wilderness, the panel recommended that “wilderness research be substantively integrated into FS Research and Development efforts to understand the effects of global climate change ... and the effects of human land use and activities.” They recognized the scientific value of wilderness as the “minimally disturbed end of the continuum represented by the wildlands-rural-urban gradient.” Among the many specific recommendations provided by the review panel, were creation of a service-wide searchable database of projects, findings, and outcomes relevant to wilderness; development of improved mechanisms for creating research collaborations and partnerships across federal agencies and with universities; and improved communication and collaboration between FS research and wilderness managers, including a process for setting national wilderness research priorities and regular meetings of wilderness scientists and managers.

## A Comment by an External Peer Review Panel Member

BY CHAD P. DAWSON

Serving on the External Peer Review Panel for the Wilderness Research Program Area was challenging—especially reading and trying to understand and comprehend the breadth and depth of the many past and ongoing USDA Forest Service (FS) funded research projects in and about wilderness. We had come together as a panel to review the Wilderness Research Program, and, even though we were warned that there was not a formal “program,” I was surprised to see how much had been accomplished and, more importantly, to see the possibilities of what more could be done if, in fact, there was a formally articulated and administered Wilderness Research Program within the FS. As a panel, we readily recognized the valuable work of the Aldo Leopold Wilderness Research Institute, and we also unanimously identified the compelling need for a more coordinated and comprehensive wilderness research agenda that includes studies conducted across all FS Research Stations and the entire Research and Development arm of the FS. As the panel report indicates, the focus and enthusiasm of the panel was for what could be accomplished through FS research leadership to support the stewardship and management of the National Wilderness Preservation System, which includes 18% of the lands managed by the FS and more than 4.5% of the U.S. landscape.

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agency training programs, if we are to have well-trained and dedicated wilderness professionals in the coming decades. **IJW**

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The panel recognized that the FS “has been conducting wilderness-related research for many years” and that there are “excellent ongoing programs from which to frame a focused wilderness research and development program.” They recognized that important wilderness-relevant research occurs in all the FS Research Stations, but many of the scientists doing this work “do not consider their work to be wilderness research.” The panel stated that the FS has a great opportunity to provide leadership among the federal agencies by demonstrating “strong

commitment and support for this research area.” Special acknowledgment was given to the success of the ALWRI in providing focus for the “science for wilderness” component of wilderness research.

In addition to using this assessment as a measure of program performance to OMB, the FS has committed to “work to implement the panel’s recommendations” and use the information provided in planning and priority identification. A committee of FS scientists and research managers has been constituted to review the

panel recommendations and to make suggestions for possible use within the agency. **IJW**

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