

The logo for GWS2013 features the text "GWS2013" in a bold, dark red serif font. The text is set against a light green background with a fine, diagonal hatched pattern. The background is shaped like a banner that tapers at the ends.

**GWS2013**



**Protected areas in a changing world  
Denver, Colorado • March 11–15, 2013**

## **Concurrent Session Program as of March 7, 2013 (“Scenario #2”)**

Now that the US federal government sequester has taken effect, we are at last closing in on a final GWS2013 concurrent session program. If you've been following our communications the last few weeks, you know that we have been working with two planning scenarios: Scenario #1, which assumed that the sequester would be at least partially resolved and a fairly large number of US federal employees would attend, and Scenario #2, which assumes minimal US federal participation. Scenario #2 has now come to pass, so the document you are reading now is the official concurrent session program for the conference.

**(PLEASE NOTE: All workshops and affinity/business meetings that had been scheduled for Friday, March 15, have now all been moved to earlier in the week. The only activities remaining on Friday are the Field Trips and Service Trip.)**

**THIS IS THE LAST UPDATE TO THE PROGRAM. ANY CHANGES THAT OCCUR AFTER THIS WILL BE HANDLED ONSITE AT THE CONFERENCE.**

	10:00–10:20	10:20–10:40	10:40–11:00	11:00–11:20	11:20–11:40	11:40–12:00
<b>Invited Papers and Contributed Papers Sessions</b>						
Session 1 • Plaza Ballroom D <i>So This is a Cultural Landscape, Eh?</i> Chair(s): Terence Young	5227 / Telling Stories of Nature and Humans in National Parks • Robert Pahre	5227 / 'The Illusion of Wilderness' in America's Automobile Campgrounds • Terence Young	5227 / Memory and Legacy: Viewing New Deal-era State Park Landscapes in the Jim Crow South • William E. O'Brien	5110 / Mendocino Woodlands: Leveraging Resources Effectively to Complete Cultural Landscape Projects for Historic Sites • Laurie Matthews & Robert Z. Melnick	5050 / Homes in the Seashore: Fire Island as an Early Piecemeal National Park • Jackie Mirandola Mullen	6097 / Finding the Extraordinary in the Ordinary: Preserving the Rockford Woodlawn Property of the Brandywine Valley • Cheryl Widell
Session 2 • Governors Square 10 <i>Remote Sensing, Mapping, and GIS</i> Chair(s): Tosha Comendant	5543 / LiDAR a Cure-All? No Matter your Management Objective, All You Need is LiDAR • John Wall et al.	5080 / A Review of Mapping Wilderness Character for National Park Wildernesses • James Tricker & Peter Landres	7020 / Using NASA Resources to Inform Climate and Land Use Adaptation • Andrew J. Hansen et al.	5377 / Integrating Participator GIS and Archaeological Research at the Sand Creek Massacre National Historic Site • Molly Cannon et al.	Q&A	
Session 3 • Governors Square 15 <i>Management Strategies for Sustainable Landscapes</i> Chair(s): Patrick J. Comer	7021 / Delivering Conservation and Preserving Livelihoods: Landscape Conservation Planning in Colorado's San Luis Valley • Michael D. Dixon & Mike Artmann	7022 / Linking Climate Change Vulnerability Assessment to Multi-Site Adaptation Strategies Using Natural Communities • Patrick J. Comer	5271 / An Evaluation of the Scientific Basis for Greater Management Intervention in Protected Areas • Cameron Naficy & Eric Keeling	7007 / A Conservation Landscape for the Future: The Southeastern Conservation Adaptation Strategy • Greg Wathen	6851 / Challenges and Opportunities Associated with Landscape-scale Natural Resource Management and Conservation Organizations • Jennifer Thomson	Q&A
Session 4 • Governors Square 16 <i>People and Protected Areas on the Cusp of the Anthropocene</i> Chair(s): Patrick McKnight	5594 / Defending Cultural Resources from the Well-Intended: Finding a Place on the Team • Meredith Hardy	5145 / Climate Change Scenario Planning Lessons from Alaska • Robert Winfree et al.	5640 / An Adaptation Portfolio Approach to Managing Climate Risk • Greg Aplet	5269 / Expanding Parks and Reducing Human Numbers: A Superior Alternative to Embracing the Anthropocene Era • Philip Cafaro	Q&A	

*More Monday Late-Morning Sessions on Next Page*

	<b>10:00–12:00</b>
<b>Panel Discussions • Sharing Circles • Café Conversations • Daycappers</b>	
<p>Session 5 • Governors Square 17  <b>An Invitation for Action: Collaboration to Foster Social Finance Investment in Biocultural Resources</b>  Chair(s): Tom Gilbert</p>	<p><b>6081/ Business Meeting (by invitation only):</b>  Kevin Jones, SoCap, Good Capital, Intl Biosphere Trust, (social investing) • Shaun Paul, People &amp; Planet Holdings (conservation &amp; development finance)  Tom Gilbert, USNPS retired (biosphere reserves, integrated conservation &amp; development) • Tom Hatley, International Biosphere Trust, Natural Resource Management Consultant (biocultural diversity)  Gary Davis, Principal, GEDavis &amp; Associates (oceans) • Per Olson, Stockholm Resilience Centre (socio-ecological system dynamics and adaptive governance)  Johanna MacTaggart, Vanern Biosphere Reserve Coordinator and Swedish Coordinator for Man &amp; the Biosphere (marine &amp; coastal conservation management)  Natarajan Ishwaran, International Center for Space Technologies for Natural and Cultural Heritage  Tim Badman, IUCN World Heritage Program Director</p>
<p>Session 6 • Plaza Court 1  <b>Water Resources: Hands on Learning and Community Science</b>  Chair(s): Stephanie Flores</p>	<p><b>5247 / Sharing Circle • Discussion Leader(s):</b>  Andrew Warnock, Director, Natural Sciences Education and Outreach, Colorado State University  Fred Cachola, President, Makani Hou O Kaloko-Honokohau  Stephanie Flores, Education Specialist, Colorado State University</p>
<p>Session 7 • Governors Square 14  <b>One-on-One with Michael Soulé</b>  Chair(s): Peter Dratch</p>	<p><b>Informal follow-up discussion with plenary speaker Michael Soulé (10:00–11:00)</b></p>
<p>Session 8 • Plaza Ballroom E  <b>Imperiled Promise: Continuing the Discussion on the State of History in the National Park Service</b>  Chair(s): Anne Whisnant &amp; Rolf Diamant</p>	<p><b>5555 / Panel Discussion • Panelists:</b>  Joy Kinard, Central District Manager, National Capital Parks East, National Park Service (by videorecording)  David Thelen, Professor Emeritus of History, Indiana University</p>

