Institute for Parks @ Clemson University

FUNDED EXTRAMURAL RESEARCH


2013-2014 Thinking Globally—Acting Locally: Enhancing Environmental Sustainability through an Interactive Mobile Exhibit from Kenya to South Carolina. ($20,000 HEHD Innovation Grant; PI Quigley, Co-PI’s Hall, Che, Dogbey)

2012-2013 Health and Wellness Promotion: Development of a Healthy Parks-Healthy People (HPHP) Strategic Action Plan for Hot Springs National Park ($57,540). Institute researchers and faculty from public health are helping to develop a plan to implement the seven guiding principles of the national HPHP program at Hot Springs National Park in Arkansas. (PI - Schmalz, Co-PI’s Hallo, Griffin)

2012-2017 United States Department of Agriculture (USDA), ($479,000)-Landscape-Scale Thresholds of Early Successional Habitat: Reconciling Biodiversity, Public Perception, and Timber Yield in Managed Forests. E. Baldwin CO-PI with Susan Loeb and Tammy Cushing (Clemson University), and the Nantahala National Forest Service research division. E. Baldwin specific role will be to measure public perception as it relates to different harvest techniques designed to enhance biodiversity in the Nantahala National Forest.

2007-2013 The Open Parks Grid at Clemson University (OPG). This project was initiated in 2007. The OPG is a visionary plan that uses cyberinfrastructure to unite the highly distributed parks community of practitioners, academics (natural and social scientists), policy-makers, and citizens. This has required the building of a multi-disciplinary team that extends within and beyond Clemson University, and includes the National Park Service as first partner for beta testing.

2007 - $7,000 to host a conference to support the initial visioning of the Open Parks Grid, Clemson University. PI-E. Baldwin

2010 - $136,000 Grant to support further content development, NPS. CO-PI E. Baldwin with B. Wright, and E. Gore, all from Clemson University

2010 - $759,000 Grant to build infrastructure, further develop and add content, refine user interface and add partners, Institute of Museum and Library Science National Leadership Grant. PI E. Gore, CO-Pls E. Baldwin and M. Witt from Purdue


**2008-2013**  
**National Audubon Society. ($506,000)** Research for the evaluation and adaptive management of LEAD GREEN conservation fellowship program and the GROW GREEN innovative conservation grants program. This research investigates the activities of TogetherGreen, an initiative of the National Audubon Society, with support from Toyota North America. Through two national programs—a fellowship-training program and a conservation grants program—TogetherGreen aims to build leadership for the future by training 200 emerging conservation professionals and to engage people in innovative conservation action by funding over 425 conservation initiatives (85 conservation projects each year for 5 years). Over 5 years this research evaluates the outcomes of the training program and investigates the activities of the grants program to assess not only to what extent each project is effective, but also to explore why conservation outcomes are occurring. In evaluating the training program, we use Kirkpatrick’s four level model (1983) for assessing training outcomes to investigate a range of potential outcomes such as utility judgments, knowledge, skill development, and behaviors pertaining to leadership, conservation planning, adaptive management, partnerships, and engaging diverse audiences, as well as career trajectory. Co-principal Investigators: **R.B. Powell**, **M.J. Stern** (Virginia Tech), & N. Ardoin, (Stanford Univ.).

**2012-2013**  
**Investigating local sustainable environmental perspectives of Kenyan community members, teachers, and students ($49,997 HEHD Innovation Grant; PI Quigley, Co-PI’s Hallo, Che, and Dogbey)**

**2012**  
**Perceptions of climate change at Kenai Fjords National Park ($2,948 Clemson University Project Completion Grant; PI Hallo, with substantial assistance from M. Brownlee)**

**2010-2012**  
**National Parks Conservation Association—Center for Park Management ($219,368).** Assessing quality indicators for interpretive programs in the National Park Service. We will evaluate the effectiveness of a range of interpretation programs in NPS units. We will also explore which program attributes tend to most consistently lead to desired outcomes across a wide range of programs in varying contexts. Co-principal Investigators: **M.J. Stern** (Virginia Tech) and **R.B.Powell**.

