

**Outdoor Recreation Research and Education for the 21st Century:
Defining National Direction and Building Capacity
National ORRE Steering Committee - convened by USDA-CSREES
October 19, 2007**

Introduction:

This Outdoor Recreation¹ Research and Education (ORRE) strategic plan reflects a number of important societal trends. First, according to the latest results from the National Survey on Recreation and the Environment², outdoor recreation participation has increased in the U.S. Second, outdoor recreation makes a major contribution to local and regional economies -- nationwide (\$730 billion per year³) and globally. Third, scientific studies suggest that quality outdoor recreation experiences can lead to healthier, active lifestyles for people of all ages. And fourth, with changing demographics and increasing participation, there is a growing challenge to provide and manage sustainable outdoor environments for recreation experiences.

Managers, policy-makers, and communities need science-based strategies to address these societal trends. This strategic plan provides national direction for research, education, and outreach programs focused on outdoor recreation. This plan is also designed to enhance the capacity of ORRE programs nationwide and to promote interagency collaboration, leading to more sustainable outdoor environments, recreation experiences, and healthier communities.

The ORRE strategic plan complements the McIntire-Stennis Strategic Plan in managing the forest lands for outdoor recreation. It also contributes to the USDA-CSREES Strategic Goal 3, Support Increased Economic Opportunities and Improved Quality of Life in Rural America; and Goal 6, Protect and Enhance the Nation's Natural Resource Base and Environment.

The ORRE strategic planning process engaged a broad range of stakeholders from academic institutions, federal agencies, and outdoor recreation managers. Additional inputs were solicited through roundtable discussions in meetings and conferences. For further information on the process, see Appendix A.

Vision:

Sustainable outdoor environments connecting people and nature through recreation, leading to healthier people, resources, and communities

¹ Outdoor recreation is defined as recreation experiences that result from leisure activities that occur in and depend on the natural environment. (Adapted from Moore, R.L. and B.L. Driver, 2005, *Introduction to Outdoor Recreation*, Venture Publishing). This includes nature-based tourism activities, e.g., agritourism and ecotourism.

² Congress mandates the National Survey on Recreation and the Environment (NSRE), conducted by the USDA Forest Service. The 8th NSRE ran from September 1999 through February 2004. See Recreation Statistics Update (www.srs.fs.fed.us/trends/RECUPDATES/recupdate0907.pdf, accessed on October 2, 2007)

³ The Outdoor Industry Foundation, 2006, *The Active Outdoor Recreation Economy*. (<http://www.outdoorindustryfoundation.org/pdf/ResearchRecreationEconomy.pdf>, accessed on August 7, 2007)

Mission:

This ORRE strategic plan is designed to:

ADVANCE knowledge about sustainable outdoor environments, recreation experiences, and healthy communities

FOSTER innovative education programs to develop future leaders and engage citizens in sustainable outdoor environments, recreation experiences, and healthy communities

BUILD capacity to transfer useable knowledge and communicate impacts about sustainable outdoor environments, recreation experiences, and healthy communities to policy-makers, industry, landowners, managers, and communities

Strategic Goals:

The goals of this ORRE strategic plan are to:

- Build a coordinated research program that is transdisciplinary⁴, multi-scale, theory-driven, and education-based, benefiting science and society
- Strengthen education and outreach programs that connect people and nature through recreation and support diverse economic opportunities
- Support an integrated program of research, education, and outreach, focusing on three thematic areas

Themes and Actions:

Theme 1: Connecting Outdoor Recreation, Human Health and Well-being

A number of research, education, and outreach actions are identified below to strengthen the impact of outdoor recreation on human health and well-being.

Research:

- Support longitudinal research studies that identify and monitor health impacts of outdoor recreation for various population groups
- Quantify and develop reliable and valid measures of health benefits of outdoor recreation
- Explain the effects of outdoor recreation participation on different physical and emotional health indicators

⁴ Transdisciplinary research implies an overall coordination of science, education, and innovation towards a specific societal purpose (Pohl C., 2007, From Science to Policy through Transdisciplinary Research, *Environmental Science & Policy*, forthcoming.)

