

# CURRICULUM VITAE

## Thomas Scott Hctor, Ph.D.

Director of the Center for Landscape Conservation Planning  
Research Associate Professor  
College of Design, Construction and Planning  
University of Florida

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Department of Urban and Regional Planning  
University of Florida

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### EDUCATION

University of Florida, Gainesville, FL  
2003. Received Ph.D. in Department of Wildlife Ecology and Conservation. Dissertation title:  
Regional landscape analysis and reserve design to conserve Florida's biodiversity.

University of Florida, Gainesville, FL  
1992. Completed a Master of Forest Resources and Conservation degree specializing in  
conservation biology and policy. Major course work included conservation biology, wetland and  
aquatic systems conservation, landscape ecology, and resource policy and management. Wrote  
technical paper on the application of buffer zone concepts to reserve design.

Harvard University, Cambridge, MA  
1989. Received a B.A. in History and Science in June 1989. Emphasis was on biology  
and American history in course work. Graduated summa cum laude in major with a 3.85 grade  
point average and a 3.65 overall. Wrote senior thesis on the history of early American fish  
culture and the involvement of anglers. Received a Harvard College Scholarship and a  
John Winthrop Scholarship for academic achievement through 1987-1989.

Astronaut High School, Titusville, FL  
1985. Class valedictorian. All-state in football and All-district in tennis.

### AREAS OF SPECIALIZATION AND SKILLS

- Regional landscape ecological analysis and conservation planning
- Ecological reserve network design
- Wildlife corridor identification and design
- Geographic Information Systems (GIS) spatial analysis using ArcGIS
- Focal species conservation planning
- Ecosystem service and green infrastructure planning
- Collaborative applied research on regional, state, and local conservation and land use planning
- Climate resiliency research and planning regarding ecosystem response and facilitation of adaptation
- Applying Landscape Ecology and Conservation Biology to environmental design at multiple scales

## **APPOINTMENTS AND POSITIONS**

2014-present	Research Associate Professor, Department of Landscape Architecture, University of Florida
2008-present	Director, Center for Landscape Conservation Planning, Department of Landscape Architecture, University of Florida
2005-present	Greenways Program Scientist, Conservation Trust for Florida
2003-present	Research Associate and Principal Investigator, GeoPlan Center, Department of Urban and Regional Planning, University of Florida
1998-present	Private Consultant, Conservation GIS, Research, and Planning
2006-2007	Adjunct Faculty, Department of Landscape Architecture, University of Florida
1997-2003	Research Assistant and Co-Principal Investigator, GeoPlan Center, Department of Urban and Regional Planning, University of Florida
1995-1996	Research Assistant, GeoPlan Center, Department of Urban and Regional Planning, University of Florida
1995-1996	Field Assistant, Conway Conservation, Inc.
1993	Research Assistant, Department of Wildlife Ecology and Conservation, University of Florida
1992-1995	Field Assistant, Department of Wildlife Ecology and Conservation, University of Florida

## **PROFESSIONAL EXPERIENCE**

- Principal Investigator, Identification of Florida Panther protection priorities, opportunities, and threats, 2017-, Working with U.S. Fish and Wildlife Service on science-based identification of highest priority areas for Florida panther habitat and corridor protection across the state of Florida.
- Principal Investigator, Identification of Hillsborough County Conservation Priority Areas, 2017-, Working with Hillsborough County natural resources staff to identify priorities for their land conservation acquisition program including development of a GIS database to guide prioritization and acquisition decisions.
- Research Scientist, National Wildlife Refuge Association Landscape Conservation Design project, 2015-. Working with the National Wildlife Refuge Association and the U.S. Fish and Wildlife Service to develop the Landscape Conservation Design concept and analysis methods on two Florida National Wildlife Refuges: Florida Panther NWR and Lower Suwannee NWR.
- Principal Investigator, The Florida Strategic Plan for Sustaining Military Readiness through Conservation Partnerships, 2015-. Working with the U.S. Fish and Wildlife Service, the U.S. Air Force, Florida Natural Areas Inventory, The Florida Chapter of The Nature Conservancy, and the Florida Fish and Wildlife Conservation Commission on identifying focal species habitat and other conservation priorities around all Air Force installations in Florida to facilitate opportunities to protect important natural resources and military training opportunities.
- Project Team Member, Polk County Habitat Conservation Plan, 2011-. Working with Wildlands Conservation, Polk County, the U.S. Fish and Wildlife Service, and the Florida Fish and Wildlife Conservation Commission to identify habitat conservation priorities and mitigation options for federally listed and candidate species in Polk County, Florida.
- Principal Investigator, Critical Lands and Waters Identification Project, 2006-. Working with the Florida Natural Areas Inventory, Florida Fish and Wildlife Conservation Commission, and U.S. Fish and Wildlife Service to identify statewide biodiversity and ecosystem service conservation priorities. CLIP versions 1.0 and 2.0 were completed by 2011. We are currently working on CLIP 3.0 scheduled to be completed in December 2013.
- Greenways Program Scientist, Conservation Trust for Florida, 2005-. Working with the Conservation Trust for Florida to implement protection of priority landscape linkages in Florida.
- Principal and Co-Principal Investigator, Florida Ecological Greenways Network, 1995-. Working with the Florida Department of Environmental Protection Office of Greenways and Trails and the Conservation Trust for Florida to identify an integrated statewide landscape conservation network for Florida; to

prioritize identified areas; to revise the model results as new information becomes available, and to protect critical wildlife corridors and large intact rural landscapes.

