



rethinking
protected
areas in a
changing world

proceedings of the 2007

george wright society biennial conference

on parks, protected areas, and cultural sites

edited by samantha weber & david harmon

The George Wright Society

Hancock, Michigan • 2008

Board of Directors (2007)

Abigail B. Miller • *President*
Rolf Diamant • *Vice President*
Rebecca Conard • *Treasurer*
Gillian Bowser • *Secretary*
Brad Barr
David Graber
Suzanne Lewis
Brent A. Mitchell
Suzette Kimball
Stephanie Toothman
Stephen Woodley

Executive Office

David Harmon • *Executive Director*
Emily Dekker-Fiala • *Conference Coordinator*

GWS2007 Conference Committee

Abigail Miller (chair), Gillian Bowser, Rolf Diamant, David J. Parsons, William H. Walker, Stephen Woodley

This book is also available on CD in PDF format. To order, go to www.georgewright.org.

Citation:

Weber, Samantha, and David Harmon, eds. 2007. *Rethinking Protected Areas in a Changing World: Proceedings of the 2007 George Wright Society Biennial Conference on Parks, Protected Areas, and Cultural Sites*. Hancock, Michigan: The George Wright Society.

© 2008 The George Wright Society, Inc. All rights reserved

Text paper 30% post-consumer recycled stock

Printing by Book Concern Printers, Hancock, Michigan

The George Wright Society • P.O. Box 65 • Hancock, Michigan 49930-0065 USA
1-906-487-9722 • fax 1-906-487-9405 • info@georgewright.org

The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions and policies of the U.S. government, any of the other co-sponsoring or supporting organizations, or the George Wright Society. Any mention of trade names or commercial products does not constitute an endorsement by the U.S. government, any of the other co-sponsoring or supporting organizations, or the George Wright Society.



Contents

Introduction and Acknowledgments	9
<i>David Harmon</i>	
Plenary Session Remarks	
Remarks of the Director, U.S. National Park Service, at the Plenary Session on North American Park Directors and Global Change	11
<i>Mary A. Bomar</i>	
The National Park Service, Education, and Civic Reflection	14
<i>Daniel L. Ritchie</i>	
Engaging Diverse Cultural Groups	
Dbajmoowin: Dialogue with the Elders	18
<i>William Arthur Allen</i>	
Finding Identity with Cultural Protected Areas: The Vevé of Afá Palma Soriano, Cuba	25
<i>Maria Ayub</i>	
Hmong Americans and Public Lands in Minnesota and Wisconsin	30
<i>David N. Bengston, Michele A. Schermann, MaiKia Moua, and Tou Thai Lee</i>	
La Vida Verde: Hispanic Engagement in Natural Resource Conservation and Education (panel discussion summary)	36
<i>Pedro Mazier Chavarria, Roel R. Lopez, Roger Rivera, Tulia Defex, Manuel Piña, Jr., and Maria R. Gutierrez</i>	
Hispanic Leadership Program in Agriculture and Natural Resources—Lessons Learned	40
<i>Manuel Piña, Jr.</i>	
Deconstructing Myths Influencing Protected Area Policies and Partnering with Indigenous Peoples in Protected Area Co-Management	44
<i>Dennis Martinez</i>	
Bears, Fish, Archeology, and Deferred Maintenance at Brooks Camp, Katmai National Park and Preserve	50
<i>Dale Vinson</i>	
Natural Resources: Assessment, Monitoring, and Policy	
Monitoring Resources in the Fremont-Winema National Forest and Yosemite National Park Using Satellite Imagery	56
<i>Galli Basson, Cindy Schmidt, and J. W. Skiles</i>	