**Concurrent sessions • Monday late morning, March 11 • 10:00–12:00**

	1:30–1:50	1:50–2:10	2:10–2:30	2:30–2:50	2:50–3:10	3:10–3:30
<b>Invited Papers and Contributed Papers Sessions</b>						
Session 9 • Plaza Ballroom D <b>Managing High-Profile Wildlife Species</b> Chair(s): John Waitthaka	5234 / Cougar Use of Colorado's Front Range Protected Areas • Kevin Blecha & Mat Alldredge	5182 / Wolves Brush with Extinction at Isle Royale—Again • Rolf Peterson et al.	7023 / White Nose Syndrome: Gaining Understanding from Bat Microbiota and Cave Microclimates • Kaitlyn J. Hughes	Q&A		
Session 10 • Governors Square 10 <b>Educating the Next Generation of Professional Park-tioners</b> Chair(s): Ryan Sharp	5564 / Mentoring Minority Students: Examining Communication Linkages between Partners and Students Participating in the Academy • Jingxian Jiang & Ulrike Gretzel	5242 / Sea Semester Marine Biodiversity and Conservation: Improving Stewardship Capacities through Field-based Undergraduate Education • John Jensen et al.	5275 / Preparing the Next Generation of Protected Area Employees: Opportunities for Students, Agencies, and Universities • Ryan Sharp	5235 / Teaching the Parks • Robert Pahre	5549 / A Novel Qualitative Evaluation Tool to Assess Student Attitudes During an Overnight Environmental Education Experience • Natalie Perez et al.	5295 / Landscape-based Learning: A Framework for Interdisciplinary Experiential Education • Mathieu Brown
Session 11 • Governors Square 11 <b>Forests under Stress: Challenges of Insects, Pathogens, and Climate Change</b> Chair(s): Anna Schoettle	5438 / Pulse Disturbances in Forest Invasion: The Importance of Interactions between Propagule Pressure and Disturbance Characteristics • Anne Eschtruth & John Battles	5335 / Biocontrol with the Tamarisk Beetle ( <i>Diorhabda carinulata</i> ): impacts on tamarisk in Grand County, Utah, 2004–2012 • Wright Robinson et al.	5516 / Proactive Strategy: Gaining the Science to Sustain High-elevation Pine Forests Threatened by Novel Stresses • Anna Schoettle et al.	5160 / Monitoring Global Change Impacts in Mountain Forests: Twenty Years of Vegetation Change • Katherine Renwick et al.	5101 / Genetic and Geographic Distributions of the West's Most Widespread Conifer, <i>Pinus contorta</i> • Sarah Bisbing et al.	5299 / Hydrological Responses of Baldcypress and Associates to Episodic Rainfall in Microtopography along the Louisiana Coast • Yu-Hsin Hsueh
Session 12 • Governors Square 15 <b>Biosphere Reserves: A New Look at Relevance to Meet Today's Challenges in Protected Areas</b> Chair(s): Larry Hamilton	5220 / Time for a Resurrection of Biosphere Reserves? • Larry Hamilton	5220 / U.S. Role in the World Network of Biosphere Reserves • Natarajan Ishwaran & Sarah Gaines	5220 / Thirty-five years of the Mexican Modality of Biosphere Reserves • Ernesto Enkerlin	5220 / Information Sharing within the World Network of Biosphere Reserves • Tom Gilbert	5220 / Discussion on Establishing a Biosphere Reserve Information Network • John Peine (facilitator)	
Session 13 • Governors Square 16 <b>Visitor Use and Protected Areas</b> Chair(s): William Valliere	5131 / Commercial and Independent Visitors at Klondike Gold Rush National Historical Park: Differences between Visitor Groups • William Valliere	5156 / Understanding Visitor Perceptions of Recreation Resource Impacts: A Comparison of Climber and Hiker Perceptions • Ashley D'Antonio & Christopher Monz	5055 / Crowding and Conflict on the North Umpqua Wild and Scenic River, Oregon) • Silvia Kainzinger et al.	5221 / Exposing Dangerous Misconceptions and Innovative Solutions in Remote Site Human Waste Management • Geoffrey Hill	6850 / Management Issues Associated with the Rise in Wildlife Tourism • Gary Vequist	Q&A
Session 14 • Governors Square 17 <b>Management, Engagement, and Sustainability: Who's Who?</b> Chair(s): Robert Winfree	5118 / The Role of Relationships in the Implementation of Canada's Heritage Lighthouse Protection Act • Norman Shields (presented by Patricia Kell)	5090 / Reconciling Competing Visions in New Deal Parks: Balancing Natural Conservation, Historic Preservation, and Recreational Development • Angela Sirna	4997 / Use, Non-Use, and Impacts of Interpretive Programs at Miquelon Lake Provincial Park, Alberta, Canada • Glen Hvengaard	5146 / How Artists Influence Decisions about Protected Areas • Robert Winfree	5295 / Protecting Historical Heritage: The Commemorative Integrity Evaluation Program at Parks Canada's National Historic Sites • Patricia Kell	Q&A

*More Monday Early-Afternoon Sessions on Next Page*

	<b>1:30–3:30</b>
<b>Panel Discussions • Sharing Circles • Café Conversations • Daycappers</b>	
<p>Session 15 • Plaza Court 1  <i>The 50th Anniversary of the Wilderness Act: Inspiration for Celebration</i>            Chair(s): Ralph Swain</p>	<p><b>5001 / Sharing Circle • Discussion Leader(s):</b>            Ralph Swain, Rocky Mountain Region Wilderness Coordinator, USDA–Forest Service            Lisa Eidson, 50th Anniversary National Planning Team Member</p>
<p>Session 16 • Plaza Ballroom E  <i>“Ready, Aim ... Where?” How Do We Target Conservation Goals in an Era of Rapid Environmental Change?</i> • Chair(s): David Cole</p>	<p><b>5249 / Panel Discussion • Panelists:</b>            Healy Hamilton, Senior Research Fellow, Marine Conservation Institute, Fairfax, CA            Bruce Stein, Director, Director, Climate Change Adaptation, National Wildlife Federation, Washington, DC            Dan Decker, Professor and Director, Human Dimensions Research Unit, Cornell University, Ithaca, NY</p>
<p>Session 17 • Governors Square 14  <i>Charting the Future Course of the George Wright Society: An Informal Discussion with the Board</i>            Chair(s): Brent Mitchell</p>	<p><b>5364 / Sharing Circle • Discussion Leader(s):</b>            Brent Mitchell, GWS President            Dave Parsons, GWS Secretary            Other GWS Board Members            (this session also given Thursday morning)</p>

**Concurrent sessions • Monday early afternoon, March 11 • 1:30–3:30**

Session 18 • Governors Square 15

**5652 / Focus Session**

***Native Leadership in Protected Area Management: An International Spectrum of Approaches***

Chair(s): Nathalie Gagnon, Senior Analyst/Lead Specialist, Aboriginal Affairs Secretariat, Parks Canada • Presenters: Hawk Rosales, Intertribal Sinkyone Wilderness Park; James Igloorte, Chair, Tongait Kakkasuangita SilakKjapvinga CMB; Herminio Diaz, San Luis Potosí, Mexico; Doug Harris, THPO, Narragansett Tribe

*Session summary*

Around the world, Native involvement in the management of protected areas is flourishing. The term “protected areas” here includes formally designated protected natural areas, sacred natural sites, sacred cultural sites, community-conserved areas, Indigenous cultural landscapes, and more. Indigenous communities are either managing them directly or in conjunction with another governmental entity or other organization. This Focus Session will provide attendees a sampling of current approaches from Canada, Mexico, and the USA — a window on the diverse world of Native stewardship of the Earth.