Project Team Member, Northwest Florida Wildlife Corridor Priorities, 2014-2015. Working with Defenders of Wildlife to identify key unprotected gaps in priority wildlife corridors from the Suwannee River west to the Perdido River in northwest Florida.

Project Team Member, Gopher Tortoise PES, 2013-2014. Working with Julie Morris from Wildlands Conservation and the Florida Fish and Wildlife Conservation Commission to develop a gopher tortoise payment for ecosystem services program in southwest Florida.

Project Team Member, Florida Panther Outreach, 2013-2014. Working with Julie Morris from Wildlands Conservation and the Florida Fish and Wildlife Conservation Commission to identify strategic parcels and stakeholders for panther habitat and corridor conservation in south-central Florida.

Principal Investigator, Predicting and Mitigating the Effects of Sea Level Rise and Land Use Change on Imperiled Species and Natural Communities, 2011-2014. Working with the Florida Fish and Wildlife Conservation Commission, University of Central Florida, and Florida Natural Areas Inventory on a statewide project to assess the impacts of land use change and sea level rise on imperiled species and communities and to identify adaptation strategies.

Associate Investigator, Planning for Sea Level Rise in the Matanzas Basin Project, 2011-2015. Working with the Guana Tolomato Matanzas National Estuarine Research Reserve and other partners from the University of Florida to assess the combined impacts of sea level rise and land use change in the Matanzas basin and to define conservation priorities.

Principal Investigator, Northwest Florida Green Infrastructure GIS Database, 2011-2013. Working with the U.S. Fish and Wildlife Service to organize, analyze, and synthesize available and new GIS analyses to identify biodiversity and ecosystem service conservation priorities in the Florida panhandle from the Apalachicola River west through Escambia County.

Principal Investigator, Cooperative Conservation Blueprint Regional Pilot Project, 2010-2014. Working with the Florida Fish and Wildlife Conservation Commission, Florida Natural Areas Inventory, and other partners to identify conservation priorities using a combination of state and regional data. Also working with stakeholders and local and regional governments to identify incentives-based conservation strategies to protect natural resources in south-central and southwest Florida.

Principal Investigator, Florida Ecological Greenways Update Project, 2010-2013. Working with the Florida Fish and Wildlife Conservation Commission and Conservation Trust for Florida on a State Wildlife Grant to update the base boundaries and priorities of the Florida Ecological Greenways Network using updated and new input GIS data layers and ecological corridor modeling methods.

Principal Investigator, Heartland 2060 Ecological Prioritization, 2009-2011. Working with Florida Natural Areas Inventory, The Nature Conservancy, Archbold Biological Station, and the Central Florida Regional Planning Council to identify ecological conservation priorities throughout south-central Florida to support regional visioning and comprehensive conservation and land use planning. Priorities were identified using a combination of data from the Critical Lands and Waters Identification Project and regional data.

Principal and Co-principal Investigator, Impacts Assessment Decision Support Model Project for the Southwest Florida Water Management District, 2002-2011. Worked with the SWFWMD to develop a GIS-based decision support model that can be used to assess the potential impacts of proposed activities on SWFWMD-owned lands.

Principal Investigator, Identification of Ecological Connectivity Priorities for Babcock Ranch, 2009-2010. Worked with Reed Noss of the University of Central Florida to develop recommendations for maintaining and restoring functional ecological connectivity between Babcock Ranch and other existing conservation areas in the southwest Florida region. Work included development of GIS habitat and connectivity models for the Florida black bear, Florida panther, and Sherman's fox squirrel; identification of issues with road crossings; and the development of recommendations to further study and protect regional ecological connectivity.

Principal Investigator, Regional Gopher Tortoise Habitat Modeling Project, 2009-2010. Worked with the U.S. Fish and Wildlife Service to develop a GIS assessment of potential gopher tortoise habitat in Florida, Georgia, and part of Alabama. Work includes identification of best potential habitat including areas that may be suitable for land protection strategies such as mitigation banking.

Principal Investigator, Cooperative Conservation Blueprint Project, 2008-2009. Worked with the Florida Fish and Wildlife Conservation Commission and other partners to adapt the Critical Lands and Waters Identification Project conservation priorities to development of a state conservation vision. Work included development of additional GIS analysis to inform the development of the blueprint including proposed new conservation incentives programs.

Principal Investigator, Southwest Florida Water Management District Conservation Land Acquisition Re-assessment, 2008-2009. Worked with the Southwest Florida Water Management District and Wildlands Conservation to develop a new GIS methodology for identifying conservation land acquisition priorities. Work included the development of a new GIS model integrating data from the Critical Lands and Waters Identification Project and various regional data to identify conservation priorities.

Habitat Modeler, Swallow-tailed Kite Regional Habitat Analysis Project, 2008-2009. Worked with Suzanne Beyeler at the University of Florida and Ken Meyer from Avian Research and Conservation Institute to identify Swallow-tailed Kite habitat in Florida, Georgia, and South Carolina. Work included the development of GIS habitat models that identify potential habitat and habitat quality using land use data and known kite nesting locations.

