

National Gap Analysis Program Conference 2007

***Featuring the Southeast Regional Gap Analysis Project
(Alabama, Florida, Georgia, Kentucky, Mississippi, North
Carolina, South Carolina, Tennessee, and Virginia)***



September 10 – 13, 2007
Renaissance Asheville Hotel
Asheville, North Carolina

Announcement and Registration

Program Background:

The mission of the Gap Analysis Program (GAP) is to assist planners, managers, researchers, and policy makers in making informed decisions by providing spatially explicit biodiversity information. GAP is designed to identify “gaps” in the existing network of protected lands by quantifying the degree to which native vertebrate species and plant communities are represented in that network. GAP data and associated analytical tools are currently used in many applications, from basic scientific research to land management and conservation planning.

Purpose of the Conference:

This meeting is sponsored by the U.S. Geological Survey, the Biodiversity and Spatial Information Center at North Carolina State University, Auburn University, the Institute of Ecology at the University of Georgia, and the University of Idaho. Attendees will learn about the important environmental conservation issues in the country, particularly in the Southeast, and discuss how GAP data sets can be used for resource management and decision-making. The meeting will also include presentations and discussions about recent developments and applications from GAP projects across the country.

The plenary session will focus on conservation issues in the Southeast and on the use of the Southeast Gap Analysis Project (SEGAP) data for addressing these issues.

This meeting will bring together individuals and agencies interested in developing high priority management and conservation needs and provide a forum to discuss how data resources can be used to assist managers and conservation efforts. Presentations will highlight the results of the Southeast Gap Analysis Project.

Conference Location:

The meeting will be held at the Renaissance Asheville Hotel at One Thomas Wolfe Plaza Asheville, North Carolina. The Renaissance Asheville Hotel is located in the heart of historic downtown Asheville overlooking the Great Smokey Mountains and within walking distance of many craft and antique shops, over 20 restaurants, and nightspots. Parking at the hotel is convenient and free. The Renaissance Asheville Hotel website is: www.renaissanceasheville.com.

Transportation to Renaissance Asheville Hotel:

- Asheville Airport (AVL) - 15.7 miles; 20 minutes (approx.)

Directions to hotel: Take Interstate 26-West to Interstate 240-East. Exit 5-A, Merrimon Avenue. Continue straight to Woodfin Street. Turn left onto Woodfin Street. The hotel is on the right at One Thomas Wolfe Plaza.

Ground transportation services: call 828-209-3660, estimated taxi fare: \$40.00 (one way)

Car rental services: Avis, Budget, Enterprise, Hertz, National/Alamo (off airport)

Asheville bus schedule:

http://www.ashevillenc.gov/residents/transportation/city_bus/default.aspx?id=968

- Charlotte Douglas International Airport (CLT) – 124.2 miles; 1 hour 56 minutes (approx.)

Directions to hotel: Take Interstate 85-South toward Gastonia. Exit #17, Gastonia/Lincolnton toward Dallas/Lincolnton/Gaston Col. Turn Left on North Chester Street (US-321). Take ramp onto Interstate 40-West toward Statesville/Asheville #43B. Exit #53B/Asheville onto Interstate 240 West. Exit 5-A, Merrimon Avenue (US-25) onto Elm Street. Turn left on Merrimon Avenue (US-25). Turn Right on Woodfin St. Arrive at 1 Woodfin Street.

Car rental services: Alamo, Avis, Budget, Dollar, Enterprise, Hertz, National, and Thrifty

Hotel Information:

Meeting attendees must reserve rooms by **August 1, 2007**, by calling the hotel at (800)-468-3571, identifying themselves as members of the 2007 Gap Analysis Program Conference. After August 1, rates will increase and availability of rooms is not guaranteed. The Renaissance Asheville Hotel is offering the Federal Government Per Diem room rate of \$82 per night until August 1.

Registration and Deadlines:

The early registration fee for this 3-day meeting is \$300 (single-day rate \$175) if paid **by August 17**. Regular registration is \$350 (single-day rate \$175) with a deadline of **September 5**. After **September 5**, attendees can register on site at the late registration fee \$400 (single-day rate \$225). Full registration includes two luncheons. Student registration is \$200 for the full 3-day meeting.

Refund and Cancellation Policy:

Registration fees will be refunded if requested 14 days before the start of the meeting. Substitutions are accepted at any time (call the National Gap Analysis Program Office at 208-885-3555). If the meeting has to be cancelled because of unforeseen circumstances, the Gap Analysis Program at the University of Idaho will refund registration fees but cannot be held responsible for any other expenses, including cancellation/change fees assessed by airlines or travel agencies.

Weather and Suggested Dress:

Business casual clothing is acceptable for this meeting. Temperatures in Asheville in the month of September range from a high of 76° to a low of 56°.

Asheville Attractions and Recreational Opportunities:

For visitor information and suggestions, see www.exploreasheville.com. More information on where to eat and what to do during your stay in Asheville will be provided at the meeting.

- **Field Trip**

On Friday, September 14th, there will be a half day field trip along the Blue Ridge Parkway, about 30 miles one way from Asheville. Stops will include Craggy Gardens and Mount Mitchell State Park. Highlights include the panoramic views of the Blue Ridge Mountains, short hikes through heath balds and alpine forests of the tallest mountain in the Eastern U.S. Milo Pyne, Senior Southeast Regional Ecologist for NatureServe and Chris Kelly, Mountain Wildlife Diversity Biologist with the North Carolina Wildlife Commission will be available to answer questions and guide discussions about the plant communities and avian ecology of the area. Plant communities include Northern Hardwood Forest, Spruce-Fir Forest, and Montane Oak Forest. Mount Mitchell is one of Audubon's Important Bird Areas and fall migration of raptors should be going on in September.