**2009-2012**  
**US National Park Service ($128,688).** Assessing the health of Environmental Interpretation and Education in the National Park Service. The purpose of this project is to develop an assessment tool that can be applied at the individual park level that will assess the condition of interpretation and education products and services. Results of assessments will be used to inform field decisions for creating and sustaining quality I&E programs by providing measurable indicators of success and to inform investment decisions to address deficiencies and sustain
excellence. Data collected at the park-level through the assessment tool will also be used to evaluate the health of the overall Interpretation and Education Program servicewide. Co-principal Investigators: M.J. Stern (Virginia Tech) and R.B.Powell.


2011-2012  Clemson University ($44,000) Research to support the application of indicator and standard-based recreation management frameworks on the Clemson University Experimental Forest: An assessment of recreational trail use, impacts, and issues (Jeff Hallo, P.I., with substantial assistance from J. A. Beeco)


2010-2011  Clemson University Research Grant Committee (URGC) Program at Clemson University ($4,985)-Archiving Narratives of People Displaced by a National Park. E. Baldwin-PI on a grant to travel to the community adjacent to the Core Banks National Seashore to interview locals, and start a project in such a way as to lead to a larger grant to support the same work. Preliminary data has been collected, and this will lead to a proposal Spring of 2012 with the National Endowment for the Humanities.

2010-2013  Anonymous Donor ($150,000) Good lighting practices fellowship and research fund for the study of the social aspects of natural night and light resources in parks and protected areas (J. Hallo, P.I., with substantial assistance from F. Mainella and B. Smith) A natural night environment, light resources, and lighting are fundamental to a high quality visitor experience and the protection of resources in national parks, as well as other parks and protected areas. A need exists for studies investigating the social and experiential aspects of natural night and light resources in parks, protected areas, and surrounding communities. The major objectives for this study are to 1) better understand the
importance of natural night and light resources to the visitor experience, 2) quantify visitors’ perceptions of natural night and artificial light impacts, and 3) assess visitors and managers’ attitudes towards various management strategies associated with natural night, light resources, and artificial light. This study was funded in August 2010 and currently a survey to examine night resources and their management is being prepared. This survey will be conducted with all national park service units and a sample of state parks in the Fall of 2010.

2010-2012  **NOAA Sea Grant ($9,947) Social impact analysis of offshore windpower development on tourism and recreation in South Carolina** (Jeff Hallo, P.I., with substantial assistance from M. Brownlee and L. Jodice) Both North Myrtle Beach and Georgetown areas of South Carolina are being examined for offshore windpower development. However, there has been no in-depth investigation of the potential impacts of offshore windpower on SC coastal stakeholders, and particularly tourist and recreationists. The overall goal of the project is to evaluate attitudes and intent to support or oppose offshore windpower among stakeholders with interest in using the coast and marine waters off the Little River/North Myrtle Beach area of South Carolina. The project was funded in July 2010 and preliminary stakeholder interviews are just beginning.

2009-2010  **USDA Forest Service ($90,000) Development of an Action Plan to Increase the Sustainable and Regionally Appropriate Use of Natural and Historic Resources in Union County, South Carolina** (J. Hallo co-P.I. with Drs. W. Norman and B. Brookover) Union County is known for its abundance and diversity of natural and historic resources, but use of the full range of these resources by visitors is meager. This research is intended to examine the nature-based recreation activities that could be developed in Union County to increase visitation and the local economy. The project will consist of three phases, and incorporate a mixed-methods approach, using both secondary data from quantitative surveys and primary data from qualitative focus groups. Currently the project work is in Phase II, which involves surveys of both heritage tourists and off-highway vehicle recreationists.

2008-2010  **National Park Service ($110,225) Visitor management and carrying capacity at Cumberland Island National Seashore** (J. Hallo co-P.I. with Dr. R. Manning) Cumberland Island National Seashore (Georgia) contains significant natural, cultural and recreational resources, including more than nine thousand acres of designated wilderness. Recreation visitation to Cumberland Island increased in 2007 by 65%, and it is now at an all-time high of more than 70,000 visits annually. The overall purpose of this research is to gather information that will help support application of the Visitor Experience and Resource Protection (VERP) framework to guide visitor management and carrying capacity decisions at Cumberland Island National Seashore. The study will also address the related design and implementation of a transit system. The study will consist of two phases, both employing quantitative surveys. Currently the project work is in
Phase II, which focuses on collection of data to help formulate standards of quality for the visitor experience.