Principal Investigator, Greater Ridge Conservation Planning Tool, 2007-2008. Worked with The Nature Conservancy and Archbold Biological Station to identify important conservation priority areas and supporting lands and waters needed to maintain the ecological integrity of conservation lands within the Lake Wales Ridge region of central Florida. Work included development of a GIS database of priority conservation areas, vertebrate species habitat, wildlife corridors, conservation lands buffers, and priority watershed protection areas.

Principal Investigator, Identification of Corridor Options for the Florida Black Bear in the Wekiva River Basin, 2007-2008. Worked with The Nature Conservancy to identify key parcels for completing a functional bear corridor between the Ocala National Forest and protected lands in the Wekiva River Basin north of Orlando using GIS habitat analysis, parcel and aerial photography data, and surveys of road crossings.

Assistant, Development of Species Occurrence Database, 2006-2007. Worked with the GeoPlan Center at the University of Florida to collect additional occurrence data for various focal species in Florida to use in the Efficient Transportation Decision Making Model (ETDM) created for the Florida Department of Environmental Protection. ETDM is an online impact review application that allows relevant agency staff and the public to review the potential environmental and social impacts of proposed transportation infrastructure projects.

Principal Investigator, development of Florida black bear habitat models, 2005-2006. Worked with the Florida Fish and Wildlife Conservation Commission to develop statewide rules-based and statistical habitat models for the Florida black bear. These models are used to develop habitat conservation recommendations for the Florida black bear to ensure its viability.

Consultant with Pandion Systems, 2005. Developed GIS habitat models for the Florida black bear and gopher tortoise for an environmental assessment application in Volusia County, Florida.

Contractor with the University of Central Florida, 2004-2005. Worked with Dr. Reed Noss to develop GIS habitat models for various focal vertebrate species to identify priority habitat and wildlife corridors in the western Florida panhandle.

Contractor with the Florida Chapter of The Nature Conservancy, 2004-2005. Developed GIS ecological threat indices for the state of Florida as part of Florida's Comprehensive Wildlife Conservation Strategy planning process.

Co-principal Investigator, development of recommendations and tools to facilitate regional ecological assessments in all U.S. EPA regions, 2003-2004. Worked with Region 4 EPA and the EPA Office of Policy, Economics, and Innovation to survey existing regional assessment efforts and develop guidelines that can be used to conduct regional assessments of areas critical for conserving biodiversity and ecosystem services.

Co-principal investigator, 2003-2004. Worked with the U. S. Army Corps of Engineers and U. S. Department of Defense to identify listed species and natural resource conservation opportunities on lands surrounding eleven military bases in the Piedmont ecoregion of Georgia, South Carolina, and North Carolina.

Consultant with Pandion Systems, 2003-2004. Conducted assessment of land conservation priorities for the St. Lucie County land conservation program.

Co-principal Investigator, Identification of reserve options for protecting federally listed species in South Florida, 2002-2003. Worked with the U.S. Fish and Wildlife Service and Frank Mazzotti et al. from the University of Florida to update habitat models for listed species and develop reserve options and priorities for conserving all federally listed species while maximizing benefits to the region's overall biodiversity.

Consultant with Pandion Systems, 2001-2002. Developed landscape assessments and potential natural vegetation information to evaluate the significance of lands for conserving biological diversity within St. Johns County.

Landscape ecologist, landscape analysis of Florida panther habitat, 2000-2002. Worked with the University of Kentucky on a GIS spatial analysis of potential habitat and landscape connectivity for the Florida panther in south and south-central Florida.

Researcher working with the Florida Chapter of The Nature Conservancy, 1999-2002. Conducted an ecoregional analysis of biological diversity to identify priority conservation areas in peninsular Florida using expert workshops and GIS.

Consultant with Pandion Systems, 1999-2002. Advised consulting team on GIS spatial landscape and species indices modeling for the Wekiva River basin. The goal was to develop a GIS model that predicts ecological impacts of proposed development in and near the Wekiva River basin.

Co-Principal Investigator, analysis of Florida black bear habitat and landscape management for the Florida Fish and Wildlife Conservation Commission, 1999-2000. Worked with the University of Kentucky on a literature review of black bear ecology and Florida ecosystem dynamics to develop habitat and landscape management recommendations for the Florida black bear.

Co-Principal Investigator, EPA Southeastern Region Landscape Ecological Analysis Project, University of Florida, 1998-2002. Conducted a GIS analysis and identification of ecologically significant areas and connectivity in the southeast region of the United States including Florida, Georgia, Alabama, Mississippi, South Carolina, North Carolina, Tennessee, and Kentucky.

Landscape ecologist, Chassahowitzka black bear landscape analysis, University of Florida, 1998-2001. Worked with the University of Kentucky and the Southwest Florida Water Management District to conduct a GIS habitat analysis for the Chassahowitzka population of the Florida black bear to determine potential habitat availability and connectivity to other bear populations.

Contractor, Indian River County Conservation Priorities Study, Conway Conservation, Inc., 1998-1999. Conducted a GIS analysis of ecological features in Indian River County, Florida to identify priority areas for county conservation lands acquisition program.

Field Assistant, Conway Conservation, Inc., 1995-1996. Conducted land cover groundtruthing for a GIS Land Use/Cover Mapping for the Suwannee River Water Management District. Member of field team verifying photo-interpretation for land use/cover mapping.