Developing Integrated Assessments for National Capital Region Network Parks: An Example from Rock Creek Park	62
<i>Lisa N. Florkowski, William C. Dennison, Todd R. Lookingbill, Tim J.B. Carruthers, Jane M. Hawkey, and Shawn L. Carter</i>	
Evaluation of Watershed Imperviousness Models Using Stream Assessment Techniques in the Cuyahoga Valley, Ohio	69
<i>Kevin L. Skerl and Meg B. Plona</i>	
Rethinking Evaluation of Terrestrial Biodiversity Conservation in Protected Areas Systems of Tropical Islands	78
<i>Suzanne Davis</i>	
The Natural Resource Challenge: A Retrospective and View to the Future	84
<i>Jonathan B. Jarvis</i>	
Whitebark Pines at Rim Village in Crater Lake National Park, Oregon	89
<i>Carrie Wittmer</i>	
Determining the Disturbance Effect on Forest Development for Use in Park Management Plans	95
<i>Bruce Larson, Regina Rochefort, and Mariano Amoroso</i>	
How Do You Manage Your Resources if They are Being Stolen and Sold at the Swap Meet?	100
<i>Todd Swain</i>	
Invasive Plant Species	
Responding to Shrinking Budgets: How to Keep Controlling Invasive Plants with Reduced Program Funding	102
<i>James Åkerson</i>	
“Rats and Weeds and Lizards—Oh My!” Eradication of <i>Rattus rattus</i> and Control of Invasive Exotic Plants on Buck Island, U.S. Virgin Islands	106
<i>D. W. Clark, Z. Hillis-Starr, and C. Furqueron</i>	
The Threat of the Non-native Neotropical Rust <i>Puccinia psidii</i> to Hawaiian Biodiversity and Native Ecosystems: A Case Example of the Need for Prevention	112
<i>Lloyd Loope, Janice Uchida, and Loyal Mehrhoff</i>	
Cost-Effective Mapping of Invasive Plants Using Systematic Reconnaissance Flights (SRFs)	118
<i>Tony Pernas and Amy Ferriter</i>	
Recreation and Wilderness Management	
Understanding Oversnow Vehicle Noise Impacts	121
<i>Shan Burson</i>	

The “Adaptable Human” Phenomenon: Implications for Recreation Management in High-Use Wilderness	126
<i>David N. Cole and Troy E. Hall</i>	
Dragonology 101: Understanding Dragon-Hunters and Odonata Interactions in Wetlands	132
<i>Raynald Harvey Lemelin</i>	
Keeping the Wild in Wilderness: Minimizing Non-Conforming Uses in the National Wilderness Preservation System	137
<i>Kevin Proescholdt and George Nickas</i>	
Agency-Sponsored Treasure Hunts: Providing Alternatives to Traditional Geocaching	144
<i>Virginia Reams and Stuart West</i>	
Recreation Opportunity Classification and Challenges in Maintaining Recreation Diversity in Thailand’s National Parks	151
<i>Noppawan Tanakanjana</i>	
Multistage Research to Assist with Pricing the New Recreation Pass	157
<i>Patricia A. Taylor, Burke D. Grandjean, David M. Aadland, Bistra Anatchkova, Jason F. Shogren, and Benjamin Simon</i>	
Sensing the Parks: The Importance of Sound, Smell, and Touch to Visitor Experience at Rocky Mountain National Park	162
<i>Patricia A. Taylor and Burke D. Grandjean</i>	
Drawing a Line in the Tundra: Conservationists and the Mount McKinley Park Road	167
<i>Frank Norris</i>	
Restoration	
Cultivating a Community-Based Approach to Restoration of the Cache River Wetlands in Southern Illinois	174
<i>Christopher A. Bridges, Mae A. Davenport, Jean C. Mangun, and Andrew D. Carver</i>	
Effective Resource Advising and Suppression Rehabilitation, BAER Teams, Planning, and Assessments	181
<i>Sandee Dingman</i>	
The Science of Large Dam Removal: Removing Dams on the Elwha River, Olympic National Park	185
<i>Jerry Freilich</i>	
Restoring Burned Area Fire Regimes at Zion National Park	189
<i>Kelly Fuhrmann</i>	

