



PARTNERS IN STEWARDSHIP

*Seventh Conference on Research
and Resource Management
in Parks and on Public Lands*

*November 16 – 20, 1992
Jacksonville, Florida*

•PROGRAM•



Cover design by Ricardo Lewis, U. S. National Park Service
Office of Public Affairs, Washington, DC.

Cover photo: West Indian Manatee (*Trichechus manatus*)
Cow and Calf

Manatees inhabit coastal, estuarine and riverine waters of the tropical and subtropical Atlantic region. *Trichechus senegalensis* of the west African coast, *T. inunguis* of the Amazon River basin, and *T. manatus* of the Caribbean area comprise the three species of this genus. The strictly aquatic manatee is also strictly herbivorous, feeding on green, aquatic higher-plant species, which restricts their distribution to relatively shallow waters. Man is virtually the only predator that manatees need fear, and this is worsened by human exploitation and manipulation of their environment. The West Indian Manatee is listed as an endangered species in the United States. A close relative of the manatee is the dugong (*Dugong dugon*), which inhabits the warm coastal waters of the Indo-Pacific region.

U. S. Fish and Wildlife Service photo by Galen Rathbun.

Seventh Conference on Research and Resource Management
in Parks and on Public Lands

“Partners in Stewardship”

November 16-20, 1992

Marina Hotel at St. Johns Place
Jacksonville, Florida

PROGRAM

The George Wright Society

Co-Sponsored by: U.S. Department of Agriculture-Forest Service, U.S. Bureau of Land Management, U.S. National Park Service, U.S. Environmental Protection Agency, National Parks & Conservation Association, The Wilderness Society, Duke University School of the Environment, Smithsonian Institution, The Nature Conservancy-U.S.

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Seventh Conference on Research and Resource Management in Parks and on Public Lands

Conference Committee

Stephanie Toothman	♦	Chairperson
Harry Butowsky	♦	Program Coordinator, Cultural Resources
John Donahue	♦	Program Coordinator, Natural Resources
Suzanne Lewis	♦	Local Arrangements Coordinator
Kheryn Klubnikin	♦	Funding/Sponsorship Coordinator
John Ehrenhard	♦	Field Sessions Coordinator
Virginia Horak	♦	Graphic Design Consultant
Ann Baugh	♦	Registration Coordinator
Dominic Dottavio	♦	Planning Coordinator
Ted Simons	♦	Poster Sessions Coordinator
William E. Brown	♦	Editor
Jean Matthews	♦	Rapporteur

Acknowledgments

The George Wright Society extends its thanks to all the members of the Conference Committee for their help in planning and carrying out the conference, to the co-sponsoring agencies and organizations for their support, to the U.S. National Park Service's Southeast Regional Office for their assistance in planning, and to the staffs of Fort Caroline National Memorial, Timucuan Ecological and Historic Preserve, Okefenokee National Wildlife Refuge, Cumberland Island National Seashore, Castillo de San Marcos National Monument, White Oak Plantation, and Ocala National Forest for their help. We also thank the USNPS Wildlife and Vegetation and Environmental Quality divisions, both based in Washington, D.C., as well as the USNPS Denver Service Center, for their assistance in enabling the participation of minority-based institutions. Special thanks is also extended to Yvonne Williams, Vice President for Governmental and International Affairs, Tuskegee University; Dr. David Morafka, California State University, Dominguez Hills; Julie Gay, Duke University School of the Environment; Dr. Raul Valdez, New Mexico State University; and the Native American Fish and Wildlife Society for assistance in minority student recruitment.

Previous Conferences

November 1976	♦	New Orleans, Louisiana
November 1979	♦	San Francisco, California
November 1982	♦	Washington, D.C.
July 1986	♦	Fort Collins, Colorado
November 1988	♦	Tucson, Arizona
November 1990	♦	El Paso, Texas

Upcoming Conference

April 1995	♦	Portland, Oregon
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Sunday, November 15

8:00-5:00 Meeting of Leaders of USNPS Cooperative
Parks Studies Units

Noon-10:00 Registration

7:00-8:30 Book Signing with Stephen Jay Gould
Registration Area

Monday, November 16

Theme of the Day: 500 Years of Change

7:30-11:30 & 12:30-1:30 Registration

8:15 Conference Convenes
Windward Ballroom

8:20 Introductory Remarks
Windward Ballroom Stephanie Toothman, Harry Butowsky, John Donahue

8:45 Welcome
Windward Ballroom Jim Coleman

9:00 PLENARY SESSION 1: KEYNOTE ADDRESS
Windward Ballroom Introduction: Melody Webb
Stephen Jay Gould: "The Partnership of History and
Science"

10:00 Break

10:30-Noon CONCURRENT SESSIONS #1-5

#1 Paleontological Resources: A Neglected Aspect of
Compass Room Our National Heritage
Harry Butowsky, Chairperson
Donald G. Mikulic (Illinois State Geological Survey)
Joanne Kluessendorf (University of Illinois Museum of
Natural History)
T. J. Fremd: Cooperative Management of Paleontological
Resources in the John Day Basin, Central Oregon

#2

Rigging-Sail Room

**The Interface of Archeology and History in
Managing Our Cultural Heritage**

F. A. Calabrese, Chairperson

Thomas Thiessen: The Integration of Cultural
Resources, Research, and Management: An
Example from the Knife River Indian Villages
National Historic Site, North Dakota

Vergil E. Noble: History and Prehistory Along the Ohio
& Erie Canal

Jeffrey Richner: The Chippewa Occupation of the
Voyageurs National Park Area

Douglas Scott: The Battle of the Little Bighorn and
Indian Testimony: A Reassessment of Validity in
Comparison with the Archeological Record

Arthur K. Ireland: A Case Study of Aerial
Photointerpretation as a Cultural Resources
Management Tool: The Warm Springs Special
Study Area

#3

Windward Ballroom

Biodiversity

Kheryn Klubnikin, Chairperson

Gary Machlis and Jean E. McKendry: Extending
Biodiversity Gap Analysis to Include Socio-
Economic Factors: Preliminary Findings from a
Pilot Test in Idaho

John D. Varley, Paul Schullery, and Robert D. Barbee:
Let's All Get on the Biodiversity Bandwagon
and . . . What?