Research Assistant, University of Florida, 1995. Conducted an ecological contextual analysis for the Camp Blanding Military Site, Florida Department of Military Affairs. Involved GIS spatial analysis using ARC-Info to identify priority conservation landscape features in and near Camp Blanding.

Field Assistant, University of Florida, 1992-1995. Surveyed bird populations in research project on impacts of clear cutting on bird usage of cypress ponds.

Research Assistant, University of Florida, 1993. Restoration Ecology/Sciences program development research. Worked with the Department of Wildlife Ecology Chair on background research for development of a restoration ecology/sciences program.

Project Supervisor of the wildlife team for the Cross-Florida Greenway study, University of Florida, 1991-1992. Developed design criteria for wildlife corridor along 150 miles of barge canal lands through north central Florida. Coordinated field work, literature reviews, mapping, and report writing. Co-authored final report on biological issues.

Independent Researcher, 1992. Quantified negative edge effects in several Florida ecosystems. Investigated negative edge effect intensity by placing artificial ground nests in transects near different ecosystem edge types on San Felasco State Preserve and the Cross-Florida Greenway.

Research Assistant, University of Florida, 1989-1990. Formulated recommendations for buffering state parks from outside threats. Also helped develop a comprehensive bibliography on reserve and park design criteria.

Research Assistant, Museum of Comparative Zoology, Harvard University, 1989. Conducted experiment on cichlid development and functional feeding morphology that became basis of lab experiment in a biology course at Harvard.

Assistant to the Curator of the research ornithological collection, Harvard University, 1986-1989.

## **TEACHING AND ADVISING EXPERIENCE**

Co-Course Instructor, Fall 2013-Spring 2018. Co-taught undergraduate Environmental Planning and Design studio, undergraduate Landscape Management lecture course, graduate Regional Planning GIS studio, and a graduate Environmental Policy course.

Co-Course Instructor, 2011-2018. Team-taught graduate online course on Ecological Issues in Sustainability for the College of Design, Construction, and Planning, University of Florida.

Co-Course Instructor, Department of Landscape Architecture, University of Florida, Spring 2010-2012. Co-taught graduate GIS and regional conservation planning studio for the Department of Landscape Architecture and Department of Urban and Regional Planning.

Co-Course Instructor, Florida Fish and Wildlife Conservation Commission (FWC) Florida Conservation Planning Manual, February 2009. Helping FWC staff teach a half day course on conservation planning as part of the development of their draft Conservation Planning Manual.

Co-Course Instructor, Department of Wildlife Ecology and Conservation, University of Florida, Spring 2007. Co-taught graduate landscape ecology class including theory, application, and GIS tools.

Co-Course Instructor, Department of Landscape Architecture, University of Florida, Spring 2006-2007. Co-taught graduate GIS and regional conservation planning studio for the Department of Landscape Architecture and Department of Urban and Regional Planning.

Course Assistant, Department of Landscape Architecture, University of Florida, Spring 2006-2007. Lectured in landscape ecology and conservation biology to a combined undergraduate and graduate course in landscape management.

Co-Course Instructor, Department of Landscape Architecture, University of Florida, Fall 2006. Co-taught undergraduate GIS analysis studio for the Department of Landscape Architecture.

Teaching Assistant and Lecturer, Departments of Landscape Architecture and Urban and Regional Planning, University of Florida, 1994-2005. Served as a teaching assistant in various undergraduate and graduate studio courses on regional landscape design and the use of GIS in regional conservation planning.

Co-Course Instructor, Department of Landscape Architecture, University of Florida, Fall 2001. Co-taught senior –level undergraduate environmental design studio using GIS to develop regional and local land use and master plans.

Co-Course Developer, National Conservation Training Center, Sheperdstown, WV, 2001. Helped develop a course in Green Infrastructure Planning taught at the National Conservation Training Center.

Co-Course Instructor, Department of Wildlife Ecology and Conservation and Department of Landscape Architecture, University of Florida, 1999-2000. Co-taught two undergraduate courses in landscape ecology including lectures, GIS labs, and a GIS project.

Co-Course Instructor, National Conservation Training Center, Sheperdstown, WV, 1998. Taught module on the application of landscape ecology and conservation biology to regional conservation planning in a course titled “GIS Design for Regional Conservation Planning”. Also presented the Florida Ecological Greenways Decision Support Model and GIS analyses used in the project.

Teaching Assistant, Department of Wildlife Ecology and Conservation, University of Florida, 1997. Supervised and coordinated course project on a regional landscape conservation application in a graduate landscape ecology course.

Teaching Assistant, Department of Wildlife Ecology and Conservation, University of Florida, 1990-1994. Served as a teaching assistant in four semesters of the undergraduate class, Wildlife Issues.

Resident Advisor, Athletic Dormitory, University Athletic Association, University of Florida, 1989-1995.

## **GRADUATE STUDENT COMMITTEES**

Widyastri Rahmy, Fulbright Scholar Ph.D., Chair, Department of Landscape Architecture, University of Florida, 2017-.

Hua Huang, MLA, Chair, Department of Landscape Architecture, University of Florida, 2017-2018.

Kim Pollard, MLA, Member, Department of Landscape Architecture, University of Florida, 2017-2018.

Martha Ramos Battagline, Ph.D., Chair, Department of Landscape Architecture, University of Florida, 2016-2018.