2008-2009 **Clemson University ($7000)** Understanding Illegal Wildlife Behavior: Wild hog release adjacent to the Great Smoky Mountains National Park. The purpose of this research is to develop an in-depth understanding as to the motivations of the hog hunting culture, specifically as it relates to unwanted transport and release of additional hogs in the region, so as to clearly define the social drivers for the illegal behavior. Semi-structured interviews with local experts and the community were started in the fall of 2008. Development of phase II is in process.

2008-2009 **US National Park Service ($266,202)** Development of a sustainable tourism/destination centerpiece strategy for the Rocky Knob Area of the Blue Ridge Parkway (Floyd and Patrick Counties, VA) (J. Hallo, co-P.I. with Drs. McGehee (VT), Norman (CU), McGee (VT), and Ms. Goetcheus (CU) The National Park Service and Blue Ridge Heritage Inc. are seeking to conceptualize a sustainable tourism strategy for Floyd and Patrick Counties in Southwestern Virginia and in the Rocky Knob area of the Blue Ridge Parkway. A multi-disciplinary team of tourism, park, geography and landscape planning researchers and extension specialists from Clemson University and Virginia Tech collaborated to meet this goal. Research to support creation of a sustainable tourism strategy was accomplished over two years and actively involve key community stakeholders. This research (1) identified and inventory existing tourism assets, (2) determined tourism asset gaps/needs, and (3) developed specific recommendations/alternatives for tourism marketing and sustainable economic development that enhance and respect the quality of life in the region. The project was completed in 2009 and its results were delivered to the project sponsors and the Congressman Rick Boucher’s office. Manuscripts related to the study are in preparation by several of the project team members.

2009 **Prepared for South Carolina State Parks ($2,475).** Visitor Profile and Evaluation: Atalaya Art Festival at Huntington Beach State Park. Created a visitor profile, evaluated the festival and assessed the effectiveness of marketing. Principal Investigator: R.D. Bixler

2008 **Cleveland Metroparks, Cleveland, OH.** Evaluation of the Potential for a Park Neighbor Program to Increase Environmental Integrity of Cleveland Metroparks. Final Report: Analysis of attitudes of local residents toward changing their residential landscaping to reduce runoff into watersheds managed by a park district. Co-Investigators: R.D. Bixler and C.E. Vadala.

2008 **Prepared for South Carolina State Parks ($2,475).** Visitor Profile and Evaluation: Charles Towne Landing Founders Day Celebration. Created a visitor profile, evaluated the festival and assessed the effectiveness of marketing. Principal Investigator: R.D. Bixler
2007-2011 US National Park Service and Friends of the Great Smoky Mountains National Park ($155,600). Research for sustainable adaptive management of environmental education and outreach at Great Smoky Mountains National Park. The investigators will develop an internally sustainable evaluation system for the curriculum-based education outreach programs. In addition, the investigators will evaluate and research 3 specific components of public education and outreach provided by Great Smoky Mountains National Park (GSMNP): (1) Junior Rangers; (2) teacher-focused educational activities; and (3) marketing of educational and interpretive programs of GSMNP, including traditional on-site interpretive programs as well as school-based outreach and teacher-focused programs. The marketing component of the research will also include viability analysis of educational outreach opportunities for local area high schools. Co-principal Investigators: M.J. Stern (Virginia Tech) and R.B.Powell.

2007-2010 US National Park Service Wilderness Stewardship & Recreation Management Division ($70,000). Evaluation of wilderness recreational ethics education on public lands. This research will evaluate the effectiveness of “Leave-No-Trace” and “Tread Lightly” outdoor skills and ethics training programs to inform management decisions regarding the future direction of these programs. Co-principal Investigators: R.B.Powell and Brett A. Wright (Clemson University).

2007 USDA Forest Service ($16,036) Needs and feasibility assessment for the development of additional campground facilities at Buck Hall Recreation Area, South Carolina. (J. Hallo, co-P.I. with Drs. Robert Bixler, Chi-Ok Oh, and Jason Draper. Buck Hall Recreation Area is a popular camping and boating site in the Francis Marion National Forest. The area is managed by the U.S.D.A. Forest Service (USFS). During peak season periods camping, boat access, and parking facilities at Buck Hall are often at capacity. A project was completed to assess the need for and financial feasibility of additional investment scenarios at Buck Hall to meet public demand and add public value. Investment possibilities examined included, but were not limited to, changing camping, boating access, and parking capacities. The project used existing (i.e., secondary) data, site visits, and the recreation literature as the basis for all project tasks and deliverables. The completed project resulted in a final report delivered to the USFS.