Regina M. Rochefort: Genetic Resource Management
Units

Kyle Jones: From Inventory to Re-Introduction: Using a
Threatened and Endangered Species Inventory to
Target Management Needs

J. Michael Scott, Kheryn Klubnikin, and R. Gerald
Wright: Beyond Crown Jewels: The Use of Gap
Analysis in Planning for Biodiversity

#4

*Commerce-Dockside
Room*

Cultural Perspectives in Wilderness Areas

Stephanie Toothman, Chairperson

Bob Mierendorf: Archeological Research and Resources
in North Cascades National Park's Wilderness

Jim Thomson: Archaeological Research to Augment
Natural Science Investigations

Session continued next page

Ian Clarke: CRM Planning in Banff National Park: The Dilemma of the National Mandate
Ted Birkedal: Ancient Hunters in the Alaskan Wilderness: Human Predators and Their Role and Effect on Wildlife Populations and the Implications for Resource Management
Jeanne Schaaf: A Study of Culture and Landscape History in Beringia

#5
Tug Room

Panel Discussion—Historical Ecology: Exploring the Management Implications of Current Research

Nora Mitchell, Chairperson
Emily Russell: Ecological Research in Three U.S. National Historical Parks
David Foster (Harvard Forest)
Ronald Myers (The Nature Conservancy)

Noon

Lunch

1:15
Windward Ballroom

PLENARY SESSION 2: NATIVE AMERICAN VIEW OF 500 YEARS OF CHANGE

John Cook, Chairperson
Regis Pecos (Keepers of the Treasures)
Jack Trope (Attorney, Native American issues)
Bernard Whitebear (United Indians)

3:00

Break

3:30

CONCURRENT SESSIONS #6-10

#6
Rigging-Sail Room

Native American Issues

Larry Belli, Chairperson
Roger J. Siglin: Subsistence and Wilderness—The Alaska Experience
Muriel Crespi: The USNPS Ethnography Program
Dave Simon: The National Parks & Conservation Association's Proposal for the Wounded Knee Battlefield Site
Ed Natay: Consultation with American Indians on the Native American Graves Protection and Repatriation Act

#7

Commerce-Dockside
Room

**Panel Discussion—Biotic Cultural Resources:
Issues in Preserving and Managing a Cultural
Landscape**

Robert Page, Chairperson

Ian J.W. Firth (University of Georgia)

Stephen Sponberg (Arnold Arboretum, Harvard
University)

Erv Gasser (USNPS Pacific Northwest Region)

#8

Tug Room

**Paleoenvironmental Reconstruction of the
Nauset Marsh Area, Cape Cod National
Seashore: An Interdisciplinary Approach**

Myra Harrison & Mary Foley, Co-chairpersons

Marjorie G. Winkler: Environmental History of Outer
Cape Cod Since Deglaciation

Dena K. Dincauze: Environmental Context of Middle
Archaic and Middle Woodland Cultures and their
Expression in Southern New England

George H. Stillson: Settlement Choice, Site Utilization,
and Archeological Excavation of the Carns Site,
Cape Cod National Seashore

James R. Allen: Paleoenvironmental Research
Opportunities in the Nauset Estuary and Priorities
of an Interdisciplinary Program

Suzette Kimball: Climate Change and Coastal
Dynamics—The Cultural Resources Link

Andrew Ringgold: Benefits of the Interdisciplinary
Nauset Research Program to the Park

#9

Compass Room

Economics and Natural Systems

Michael Brody, Chairperson

Michael Brody: Introduction

Clyde F. Kiker: Integrating Ecology and Economics: The
Role of Perspective

Linda L. Langner: Economics of Protected Areas: A Forest
Service Perspective

Pamala L. James: Potential Environmental and Economic
Impacts of the Florida Keys National Marine
Sanctuary

Holly S. Greening and Richard M. Eckenrod: Financing
Options Evaluation: A Critical Element of Estuary
Watershed Management

Jeffrey T. Olson: Merging Environmental Objectives
and Community Development

#10
Windward Ballroom

The Changing Nature of Nature and Wilderness

Bob Linn, Chairperson

Walter L. Cook, Jr.: Compatibility of Tourism and
Wilderness

James Stevenson: Determining Florida's Natural
Landscape in the 17th Century

Carl Hummel: Meanings of the "Wilderness
Experience" and Related Concepts

Dan E. Huff: On Naturalness

Arthur Magill: Landscape Views: What People See and
their Concerns

Peter Goin: Redefining Nature: The Management of the
Environment—An Artist's View

5:00

Adjourn

6:30-8:30
The University Club

Evening Reception (cash bar available)

Co-hosts: The George Wright Society and the National
Parks & Conservation Association

Tuesday, November 17

8:30
Windward Ballroom

**PLENARY SESSION 3: COOPERATIVE CULTURAL
RESOURCES MANAGEMENT IN A NATURAL AREA**

Jerry Rogers, Chairperson

David L. Morgan: State Historic Preservation Officer's
Perspective

David Mihalic: Lessons for Park Managers

Bruce J. Noble, Jr.: A USNPS Washington Office
Perspective

9:45

Break

10:00

CONCURRENT SESSIONS #11-15

#11
Compass Room

Planning the Partnership

Marie Rust, Chairperson

Paul Labovitz, Barbara Nelson-Jameson, and Rory

Robinson: The Planning of a Heritage Corridor:
The Ohio & Erie Canal Corridor in Northeast
Ohio

Paul Bray: The American Park Tradition as a Dynamic
Social and Environmental Force

Session continued next page

Mike Wurm: The Rediscovery of the Rejuvenated
Merrimack River through Cooperative
Educational Programming and Trail Development

Jean Travers: Changing Federal Role in Historic
Preservation: Public Perceptions of the Role of
Government in Preservation and the Economic
and Social Conditions that Affect It

Doug Reynolds: History for Resources and Partnerships

Peter Thompson: Kalaupapa: Partnerships as Life's
Blood

#12

Tug Room

Ecological Effects of Air Pollution

Kathy Tonnessen, Chairperson

Kathy A. Tonnessen: The Ecological Effects of Air
Pollution and Deposition in the National Parks:
Priorities for a Research and Monitoring Program

Howard S. Neufeld, James R. Renfro, and W. David
Hacker: Ozone Dose-Response Relationships for
Plants in Great Smoky Mountains National Park

Arthur H. Chappelka, Deborah Mangis, and James R.
Renfro: Effects of Ozone on Mature Black
Cherry, Sassafras, and Tulip Poplar Growing in
Great Smoky Mountains National Park

E.S. Hildebrand et al.: An Assessment of Ambient-
Ozone-Induced Injury on Canopy Hardwood
Species in the Shenandoah National Park