Transportation in 15 passenger vans will be available for up to 65 field trip participants who register for the field trip in advance. Participants should plan to bring along snacks and clothing layers appropriate for rain and wind at higher elevations (> 6000 ft, 1829 m). Soft drinks and water will be provided. Vans will depart the hotel parking lot at 8:00 am and returning by 12:00 pm. Please contact the National Gap Analysis Program Office at nnell@uidaho.edu or (208)885-3555 as soon as possible if you are interested in signing up for the field trip.

Key Species identified in the Black and Great Craggy Mountains (Audubon 2004 Important Bird Areas of North Carolina, compiled by Walker Golder with the account of North Carolina's Mountain Region by David Lee.
(http://www.ncaudubon.org/NCIBA%202004/NCIBA_26MB.pdf).

KEY BIRD SPECIES				
Criteria		Season	Number	Year
2a	Yellow-bellied Sapsucker	B	---	2001
2a	Northern Saw-whet Owl	B	---	2001
2a	Alder Flycatcher	B	---	2001
2a	Hermit Thrush	B	---	2001
2a	Red Crossbill	B	---	2001
3a	Common Raven	All	---	2001
3a	Ruffed Grouse	All	---	2001
3a	Veery	B	---	2001
3f	raptors	FM	3,600-9,000	2001
3g	migratory landbirds	All	---	2001

B=Breeding FM=Fall Migration SM=Spring Migration W=Winter

<http://www.hikewnc.info/trailheads/parkway/guidedhikes/craggygardens.html>
<http://www.ils.unc.edu/parkproject/visit/momi/home.html>
<http://www.northcarolinaoutdoors.com/places/mountains/blacks.html>
http://www.theblueridgehighlander.com/mountain_birding/index.html
<http://www.northcarolinaoutdoors.com/pastimes/birding/birding.html>
<http://www.ncaudubon.org/NCIBA%202004/MOUNTAIN.PDF>

- Biltmore Estates

Biltmore Estates has offered Gap Analysis Program conference attendees discounted adult daytime admission tickets at the price of \$36. Vouchers can be reserved in advance by contacting the National Gap Analysis Program Office at nnell@uidaho.edu or (208)885-3555 and can also be obtained at the conference registration table. More information about the Biltmore Estates and what your admission ticket includes can be found at www.biltmore.com.

- French Broad Rafting Expeditions

Experience the thrill of whitewater rafting on Asheville's own French Broad River. Just 30 miles from Asheville. 5-mile & 9-mile whitewater trips or calm water rentals available. More information can be found at www.frenchbroadrafting.com or by calling (800)570-RAFT. Group discounts are available. If interested in joining a group being organized with GAP conference attendees, please contact Steve Williams at steve_williams@ncsu.edu or (919) 513-7413.

Program Highlights:

The Gap Analysis Program is fortunate to have in the plenary session on Tuesday, September 11, the following key note speakers:

Gary Myers, Director of the Tennessee Wildlife Resource Agency - Gary Myers has served as Executive Director of the Tennessee Wildlife Resources Agency for the past 29 years. He played a leadership role in the development and passage of a \$125 million annual expansion of the Dingle-Johnson fund and was president of the International Association of Fish and Wildlife Agencies in 1986. He has been actively involved in implementation of the North American Waterfowl Management Plan, both nationally and internationally. He also has served on the North American Wetlands Conservation Council and is presently involved in the North American Bird Conservation Initiative. He currently serves on the U.S. Trilateral Committee dealing with bird issues with Canada, Mexico and the U.S. The Tennessee Wildlife Resources Agency secured funds used to establish the first waterfowl Joint Venture, hosted the original meeting of what became the Lower Mississippi Valley Joint Venture and has remained actively involved in North American Waterfowl Management Plan implementation activities. He also served on the Sport Fishing and Boating Partnership Council Fisheries Program Strategic Plan Steering Committee (SFBPC) and the SFBPC National Fish Hatchery Project Steering Committee and is currently involved in an effort to develop a Regional Fish Habitat Plan. He also is a strong supporter of the Southeastern Aquatic Resources Partnership initiative.

Robert Ford, Supervisory Wildlife Biologist, United States Fish and Wildlife Service - Robert Ford graduated with a BS and MS in Wildlife Sciences from the University of Tennessee at Knoxville. For a few years, he worked for the state of Tennessee and under a variety of contracts conducting field work, primarily with passerines. He led the Tennessee Biodiversity Program for the Tennessee Conservation League for several years in the 1990s; then worked on ecoregional planning and community based conservation for The Nature Conservancy. Mr. Ford joined the U.S. Fish and Wildlife Service in 2000, and moved to the Washington DC office as coordinator for the North American Bird Conservation Initiative (NABCI). In 2006, he moved back to the southeast, and heads the FWS Migratory Bird Field Office in Memphis, TN, where he continues active involvement with Joint Ventures, bird survey and population work, and conservation partnerships and work in Mexico.