Scott Rothberg, Ph.D., Department of Urban and Regional Planning, University of Florida, 2016-2017.

Mario Rivera, MLA, Chair, Department of Landscape Architecture, University of Florida, 2016-2017.

Qianqian Zhao, MLA, Member, Department of Landscape Architecture, University of Florida, 2016-2017.

Jana Rosenbloom, MLA, Chair, Department of Landscape Architecture, University of Florida, 2015-2016.

John Michael Simpson, MLA, Department of Landscape Architecture, University of Florida, 2014-2015.

Max Deledda, MLA, Department of Landscape Architecture, University of Florida, 2014-2015.

Mingjian Zhu, Ph.D., Chair, Department of Landscape Architecture, University of Florida, 2011-2014.

Amanda Abel, M.S., School of Natural Resources and Environment, University of Florida, 2013-2014.

Scott Rothberg, MURP, Department of Urban and Regional Planning, University of Florida, 2013-2014.

Caitlin Jacobs, M.S., Wildlife Ecology and Conservation, University of Florida, 2012-2014.

Kelly Burks-Cope, Ph.D., School of Natural Resources and Environment, University of Florida, 2008-2013.

Taylor Clem, MLA, Member, Department of Landscape Architecture, University of Florida, 2012-2013.

Michael O'Brien, MLA, Member, Department of Landscape Architecture, University of Florida, 2009-2010.

## **CONTRACTS AND GRANTS**

Principal Investigator, Identification of Florida Panther protection priorities, opportunities, and threats, 2017-, Working with U.S. Fish and Wildlife Service on science-based identification of highest priority areas for Florida panther habitat and corridor protection across the state of Florida: \$75,000.

Principal Investigator, Identification of Hillsborough County Conservation Priority Areas, 2017-, Working with Hillsborough County natural resources staff to identify priorities for their land conservation acquisition program including development of a GIS database to guide prioritization and acquisition decisions. Funding: \$40,000.

Principal Investigator, Critical Lands and Waters Identification Project, 2006-. Working with the Florida Natural Areas Inventory, Florida Fish and Wildlife Conservation Commission, and U.S. Fish and Wildlife Service to identify statewide biodiversity and ecosystem service conservation priorities. CLIP versions 1.0 and 2.0 were completed by 2011. We are currently working on CLIP 3.0 scheduled to be completed in December 2013. Funding to date: \$353,094.

Principal Investigator, The Florida Strategic Plan for Sustaining Military Readiness through Conservation Partnerships, 2015-. Working with the U.S. Fish and Wildlife Service, the U.S. Air Force, Florida Natural Areas Inventory, The Florida Chapter of The Nature Conservancy, and the Florida Fish and Wildlife Conservation Commission on identifying focal species habitat and other conservation priorities around all Air Force installations in Florida to facilitate opportunities to protect important natural resources and military training opportunities. Funding: \$322,330.

Principal Investigator, Predicting and Mitigating the Effects of Sea Level Rise and Land Use Change on Imperiled Species and Natural Communities, 2011-. Working with the Florida Fish and Wildlife Conservation Commission, University of Central Florida, and Florida Natural Areas Inventory on a statewide project to assess the impacts of land use change and sea level rise on imperiled species and communities and to identify adaptation strategies. Funding: \$269,724.

Associate Investigator, Planning for Sea Level Rise in the Matanzas Basin Project, 2011-. Working with the Guana Tolomato Matanzas National Estuarine Research Reserve and other partners from the University of Florida to assess the combined impacts of sea level rise and land use change in the Matanzas basin and to define conservation priorities. Funding: \$76,273.

Principal Investigator, Cooperative Conservation Blueprint Regional Pilot Project, 2010-. Working with the Florida Fish and Wildlife Conservation Commission, Florida Natural Areas Inventory, and other partners to identify conservation priorities using a combination of state and regional data. Also

working with stakeholders and local and regional governments to identify incentives-based conservation strategies to protect natural resources in south-central and southwest Florida. Funding to date: \$378,268.

Principal Investigator, Florida Ecological Greenways Update Project, 2010-. Working with the Florida Fish and Wildlife Conservation Commission and Conservation Trust for Florida on a State Wildlife Grant to update the base boundaries and priorities of the Florida Ecological Greenways Network using updated and new input GIS data layers and ecological corridor modeling methods. Funding: \$68,894.

Principal Investigator, Heartland 2060 Ecological Prioritization, 2009-. Working with Florida Natural Areas Inventory, The Nature Conservancy, Archbold Biological Station, and the Central Florida Regional Planning Council to identify ecological conservation priorities throughout south-central Florida to support regional visioning and comprehensive conservation and land use planning. Priorities were identified using a combination of data from the Critical Lands and Waters Identification Project and regional data. Funding to date: \$45,000

Principal and Co-Principal Investigator, Florida Ecological Greenways Network, 1995-. Working with the Florida Department of Environmental Protection Office of Greenways and Trails and the Conservation Trust for Florida to identify an integrated statewide landscape conservation network for Florida; to prioritize identified areas; to revise the model results as new information becomes available, and to protect critical wildlife corridors and large intact rural landscapes. Funding to date: approximately \$2,500,000.