Judith E. Rocchio et al.: Project FOREST—Forest Ozone
Response Study

L.P. Gough et al.: The Use of Biomonitors in Air Quality
Studies in National Parks and Refuges

#13

Rigging-Sail Room

**Panel Discussion—Wildlife Issues in Historical
Parks**

Mike Coffey, Chairperson

Nora Mitchell: A Historical/Cultural Perspective

John Hadidian: A Research/Science Perspective

John Dennis: A Policy Perspective

Wayne Pacelle: An Ethical Perspective

William Supernaugh: A Management Perspective

#14
*Commerce-Dockside
Room*

**Panel Discussion—Education: Teaching with
Historic Places**
Carol Shull, Chairperson
Kathleen Hunter (National Trust for Historic
Preservation)
Dorothy Jenkins Fields (Florida National Register
Review Board)

#15
Windward Ballroom

History of Resources Management
Barry Mackintosh, Chairperson
Richard W. Sellars: George Wright and His Times: The
Rise and Decline of Ecological Attitudes in
National Park Management, 1929-1940
Stephen Mark: Administrative History as a Synthesis for
Scientific and Cultural Research: Some
Techniques and an Example
Don Reeser: Establishment of the Resources Management
Division at Hawaii Volcanoes National Park
R. Gerald Wright: Evolution of Wildlife Management
Policy in the USNPS

Noon

Lunch

1:15
Windward Ballroom

**PLENARY SESSION 4: NEW DIRECTIONS IN
PROTECTED LANDS**
Gene Hester, Chairperson
Ann Bartuska (USDA-Forest Service)
Mike Brennan (US Fish & Wildlife Service)
USEPA Representative
Jordan Pope (US Bureau of Land Management)
L. Peter Boice: DoD's Legacy Resources Management
Program: Partners in Stewardship of Our Natural
and Cultural Resources

3:00

Break

3:30-5:00

CONCURRENT SESSIONS #16-20

#16
Rigging-Sail Room

**Obstacles to Natural Resources Revitalization in
Urban Areas**
John Tanacredi, Chairperson
R. Cook: Habitat Restoration—Revitalization of
Abandoned Concrete Airport Tarmak to
Grassland Bird Habitat

Session continued next page

- C. Griffen: Airports, Birds and People—No Laughing Matter!
- M. Matthews: In the Shadow of the World Trade Center Wildlife Biodiversity Flourishes
- D. Riepe: Urban Parks as Laboratories for Solutions of Global Environmental Pollution Problems
- J. Tanacredi: Is Commercial Shell Fishing an Appropriate Activity in an Urban Estuarine National Park Unit?

#17

Compass Room

GIS

- Phil Wondra, Chairperson
- Hilary M. Swain and Vickie Larson: Selecting Lands for Stewardship: A GIS Approach
- Chip Jenkins and Nancy Arkin: Interagency GIS Applications for Managing an Ecosystem: The Santa Monica Mountains Experience
- Hugh A. Devine, Charles D. Rafkind, and Janet Johnson: GIS to Support Cultural Resource Management: A Case Study at Colonial National Historical Park
- Carl H. Hershner et al.: GIS Applications in the Development of a Water Resources Management Plan for the Colonial National Historical Park
- Sarah Wynn: Implementation of GIS in the Rocky Mountain Region, USNPS

#18

Windward Ballroom

Inventory & Monitoring

- Mike Ruggiero, Chairperson
- Werner d'Oleire-oltmanns: Building and Using a Landscape Inventory at Berchtesgaden National Park
- Nora Mitchell: Inventorying Historic Biotic Cultural Resources
- Thomas J. Stohlgren and J. F. Quinn: Approaches to Resource Inventories at Varying Scales
- Mark Lynott: Past Patterns of Human Adaptation in the Eastern Ozarks, Southeast Missouri
- William Gregg, E. Serabian, and M. Ruggiero: Building Resource Inventories on a Global Scale

#19

*Commerce-Dockside
Room*

Water Resources

Bill Jackson, Chairperson

J.P. Kumer and C.E. Furbish: Surf Water Quality at Assateague Island National Seashore, Maryland & Virginia: Design of Pilot Testing Program, Initial Response & Management Implications

Del Wayne R. Nimmo and Gerald E. Walsh: Our National Parks: Islands Under Siege from Nonpoint Threats

Larry Martin: Ground-water Management in the Cape Hatteras Area: Conflict between Development and Preservation

Joel Wagner and Larry Martin: Restoration Options for a Degraded Riparian System in Hog Canyon, Dinosaur National Monument

Larry Stevens, William L. Jackson, and Stanley L. Ponce: Issues Surrounding the Coexistence of National Parks and Regulated Rivers

#20

Tug Room

Hydropower

Cynthia Annett, Chairperson

Kelly Schaeffer: The Federal Energy Regulatory Commission's Role in Protected Areas

Jeff Connor and Joe Arnold: Restoration of Three Lakes Inundated by Dams within Rocky Mountain National Park

Jonathan B. Jarvis: Hydropower Mitigation in the U.S. National Park System—Case Study: Skagit Hydroelectric Project

Fred York (USNPS Pacific Northwest Region)
Cynthia Annett (University of Kansas)

5:00

Adjourn

7:00-9:00

*Windward Ballroom
(Starboard Section),
Navigator Room,
Engine Room*

Poster Session (cash bar available)

Wednesday, November 18

FIELD SESSIONS

Cumberland Island National Seashore

Leaders: John Ehrenhard, Paul Hartwig, John Jameson

7:45

Board buses for departure

8:00

Leave Marina Hotel for St. Marys, Georgia

Arrive St. Marys; board *Cumberland Princess* for Plum Orchard

Presentations at Plum Orchard:

- Cultural Resources and Legislation/Politics (Paul Hartwig)
- The Issue of Wilderness (Carol Ruckdeschel)
- The Reality of Resource Management (Rolland Swain)

Lunch

Presentations continue:

- Cultural History of Cumberland Island (Bert Ryan)
- The Kings Bay Environmental Monitoring Program (Stephen Cofer-Shabica)

Board *Cumberland Princess* to Sea Camp

At Sea Camp, choose between walk to beach or trail tour with Bert Ryan

Cumberland Princess leaves for return to St. Marys

4:45

At St. Marys, board buses for return to Marina Hotel

5:45

Arrive Marina Hotel (arrival time approximate)

Okefenokee National Wildlife Refuge

Leader: Harry Scheele

7:45

Board buses for departure

8:00

Leave Marina Hotel for Okefenokee

Arrive Okefenokee; presentations begin:

- 22-minute orientation film
- Wilderness Management (Jim Burkhart)
- Fire and Management Policies (Jim Burkhart)
- Succession of Okefenokee Ecosystem (Jim Burkhart)
- Human-Land Relationships (Jim Burkhart)

Lunch

Participants split into two groups. . . .