On Wednesday, September 12, the Gap Analysis Program will be sponsoring a special session and workshop on the applicability of GAP data to State Wildlife Action Plan implementation and monitoring efforts. This workshop will provide an opportunity for State Wildlife Action Plan coordinators and other natural resource professionals to learn how others have used GAP data to address conservation needs in their states and regions.

Tentative Agenda as of August 20, 2007:

<u>Monday, September 10, 2007</u>	
4:00-6:00 pm	Registration
5:00-6:00 pm	Discussion Topic: "What are the technical issues involved in using GAP data?" - <i>Joan Ratz, U.S. Geological Survey, Fort Collins, Colorado (invite only)</i>
6:00-8:00 pm	Welcome Reception (cash bar and appetizers)
<u>Tuesday, September 11, 2007</u>	
PLENARY SESSION	
8:00-4:00 pm	Registration
8:30-9:00 am	Continental Breakfast
9:00-9:10 am	Welcome to the 2007 National Gap Analysis Program Conference and Introduction of Gladys Cotter - <i>Jaime Collazo, U.S. Geological Survey, North Carolina State University, Raleigh, North Carolina</i>
9:10-9:20 am	Welcome - <i>Gladys Cotter, U.S. Geological Survey, Reston, Virginia</i>
9:20-9:25 am	Introduction of Plenary Speaker - <i>Alexa McKerrow, North Carolina State University, Raleigh, North Carolina</i>
9:25-9:55 am	Plenary Speaker - <i>Gary Myers, Tennessee Wildlife Resource Agency, Nashville, Tennessee</i> Wildlife conservation in the Southeast: From single species to ecosystem services
9:55-10:00 am	Introduction of Plenary Speaker - <i>Alexa McKerrow, North Carolina State University, Raleigh, North Carolina</i>
10:00-10:30 am	Plenary Speaker - <i>Robert Ford, U.S. Fish and Wildlife Service, Memphis, Tennessee</i> Bird conservation and management in the Southeastern U.S.: Evolution and challenge
10:30-10:45 am	Break
10:45-11:10 am	Strategic Plan for the National Gap Analysis Program - <i>Kevin Gergely, U.S. Geological Survey, Moscow, Idaho</i>
11:10-11:35 am	Protected Areas in the Future - <i>Larry Orman, GreenInfo, San Francisco, California</i>
11:35-12:00 pm	Continental-Scale Analysis of Ecological Context and Content of Federal Lands and Implications for Policy - <i>Michael Scott, U.S. Geological Survey, University of Idaho, Moscow, Idaho; Brad Griffith, U.S. Geological Survey, Alaska Cooperative Fish and Wildlife Research Unit, Fairbanks, Alaska; and Anna Pidgorna and Emmi Blades, University of Idaho, Moscow, Idaho</i>
12:00-1:30 pm	Lunch (provided)
SESSION 1: OVERVIEW OF SOUTHEAST GAP ANALYSIS PROJECT	
1:30-1:55 pm	SEGAP project overview and GAP landcover mapping - <i>Alexa McKerrow, North Carolina State University, Raleigh, North Carolina; Jaime A. Collazo, U.S. Geological Survey, North Carolina State University, Raleigh, North Carolina; Todd S. Earnhardt, North Carolina State University, Raleigh, North Carolina; Andrea Ernst, New Mexico State University, Las Cruces, New Mexico; James B. Grand, U.S. Geological Survey, Auburn University, Auburn, Alabama; Kevin Kleiner, Auburn University, Auburn, Alabama; Liz A. Kramer, University of Georgia, Athens, Georgia; Ed J. Laurent, North Carolina State University, Raleigh, North Carolina; Jason W. Lee, University of Georgia, Athens, Georgia; Mark D. MacKenzie, Auburn University, Auburn, Alabama; Milo Pyne, NatureServe, Durham, North Carolina; Matt J. Rubino, North Carolina State University, Raleigh, North Carolina; Amy L. Silvano, Auburn University, Auburn, Alabama; and Steven G. Williams, North Carolina State University, Raleigh, North Carolina</i>
1:55-2:15 pm	Vertebrate modeling in the Southeast: Process and review - <i>Amy L. Silvano, Auburn</i>