Session 19 • Plaza Ballroom E

**5654 / Focus Session**

***Using Research into the Human Dimensions of Natural Resource Management to Enhance Science-Informed Decisions***

Chair(s): Carena van Riper, PhD Candidate, Texas A&M University • Presenters: Katherine McComas, Cornell University, Department of Communication (risk perception and communication); Robert Manning, University of Vermont, Park Studies Laboratory (recreation management) ; Joe McCarter ( traditional ecological knowledge)

*Session summary*

In an era of rapid environmental change and uncertain futures, context-specific information about how stakeholders relate to resources and resource management will become increasingly important in designing effective and durable natural resource management strategies. Human dimensions practitioners utilize a range of social science disciplines, which can produce different kinds of knowledge. Some approaches are better suited than others to addressing particular types of questions that might emerge with respect to various management activities. This session will introduce some of the key considerations in choosing between social science approaches to assist managers in assessing what type of information could be most helpful in a particular situation. Invited panelists will each introduce their area of expertise, the types of questions that their theory and methodology are best able to address (and at what points of the management cycle), and an example of how this insight can assist in management.

	10:00–10:20	10:20–10:40	10:40–11:00	11:00–11:20	11:20–11:40	11:40–12:00
<b>Invited Papers and Contributed Papers Sessions • Focus Session</b>						
Session 20 • Plaza Ballroom D <i>Management of Ungulate Species</i> Chair(s): Amanda Hardy	5597 / Elk and Pronghorn Responses to Recreational Pathway Activities in Grand Teton National Park • Amanda Hardy & Kevin R. Crooks	5352 / Management of Hyper-abundant Wildlife Populations in Canada's National Parks: Lessons Learned • John Waithaka	5473 / Grazing Conflicts and the National Park Service: Range Management Histories for Two Arizona National Monuments • Robin Pinto	Q&A		
Session 21 • Governors Square 11 <i>Spatial Technologies for Monitoring, Evaluating and Managing Visitor Use</i> Chair(s): Nathan Reigner & J. Adam Beeco	5353 / Modeling Recreation Dynamics and Capacity at Multiple Spatial Scales • Jeremy Wimpey et al.	5353 / Visitor Crowding in 3D! Linking Perception and Behavior for Research and Management • Nathan Reigner & Jillian Spies	5353 / Monitoring Group Distribution and Behavior in Open Landscapes of Yosemite National Park with Geospatial Technology • Chelsey Walden-Schreiner & Yu-Fai Leung	5353 / The Importance of Spatial Considerations in Understanding the Relationship between Visitor Use and Landscape Impacts • J. Adam Beeco	5353 / Your Cellphone Measures Far More than You Can: Smartphones as Pro-grade Park Monitoring Sensor Platforms • Logan Park	Q&A
<b>Panel Discussions • Sharing Circles • Café Conversations • Daycappers</b>						
Session 22 • Plaza Ballroom E <i>Leopold 1963 Redux: Now What?</i> Chair(s): Gary Davis, Principal, GEDavis & Associates	<b>5648 / Focus Session • Presenters:</b> David Graber, U.S. National Park Service (by videorecording); Healy Hamilton, Senior Research Fellow, Marine Conservation Institute, Fairfax, CA  <i>Session summary:</i> The 1963 Leopold Report "Wildlife Management in the National Parks" guided a generation of park stewards. The U. S. National Park Service recently asked its National Park System Advisory Board to revisit this landmark advice and update its guidance regarding appropriate goals for park stewardship and policies and actions needed to achieve them, given much-changed knowledge and circumstances. Panelists will review the Leopold 1963, describe environmental and social changes influencing park stewardship since 1963, and describe key findings and recommendations of the 2012 report "Revisiting Leopold: Resource Stewardship in the National Parks" to frame a discussion with attendees of how this advice may influence U. S. National Park Service stewardship goals, policies and practices.					
Session 23 • Plaza Court 1 <i>Extractive Activities in Protected Areas and Indigenous Lands</i> Chair(s): Angeles Mendoza Sammet	<b>5400 / Sharing Circle • Discussion Leader(s):</b> Angeles Mendoza Sammet, President, White Eagle Sustainable Development, Calgary, AB					
Session 24 • Governors Square 14 <i>One-on-One with Emma Marris</i> Chair(s): Jerry Mitchell	<b>Informal follow-up discussion with plenary speaker Emma Marris (10:00–11:00)</b>					
Session 25 • Governors Square 17 <i>Have Your Say! Shape How Tourism is Planned and Managed in Parks</i> Chair(s): Elizabeth Halpenny	<b>5613 / Workshop • Leader(s):</b> Elizabeth Halpenny, Assistant Professor, University of Alberta Glen Hvenegaard Yu-Fai Leung Steve McCool Therese Salenieks • Maral Mehrabani					

Concurrent sessions • Tuesday late morning, March 12 • 10:00–12:00

	1:30–1:50	1:50–2:10	2:10–2:30	2:30–2:50	2:50–3:10	3:10–3:30
<b>Invited Papers and Contributed Papers Sessions</b>						
Session 26 • Plaza Ballroom D <i>Climate Change Risks, Impacts, and Adaptations I</i> Chair(s): Patrick Shirey	5697 / The Changing Glaciers in the National Parks of the Rocky Mountain West, USA • Andrew Fountain et al.	5145 / Climate Change Scenario Planning Lessons from Alaska • Robert Winfree et al.	5572 / Identifying Climate Change Refuge for At-risk, Native Brook Trout ( <i>Salvelinus fontinalis</i> ) of the Namekagon River • Patrick Shirey et al.	7024 / Assessing Thermal Sensitivity of Brook Trout Streams to Climate Change • Nathaniel Hitt et al.	7026 / Out of Thin Ice: The Unparalleled Archaeological and Paleobiological Record Melting Out of National Parks • Craig Lee	Q&A
Session 27 • Governors Square 10 <i>Scientific Research in Marine Protected Areas</i> Chair(s): Gary Davis	5346 / Assessing and Communicating the Response of Glacier Bay, Alaska, to Ocean Acidification • Stacey Reisdorph et al.	5136 / Predicting the Effects of Sea Level Rise and Introduced Fishes on Hawaiian Anchialine Pool Ecosystems • Lisa Marrack	5329 / Acclimation of Reef-building Corals in Ofu, American Samoa • Rachael Bay & Stephen R. Palumbi	5331 / Short-term Coral Growth Rates in a Coral Reef with High Environmental Variability • Guadalupe Ruiz-Jones & Stephen Palumbi	Q&A	
Session 28 • Plaza Ballroom E <i>Picturing the Future of Parks and Protected Areas</i> Chair(s): Mike Wong	5475 / The National Park Idea and the Future of the National Park System • Robert Keiter	5031 / South Australia's Nature-Links Program: Successfully Integrating Protected Areas Into Landscape-scale Conservation • Greg Leaman	5554 / A Forward-Looking Retrospective of Leopold's "A Conservationist in Mexico" • Ernesto C. Enkerlin-Hoeflich	4993 / Identifying and Conserving Ecological Corridors for Gatineau Park (QC, Canada) • Christie Spence et al.	5596 / Assessment of Biodiversity Management Practices in the Nigeria National Park Service • Augustine U. Ogogo et al.	5411 / Communication and Yellowstone Winter Use: Designing and Implementing Strategic Communication Initiatives for Winter Use Planning • Udeitha Srimushnam
Session 29 • Governors Square 11 <i>The Visitor Experience: Transportation, Recreation, Ecotourism</i> Chair(s): Robert Dvorak	5205 / Visitor Experience Considerations in Transportation Planning for Protected Areas • Nancy Doucette & Ryan L. Sharp	5042 / Understanding Gender Differences and Constraints of Wilderness Experiences • Robert Dvorak et al.	5505 / An Integrated Approach to Coastal Backcountry Management and Monitoring at Kenai Fjords National Park • Kelly Goonan et al.	5301 / Does Nature Subsidize Costs for Ecotourism Providers? Externality Cost Analysis for Best Business Practices • Marcelo Arze & Patrick J. Holladay	5333 / Valuing the Value of Play in Developing Countries: An Advocacy for Quality, Safe Urban Parks • Bernard Kitheka & Fran Mainella	5148 / Uncovering Best Practices in Interpretation in the U.S. National Park Service • Robert Powell et al.