- 1) Boat trip and discussion
- 2) Historic Homestead

Groups reverse: Group 1 goes to Homestead; Group 2 takes boat trip

Session continued next page

3:30 At Visitor Center, buses board for return to Marina Hotel
5:00 Arrive Marina Hotel (arrival time approximate)

White Oak Plantation

Leaders: Dominic Dottavio, Suzanne Lewis

8:15 Board bus for departure
8:30 Leave Marina Hotel for White Oak
Arrive White Oak arena; board vans for tour
Lunch
Discussion of morning tour with regard to private initiatives in conservation and human-land relationships
Presentations:
Overview of Florida Panther Recovery Program (Dominic Dottavio)
White Oak Involvement in Panther Program as it Relates to Captive Breeding (John Lukas)
3:15 Board bus for return to Marina Hotel
4:30 Arrive Marina Hotel (arrival time approximate)

Castillo de San Marcos National Monument / St. Augustine

7:45 Board buses for departure
8:00 Leave Marina Hotel for Castillo de San Marcos
Arrive Castillo de San Marcos
Presentations:
• History and Current Issues (Gordy Wilson & staff)
• Guest Speaker—Eugene Lyon, historian and author
Lunch and free time to tour old St. Augustine
3:15 Board buses for return to Marina Hotel
4:15 Arrive Marina Hotel (arrival time approximate)

Ocala National Forest / Juniper Springs Recreation Area

Leader: Kheryn Klubnikin

7:15 Board bus for departure
7:30 Leave Marina Hotel for Ocala National Forest
Arrive Ocala National Forest
Orientation to biodiversity and management of Ocala, including slide presentation. Issues include logging, endangered species, wilderness and related topics. (U.S. Forest Service Staff)
Field site visits
Lunch on trip
3:30 Return to livery; board bus for return to Marina Hotel
6:00 Arrive Marina Hotel (arrival time approximate)

7:00-8:00
Registration Area

Book Signing with Alfred Runte

7:00-9:00
Windward Ballroom
(Starboard Section),
Navigator Room,
Engine Room

Poster Session (cash bar available)

8:00-9:30
Compass Room

**National Parks & Conservation Association:
Special Panel Presentation on the National
Academy of Sciences' Report *Science and the
National Parks***

Thursday, November 19

Theme of the Day: 21st Century—Getting Ahead of the Curve

8:30
Windward Ballroom

**PLENARY SESSION 5: POLITICS, PROTECTED
AREAS, AND PARTNERSHIPS**

Bob Baker, Chairperson

Sarah Bransom and Raymond Gunn: The Glen Canyon
Dam Environmental Impact Statement: Can
"Partners in Stewardship" Work?

Michael Soukup: The Application of Science in the
Everglades Water Quality Lawsuit

David E. Gackenbach and Nancy S. Arkin: Santa Monica
Mountains National Recreation Area: A Player at
the Table

Maureen Finnerty: Exotic Mountain Goats at Olympic
National Park

John Latcher: A Perspective from Steamtown National
Historic Site

John Freemuth and Greg Cawley: Tree Farms, Mother
Earth, and Other Dilemmas: Ecosystem
Management in Greater Yellowstone

10:15

Break

10:30-Noon

CONCURRENT SESSIONS #21-25

#21

Windward Ballroom

Consumptive Uses

Carmen Lane, Chairperson

Carmen Lane: TVA Perspective

Frank Buono: The Lesson of *National Rifle Association v. Potter*

Joe Dunstan and Geoff Swan: The Ethics of Sustainable Design

John Cook: American Indian Traditional Uses of Renewable Resources

Stephen E. Fairweather et al.: Forest Regeneration and White-Tailed Deer at Gettysburg National Military Park

John Hiscock: Consumptive Use of National Park System Renewable Resources and the Glacier Bay Fishing Issue

#22

Tug Room

Protected Areas as Classrooms

Robert Huggins, Chairperson

Jerry Hightower: Creation and Utilization of Campus Outdoor Classrooms for Interdisciplinary Curriculum Enhancement

Robert H. Gray: Educating the Public: Information, Outreach, and Involvement

Sandra Faulkner and Susan Morton: Partners in Stewardship: National Register Programs

#23

Rigging-Sail Room

Panel Discussion—Recreational Use: Making the Link Between Science and Policy

Carol Aten, Chairperson

Derrick A. Crandall (American Recreation Coalition)

Walt Dabney (Canyonlands National Park)

Elizabeth Estill (USDA-Forest Service Rocky Mountain Region)

Laura Loomis (National Parks & Conservation Association)

Del Price (USBLM)

#24

Commerce-Dockside Room

Science, Research, and Management: Can the Gaps be Bridged?

Patricia MacLaren, Chairperson

Veletta Canouts: Scientific Methods in Historical

Inquiry: Implications for Management Planning

Session continued next page

Robert D. Powers: Archeological Research as Research
F. A. Calabrese: Science and Management:
Implementing an Effective Program
Mike Fleming, Tom Alex, and Raymond Skiles:
Resources Managers—On the “Firing Line”
Patricia A. MacLaren: Bridging the Gap between
Biologists and Managers: Resource Management
Audits

#25

Compass Room

Global Change Research in National Parks

Ken Cole, Chairperson

Kenneth L. Cole: The Magnitude of Future Global
Environmental Change: Comparison with Past
and Present Rates of Change

David W. Stahle and Phillip L. Chaney: Successful
Prospecting for Ancient Forest Remnants in the
Eastern United States

David Galat, Jim Peterson, and Rob Jacobson: Evaluating
Effects of Climate Change on Ecological Structure
and Function of Ozark Highlands Streams

Thomas J. Stohlgren: The Potential Effect of Global
Change on Vegetation in the Colorado Rockies:
Developing a Research Approach

Marc D. Abrams: Fire and the Development of Oak
Forests in Eastern North America

Noon

Lunch

1:30

Windward Ballroom

**PLENARY SESSION 6: PLANNING FOR THE 21ST
CENTURY**

Denis Galvin, Chairperson

Edward T. La Roe: Information and Planning for the
Future of Public Lands

Norman Christensen: An Integrated Context for
Planning

Robert Graham: Informal Community Environmental
Knowledge and the Canadian Parks Service's
National Marine Park System Planning