	<i>University, Auburn, Alabama; Matthew J. Rubino, North Carolina State, Raleigh, North Carolina; Steven Williams, North Carolina State University, Raleigh, North Carolina; and James B. Grand, U.S. Geological Survey, Auburn University, Auburn, Alabama</i>
2:15-2:40 pm	Online GAP Data Explorer Tool: An opensource GIS decision support tool for Gap Analysis data – <i>Steven G. Williams and James B. White, North Carolina State University, Raleigh, North Carolina</i>
2:40-3:00 pm	Break
3:00-3:30 pm	Using GAP data to design and inform field research - <i>James B. Grand, U.S. Geological Survey, Auburn University, Auburn, Alabama; and Amy L. Silvano, Mark D. MacKenzie, and Edward F. Loewenstein, Auburn University, Auburn, Alabama</i>
3:30-4:00 pm	A statewide approach for identifying potential areas for wetland restoration and mitigation banking in Georgia: an ecosystem functional approach - <i>Liz Kramer, Steve Carpenendo, Kevin Samples, and Jason Lee, University of Georgia, Athens, Georgia; and Alice Miller-Keyes, Georgia DNR, Environmental Protection Division, Atlanta, Georgia</i>
SESSION 2: POSTER SESSION AND SOFTWARE DEMONSTRATION	
4:00-4:30 pm	Poster Setup
4:30-5:30 pm	Reception (cash bar and appetizers)
4:30-6:00 pm	Poster Session and Software Demonstration
	Poster Titles:
	Land Management Stewardship in the Southeastern United States - <i>Alexa McKerrow, North Carolina State University, Raleigh, North Carolina; Andrea Ernst, New Mexico State University, Las Cruces, New Mexico; and Amy L. Silvano, Auburn University, Auburn, Alabama</i>
	Southeast Regional Land Cover Dataset: From the Mountains to the Sea - <i>Alexa McKerrow, North Carolina State University, Raleigh, North Carolina; Todd S. Earnhardt, North Carolina State University, Raleigh, North Carolina; Kevin Kleiner, Auburn University, Auburn, Alabama; Jason W. Lee, University of Georgia, Athens, Georgia; Milo Pyne, NatureServe, Durham, North Carolina; Mark D. MacKenzie, Auburn University, Auburn, Alabama; and Liz A. Kramer, University of Georgia, Athens, Georgia</i>
	Using Aquatic GAP analysis to prioritize watersheds for management of Alabama's species of greatest conservation need - <i>Gareth T. Turner, Kathryn D. Kennedy, and Taconya D. Piper, Auburn University, Auburn, Alabama; and Elise R. Irwin, U.S. Geological Survey, Auburn University, Auburn, Alabama</i>
	Methods and status of land cover mapping for the Northwest Gap Analysis Project - <i>Anne Davidson, University of Idaho, Moscow, Idaho; Tom Miewald, Sanborn, Portland, Oregon; Janet Ohmann, U.S. Forest Service, Portland, Oregon; Jimmy Kagan, Oregon State University, Portland, Oregon; Emilie Grossmann, Oregon State University, Corvallis, Oregon; Todd Sajwaj, University of Idaho, Moscow, Idaho; Jocelyn Aycrigg, University of Idaho, Moscow, Idaho; Steven Lennartz, Sanborn, Portland, Oregon; and Stacy McDonough, University of Idaho, Moscow, Idaho</i>
	Status of protection of ecosystems and habitats, related to the distribution area of Saffron-cowled blackbird (<i>Xanthopsar flavus</i>) at the Southern grasslands (Pampas) in Paraguay - <i>Oscar Rodas, Leticia López, and Cesar Balbuena, Asociación Guyra Paraguay, Paraguay</i>
	Crosswalking GAP stewardship codes to IUCN categories for GAP data inclusion in the World Database for Protected Areas – <i>Andrea Ernst, New Mexico State University, Las Cruces, New Mexico; Nicole Nell and Jocelyn Aycrigg, University of Idaho, Moscow, Idaho</i>
	Southern Examples of the NBII - Geospatial Interoperability Framework application - <i>Brandon League, ISSE, Knoxville, Tennessee; Wimolrat Ratchukool, University of Tennessee, Knoxville Tennessee; Shelaine Hetrick, Ila, Oak Ridge Tennessee; Mike Frame, U.S. Geological Survey, Oak Ridge Tennessee; Jean Freeney, U.S. Geological Survey, Oak Ridge Tennessee</i>
	An evaluation of the use of multicriteria evaluation in reserve site selection - <i>Heather A. Sander, Previous affiliation: Department of Geography, University of New Orleans, New Orleans, Louisiana; Present affiliation: Conservation Biology Program, University of Minnesota, Saint Paul, Minnesota</i>
	Biological Inventories from the Appalachian Highlands Network Inventory and Monitoring Program, National Park Service - <i>Nora Murdock, Robert Emmott, and Patrick Flaherty, National Park Service, Asheville, North Carolina</i>
	Geographic analysis of habitat change for endemic animal species of Puerto Rico - <i>Jessica</i>