Education:

- Support the integration of outdoor-recreation education into K-12 school curricula to promote healthy lifestyles
- Provide outdoor-recreation education through multiple delivery systems to reach diverse audiences

Extension/Outreach/Engagement:

- Engage health professions to promote the health benefits of outdoor recreation to U.S. public
- Translate and disseminate health benefit knowledge to critical audiences, including public officials, government agencies, industry, and citizens
- Expand community-base youth programs to experience outdoor recreation
- Target youth, family, retirees, urban populations, and people with disabilities for outdoor-recreation education
- Support the development of science-based performance standards to improve health through outdoor recreation programs

Theme 2: Creating Sustainable and Accessible⁵ Outdoor Recreation Environments

A number of research, education, and outreach actions are identified below to promote sustainable and accessible outdoor environments for outdoor recreation.

Research:

- Understand natural resource impacts of outdoor recreation and improve mitigation strategies
- Assess and design management strategies to reduce competing uses and user conflicts in outdoor environments
- Develop improved measures of efficiency, e.g., benefit-cost analysis, for outdoor recreation programs
- Examine how land ownership changes are affecting access to outdoor recreation environments by different population groups
- Understand and monitor the preferences, expectations, demographics, and behavior of outdoor recreation participants and non-participants
- Develop and design management systems that balance the benefits and ecological impacts of outdoor recreation
- Identify and quantify the environmental services that outdoor recreation environments provide

Education:

- Strengthen university academic programs in outdoor recreation management and science
- Increase the scientific capacity of outdoor recreation academic programs and social science research through quality graduate education programs
- Recruit students with diverse backgrounds into graduate education programs

⁵ “Accessible” refers to policies and programs designed to encourage the use of outdoor recreation areas and facilities by the public, including individuals with disabilities and with limited financial resources.

- Integrate social sciences into natural resource curricula and resource management position descriptions
- Incorporate the needs of new landowners (e.g., land trusts, conservation organizations, real estate investment groups) into outdoor recreation curricula
- Broaden the level of engagement between outdoor recreation professionals and academic researchers and educators

Extension/Outreach/Engagement

- Strengthen outreach programs that promote sustainable outdoor environments for recreation experiences
- Engage community and resource managers to design and deliver quality outdoor recreation outreach programs
- Incorporate new technology in the design and delivery of outreach programs, e.g., eXtension
- Support a collaborative approach to outreach program delivery, partnering with cooperative extension, public land management R&D units, land trusts, and community-based organizations.

Theme 3: Integrating Outdoor Recreation, Resilient and Vibrant Communities

A number of research, education, and outreach actions are identified below to enhance the impact of integrating outdoor recreation on building resilient and vibrant communities.

Research

- Improve quantitative methods in economic modeling to incorporate outdoor recreation benefits to individuals, families, and communities
- Monitor and evaluate social, economic, and environmental changes occurring in selected recreation-based gateway communities through longitudinal studies
- Examine the causes and consequences of amenity-led migration on rural communities
- Enhance knowledge of the interrelationship between outdoor environments and community development
- Identify and evaluate adaptive land use, community planning, and management systems that balance economic, social, and ecological attributes
- Assess how supporting infrastructures (e.g., health-care, technology, airports, etc.) affect amenity-led development
- Analyze the social, economic, and environmental consequences of the rapidly aging population on both the demand and the supply of outdoor recreation resources

Education

- Expand academic recreation workforce training programs, including the community college system, to meet community needs
- Support university-led leadership and strategic planning training for community and resource management leaders
- Strengthen professional training opportunities for outdoor recreation workforce

Extension/Outreach/Engagement

- Sponsor forums that bring together land managers and local leaders to discuss alternative futures for communities
- Communicate the trade-offs of social, economic, and environmental benefits and costs of outdoor recreation to the communities
- Encourage community partnerships that achieve balance between land stewardship and economic development
- Enhance recreation and nature-based tourism businesses through workshops and training programs (e.g., entrepreneurship, partnership, and leadership)

ORRE Implementation Strategies:

In addition to identifying vision, mission, strategic goals, and thematic areas, a number of strategies to implement the ORRE Strategic Plan are identified below:

- Promote the ORRE Strategic Plan to university scientists, educators, and administrators
- Develop multi-state research projects, e.g., assessing benefits of outdoor environments; longitudinal studies in amenity-led migration and community development
- Support more inclusive language of outdoor recreation research and education in existing formula funds (McIntire-Stennis, Hatch, Evans-Allen, and Smith-Lever), competitive research programs (National Research Initiative), and Small Business Innovation Research (SBIR) to incorporate ORRE Strategic Goals
- Establish a national Advocacy Leadership Committee to assist in implementing the ORRE Strategic Plan
- Support a unified professional advocacy network for ORRE
 - Enhance professional identity, communication, coordination, and advocacy among key ORRE constituencies through a deliberative planning process, consulting with key constituency to promote a shared-agenda for ORRE
 - Utilize the skills and networks of retired professionals to advocate for robust outdoor recreation management and science programs
 - Garner the support of the ORRE Strategic Plan by diverse professional societies; government science, education, and management leaders; and policy makers
 - Engage conservation and citizen groups, and recreation and tourism industries to support the ORRE Strategic Plan

Appendix A:

ORRE Strategic Planning Process:

A deliberative and inclusive planning process was followed in developing the ORRE Strategic Plan. The planning process engaged a diverse set of professional stakeholders nationwide with expertise in outdoor recreation research and education. A National Steering Committee, which comprised of multidisciplinary cross-section of expertise from leading academics, agency researchers, and outdoor recreation managers, was convened in May 2007 to provide national

guidance in developing the ORRE Strategic Plan. In addition, other professional networks were engaged in the planning process through roundtable discussions held at several conferences in 2007, including the Northeast Recreation Research Symposium in April, the International Symposium on Society and Resource Management in June, and the Society of American Foresters in October. At each roundtable, participants identified strategic issues, concerns, and opportunities to be incorporated into the ORRE Strategic Plan. Transcripts were completed for each roundtable.

In May 2007, the Steering Committee met for a two-day workshop in Baltimore, Maryland, to incorporate all planning inputs into a draft strategic plan, which included an overall vision, mission, strategic goals, thematic areas in research, education, and outreach objectives, and implementation strategies for the ORRE Strategic Plan. Several iterations of the draft plan were commented on by the steering committee and incorporated into a final strategic plan.

Appendix B:

ORRE Steering Committee Members (in alphabetic order by last name):

- Adoum, Djime, CSREES Planning & Accountability
- Blanche, Catalino, co-team leader, CSREES Natural Resources & Environment
- Boteler, Franklin E., CSREES Deputy Administrator, Economic & Community Systems
- Brown, Perry, University of Montana
- Caldwell, Linda, The Pennsylvania State University
- Chang, Wen-Huei, U.S. Army Corps of Engineers
- Caldwell, Nathan, U.S. Fish and Wildlife Service
- Deller, Steve, University of Wisconsin
- Dennis, John, National Park Service
- Diana, Augusto, National Institutes of Health
- Falk, James, University of Delaware
- Gramann, James, Texas A&M University and National Park Service
- Hallett, Hal, Bureau of Land Management
- Hoover, Anne, USDA Forest Service
- Hammit, Bill, Clemson University
- Hunt, Fen, Team Leader, CSREES Economic and Community Systems
- Kruger, Linda, USDA Forest Service
- Leahy, Jessica, University of Maine
- McDonough, Maureen, Michigan State University
- McGranahan, David, USDA Economic Research Service
- Pierskalla, Chad, West Virginia University
- Propst, Dennis, Michigan State University
- Reeder, Richard, USDA Economic Research Service
- Rosenberger, Randy, Oregon State University
- Schneider, Ingrid, University of Minnesota
- Selin, Steve, co-team leader, West Virginia University
- Simmons, Randy, Utah State University
- Thompson, Kate, West Virginia University
- Weber, Bruce, Oregon State University
- Wellman, Doug, North Carolina State University