Elizabeth Estill: Is the Past Prologue? Future Politics in
Land Management Planning

John Reynolds and Joe Dunstan: Plan Implementation:
Sustainable Development

2:45

Break

3:15-5:00

CONCURRENT SESSIONS #26-30

#26

Windward Ballroom

Beyond Boundaries

Jim Coleman, Chairperson

William T. Spitzer: How to Develop a Cooperative
Federal Role in Landscape Protection for the 21st
Century

Barbara West and Jake Vander Wal: The Lake Superior
Task Force: Protecting Parks through Interagency
and International Cooperation

Jim Fox: Protecting Parkway Viewscapes: A Vital
Community Approach

James Milestone: Geographic Description of the Greater
Mt. Mazama Ecosystem

Warren Lee Brown: Park Boundaries: Where to Draw
the Line

#27

Rigging-Sail Room

Tourism

Tom Lennon, Chairperson

Robert Arnberger, Jeff Selleck, and Keith Yarborough:
Economic Benefits Attributable to Big Bend
National Park in its Vicinity

John Peine: Sustainable Development Strategies for
Communities with Tourism-Based Economies in
the Southern Appalachian Highlands

Nancy B. Woods: Tourism—We're In It

Susan K. Jacobson and Rafael Robles: Park
Interpretation to Ameliorate Ecotourism: A Costa
Rican Example

#28

Compass Room

Regional Ecosystem Management

Boyd Evison, Chairperson

D. Scott Slocombe: Ecosystem Management in the
Northern Yukon Park Region

Mary Ann Grasser: The Greater Yellowstone Vision

Jeffrey L. Marion: Managing Visitor Impacts in Eastern
Forested Environments: Results and Implications
from a Comprehensive Long-Term Research
Program at Delaware Water Gap National
Recreation Area

Melissa Connor: Human Ecology of the Greater
Yellowstone Ecosystem

Jim Webb: The Need for a Water Management System
in the Everglades

Session continued next page

Barry Allen: Management Strategies for Protected
Landscapes

#29

*Commerce-Dockside
Room*

Wildlife Management in the 21st Century

John Donahue, Chairperson

Wayne E. Williams, Delmar W. Bachert, and Paul L.
Gaskill: Activism: Animal Rights and the
Wildlife Refuge

Jay Kirkpatrick et al.: Fertility Control and Wildlife
Management

Rolf O. Peterson: A Predictive Model of Wolf Population
Regulation on Isle Royale

Robert J. Warren: Ecological Justification for Controlling
Deer Populations in Eastern National Parks

Wayne Pacelle (The Fund for Animals)

Allen Rutberg (The Humane Society of America)

#30

Tug Room

**Integrating Cultural and Natural Resource
Management**

Roland Bowers & Denny Fenn, Co-Chairpersons
John Humke (The Nature Conservancy)

5:00

Adjourn

7:00

Windward Ballroom

The George Wright Society Banquet:

Master of Ceremonies: Melody Webb

Featured Speaker: Alfred Runte, Environmental
Historian

Friday, November 20

Theme of the Day: Stewardship in Perpetuity

8:30

Windward Ballroom

PLENARY SESSION 7: A VIEW FROM A CANADIAN PERSPECTIVE

Introduction: Stephanie Toothman

G. W. (Tony) Bull (Canadian Parks Service, National
Historic Sites)

9:30

Break

9:45

Windward Ballroom

PLENARY SESSION 8: OUTSIDE LOOKING IN

Loretta Neumann, Chairperson

Loretta Neumann: Working from the Inside Out: The
National Park Service as a Conservation Leader

Judy Bense (Society for American Archeology,
Governmental Affairs Committee)

Destry Jarvis (Student Conservation Association)

Nellie L. Longworth (Preservation Action)

William Chandler (National Parks & Conservation
Association)

Don Hellmann (The Wilderness Society)

11:15

Windward Ballroom

PLENARY SESSION 9: CONCLUSION

Introduction: Kheryn Klubnikin

Concluding Remarks: Gaylord Nelson (Wilderness
Society)

12:30

Conference Adjourns

2:00-3:00

Windward Ballroom

GWS Annual Membership Meeting

3:30-5:30

Windward Ballroom

GWS Board of Directors Meeting

Notes

Poster Presentations

- Richard Bachand and William A. Patterson III: Identifying Upland/Wetland Transitions in Cape Cod Wetlands
- Jonathan Bayless: Research Archives: Gone But Not Forgotten
- Jonathan Bayless: Resource Management on the Edge: War in the Pacific National Historical Park
- Kim R. Beason: The Relationship between Limits of Acceptable Change (LAC) Management Practices of the U.S. Forest Service and Customer Satisfaction in the Black Creek Wilderness Area and Wild and Scenic River of Mississippi
- Holly A. Belles, Ronald L. Myers, and James R. Snyder: Integrated Approaches to Controlling *Melaleuca quinquenervia* in the Big Cypress National Preserve, Florida
- Jayne Belnap and Kimball T. Harper: Essential Nutrients in Two Species of Desert Vascular Plants: The Role of Cryptobiotic Soil Crusts
- Sarah G. Bishop: Building Partnerships for Research and Resource Management
- John Blake, Bette Loiselle, and Gillian Bowser: Predator Activity Surveys on Three Potential Black-Footed Ferret Reintroduction Sites in Badlands National Park, South Dakota
- Kenneth P. Cannon: Woodland or Plains: A Multivariate Analysis of Prehistoric Bison Remains from Grand Teton National Park, Wyoming
- Lloyd N. Chapman, Michael R. Waring, and Paul R. Nickens: Addressing the Erosion of National Heritage: An Interagency Example
- E. Blaine Cliver, Kenneth Wild, and Doug Potter: Partnership with the Past
- Tim Cochrane: Applying Ethnography to Public Resources Management
- Stephen Cofer-Shabica and Lindsay Nakashima: Sedimentological Equilibrium of Marshes and Mudflats at Cumberland Island National Seashore, Georgia
- Kenneth L Cole et al.: Nineteenth-Century Grazing Impacts on Santa Rosa Island, Channel Islands National Park
- Bruce Connery, Karen Anderson, and Bob Breen: The Endangered Species Act's Partnership Process as a Key to the Future
- J.H. Connery et al.: Visitor Risk Assessment and Ecology of Lyme Disease at Acadia National Park
- Jeffery W. Converse and David Galat: Longitudinal and Storm Flow Nutrient Dynamics of a Karst Spring: Big Spring, Ozark National Scenic Riverways, Missouri
- Roseann Densmore, Kenneth Karle, and Page Spencer: Restoration of Streams Disturbed by Placer Mining
- Natalie E.R. Drake and William A. Patterson III: Fire Regimes of North American Boreal Forests
- Robert T. Eckert: Plant Injury Caused by Ozone at Acadia National Park
- Richard L. Ernenwein and Wesley R. Henry: The Effects of Aircraft Overflights on U.S. National Parks: Results from Several Research Projects
- Diane M. Ewell: Long-Term Monitoring of Ozone Injury to Yellow Pines