National Park Service CD Workbook for Planning, and Specifications for Ecological Restoration	194
<i>Wendell Hassell, Nancy Dunkle, David Steensen, and Sarah Wynn</i>	
Formation of a Cooperative to Conduct Research on Native Plants and Restore Damaged Ecosystems	197
<i>Steven O. Link, Sally A. Simmons, Rico O. Cruz, and Barbara Harper</i>	
Interpretation, Education, and Outreach	
Sharing a World of Resources: Incorporating Science Content in Effective Interpretation	201
<i>Anita Davis and Ruth Paglierani</i>	
Breakfast at the Cockpit Café and Other Innovations in Protected Area Outreach	208
<i>Christine Baumann Feurt and Ward Feurt</i>	
Great Lakes Research and Education Center, Indiana Dunes National Lakeshore: Connecting Research, Education, and Outreach through Research Internships	215
<i>Joy Marburger</i>	
Using Experiential Learning Opportunities in the National Parks to Inform Science Classroom Practice	219
<i>Michael P. Marlow</i>	
Research Learning Centers: Promoting Resource Stewardship through Partnerships	225
<i>Susan Sachs, Theresa Thom, Mac Brock, and Kim Tripp</i>	
Methods of Public Engagement	228
<i>Denice Swanke</i>	
Healthy Parks Healthy People: A Broad-based Partnership Program, Linking People with Parks for Better Health Outcomes and a Sustainable Future	234
<i>Gerard O'Neill</i>	
Parks and Climate Change	
Paleontological Parks and Global Change	238
<i>Regan Dunn, Theodore Fremd, James Hammett, and Matthew Smith</i>	
Global Climate Change: Leadership in the Pacific West Region	244
<i>Jonathan B. Jarvis</i>	
State Agency Responses to the Challenges of Climate Change Impacts for Fish and Wildlife Resources (panel discussion summary)	248
<i>Amber Pairis</i>	
Opportunities in a Changing Climate: British Columbia Parks and Protected Areas . .	251
<i>Victoria Stevens</i>	

Protecting Biodiversity in a Changing Climate: The State of Adaptation Policies Dedicated to Enhancing the Resiliency of Biota . . . .	.257
<i>Kelly Levin</i>	
 Active Management—Or Not?—In U.S. National Parks	
When It's Better Not to Manage NPS Resources . . . . .	.263
<i>Jerry Freilich and Philip Cafaro</i>	
Managing to Give Nature a Chance . . . . .	.268
<i>Jerry M. Mitchell</i>	
Beyond Hunting: Increasing Options for Effective Wildlife Management in the National Park System . . . . .	.272
<i>Margaret A. Wild, Therese Johnson, Michael Mayer, and Gary Johnston</i>	
 Citizen Science	
Using Students to Monitor the Effects of Ground-level Ozone on Plants . . . . .	.277
<i>Susan Sachs</i>	
Citizen Science: A Best Practices Manual and How it Can be Applied . . . . .	.280
<i>Susan Sachs, Paul E. Super, and Michelle Prysby</i>	
Ivory-billed Woodpecker Searches with Citizen Scientists: Lessons Learned at Congaree National Park . . . . .	.285
<i>Theresa Thom</i>	
 Assessing Public Attitudes and Experiences	
Community Attitudes towards Wildlife Conservation in Ethiopia . . . . .	.287
<i>Mekbeb E. Tessema, Zelealem T. Ashenafi, Robert J. Lilieholm, and Nigel Leader-Williams</i>	
Bridging the Gap: Assessing Managers' Perspectives of Visitor Experiences at Canyon de Chelly National Monument . . . . .	.293
<i>Carena J. van Riper and Dave D. White</i>	
 Natural Resource Management and Research	
A Comparison of Wildlife Management in Mid-size Parks in South Africa and the United States . . . . .	.300
<i>Daniel S. Licht, Rob Slotow, and Joshua Millsbaugh</i>	
Environmental Contaminant Hazards to Wildlife at National Capital Region and Mid-Atlantic National Park Service Units . . . . .	.307
<i>Barnett A. Rattner and Betty K. Ackerson</i>	

The Role of Protected Areas as Bird Stop-over Habitat: Ecology and Habitat Utilization by Migrating Land Birds within Colorado River Riparian Forests of Southwestern North America	312
<i>Charles van Riper III, Kristina L. Paxton, Chris O'Brien, Carena J. van Riper, Kimberly A. van Riper, Laura McGrath, and J. J. Fontaine</i>	
The Effects of Fire on Beach Grass (<i>Ammophila breviligulata</i>) at Apostle Islands National Lakeshore	321
<i>Peggy Burkman</i>	
ROVs in the Great Lakes: National Park Case Studies	325
<i>Laurie Harmon and Mark Gleason</i>	