	<i>Acosta, Pennsylvania State University, University Park, Pennsylvania; William A. Gould, Ph.D., International Institute of Tropical Forestry, Río Piedras, Puerto Rico; Robert P. Brooks, Ph.D., Pennsylvania State University, University Park, Pennsylvania</i>
	<i>Suburban growth and forest expansion following agricultural abandonment in Puerto Rico - Isabel Parés-Ramos, University of Puerto Rico, San Juan, Puerto Rico; William A. Gould, International Institute of Tropical Forestry, USDA Forest Service, Río Piedras, Puerto Rico; and T. Mitchell Aide, University of Puerto Rico, San Juan, Puerto Rico</i>
	<i>Gap Analysis in the US Virgin Islands - Mariano Solórzano, Gary Potts, and William A. Gould International Institute of Tropical Forestry, U.S. Forest Service, Río Piedras, Puerto Rico</i>
	<i>NatureServe Vista Demonstration: A Decision Support System for Gap Analysis and Conservation Planning - Patrick Crist, Pat Comer, Jon Hak, Janene McCrillis, Dan Shoutis, and Kristin Barker, NatureServe, Arlington, Virginia</i>
Wednesday, September 12, 2007	
CONCURRENT SESSION 3A: IS GAP FOR THE BIRDS?	
8:00-4:00 pm	Registration
8:30-9:00 am	Continental Breakfast
9:00-9:05 am	Welcome and Introduction to Session – <i>Robert Ford, U.S. Fish and Wildlife Service</i>
9:05-9:25 am	<i>Habitat modeling for eco-regional scale land bird conservation planning - Todd Jones-Farrand, University of Missouri, Columbia, Missouri; John Tirpak, Charles Baxter, and Bill Uihleinr, Lower Mississippi Valley Joint Venture, U.S. Fish and Wildlife Service, Vicksburg, Mississippi; Jane Fitzgerald, Central Hardwoods Joint Venture, American Bird Conservancy, St. Louis, Missouri; Frank Thompson, U.S. Forest Service, North Central Research Station, Columbia, Missouri; and Dan Twedt, U.S. Geological Survey, Patuxent Wildlife Research Center, Vicksburg, Mississippi</i>
9:25-9:45 am	<i>Designing sustainable landscapes for birds in the Atlantic Coast Joint Venture - Tim Jones, Atlantic Coast Joint Venture, U.S. Fish and Wildlife Service, Laurel, Maryland; Andrew Milliken, Atlantic Coast Joint Venture, U.S. Fish and Wildlife Service, Hadley, Massachusetts</i>
9:45-10:05 am	<i>Stepping-down national population objectives to regional and refuge levels in North Carolina and Virginia - C. Ashton Drew and Alexa McKerrow, North Carolina State University, Raleigh, North Carolina; Jaime Collazo, U.S. Geological Survey, North Carolina State University, Raleigh, North Carolina</i>
10:05-10:25 am	<i>Evaluating and enhancing GAP predictions of birds in western North Carolina - Ed Laurent, Steven Williams, and Alexa McKerrow, North Carolina State University, Raleigh, North Carolina; and Jaime Collazo, U.S. Geological Survey, North Carolina State University, Raleigh, North Carolina</i>
10:25-10:40 am	Break
10:40-11:00 am	<i>Mapping breeding habitat distribution of the Appalachian Yellow-bellied Sapsucker in North Carolina - Scott M. Pearson, Mars Hill College, Mars Hill, North Carolina and John Gerwin, North Carolina Museum of Natural Sciences, Raleigh, North Carolina</i>
11:00-11:20 am	<i>Overcoming challenges to implementing gap analysis in Alaska: modeling avian distribution using an inductive approach - Tracey Gotthardt and Tamara Fields, University of Alaska Anchorage, Anchorage, Alaska; and Falk Huettmann, University of Alaska Fairbanks, Fairbanks, Alaska</i>
11:20-11:40 am	<i>Our piece of the Partners in Flight jigsaw puzzle: Quantitative habitat and population objectives at the regional scale – Bob Altman, American Bird Conservancy, Corvallis, Oregon; Erin Stockenberg, U.S. Fish and Wildlife Service, Portland, Oregon; Daniel Casey, American Bird Conservancy, Kalispell, Montana; Michael Green, U.S. Fish and Wildlife Service, Portland, Oregon; and Barbara Bresson, U.S. Forest Service/Bureau of Land Management, Sandy Oregon</i>
11:40-12:00 pm	TBA
CONCURRENT SESSION 3B: GAP DATA IN STATE WILDLIFE ACTION PLANS	
8:00-4:00 pm	Registration
8:30-9:00 am	Continental Breakfast
9:00-9:05 am	Welcome and Introduction to Session - <i>Jill Maxwell, University of Idaho, Moscow, Idaho</i>
9:05-9:25 am	TBA
9:25-9:45 am	<i>Applications of GAP data for State Wildlife Action Plan implementation - Jill Maxwell,</i>