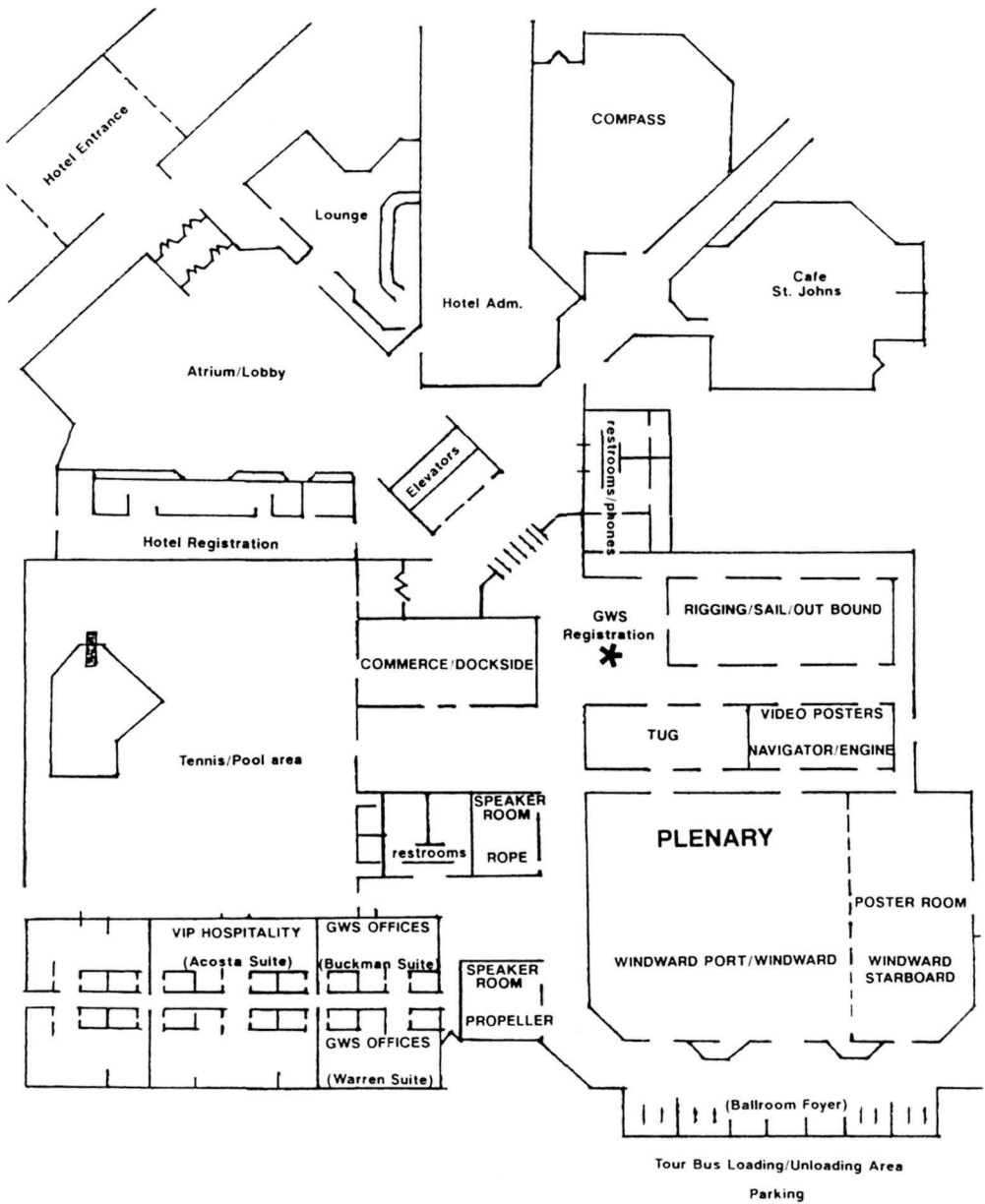
- Christine L. Favre and James L. Sherald: Gypsy Moth Management in Rock Creek Park
- Ian J.W. Firth and Brian W. Morris: Manassas Battlefield Landscape Restoration
- M.R. Fletcher and D.C. Fredericks: Using GIS as a Tool for Archeological Site Management
- Marshall Flug: Displaying Tradeoffs & Value Judgements: Multicriteria Methods for Resource Decision Making
- Mary K. Foley and Linda L. Gregory: The Ecology of Subalpine Communities of the Summits of Acadia National Park
- Elena T. Fraire and Mark W. Sogge: Evaluation of Existing Biological Baseline Information for the Colorado Plateau National Park Service Units
- Russell E. Galipeau, Jr.: Copper River Delta Institute: A Program for Research, Development, Education, and Interpretation
- Richard V. Giamberdine, Robert Lopenski and John Reynolds: Sustainable Design: Applications Throughout the National Park System
- Stephen T. Gibbons: National Natural Landmarks: A Program in Transition
- Randy H. Gimblett et al.: A Method for Assessing and Resolving Conflict Analysis for Multi-Objective State Park Resource Management
- Tim B. Graham and Ron Meyer: Six Years of Observations of a Great Blue Heron Rookery
- Tim B. Graham, Mike Salamacha, and Gary Salamacha: Piñon-Juniper Breeding Bird Community Dynamics at Arches National Park: Trends and Fluctuations Over Ten Years at a Breeding Bird Census Plot
- James H. Gramann: Science and Resource Allocation: The Displacement Dilemma at Yosemite National Park
- Robert H. Gray: Wildlife Monitoring, Research, and Resource Management on the Hanford Reservation in Southeastern Washington
- Jennifer S. Haley: Working within the Nevada Highway Department System to Meet National Park Service Goals
- Ross Haley: Cooperative Management of the Endangered Razorback Sucker at Lake Mead National Recreation Area
- Richard S. Hammerschlag and Stephen Syphax: The Rehabilitation of Kenilworth Marsh
- Ralph J. Hartley et al.: Monitoring Change in the Prehistoric Rock Art of Dinosaur National Monument
- Robert Higgins: Success Story—Cooperative Efforts in Abandoned Mine Land Mitigation and Reclamation on NPS Land
- Cat Hawkins Hoffman: Potential for Dam Removal on the Elwha River, Olympic National Park
- Helen Hossley: Recycling and Waste Management: There's a Place for Everything
- Judd Howell and Frederic Bioret: Comparison of Coastal Ecosystem Recovery after Human-Use Changes Between Two Biosphere Reserves
- Trudy Ingram: Why Park Science Programs Need Both Research and Resources Management: Examples from Nesting Seabirds