*More Tuesday Early-Afternoon Sessions on Next Page*



	<b>1:30–3:30</b>
<b>Panel Discussions • Sharing Circles • Café Conversations • Daycappers</b>	
<p>Session 30 • Governors Square 14  <b>Connecting Citizens to Nature through Innovation, Collaboration, and Commitment</b>  Chair(s): Dawn Carr &amp; Steve Donelon</p>	<p><b>5609 / Café Conversation • Discussion Leader(s):</b>  Dawn Carr, Executive Director, Canadian Parks Council  Steve Donelon, Executive Director, Alberta Parks</p>
<p>Session 31 • Governors Square 15  <b>Protecting National Historic Trails in a Changing World</b>  Chair(s): Jeremy Call</p>	<p><b>6793 / Panel Discussion • Panelists:</b>  Britta Nelson, National Scenic and Historic Trails Specialist, Bureau of Land Management  Jeremy Call, Senior Planner, Logan Simpson Design</p>
<p>Session 32 • Plaza Court 1  <b>Supporting Experiential Learning in National Parks: The 2012 Delaware Water Gap NRA Park Break Program</b>  Chair(s): Carena van Riper</p>	<p><b>5164 / Sharing Circle • Discussion Leader(s):</b>  Carena van Riper, Texas A&amp;M University, Department of Recreation, Park &amp; Tourism Sciences  Cori Knudten, University of California at Davis, Department of History • Matthew Browning, Virginia Polytechnic Institute &amp; State University, Department of Forest Resources &amp; Environmental Conservation  Nicholas Rose, Oklahoma State University, Department of Geography • Darrick Evenson, Cornell University, Natural Resources  Sarah Reed, University of California at Berkeley, Environmental Science  Katherine Dennis, Texas A&amp;M University, Department of Recreation, Park &amp; Tourism Sciences • Cathy Bell</p>
<p>Session 33 • Governors Square 16  <b>Working across Agency Lines to Improve Visitor Use Management on Public Lands</b>  Chair(s): David Cole</p>	<p><b>5434 / Panel Discussion • Panelists:</b>  Linda Merigliano, USFS  David Cole, USFS (retired)  Keith Brown, BLM</p>

**Concurrent sessions • Tuesday early afternoon, March 12 • 1:30–3:30**

	4:00–4:20	4:20–4:40	4:40–5:00	5:00–5:20	5:20–5:40	5:40–6:00
<b>Invited Papers and Contributed Papers Sessions</b>						
Session 34 • Plaza Ballroom D <i>Protected Area Planning and Environmental Governance</i> Chair(s): James Barborak	4631 / The Evolution and Revolution of National Park Planning: Bruce Peninsula National Park, Canada (1987–2012) • Patrick Lawrence	5645 / Protected Planet Report 2012: Tracking Progress towards Global Targets for Protected Areas • Amy Milam et al.	5308 / The Role of Small-Scale Community Conserved Areas in Larger-Scale Protected Area Conservation and Management Planning • Jonathan Lyon & Robert Horwich	6809 / Conservation across International Boundaries • Gillian Bowser	6847 / Building Global Capacity for Protected Area Management: The Role of Colorado State University • James Barborak	Q&A
Session 35 • Plaza Ballroom E <i>The Sound Sessions: How Social Science Informs the Protection of the Acoustic Environment</i> Chair(s): Peter Newman & Derrick Taff	5469 / Using Personality Measurements in Field Research on Soundscapes: Two Brief Options • Jacob A. Benfield et al.	5469 / Cognitive, Affective, and Biophysical Response to Motorized Noise in National Parks • David Weinzimmer et al.	5469 / Modeling and Mapping Visitors' Exposure to Roadway Noise and Natural Sounds in Yosemite National Park • Eric Talbot et al.	5469 / Protecting Soundscapes in U.S. National Parks: Lessons Learned from the Laboratory to the Field • Peter Newman et al.	Q&A	
Session 36 • Governors Square 10 <i>Using Technology to Manage Resources and Visitor Interactions</i> Chair(s): Logan Park	5226 / Using Time-lapsed Photography for Monitoring Backcountry Crowding Conditions at Pinnacles National Monument • Matthew Brownlee & Jeffrey C. Hallo	5360 / High-Tech Wilderness: An Oxymoron? • W. Vinson Pierce III & Robert E. Manning	5393 / The Digital Preservation of Mount Rushmore National Memorial • Elizabeth Lee & Maureen McGee-Ballinger	5533 / Updating Computer Simulation of Hikers in Complex Trail Networks: GPS-based Movement, Rocky Mountain National Park • Logan Park	Q&A	
Session 37 • Governors Square 11 <i>Innovations and Internationalization in Parks and Protected Area Education and Training</i> Chair(s): Eick von Ruschkowski et al.	<b>5602 / "20/20" Session • Each presenter has 20 slides, each slide shown for 20 seconds • 8 presentations delivered in 1 hour • Second hour of session is Q&amp;A with audience</b> Improving Global Management for Parks and Protected Areas: The IUCN WCPA Initiative on Capacity Development • Nigel Dudley Capacity Building to Enhance Protected Area Management and Wildlife Conservation in India • Tara Teel et al. Facilitating Place-based Climate Change Engagement on America's Public Lands • Jessica L. Thompson & Shawn Davis Internationalizing Academic Training in Parks and Protected Area Management through the EU's ERASMUS Programme • Eick von Ruschkowski et al. Fostering Internationalization through Student Exchanges in Nature-based Recreation Education • Robert C. Burns Perspectives on Online Teaching and Learning in a Master Program • Natalia Buta					