	<i>University of Idaho, Moscow, Idaho</i>
9:45-10:05 am	Analysis of the priorities, obstacles and opportunities for implementing U.S. State Wildlife Action Plans - <i>Lynn Maguire, Duke University, Durham, North Carolina; David Stoms and Frank Davis, University of California, Santa Barbara, Santa Barbara, California; and Michael Scott, U.S. Geological Survey, University of Idaho, Moscow, Idaho</i>
10:05-10:25 am	Application of SWReGAP data: Perspectives from State Wildlife Agencies - <i>Kenneth Boykin, New Mexico State University, Las Cruces, New Mexico</i>
10:25-10:40 am	Break
10:40-11:00 am	Kentucky GAP data in the Kentucky Wildlife Action Plan - <i>M. Keith Wethington, Kentucky Department of Fish & Wildlife Resources, Frankfort, Kentucky</i>
11:00-11:20 am	Use of GAP and natural heritage data in statewide land conservation planning in Georgia - <i>Matt Elliott, Georgia Department of Natural Resources, Athens, Georgia; Liz Kramer, University of Georgia, Athens, Georgia; and Chris Canalos and Jon Ambrose, Georgia Department of Natural Resources, Athens, Georgia</i>
11:20-11:40 am	The Northeast habitat classification project: Providing a foundation for regional wildlife action plan implementation - <i>Dave Morton, Virginia Department of Game and Inland Fisheries, Richmond, Virginia and Sue Gawler, NatureServe, Arlington, Virginia</i>
11:40-12:00 pm	Relating habitats in North Carolina Wildlife Action Plan to a regional basis - <i>Gordon Warburton, North Carolina Wildlife Resources Commission, Raleigh, North Carolina</i>
12:00-1:30 pm	Lunch (provided)
CONCURRENT SESSION 4A: CONSERVATION RESERVE DESIGN AND APPLICATIONS	
1:30-1:35 pm	Welcome and Introduction to Session – <i>William Gould, International Institute of Tropical Forestry, U.S. Forest Service, Río Piedras, Puerto Rico</i>
1:35-1:55 pm	Conservation priorities in Puerto Rico - <i>William Gould, Mariano Solórzano, Caryl Alarcón, Sebastián Martinuzzi, and Gary Potts, International Institute of Tropical Forestry, U.S. Forest Service, Río Piedras, Puerto Rico</i>
1:55-2:15 pm	Application of Gap Analysis Program data to conservation planning in Puerto Rico - <i>Patrick Crist, Pat Comer, Jon Hak, and Lynn Scharf, NatureServe, Arlington, Virginia; and Fernando Lloveras and Jorge Baez, Conservation Trust of Puerto Rico</i>
2:15-2:35 pm	Conservation priorities in Mexican ecoregions - <i>César Cantú, Universidad Autonoma of Nuevo Leon, Mexico; Patricia Koleff, Marcia Tambutti, and Andrés Lira-Noriega National Commission for Knowledge and Use of Biodiversity (CONABIO), Mexico; Michael Scott, U.S. Geological Survey, University of Idaho, Moscow, Idaho; Ignacio March, The Nature Conservancy, Mexico; and Rocío Esquivel, National Commission for Protected Areas (CONANP), Mexico</i>
2:35-2:55 pm	Developing Mexico's strategy for conservation: A National gap meta-analysis - <i>Andrés Lira-Noriega National Commission for Knowledge and Use of Biodiversity (CONABIO), Mexico</i>
2:55-3:15 pm	Habitat distribution models for 37 vertebrate species addressed by the multi-species habitat conservation plan of Clark County, Nevada - <i>Kenneth Boykin, New Mexico State University, Las Cruces, New Mexico; and David Bradford and William Kepner, U.S. Environmental Protection Agency, Las Vegas, Nevada</i>
3:15-3:30 pm	Break
3:30-3:50 pm	Southeast Regional Partnership for Planning and Sustainability (SERPPAS) - <i>Susan Gibson, U.S. Department of Defense, Atlanta, Georgia</i>
3:50-4:10 pm	Survey of Southeast protected lands and waters - <i>Lucas Ridley and Andy Carroll, University of Tennessee at Chattanooga, Chattanooga, Tennessee; and Shelaine Curd-Hetrick Information International Associates, Chattanooga, Tennessee</i>
4:10-4:30 pm	Use of GAP products in Oregon for assessments and in developing statewide environmental benchmarks - <i>James S. Kagan, Oregon State University, Corvallis, Oregon</i>
4:30-4:50 pm	Identifying strategic habitat conservation areas in Florida - <i>Mark Endries, Florida Fish and Wildlife Conservation Commission, Tallahassee, Florida</i>
4:50-5:10 pm	BIOBLITZES: Experts and citizens inventorying data to assess GAP maps and create baseline data for land planners - <i>Karen Dvornich, University of Washington, Seattle, Washington</i>

CONCURRENT SESSION 4B: WORKSHOP: APPLICABILITY OF GAP DATA TO STATE WILDLIFE ACTION PLANS: IMPLEMENTATION AND MONITORING EFFORTS	
1:30-1:35 pm	Welcome and Introduction to Session - <i>Julie Prior-Magee, U.S. Geological Survey, Las Cruces, New Mexico</i>
1:35-1:45 pm	GAPServe Introduction - <i>Jill Maxwell, University of Idaho, Moscow, Idaho</i>
1:45-2:15 pm	GAPServe exercise
2:15-2:25 pm	Online GAP Data Explorer Tool Introduction - <i>Steven Williams, North Carolina State University, Raleigh, North Carolina</i>
2:25-2:55 pm	Online GAP Data Explorer Tool: an online decision support tool for Gap Analysis datasets exercise
2:55-3:10 pm	Break
3:10-4:30 pm	Free time for participants to explore GAP data
EVENING DISCUSSION GROUP:	
5:00-6:00 pm	Discussion Topic: "What are the mechanics of transferring knowledge from the GAP products to decision makers?" - <i>Joan Ratz, U.S. Geological Survey, Fort Collins, Colorado (invite only)</i>
Thursday, September 13, 2007	
CONCURRENT SESSION 5A: GAP AND FIRE MANAGEMENT	
8:00-4:00 pm	Registration
8:30-9:00 am	Continental Breakfast
9:00-9:05 am	Welcome and Introduction to Session – <i>Zhi-Liang Zhu, U.S. Geological Survey, EROS Data Center, Sioux Falls, South Dakota</i>
9:05-9:25 am	Long Leaf Pine decision support tool for the East Gulf Coastal Plain - <i>Kevin Kleiner, Auburn University, Auburn, Georgia</i>
9:25-9:45 am	Using spatial data to prioritize prescribed burning across the Onslow Bight landscape - <i>Jennifer Costanza, The Nature Conservancy, Durham, North Carolina; Alexa McKerrow, North Carolina State University, Raleigh, North Carolina; Chris Szell, The Nature Conservancy, Durham, North Carolina; and Margit Bucher, The Nature Conservancy, Durham, North Carolina</i>
9:45-10:05 am	Development of an integrated ecological database: The mapping process used for the LANDFIRE project - <i>Don Long, U.S. Forest Service, Rocky Mountain Research Station, Missoula, Montana</i>
10:05-10:25 am	LANDFIRE mapping of NatureServe Ecological Systems: Methods and lessons learned - <i>Greg Dillon, U.S. Forest Service, Rocky Mountain Research Station, Missoula, Montana</i>
10:25-10:40 am	Break
10:40-11:00 am	The Fire Research and Management Exchange System (FRAMES): Technology in support of wildland fire research and management - <i>Greg Gollberg, University of Idaho, Moscow, Idaho; Jennifer Pollock, U.S. Geological Survey, Denver, Colorado; Jean Freaney, U.S. Geological Survey, Oak Ridge, Tennessee</i>
11:00-11:20 am	Southern Fire Portal: Regional fire information management - <i>Shelaine C. Hetrick, Information International Associates, Oak Ridge, Tennessee; Greg Gollberg, University of Idaho, Moscow, Idaho; Jennifer Pollock, U.S. Geological Survey, Denver, Colorado; Kevin Robertson, Tall Timbers Research Station, Tallahassee, Florida; Ronald Masters, Tall Timbers Research Station, Tallahassee, Florida; Ken Outcalt, U.S. Forest Service, Asheville, North Carolina; Mike Rauscher, U.S. Forest Service, Asheville, North Carolina; Ann M. Bruce, Tall Timbers Research Station, Tallahassee, Florida; Marilyn Naito, Tall Timbers Research Station, Tallahassee, Florida; and Chris Szell, The Nature Conservancy, Durham, North Carolina</i>
11:20-12:00 pm	Maintaining time-relevant national vegetation databases in the coming years - <i>Zhi-Liang Zhu, U.S. Geological Survey, EROS Data Center, Sioux Falls, South Dakota</i>
CONCURRENT SESSION 5B: AQUATIC GAP ANALYSIS PROGRAM: RESEARCH PROJECTS, DATA PRODUCTS, AND APPLICATIONS	
8:00-4:00 pm	Registration
8:30-9:00 am	Continental Breakfast