Principal Investigator, Northwest Florida Green Infrastructure GIS Database, 2011-2013. Working with the U.S. Fish and Wildlife Service to organize, analyze, and synthesize available and new GIS analyses to identify biodiversity and ecosystem service conservation priorities in the Florida panhandle from the Apalachicola River west through Escambia County. Funding to date: \$20,000.

Principal and Co-principal Investigator, Impacts Assessment Decision Support Model Project for the Southwest Florida Water Management District, 2002-2011. Worked with the SWFWMD to develop a GIS-based decision support model that can be used to assess the potential impacts of proposed activities on SWFWMD-owned lands. Funding: \$435,000.

Principal Investigator, Identification of Ecological Connectivity Priorities for Babcock Ranch, 2009-2010. Worked with Reed Noss of the University of Central Florida to develop recommendations for maintaining and restoring functional ecological connectivity between Babcock Ranch and other existing conservation areas in the southwest Florida region. Work included development of GIS habitat and connectivity models for the Florida black bear, Florida panther, and Sherman's fox squirrel; identification of issues with road crossings; and the development of recommendations to further study and protect regional ecological connectivity. Funding: \$34,375.

Principal Investigator, Regional Gopher Tortoise Habitat Modeling Project, 2009-2010. Worked with the U.S. Fish and Wildlife Service to develop a GIS assessment of potential gopher tortoise habitat in Florida, Georgia, and part of Alabama. Work includes identification of best potential habitat including areas that may be suitable for land protection strategies such as mitigation banking. Funding: \$50,000.

Principal Investigator, Cooperative Conservation Blueprint Project, 2008-2009. Worked with the Florida Fish and Wildlife Conservation Commission and other partners to adapt the Critical Lands and Waters Identification Project conservation priorities to development of a state conservation vision. Work included development of additional GIS analysis to inform the development of the blueprint including proposed new conservation incentives programs. Funding: \$24,000.

Principal Investigator, Southwest Florida Water Management District Conservation Land Acquisition Re-assessment, 2008-2009. Worked with the Southwest Florida Water Management District and Wildlands Conservation to develop a new GIS methodology for identifying conservation land acquisition priorities. Work included the development of a new GIS model integrating data from the Critical Lands and Waters Identification Project and various regional data to identify conservation priorities. Funding: \$40,000.

Habitat Modeler, Swallow-tailed Kite Regional Habitat Analysis Project, 2008-2009. Worked with Suzanne Beyeler at the University of Florida and Ken Meyer from Avian Research and Conservation Institute to identify Swallow-tailed Kite habitat in Florida, Georgia, and South Carolina. Work included the development of GIS habitat models that identify potential habitat and habitat quality using land use data and known kite nesting locations. Funding: \$15,000.



Principal Investigator, Greater Ridge Conservation Planning Tool, 2007-2008. Worked with The Nature Conservancy and Archbold Biological Station to identify important conservation priority areas and supporting lands and waters needed to maintain the ecological integrity of conservation lands within the Lake Wales Ridge region of central Florida. Work included development of a GIS database of priority conservation areas, vertebrate species habitat, wildlife corridors, conservation lands buffers, and priority watershed protection areas. Funding: \$15,000.

Principal Investigator, Identification of Corridor Options for the Florida Black Bear in the Wekiva River Basin, 2007-2008. Worked with The Nature Conservancy to identify key parcels for completing a functional bear corridor between the Ocala National Forest and protected lands in the Wekiva River Basin north of Orlando using GIS habitat analysis, parcel and aerial photography data, and surveys of road crossings. Funding: \$15,000.

Principal Investigator, development of Florida black bear habitat models, 2005-2006. Worked with the Florida Fish and Wildlife Conservation Commission to develop statewide rules-based and statistical habitat models for the Florida black bear. These models are used to develop habitat conservation recommendations for the Florida black bear to ensure its viability. Funding: \$10,000.

Co-principal Investigator, development of recommendations and tools to facilitate regional ecological assessments in all U.S. EPA regions, 2003-2004. Worked with Region 4 EPA and the EPA Office of Policy, Economics, and Innovation to survey existing regional assessment efforts and develop guidelines that can be used to conduct regional assessments of areas critical for conserving biodiversity and ecosystem services. Funding: \$50,000.

Co-principal investigator, 2003-2004. Working with the U. S. Army Corps of Engineers and U. S. Department of Defense to identify listed species and natural resource conservation opportunities on lands surrounding eleven military bases in the Piedmont ecoregion of Georgia, South Carolina, and North Carolina. Funding: \$20,000.

Co-principal Investigator, identification of reserve options for protecting federally listed species in South Florida, 2002-2003. Worked with the U.S. Fish and Wildlife Service and Frank Mazzotti et al. from the University of Florida to update habitat models for listed species and develop reserve options and priorities for conserving all federally listed species while maximizing benefits to the region's overall biodiversity. Funding: \$15,000.

Landscape ecologist, landscape analysis of Florida panther habitat, 2000-2002. Worked with the University of Kentucky on a GIS spatial analysis of potential habitat and landscape connectivity for the Florida panther in south and south-central Florida. Funding: \$3,000.

Researcher working with the Florida Chapter of The Nature Conservancy, 1999-2002. Conducted an ecoregional analysis of biological diversity to identify priority conservation areas in peninsular Florida using expert workshops and GIS. Funding: \$20,000.