*More Tuesday Late-Afternoon Sessions on Next Page*

<b>4:00–6:00</b>	
<b>Panel Discussions • Sharing Circles • Café Conversations • Daycappers</b>	
<p>Session 38 • Governors Square 15  <i>A Framework for a Changing World: The National Fish, Wildlife and Plants Climate Adaptation Strategy</i>                      Chair(s): Mark Shaffer</p>	<p><b>5183 / Panel Discussion • Panelists:</b>                      Lauren Wenzel, NOAA                      Jim Zorn, Great Lakes Indian Fish and Wildlife Commission                      John Morton, U.S. Fish and Wildlife Service                      Gregor Schurmann, WI Department of Natural Resources</p>
<p>Session 39 • Governors Square 16  <i>Who Will Care about Wilderness Tomorrow? Engaging Youth in Wilderness</i>                      Chair(s): Suzanne Stutzman</p>	<p><b>5115 / Daycapper • Presenters:</b>                      Ralph Swain, Wilderness and Wild and Scenic Rivers Programs, Region 2, U.S. Forest Service                      Steve Archibald, Education and Outreach Specialist, Arthur Carhart National Wilderness Training Center                      Wilderness fellows: Kelly Pippins, Mark Douglas, Molly McCarty, and Jesse Engebretson</p>
<p>Session 40 • Governors Square 17  <i>Indigenous Cultural Landscapes: Developing a More Inclusive Approach to Large Landscape Conservation</i>                      Chair(s): Brenda Barrett</p>	<p><b>5129 / 5106 / 5586 / Panel Discussion • Panelists:</b>                      Erve Chambers, Professor of Anthropology, University of Maryland                      Kristin Sullivan, Graduate Student, University of Maryland                      Paulette Wallace, PhD Candidate, Deakin University                      Lisa Hayes, President &amp; CEO, The Accokeek Foundation at Piscataway Park</p>
<p>Session 41 • Plaza Court 1  <i>The Volunteer Experience: Total Immersion</i>                      Chair(s): Carly Summers</p>	<p><b>5248 / Sharing Circle • Discussion Leader(s):</b>                      Carly Summers, US Play Coalition, Clemson University</p>
<p>Session 42 • Governors Square 14  <i>Recreation and Tourism in Marine Protected Areas: Getting the Balance Right</i>                      Chair(s): Lauren Wenzel &amp; John Jensen</p>	<p><b>5356 / Café Conversation • Discussion Leader(s):</b>                      Lauren Wenzel, Acting Director, NOAA National Marine Protected Areas Center                      Gary Davis, Principal, GEDavis and Associates                      John Jensen, University of Rhode Island and Sea Education Association</p>
<h2>Special Evening Session</h2>	
<b>SPECIAL EVENING SESSION • 7:30–9:30p</b>	
<p>Session 43 • Governors Square 16  <i>Parks and Protected Areas as Health Resources: Trends, Tools, and the Recreation Economy</i>                      Chair(s): Robert Powell</p>	<p><b>5092 / Panel Discussion • Panelists:</b>                      Jennifer Thomsen, Clemson University                      Myron Floyd, North Carolina State University                      Chelsey Walden-Schreiner, Research Associate, North Carolina State University                      Statia Raines, Outdoor Foundation</p>

Session 44 • Governors Square 15

**5656 / Focus Session**

***Marine Protected Areas: Tools for Conserving Our Seascapes***

Chair(s): Lauren Wenzel, Acting Director, NOAA National Marine Protected Areas Center

Presenters: Lauren Wenzel, NOAA; John Jensen, University of Rhode Island and Sea Education Association

*Session summary*

Like landscapes, seascapes are large, multiple use areas. Recently, they have been defined more specifically as areas in which government authorities, private organizations and other stakeholders cooperate to conserve the diversity and abundance of marine life and promote human well-being. Seascapes provide a useful framework for bringing together diverse stakeholders interested in many uses to discuss and plan for ocean areas that can accommodate multiple uses as well as the long term conservation of ecosystem functions and services over the long-term. Marine protected areas are key element within seascapes for protecting coastal and ocean resources. This session will look at how MPAs can be used within the context of larger seascapes to achieve these objectives.

Session 45 • Plaza Ballroom E

**5651 / Focus Session**

***Capturing the Multiple Values of Parks, Protected Areas and Cultural Sites***

Chair(s): Carena van Riper, PhD Candidate, Texas A&M University

Presenters: Dan Williams, Research Social Scientist, U.S. Forest Service; John Loomis, Professor, Colorado State University; Kai Chan, Professor, University of British Columbia

*Session summary*

This Focus Session will explore how to put (or not put) a value on natural and other protected area resources. Speakers will discuss various approaches to placing value on these resources including measures of economic impact / welfare analysis and non-material valuations. Presenters will describe the values that each of these approaches address, the advantages and disadvantages, as well as the associated benefits provided to protected area managers. Following these presentations, the panel will further explore these concepts with the audience. This session will complement the National Park Service Call to Action item #14 (Value Added) by defining the alternate valuation systems that can be used to illustrate the importance of parks and protected areas while aligning valuation research with the challenges faced by protected area managers.

Session 46 • Governors Square 17

**7030 / Focus Session**

***The Changing World: Status of the Global Protected Area Network***

Chair(s): Ernesto Enkerlin, IUCN World Commission on Protected Areas

Presenters: Amy Milam, Protected Areas Programme, UNEP-WCMC; Tim Badman, Director, IUCN World Heritage Programme; Lisa Duarte, PAD-US Coordinator, USGS Gap Analysis Program – University of Idaho

*Session summary*

The Protected Planet Report, published in 2012, reviews progress towards the achievement of the protected area targets of the Convention on Biological Diversity (CBD). Building on the work of the CBD-mandated Biodiversity Indicators Partnership (BIP), the report includes a set of indicators of protected area coverage, representativeness, effectiveness, management and governance. This presentation will give a high-level overview of the status of the world's protected areas based on the findings of this report. (Milam)

Natural World Heritage Sites are internationally recognized as the world's most important natural areas and include well-known conservation names such as the Serengeti, Great Barrier Reef and the Galapagos Islands. IUCN is undertaking Conservation Outlook Assessments in order to fill the current knowledge-gap on natural World Heritage Sites and provide a global overview of their state of conservation. This presentation will take a look at the current World Heritage Network, preliminary work toward an assessment of the conservation outlook for Natural World Heritage sites, scheduled for publication in 2014, plus a new global gap analysis of World Heritage sites. (Badman)

Join us to hear about the Protected Areas Database of the United States (PAD-US) including recent updates and analyses. We will also discuss data development with PAD-US State Data Stewards, federal partners, the National Conservation Easement Database (NCED) Team and national NGO's (e.g. The Nature Conservancy, Trust for Public Land). Finally, we will highlight partnerships with UNEP-World Conservation Monitoring Center (WCMC) and the Commission for Environmental Cooperation (CEC) to ensure protected areas data are locally and globally relevant, along with the challenges of doing so. (Duarte)

	10:00–10:20	10:20–10:40	10:40–11:00	11:00–11:20	11:20–11:40	11:40–12:00
<b>Invited Papers and Contributed Papers Sessions</b>						
Session 47 • Plaza Ballroom D <i>Integrating Local Community Perspectives into Park Management</i> Chair(s): Natalia Buta	5233 / Residents' Images and Perceptions of their Community and a Neighboring Park • Natalia Buta	5429 / Conflict, Collaboration, and Sustainability: Can Institutions Learn? • Jack Corbett & Nelly Robles Garcia	5189 / Connecting Urban Populations to Protected Areas • Pam Veinotte & Louis Lavoie	5569 / Chaos on the Coast: Resident Attitudes about Protected Area Management at Kealakekua Bay, Hawaii • Mark D. Needham & Brian W. Szuster	5447 / Perceptions of Protection: Coastal Residents' Awareness and Understanding of New Marine Reserves in Oregon • Elizabeth E. Perry et al.	5371 / Stories that Stakeholders Tell: Environmental Governance of the Manas National Park and Biosphere Reserve (India) • Dhananjaya Katju
Session 48 • Plaza Ballroom E <i>Sustainable Transportation for National Parks</i> Chair(s): Steve Lawson et al.	5423 / Evaluating the Long-Term Sustainability of Shuttle Service in Mount Rainier National Park • Brett Kiser et al.	5423 / Natural Resource Consequences of Park Transportation System Delivery: An Example From Rocky Mountain National Park • Christopher Monz et al.	5423 / Geography, Minority Visitation, and the Accessibility of "America's Best Idea" in a Multicultural Nation • Joe Weber & Selima Sultana	5423 / Transportation as Recreation: Extending the Recreation Opportunity Spectrum • Peter Pettengill et al.	5423 / Shuttle System Design Features Important to Visitors at Cumberland Island National Seashore • Jeffrey C. Hallo & Robert E. Manning	5279 / What We Know about Users of New Transit Systems in National Parks • Katherine Turnbull
Session 49 • Governors Square 15 <i>Leave No Trace: From Science to Application</i> Chair(s): Ben Lawhon	5339 / Influencing Leave No Trace Behavior in State Parks • Ben Lawhon et al.	5339 / Influences on Future Leave No Trace Behavior in National Parks Derrick Taff et al.	5339 / From Education to Impact: The Effects of Messaging on Environmental Conditions in Acadia National Park • Charlie Jacobi et al.	Q&A		