9:00-9:05 am	Welcome and Introduction to Session - <i>Gabrielle Canonico, U.S. Geological Survey, Reston, Virginia</i>
9:05-9:25 am	Coastal Aquatic Gap Analysis and Near-shore Habitat Classification - <i>James E. McKenna, Jr., U.S. Geological Survey, Great Lakes Science Center, Cortland, New York; Chris Castiglione, U.S. Fish and Wildlife Service, Amherst, New York</i>
9:25-9:45 am	Aquatic Gap Analysis in three dimensions - <i>Deborah Reusser, U.S. Geological Survey, Newport, Oregon and Nancy Elder, U.S. Geological Survey, Nordland, Washington</i>
9:45-10:05 am	Predicting effects of land-use changes on the distribution and abundance of Wisconsin stream fishes, from pre-settlement to future conditions - <i>Jana Stewart, U.S. Geological Survey, Middleton, Wisconsin</i>
10:05-10:25 am	Predicting freshwater mussel occurrence in the Delaware River - <i>Cara A. Campbell and William A. Lellis, U.S. Geological Survey, Wellsboro, Pennsylvania; Robert H. Hilderbrand, University of Maryland, Center for Environmental Science, Frostburg, Maryland; James E. McKenna, Jr., U.S. Geological Survey, Great Lakes Science Center, Cortland, New York</i>
10:25-10:40 am	Break
10:40-11:00 am	Lower Colorado river aquatic gap: meeting the needs of stakeholders - <i>Joanna Whittier, Kansas State University, Manhattan, Kansas; Craig P. Paukert, U.S. Geological Survey, Kansas State University, Manhattan, Kansas; Kristen Pitts, Kansas State University, Manhattan, Kansas; Jillian D. Olden, University of Washington, Seattle, Washington</i>
11:00-11:20 am	Geographic distributions of fish traits as tools for prioritizing large-scale freshwater conservation in the United States - <i>Emmanuel A. Frimpong, Virginia Polytechnic Institute and State University, Blacksburg, Virginia; and Paul L. Angermeier, U. S. Geological Survey, Virginia Polytechnic Institute and State University, Blacksburg, Virginia</i>
11:20-11:40 am	Using a vulnerability assessment to determine protective status of fishes in aquatic gap analyses - <i>Kimberly M. Mattson, Virginia Polytechnic Institute and State University Blacksburg, Virginia; and Paul L. Angermeier, U. S. Geological Survey, Virginia Polytechnic Institute and State University, Blacksburg, Virginia</i>
11:40-12:00 pm	Incorporating population boundaries into GAP assessments: Is gerrymandering in order? - <i>James H. Roberts, Virginia Polytechnic Institute and State University, Blacksburg, Virginia; Daniel J. Dutton, Virginia Polytechnic Institute and State University, Blacksburg, Virginia; Paul L. Angermeier, U. S. Geological Survey Virginia, Polytechnic Institute and State University, Blacksburg, Virginia; and Eric M. Hallerman, Virginia Polytechnic Institute and State University, Blacksburg, Virginia</i>
12:00-1:40 pm	Lunch (on your own)
CONCURRENT SESSION 6A: GAP MODELING AND MAPPING: NATIONAL AND INTERNATIONAL PERSPECTIVES	
1:40-1:45 pm	Welcome and Introduction to Session – <i>Jocelyn Aycrigg, University of Idaho, Moscow, Idaho</i>
1:45-2:05 pm	A pilot habitat change characterization in Kentucky: 1192-2001 – <i>Brian D. Lee, University of Kentucky, Lexington, Kentucky</i>
2:05-2:25 pm	Remote sensing of ecological systems: lessons learned from the NW GAP Project - <i>Steve Lennartz, Sanborn Solutions, Portland, Oregon</i>
2:25-2:45 pm	Models for ecological systems map building: random forest and gradient nearest neighbor. Which one works best? - <i>Emilie Grossmann, Oregon State University, Corvallis, Oregon; Janet Ohmann, U. S. Forest Service, Corvallis, Oregon; James Kagan, Oregon State University, Corvallis, Oregon; Kenneth Pierce, U.S. Forest Service, Corvallis, Oregon; Heather May, Oregon State University, Corvallis, Oregon; and Matthew Gregory, Oregon State University, Corvallis, Oregon</i>
2:45-3:05 pm	Glacial recession as a driver in vegetation patterns in Alaska - <i>Keith Boggs, University of Alaska, Anchorage, Alaska</i>
3:05-3:15 pm	Break
3:15-3:35 pm	Identifying Mexico’s terrestrial priority sites: an analysis of key targets and major threats - <i>Tania Urquiza, National Commission for Knowledge and Use of Biodiversity (CONABIO), Mexico</i>
3:35-3:55 pm	Current status of the gap analysis for the state of San Luis Potosi in Central Mexico - <i>Leonardo Chapa-Vargas, I.C. Monzalvo Santos, and MC. Jasso Gordo, Potosine Institute of Scientific and Technological Research, San Luis Potosí, Mexico</i>