- Arthur K. Ireland: Aerial Photography Acquisition and Photogrammetric Mapping in the USNPS Southwest Region: A Unique and Inexpensive New Combination of Existing Equipment and Techniques
- Deborah K. Jansen: Food Habits of Florida Panthers in Big Cypress National Preserve
- Deborah K. Jansen and Kenneth D. Meyer: Population Status and a Localized Decline of Red-Cockaded Woodpeckers in Big Cypress National Preserve
- Kurt L. Jenkins and Edward E. Starkey: Modeling Elk Forage Values on Landscapes Adjoining Mount Rainier National Park
- Therese L. Johnson and David M. Swift: A Test of Rocky Mountain Bighorn Sheep Habitat Evaluation Procedure
- Bruce A. Jones: Paleoenvironmental Research in the Southern Rocky Mountains: Humans and Climate in the Gunnison Basin at 7000-5000 BP
- Bruce A. Jones and Tim B. Graham: Shoreline Archeology of Curecanti National Recreation Area
- Kyle Jones: Piping Plover Research and Management at Cape Cod National Seashore
- Charles Laing and William A. Patterson III: The Paleocology of Jack Pine (*Pinus banksiana*) at its Southeastern Range Limit in North America
- Keith Langdon, Janet Rock, and Robert Emmott: Applying the Nature Conservancy's Natural Heritage Methodology in Great Smoky Mountains National Park
- Lloyd L. Loope: Developing and Implementing Strategies for Combatting Alien Melastomes on Maui, Hawaii
- Walter L. Loope and Gregg L. Bruff: Planning for Recreational Use in a Highly Fragile and Scientifically Important Natural Area: Grand Sable Dunes, Pictured Rocks National Lakeshore
- Jerry Lorenz, Nancy Dunkle and Gary Hunter: Blurring the Lines: Agencies Sharing Mandates
- Patricia A. MacLaren: Partners in Communication: "Resource Management Notes"
- Arthur W. Magill: Monitoring Environmental Change with Color Slides
- David A. Manski et al.: The U.S. National Park Marine Debris Monitoring Program: Assessing Long-Term Changes in Marine Pollution
- Larry Martin, Richard Inglis, Jr., and William Werrell: Sand Bar Erosion in Grand Canyon National Park: A Response to Ground Water Seepage During Fluctuating Flow Releases from Glen Canyon Dam
- Paul McGuff: Public Trust
- Jean Marie McManus, Erv Gasser, and Hugh A. Devine: Developing a GIS Database from Multiple Map Sources in a Cultural Resource Park: Richmond National Battlefield Park
- Joe Meiman and Jeff Bradybaugh: Partnership Strategies to Achieve Protection of the Subterranean Aquatic Ecosystems of Mammoth Cave National Park
- Kenneth D. Meyer and Steven M. McGehee: Nesting and Foraging Habitat Selection by American Swallow-Tailed Kites in Big Cypress Swamp and Everglades Regions
- Diane Miller: In Support of Cultural Resources Management: The National Register Information System and the Integrated Preservation Software