*More Wednesday Late-Morning Sessions on Next Page*

	10:00–10:20	10:20–10:40	10:40–11:00	11:00–11:20	11:20–11:40	11:40–12:00
<b>Panel Discussions • Sharing Circles • Café Conversations • Daycappers</b>						
Session 50 • Governors Square 16 <i>Mechanisms for Connecting Park Professionals across Multiple Scales, Nationally and Globally</i> Chair(s): Betty Baldwin	<b>5471 / Panel Discussion • Panelists:</b> David White, Conservation Informatics, Clemson University Fran Mainella, Clemson University					
Session 51 • Governors Square 17 <i>Developing a Collaborative Learning Network for Visitor Impact Monitoring in Protected Areas: A USA–Brazil Panel</i> Chair(s): Yu-Fai Leung & Anna Miller	<b>5276 / Panel Discussion • Panelists:</b> Teresa Magro, University of São Paulo, Brazil Jasmine Moreira, Ponta Grossa State University, Brazil Jonathan Putnam, National Park Service Office of International Affairs, USA Yu-Fai Leung, North Carolina State University, USA Steve McCool, University of Montana (retired), USA					
Session 52 • Plaza Court 1 <i>Interagency Wilderness Fellows: Post-Graduate Students Assess Wilderness Character</i> Chair(s): Suzanne Stutzman	<b>5114 / Sharing Circle • Discussion Leader(s):</b> Peter Landres, Ecologist, Aldo Leopold Wilderness Research Institute • Peter Dratch, Senior Biologist, U.S. Fish and Wildlife Service Ralph Swain, Wilderness and Wild and Scenic Rivers Programs, Region 2, U.S. Forest Service • Shane Barrow, American Conservation Experience Mark Swenson, American Conservation Experience Wilderness Fellows: Jessica Bolis, FS; Mark Douglas, NPS; Jesse Engebretson, NPS; Molly McCarter, FWS; Kelly Pippins, FWS					
Session 53 • Governors Square 14 <i>Park Stewardship Institute</i> Chair(s): Maureen Finnerty	<b>5222 / Café Conversation • Discussion Leader(s):</b> Maureen Finnerty, Chair, Executive Council, Coalition of National Park Service Retirees Don Field, Executive Council, Coalition of National Park Service Retirees Brent Mitchell, President, George Wright Society					
Session 54 • Governors Square 10 <i>Film Festival and Discussion: Young People Helping NPS Respond to Climate Change</i> Chair(s): Stephanie Harrington	<b>5058 / Panel Discussion &amp; Short Films Screening • Presenters:</b> Karen Hevel-Mingo, NPCA Stephanie Harrington, University of Washington George Melendez Wright Climate Change Youth Initiative Fellows					

**Concurrent sessions • Wednesday late morning, March 13 • 10:00–12:00**

	1:30–1:50	1:50–2:10	2:10–2:30	2:30–2:50	2:50–3:10	3:10–3:30
<b>Invited Papers and Contributed Papers Sessions</b>						
Session 55 • Governors Square 10 <i>Visitor and Partner Engagement in Management Planning</i> Chair(s): Greg Leaman	5567 / What Will They Do? Visitor Sanctions in Response to Crowding at Coastal Parks in Oregon • Wesley J. Mouw et al.	5646 / Landscape Conservation: The Role of National Park Advocates • Mark Wenzler et al.	5029 / Protected Areas on Private Land: Shaping the Future of the Park System in Australia • Greg Leaman	5621 / Building Trust: Reflections from a Ten-year Collaboration • Dee Patriquin & Elizabeth Halpenny	Q&A	
Session 56 • Governors Square 14 <i>Nighttime Recreation and Night Skies in National Parks</i> Chair(s): Ellen Rovelstad	5363 / The Importance of Darkness and the Night Sky to National Park Visitors • Ellen L. Rovelstad & Robert E. Manning	5363 / Night Recreation in the National Parks: Indicators, Standards, and Related Visitor Perceptions • Brandi L. Smith	<b>Roundtable discussion with audience:</b> Ellen Rovelstad, Brandi Smith, Jeff Hallo, Bob Manning			
<b>Panel Discussions • Sharing Circles • Café Conversations • Daycappers (1:30–3:30)</b>						
Session 57 • Plaza Ballroom D <i>OPEN</i> Chair(s):						
Session 58 • Governors Square 15 <i>Non-Recognized Tribal Communities Protecting Cultural &amp; Natural Resources</i> Chair(s): Angela Mooney D'Arcy	<b>5265 / Panel Discussion • Panelists:</b> Angela Mooney D'Arcy, Executive Director, Sacred Places Institute for Indigenous Peoples Deborah Sanchez, Co-Chair, Barbareno Chumash Council (Invited) Rebecca Robles, Co-Director, United Coalition to Protect Panhe (Invited)					
Session 59 • Plaza Court 1 <i>Parks and Protected Lands Where Farms and Food Matter</i> Chair(s): Rolf Diamant	<b>5321 / Sharing Circle • Discussion Leader(s):</b> Jessica Brown, Director, New England Biolabs Foundation/Consultant, COMPACT Initiative Rolf Diamant, Retired, National Park Service, Woodstock, Vermont					
Session 60 • Governors Square 16 <i>Environmental and Natural Resource Management of Concessions in Parks and Protected Areas</i> Chair(s): Emily Daigneau	<b>5413 / Panel Discussion • Panelists:</b> Lora Farabaugh, National Park Service Commercial Services Program, Concessions Management Specialist, Contract Management Mark Gallagher, DNC, NPS Concessioner Catherine Greener, Xanterra, NPS Concessioner Nat Patridge, Exum, NPS Concessioner (Representative, Grand Canyon River Outfitters Association)					
Session 61 • Governors Square 17 <i>Shifting the Focus to Results: Ecological Restoration in Canada's National Parks</i> Chair(s): Stephen McCanny	<b>5186 / Workshop • Leader(s):</b> Stephen McCanny, Restoration Ecology Specialist, Parks Canada John Waithaka, Conservation Biologist, Parks Canada					