3:55-4:15 pm	The use of high resolution remote sensing data to assess vegetation mapping and wildlife habitat modeling - <i>Sebastian Martinuzzi, University of Idaho, Moscow, Idaho; Lee Vierling, University of Idaho, Moscow, Idaho; William Gould, U.S. Forest Service, Río Piedras, Puerto Rico; Andrew Hudak, U.S. Forest Service, Moscow, Idaho; Ross F. Nelson, National Aeronautics and Space Administration, Greenbelt, Maryland; and Kerri Vierling, University of Idaho, Moscow, Idaho</i>
4:15-4:35 pm	Modeling it all: georeferenced data for vertebrates, invertebrates, vascular plants, and all forms of life from all taxa biodiversity inventories - <i>Paul Super, National Park Service, Lake Junaluska, North Carolina; Keith Langdon, Great Smoky Mountains National Park, Gatlinburg, Tennessee; Michael Kunze, Great Smoky Mountains National Park, Gatlinburg, Tennessee; Charles R. Parker, U. S. Geological Survey, Great Smokies Field Station, Gatlinburg, Tennessee; and Becky J. Nichols, National Park Service, Lake Junaluska, North Carolina</i>
4:35-4:55 pm	Using GAP data to guide integrated management of invasive species - <i>Gary N. Ervin and John D. Madsen, Mississippi State University, Starkville, Mississippi</i>
CONCURRENT SESSION 6B: AQUATIC GAP ANALYSIS PROGRAM: A DISCUSSION OF REGIONAL AND NATIONAL DATA INTEGRATION	
1:40-1:45 pm	Welcome and Introduction to Session – <i>Gabrielle Canonico, U.S. Geological Survey, Reston, Virginia</i>
1:45-2:05 pm	Importance of the Aquatic GAP Program to the National Fish Habitat Action Plan: Providing data, approaches, and resolution to the initial assessment of the status of fish habitats - <i>Dana Infante, Michigan State University, East Lansing, Michigan; Dayong Wu, Michigan State University, East Lansing, Michigan; Gabrielle Canonico, U.S. Geological Survey, Reston, Virginia; Doug Beard, U.S. Geological Survey, Reston, Virginia; Lizhu Wang, Institute for Fisheries Research, Ann Arbor, Michigan; and William W. Taylor, Michigan State University, East Lansing, Michigan</i>
2:05-2:25 pm	Improving data integration and analysis for the Aquatic Gap Analysis Program: A strategy for review and summary of completed projects - <i>Dayong Wu, Michigan State University, East Lansing, Michigan; Dana Infante, Michigan State University, East Lansing, Michigan; and Gabrielle Canonico, U.S. Geological Survey, Reston, Virginia</i>
2:25-2:45 pm	Great Lakes Regional Aquatic Gap Analysis: Preserving aquatic biodiversity in the Great Lakes region - <i>Jana Stewart, U.S. Geological Survey Middleton, Wisconsin; Jim McKenna, U.S. Geological Survey, Cortland, New York; Jeff Schaeffer, U.S. Geological Survey, Ann Arbor, Michigan; Paul Steen, U.S. Geological Survey, Ann Arbor, Michigan; and John Lyons, Wisconsin Department of Natural Resources, Madison, Wisconsin</i>
2:45-3:05 pm	Great Lakes Regional Aquatic Gap Analysis as a management tool: Some example applications - <i>James E. McKenna, Jr., U.S. Geological Survey, Cortland, New York; Jana Stewart, U.S. Geological Survey, Middleton, Wisconsin; Jeff Schaeffer, U.S. Geological Survey, Ann Arbor, Michigan; Paul Steen, U.S. Geological Survey, Ann Arbor, Michigan; and John Lyons, University of Wisconsin Zoological Museum, Wisconsin Department of Natural Resources Curator of Fishes, Madison, Wisconsin</i>
3:05-3:15 pm	Break
3:15-3:35 pm	Integrating Data: Issues, Examples, Obstacles, and Opportunities for Aquatic GAP – <i>Scott Sowa, University of Missouri, Columbia, Missouri</i>
3:35-5:00 pm	Discussion on GAP data integration – <i>Gabrielle Canonico, U.S. Geological Survey, Reston, Virginia (all participants)</i>