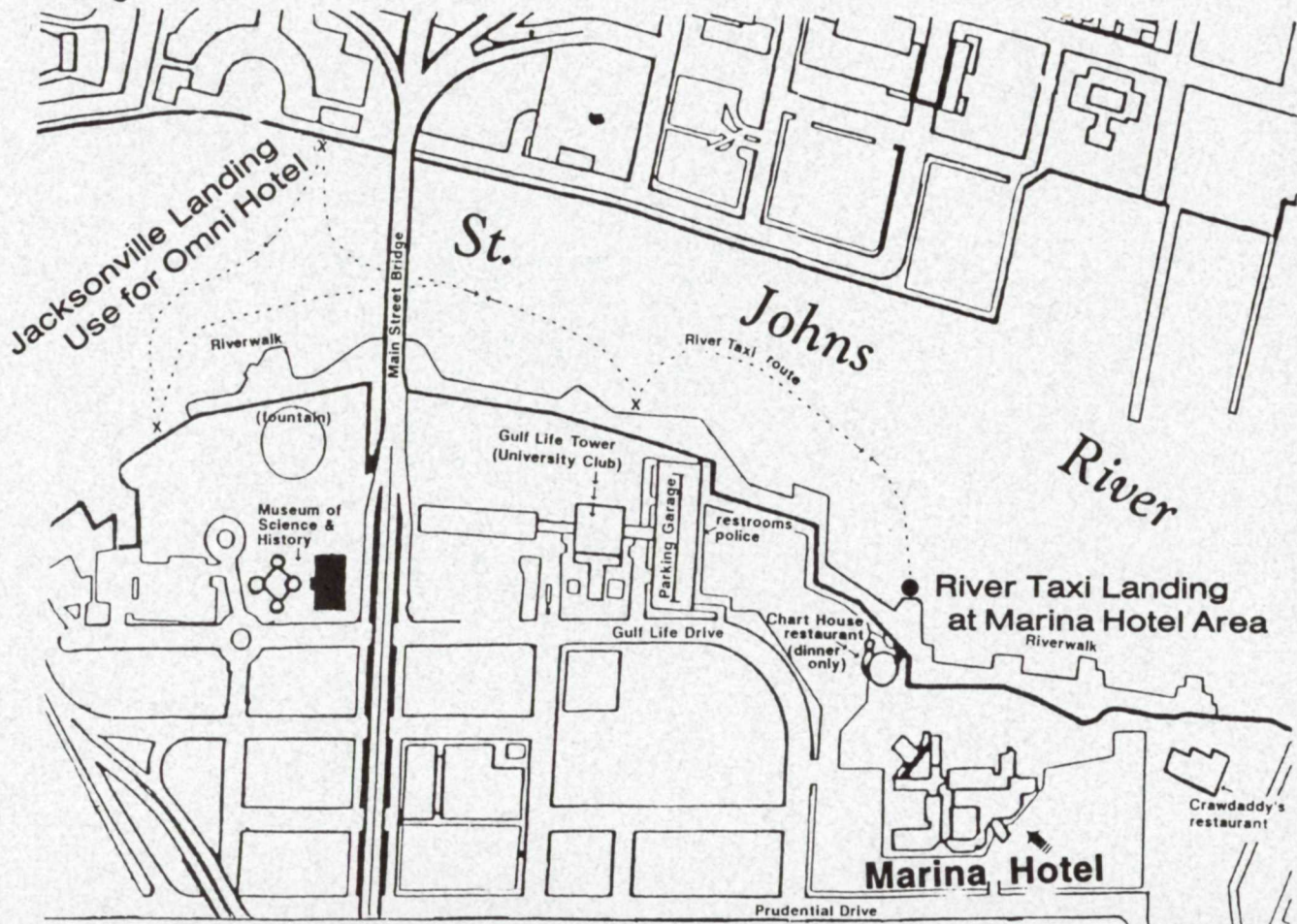
- Ray Morris: *Is Living History Dead? The Future of Living History Interpretation in the 1990s*
- Kerry Moss: *Sounds of Silence*
- Ronald J. Nagata, Sr., and Stephen J. Anderson: *The Evolution of Active Resource Management, Haleakala, East Maui*
- Susan Nelson: *Mapping Plant Communities and Assessing Cultural Resources of the Santa Monica Mountains National Recreation Area: A Study of a Community in Action*
- Howard S. Neufeld and James R. Renfro: *Spatial and Temporal Dynamics of Ozone in Great Smoky Mountains National Park and Implication for Plant Responses*
- Paul R. Nickens: *Archeological Resources and the Conservation Ethic: Advances in Site Preservation and Long-Term Management Goals*
- Carl D. Nielsen and David Galat: *Differences in Substrate Use by Macroinvertebrates in a Large, Cold Springbranch, Ozark National Scenic Riverways, Missouri*
- Del Wayne R. Nimmo: *The Detection of Nonpoint Threats to Parks—And What We Can Do About Them*
- Larry L. Norris: *Linkages for Planning Among Natural and Cultural Resources: Examples from Two Desert Parks*
- Allan F. O'Connell: *Physical Characteristics of Deer and an Evaluation of Sport Hunting on Fire Island, New York*
- William A. Patterson III: *Burning Australia—Lessons for North American Fire Managers*
- William A. Patterson III and David W. Crary, Jr.: *Prescribed Fire Experiments at Cape Cod National Seashore*
- Gordon R. Peters and Mark E. Bruhy: *Passport in Time: A Forest Service Initiative at Marketing Stewardship for Heritage Resources*
- David L. Peterson and Daniel L. Schmoldt: *A New Approach to the Development of Inventory and Monitoring Programs in National Parks*
- Jim Petterson: *Monitoring Shorebirds and Waterfowl in Cape Krusenstern National Monument in Northwestern Alaska*
- James R. Renfro and Howard S. Neufeld: *Effects of Ambient Ozone on Foliage of Plants in Great Smoky Mountains National Park*
- Dee Robbins and Tally Forbes: *Teacher Involvement in Park Research*
- Peter R. Robichaud and Randy B. Foltz: *An Onsite Sediment Prediction Model from Forest Roads and Timber Harvest Areas*
- David W. Robinson: *Impacts of Alternative Tourism in Sagarmatha (Everest) National Park: Implications for Sustainable Tourism*
- Malcolm Ross, Jr.: *Regional Resource Management through Networking*
- Peter G. Rowlands and Mark K. Sogge: *An Intensive Integrated Monitoring System for a Small Park Unit—Montezuma Castle*
- Catherin Schwemm: *Human Impact Effects on Small Mammal Diversity in the Santa Monica Mountains National Recreation Area*

- John R. Short: Characterization and Mapping of the Anthropogenic Soils of the Washington Monument Grounds
- Tammy M. Stidham and James L. Sherald: Dogwood Athracnose Research at the Center for Urban Ecology
- George H. Stillson: Environmental Context of Middle Archaic and Middle Woodland Cultures and Their Expression in Southern New England
- R. Stottlemeyer and R. Kepner: Relationship of Geomorphology to Lake, Pond, and Streamwater Quality, Noatak National Preserve, Alaska
- R. Stottlemeyer and D. Toczydlowski: Surface Water Chemistry During Snowmelt for a Catchment Draining into Lake Superior
- Hilary M. Swain, Ross C. Hinkle, and Paul A. Schmalzer: Stewardship at the Local Level: A Case Study for Brevard County, Florida
- Spencer James Taggart, Philip N. Hooge, and Terrance J. Quinn: Pacific Halibut at Glacier Bay National Park, Part I: The History and Present Status of Commerical Halibut, *Hippoglossus stenolepis*, Fishing in the Park
- Spencer James Taggart, Philip N. Hooge, and Terrance J. Quinn: Pacific Halibut at Glacier Bay National Park, Part II: Home Range Analysis of the Pacific Halibut, *Hippoglossus stenolepis*, Using Sonic Tags
- Michael J. Tranel: Changing to Prevent Change: Building a Science and Resource Management Program at Timpanogos Cave National Monument
- Anne M. Wolley Vawser: Archeology and Geographic Information Systems: Meeting the Needs of Cultural Resources Management and Research
- J. Reese Voshell, Jr., et al.: The Black Fly Quandary in New River Gorge National River: A Case History of the Role of Ecological Research and Monitoring in Natural Resource Management by the National Park Service
- David W. Willey, Sarah E. Rinkevich, and Michael W. Britten: Conservation and Ecology of the Mexican Spotted Owl on the Colorado Plateau
- Peter Williams and Jeffrey L. Marion: An Evaluation of Backcountry Campsite Management Strategies at Shenandoah and Great Smoky Mountains National Parks
- Wayne E. Williams, Delmar W. Bachert, and Paul L. Gaskill: Anglers on the Blue Ridge Parkway: Tourists and Locals
- Stephen Woodley: Internal and External Stresses to Ecosystems Protected by Canadian National Parks
- Andrea Woodward: Ungulate/Forest Relationships in Olympic National Park: Retrospective Exclosure Studies
- R. Gerald Wright and Elena Robisch: Natural Regulation of Ungulates in U.S. National Parks: Fact or Fiction?

Marina Hotel Floor Plan



Omni Hotel



Downtown Jacksonville

The George Wright Society



Dedicated to
The Protection, Preservation and Management
of Cultural and Natural Parks and Reserves
Through Research and Education