	4:00–4:20	4:20–4:40	4:40–5:00	5:00–5:20	5:20–5:40	5:40–6:00
<b>Invited Papers and Contributed Papers Sessions</b>						
Session 62 • Plaza Ballroom D <i>Public Lands and University Partnerships: Cultural Resource Management through the CESU Network</i> Chair(s): Cheria Yost & Bob Brunswig	5153 / University of Northern Colorado and BLM Heritage Studies in the North Park Valley, Colorado • Bob Brunswig & Fred-eric Sellet	5153 / Cultural Landscape Documentation Using Modern Technologies: Capturing a Story of Place • Ekaterini Vlahos	5153 / Environmental History as the Foundation for Park Management Strategies • Maren Thompson Bzdek	5153 / For the Public Good: The Benefits of Cooperative Projects • Karen E. Waddell	Q&A	
Session 63 • Governors Square 11 <i>GIS, Modeling, and Records Management</i> Chair(s): Carol Griffin	5280 / An Analysis of the Location and Impact of User-created Campsites in the Nordhouse Dunes Wilderness • Carol Griffin	7001 / Badlands National Park Climate Change Vulnerability Assessment • Barry Drazkowski et al.	6787 / Changes in Rodent and Plant Biodiversity following Capping Artesian Wells in Great Sand Dunes Ecosystem • Sarah Garza et al.	6846 / Bringing Order to Chaos: Managing Records at Disasters • Patrick McKnight	Q&A	
<b>Panel Discussions • Sharing Circles • Café Conversations • Daycappers (4:00–6:00)</b>						
Session 64 • Governors Square 14 <i>Connecting People to Parks through Outdoor Play</i> Chair(s): Fran Mainella	<b>5119 / Café Conversation • Discussion Leader(s):</b> Fran Mainella, Visiting Scholar, Clemson University Carly Summers, Administrative Assistant, US Play Coalition					
Session 65 • Plaza Court 1 <i>Tribal Marine Conservation and Marine Protected Areas</i> Chair(s): Valerie Grussing	<b>5379 / Sharing Circle • Discussion Leader(s):</b> Valerie Grussing, Cultural Resources Coordinator, National Marine Protected Areas Center					
Session 66 • Governors Square 15 <i>Exploring Opportunities for Enhancing Relevancy and Sustainability through Cultural Landscape Conservation</i> Chair(s): Nora Mitchell	<b>5455 / Panel Discussion • Panelists:</b> Brenda Barrett, Living Landscape Observer Jessica Brown, New England Biolabs Foundation Terence Hay-Edie, UN Development Program Tim Badman, IUCN					
Session 67 • Governors Square 16 <i>Protected Areas as Tools to Address Climate Change and Protect Ecosystem Services</i> Chair(s): Nigel Dudley	<b>5244 / Panel Discussion • Panelists:</b> Ernesto Enkerlin, Chair, IUCN World Commission on Protected Areas (WCPA) Stephen Woodley, Parks Canada (on secondment to IUCN) Nigel Dudley, Equilibrium Research					
Session 68 • Governors Square 17 <i>Green Fire: Aldo Leopold and a Land Ethic for Our Time (Film: 73 minutes)</i> Chair(s): Barrett Kennedy	<b>6737 / Day-capper • Presenter(s):</b> Barrett Kennedy, Professor Emeritus, Louisiana State University (host of film screening)					



Session 69 • Governors Square 17

**6731 / Focus Session**

***Conflict and Confluence: Rethinking Cultural Heritage and Environmental Stewardship***

Chair(s): Barrett Kennedy, Professor Emeritus, Louisiana State University; Andy Ferrell, National Center for Preservation Technology and Training

Presenters: Nathalie Gagnon, Senior Analyst/Lead Specialist, Aboriginal Affairs Secretariat, Parks Canada; Hugh C. Miller FAIA, Chief Historical Architect, National Park Service (ret.); Director, Virginia Department of Historic Resources (ret.); Richard W. Sellars, Historian and Author, National Park Service (ret.)

*Session summary*

This Focus Session provides an opportunity hear from (and interact with) a panel of recognized heritage conservation leaders, who will share their perspectives on the necessity of collaborative, multidisciplinary approaches to preserving our natural and cultural heritage. Examined through illustrations of the challenges encountered in managing/balancing values associated with wilderness/natural areas and cultural landscapes/historic sites, panelists will address questions such as: What happens when cultural and natural resource values are inadequately understood and/or appreciated? What happens when resource management policies/regulations conflict? Are there good models, case studies and precedents that can inform better management practices, planning, and decision processes? Does past experience give us insight into viable stewardship strategies in the face of factors such as climate change, diminishing maintenance/management funding, increasing resource de-

Session 70 • Plaza Ballroom E

**5579 / Focus Session**

***Connecting People with Nature***

Chair(s): Mike Wong

Panelists: Alan Latourelle, CEO, Parks Canada Agency; Luis Fueyo, Comisionado, CONANP (Comisión Nacional de Áreas Naturales Protegidas, Mexico); Ernesto Enkerlin-Hoeflich, Chair, IUCN World Commission on Protected Areas

*Session summary*

Concerns have been expressed that people are increasingly being disconnected from nature; a situation that calls for urgent action at all levels. Protected areas (PAs) can be used as strategic avenues for connecting people with nature due to the great range of values and benefits they provide to diverse communities, partners and stakeholders from local to global levels. Besides being cornerstone of biodiversity conservation and sustainable tourism, PAs also protect critical components of the planetary life support systems that are central to human well-being, including those that enhance food security and human health. Connecting people to PAs in particular, and to nature in general calls for enhanced collaborations with traditional and non-traditional partners, and finding creative ways of inspiring broad-based awareness, support, and engagement. The panelists will address these issues as well as strategies for establishing guidelines, targets and measurable outcomes for achieving this goal; and mechanisms to share best practices.

	10:00–10:20	10:20–10:40	10:40–11:00	11:00–11:20	11:20–11:40	11:40–12:00
<b>Invited Papers and Contributed Papers Sessions</b>						
Session 71 • Governors Square 11 <i>Impacts of Climate Change and Invasive Species: From the Sea to the Mountains</i> Chair(s): Glenn Patterson	5488 / Spatial and Temporal Trends in Snowpack Dynamics in Rocky Mountain National Park • Glenn Patterson et al.	5601 / Examining Evidence for Climate-mediated Range Contraction at Multiple Spatial Resolutions • Joseph A.E. Stewart	5355 / The Effects of Sea Level Rise on the Federal Candidate <i>Chromolaena frustrata</i> , Everglades National Park • Kristie Wendelberger et al.	5635 / Use of Early Seral Plant Species to Improve Restoration Success in the Western United States • Jayne Jonas et al.	Q&A	
<b>Panel Discussions • Sharing Circles • Café Conversations • Daycappers (10:00–12:00)</b>						
Session 72 • Plaza Ballroom E <i>A Dialogue among Philanthropic Leaders on Conservation in a Changing World</i> Chair(s): Jessica Brown	<b>5526 / Panel Discussion • Panelists:</b> Lynn Lohr, Consultative Group on Biological Diversity (CGBD), moderator Denise Joines, Wilburforce Foundation Jessica Brown, New England Biolabs Foundation Terence Hay-Edie, UNDP/GEF Small Grants Programme					
Session 73 • Governors Square 14 <i>Marine Protected Area Professionals Peer-to-Peer Networks: Are They Good Investments?</i> Chair(s): Gary Davis	<b>5105 / Café Conversation • Discussion Leader(s):</b> Gary Davis, President, GEDavis & Associates Lauren Wenzel, National Marine Protected Areas Center, National Oceanic and Atmospheric Administration					
Session 74 • Plaza Ballroom D <i>Transit as a Public Lands Management Tool: Applications for Multiple Scales</i> Chair(s): Haley Peckett	<b>5159 / Panel Discussion • Panelists:</b> Laurie Miskimis, Federal Highway Administration - Central Federal Lands Chris Spori, Maroon Bells (USFS) Bob Manning, University of Vermont					
Session 75 • Plaza Court 1 <i>Charting the Future Course of the George Wright Society: An Informal Discussion with the Board</i> Chair(s): Brent Mitchell	<b>5364 / Sharing Circle • Discussion Leader(s):</b> Brent Mitchell, GWS President Dave Parsons, GWS Secretary Other GWS Board Members (this session also given Monday early afternoon)					
Session 76 • Governors Square 17 <i>Legal Perspectives on Managing Protected Areas</i> Chair(s): Bruce Huber	<b>6760 / Panel Discussion • Panelists:</b> Peter A. Appel, University of Georgia School of Law John Copeland Nagle, Notre Dame Law School Bruce R. Huber, Notre Dame Law School					