Co-Principal Investigator, EPA Southeastern Region Landscape Ecological Analysis Project, University of Florida, 1998-2002. Conducted a GIS analysis and identification of ecologically significant areas and connectivity in the southeast region of the United States including Florida, Georgia, Alabama, Mississippi, South Carolina, North Carolina, Tennessee, and Kentucky. Funding: \$355,000.

Co-Principal Investigator, analysis of Florida black bear habitat and landscape management for the Florida Fish and Wildlife Conservation Commission, 1999-2000. Worked with the University of Kentucky on a literature review of black bear ecology and Florida ecosystem dynamics to develop habitat and landscape management recommendations for the Florida black bear. Funding: \$5,400.

Landscape ecologist, Chassahowitzka black bear landscape analysis, University of Florida, 1998-2001. Worked with the University of Kentucky and the Southwest Florida Water Management District to conduct a GIS habitat analysis for the Chassahowitzka population of the Florida black bear to determine potential habitat availability and connectivity to other bear populations. Funding: \$5,000.

## **BOARDS, COMMITTEES AND PANELS**

- Search Committee for Associate Dean for Research and Strategic Initiatives, College of Design, Construction and Planning, University of Florida, 2016-2017.
- Search Committee for Interim Associate Dean for Research, College of Design, Construction and Planning, University of Florida, 2015.
- Steering Committee of the Peninsular Florida Landscape Conservation Cooperative

- Cooperative Conservation Blueprint Steering Committee
- Florida Black Bear Technical Advisory Group
- Gopher Tortoise Technical Advisory Group
- Florida Forever Technical Advisory Group
- Editorial Board, Journal of Conservation Planning
- Editorial Board, Environmental Bioindicators journal
- Member of the Alachua County Land Conservation Board, which is in charge of selecting conservation lands to purchase under the Alachua Forever land conservation program.
- U.S. Fish and Wildlife Service's South Florida Multi-species/Ecosystem Recovery Implementation Team (MERIT), 2000-2002, Chair of the Landscape Subteam responsible for developing reserve design strategies for listed species in South Florida.
- U.S. Fish and Wildlife Service's MERIT sub-team for identifying essential habitat and conservation strategies for the Florida panther, 2000-2002.
- Served on an advisory group working with Florida Natural Areas Inventory to develop methods to prioritize potential conservation land acquisitions for the Florida Forever program, 2000-2002.
- Biodiversity Conservation Goals Panel for the Florida Forever Advisory Council, 2000
- Committee Member, Interstate 4 Ecological Impact Review Team, 1995-1997
- Committee Member, State Road 40 EIS Review Team, 1995-1996
- Designee for Dr. Larry Harris on the Florida Greenways Commission, 1992-1995
- Ecological Consultant, Hillsborough County Development Code, 1993

#### MISCELLANEOUS

- Co-founder of the Florida Wildlife Corridor Project, an education and outreach campaign to increase awareness and foster action to protect the most important wildlife corridors across the state of Florida <http://www.floridawildlifecorridor.org/>.
- Expert witness for the Department of Community Affairs on the ecological impacts of the proposed Farmton Development in Volusia County, Florida in August-September 2010.
- Peer-reviewed proposals for the National Fish and Wildlife Foundation in 2005 and 2006.
- Peer-reviewed articles for the journals *Conservation Biology*, *BioScience*, *Journal of Wildlife Management*, *Southeastern Naturalist*, *Conservation Planning*, *Landscape Ecology*, *Landscape and Urban Planning*, *Ecological Applications*, *Ecological Modeling*, *Environmental Management*, *Climatic Change*, *Regional Environmental Change*, *Forest Ecology and Management*, and *Environmental Bioindicators*.
- Expert witness for the Sierra Club on the ecological impacts of the proposed changes to the Alachua County Comprehensive Plan in administrative hearing process in December 2003.
- Served as expert on wildlife corridors for team working to get the San Felasco-Sante Fe Conservation Corridor project included in the Alachua County, FL conservation land acquisition program, Spring, 2002.
- Expert witness for the St. Johns County Sierra Club on the ecological impacts of the proposed Nocatee development in St. Johns County, FL in administrative hearing process, October 2001.
- Expert witness on the ecological impacts of a proposed school within the Etoniah Creek CARL Project in Putnam County, FL in administrative hearing process, Spring 2001.
- Advisor on the ecological impacts of the Suncoast Parkway in west-central Florida to legal team in lawsuit against the Corps of Engineers.
- Co-sponsored with Richard Hilsenbeck of the Florida Chapter of The Nature Conservancy the addition of the Lecanto Sandhills and OTOW Sandhills to the Longleaf Pine Ecosystem CARL Project in the Florida Preservation 2000 land acquisition program.
- Hosted a conservation biology class from Karlstad University in Sweden while they were visiting Gainesville in November 1998 and 1999, which included lectures on reserve design and field trips to local reserves.
- Reviewed reserve design lab exercise for a landscape ecology lab manual, *Learning Landscape Ecology: A Practical Guide to Concepts and Techniques*, written by Sarah Gergel and Monica Turner at the University of Wisconsin, spring 1999.

- Invited participant for the Endangered Cats of North America Workshop sponsored by the National Wildlife Federation at White Oak Plantation, FL, February 4-6, 2000.
- Took course in spring 1992 on college teaching methods.
- Travel experience in Costa Rica, southwestern U.S., Alaska, California, Arizona, Colorado, Alberta and eastern Canada; extensive knowledge of the natural history of Florida, Maine, and southern California
- Recreational interests include fishing, birding, hiking, and camping.