Concurrent sessions • Thursday morning, March 14 • 10:00–12:00

	1:30–1:50	1:50–2:10	2:10–2:30	2:30–2:50	2:50–3:10	3:10–3:30
<b>Invited Papers and Contributed Papers Sessions</b>						
Session 77 • Governors Square 10 <i>Tangible and Intangible Values</i> Chair(s): Carena van Riper	5133 / Mapping Social Values for Ecosystem Services among Outdoor Recreationists at Channel Islands National Park • Carena van Riper et al.	5180 / Valuing Ecosystem Services in Support of Protected Areas Management: A Cross-agency Case Study • Kenneth Bagstad et al.	5239 / Latin-Americans' Values on Natural and Historical National Parks in the United States • Carla Mora-Trejos	5256 / The Nature of the Sublime in Sequoia & Kings Canyon National Park • Laurlyn Harmon et al.	5576 / Spiritual Outcomes of Park Experience: A Synthesis of Social Science Research • Paul Heintzman	Q&A.
Session 78 • Governors Square 11 <i>Want a Sustainable Park? Ask the Indigenous People ... They Might Know a Thing or Two</i> Chair(s): Angela Mooney D'Arcy	5077 / Traditional Ecological Knowledge and Natural Resource Management in the Heartland: Challenges in Michiana • David Ostergren	5065 / Restoring Mana: Maori Influence in New Zealand National Park Management • Diane Krahe	5030 / Co-managing Parks with Aboriginal Communities: Improving Outcomes for Conservation and Cultural Heritage • Greg Leaman	5365 / Protected Areas, Indigenous Lands, and Mining • Angeles Mendoza Sammet & Veronica Chirino Baker	6134 / Reconciling Protection and Development in Indigenous Settings: The Case of the We-mindji Protected Areas Network • Rodney Mark	6590 / Are ICCAs the Solution? Overcoming Challenges and Harnessing Opportunities • Véronique Bussière
<b>Panel Discussions • Sharing Circles • Café Conversations • Daycappers (1:30–3:30)</b>						
Session 79 • Governors Square 14 <i>The Bob Marshall Wilderness</i> Chair(s): Timothy Light	<b>Film screening (26 mins)</b>					
Session 80 • Governors Square 15 <i>Phenology in Protected Areas: Projects and Best Practices</i> Chair(s): Kathy Gerst	<b>5123 / Workshop • Leader(s):</b> Kathy Gerst,, USA National Phenology Network					
Session 81 • Governors Square 16 <i>Cyberinfrastructure for Connecting the Parks Community</i> Chair(s): David White	<b>5482 / Workshop • Leader(s):</b> David White, Conservation Informatics, Clemson University Chris Vinson, Clemson Libraries, Clemson University Scott Hammel, Clemson Computing and Information Technology, Clemson University Betty Baldwin, Parks and Conservation Area Management, Clemson University					
Session 82 • Governors Square 17 <i>Protected Areas Database of the United States (PAD-US) Overview and Feedback</i> Chair(s): Lisa Duarte	<b>5515 / Workshop • Leader(s):</b> Lisa Duarte, PAD-US Coordinator, USGS Gap Analysis Program, University of Idaho					

**Concurrent sessions • Thursday early afternoon, March 14 • 1:30–3:30**

	4:00–4:20	4:20–4:40	4:40–5:00	5:00–5:20	5:20–5:40	5:40–6:00
<b>Invited Papers and Contributed Papers Sessions</b>						
Session 83 • Plaza Ballroom D <i>Climate Change Risks, Impacts, and Adaptations II</i> Chair(s): Greg Aplet	5640 / An Adaptation Portfolio Approach to Managing Climate Risk • Greg Aplet	5466 / It's a Small World: Geographic and Taxonomic Variation in Plethodon Salamanders' Skin Microbiome • Carly Muletz et al.	5477 / Climate and Conservation: Landscape and Seascape Science, Planning and Action • Charles Chester et al.	5337 / ClimateAnalyzer.org: A Portal for Accessing and Summarizing Climate Data • Mike Tercek	Q&A	
Session 84 • Governors Square 10 <i>Natural vs. Cultural: Where the Rubber Meets the Road</i> Chair(s): Barrett Kennedy	5060 / Parks Canada Pictograph Project • Brad Himour	5238 / Conserving the Agricultural Heritage of Canada's National Capital Greenbelt • Ève Wertheimer	5084 / Bridging Connections: Exploratory Social Network Analysis of the Illinois & Michigan Canal National Heritage Corridor • Patrick Holladay et al.	5096 / Managing Barrier Island Breaches: Preserving Natural System Function and Protecting Private Property and Cultural Resources • Mary Foley & Patricia Rafferty	7010 / Characterizing Tribal Cultural Landscapes for Resource Preservation and Protection During Renewable Energy Development • Valerie Grussing	Q&A
Session 85 • Governors Square 11 <i>Public Participation in Scientific Research: Case Studies from National Parks</i> Chair(s): Gerard Kyle	5384 / The California Phenology Project: A Case Study of PPSR • Kathy Gerst	5630 / Understanding Changes in the Land Using Phenology of Local Residents in Wrangell Saint Elias Park • Margot Higgins	5309 / Public Participation in Scientific Research: A Profile of National Geographic/National Park Service Bioblitz Participants • Gerard Kyle et al.	5612 / Why Do Parks Have Friends? A Statistical Analysis of "Friends of Groups" and National Parks • Tracy Yandle & Douglas S. Noonan	Partners in Science • Rajul Pandya	Q&A
<b>Panel Discussions • Sharing Circles • Café Conversations • Daycappers (4:00–6:00)</b>						
Session 86 • Governors Square 15 <i>Don't Forget the Drama!</i> Chair(s): Lisa Hayes	<b>5581 / Day-capper • Participant(s):</b> Lisa Hayes, President & CEO, The Accokeek Foundation at Piscataway Park					
Session 87 • Plaza Court 1 <i>Accomplishing Wilderness Character Monitoring through Partnerships with Non-governmental Organizations</i> Chair(s): Linda Merigliano	<b>5374 / Sharing Circle • Discussion Leader(s):</b> Linda Merigliano, Professional Development Committee Chair, Society for Wilderness Stewardship Ralph Swain, Wilderness and Wild & Scenic Rivers Specialist, Rocky Mountain Region, USDA Forest Service					
Session 88 • Plaza Ballroom E <i>Global Protected Area Issues and Trends: Informing the Agenda of the World Parks Congress 2014</i> Chair(s): Brent Mitchell	<b>5322 / Panel Discussion • Panelists:</b> Alan Latourelle, CEO, Parks Canada Ernesto Enkerlin-Hoeflich, Chair, World Commission on Protected Areas Sally Barnes, NSW National Parks, Australia					
Session 89 • Governors Square 17 <i>Accessing and Utilizing Protected Areas Datasets, Tools, and Networks</i> Chair(s): Tosha Comendant & Kai Henifin	<b>5465 / Workshop • Leader(s):</b> Tosha Comendant, Senior Scientist and Director of Education and Outreach, Conservation Biology Institute Kai Henifin, Cultural Anthropologist and GIS Analyst, Conservation Biology Institute					