## PUBLICATIONS

### Journal Articles

- Frank, K., Volk, M., Jourdan, D., Hctor, T., Zwick, P., Shirley, M., Linhoss, A., Kiker, G. Integrated and Collaborative Land Use Planning for Coastal Resilience: Considering Sea Level Rise, Development Patterns, and Conservation Priorities in the Matanzas River Basin, Florida. Revisions requested by Journal of Planning Education and Research and updated manuscript in progress.
- Noss, R., Reece, J., Volk, M., Hctor, T., Oetting, J., Zwick, P., Carr, M. Population Growth and Sea-Level Rise on a Collision Course in Florida. In preparation.
- Spontak, M., and T. Hctor. 2017. A multi-faceted approach to corridor planning for the Florida panther and black bear. *Journal of Conservation Planning* Vol. 13 (2017) 1 – 10.
- Zhu, M., Xuesong, X., Hctor, T., Volk, M. 2015. Integrating Conservation Costs into Sea Level Rise Adaptive Conservation Prioritization. *Global Ecology and Conservation*: doi:10.1016/j.gecco.2015.05.007
- Zhu, M., Hctor, T., Volk, M., Frank, K., Zwick, P., Carr, M., Linhoss, A. 2015. Spatial Prioritization to Conserve Biodiversity in Response to Sea Level Rise and Land Use Change in the Matanzas Basin, Northeast Florida. *Landscape and Urban Planning*, 144(2015), 103-118. doi:10.1016/j.landurbplan.2015.08.018
- Zhu, M., Hctor, T., Volk, M., Frank, K., Linhoss, A. 2015. The Conservation Value of Elevation Data Accuracy and Model Sophistication in Reserve Design under Sea Level Rise. *Journal of Ecology and Evolution*: doi: 10.1002/ece3.1669
- Reece, J.S. R.F. Noss, J. Oetting, T.S. Hctor, and M. Volk. 2013. A vulnerability assessment of 300 species in Florida: threats from sea level rise, land use, and climate change. *PLoS ONE* 8(11): e80658. doi:10.1371/journal.pone.0080658
- Hctor, T. S., W. L. Allen, III, M. H. Carr, P. D. Zwick, E. Huntley, D. J. Smith, D. S. Maehr, R. Buch, and R. Hilsenbeck. 2008. Land corridors in the Southeast USA: connectivity to protect biodiversity and ecosystem services. *Journal of Conservation Planning* 4:90-122.
- Kautz, R., Kawula, R., Hctor, T., Comiskey, J., Jansen, D., Jennings, D., Kasbohm, J., Mazzotti, F., McBride, R., Richardson, L., and Root, K. 2006. How much is enough? Landscape-scale conservation for the Florida panther. *Biological Conservation* 130:118-133.
- Maehr, D.S., P. Crowley, J.J. Cox, M.L. Lacki, J.L. Larkin, T.S. Hctor, L.D. Harris, and P.M. Hall. 2006. Of cats and Haruspices: genetic intervention in the Florida panther. *Animal Conservation* 9:127-132.
- Maehr, D.S., J.N. Layne, T.S. Hctor, and M.A. Orlando. 2004. Status of the black bear in south-central Florida. *Florida Field Naturalist* 32:85-101.
- Larkin, J. L., D. S. Maehr, T. S. Hctor, M. A. Orlando, and K. Whitney. 2004. Landscape linkages and conservation planning for the black bear in west-central Florida. *Animal Conservation* 7:23-34.
- Maehr, David S., E. Darrell Land, David B. Shindle, Oron L. Bass, Thomas S. Hctor. 2002. Florida panther dispersal and conservation. *Biological Conservation* 106:187-197.
- Hctor, Thomas S., M. Carr, and P. Zwick. 2000. Identifying a linked reserve system using a regional landscape approach: the Florida ecological network. *Conservation Biology* 14(4): 984-1000.

### Book Chapters

- Volk, M., Hctor, T. S., Nettles, B. B., Hilsenbeck, R., Putz, F. E., & Oetting, J. (2017). Florida land use and land cover change in the past 100 years. In E. P. Chassignet, J. W. Jones, V. Misra, & J. Obeysekera (Eds.), *Florida's climate: Changes, variations, & impacts* (pp. 51–82). Gainesville, FL: Florida Climate Institute. <https://doi.org/10.17125/fci2017.ch02>

- Hector, Thomas S., L. D. Harris, R. F. Noss, and K. A. Whitney. 2006. Spatial ecology and restoration of the longleaf pine ecosystem. Pages 377-402 In S. Jose, E. Jokela and D. Miller, editors. Longleaf pine ecosystems: ecology, silviculture, and restoration. Springer-Verlag, New York.
- Hector, Thomas S., M. Carr, P. Zwick, and D. S. Maehr. 2004. Identification and realization of a Florida Ecological Network: the Florida Statewide Greenways Project and its political context. Pages 222-250 in R. H. G. Jongman and G. Pungetti, editors. Ecological networks and greenways: concept, design, implementation. Cambridge University Press, Cambridge.
- Maehr, D. S., R. C. Lacy, E. D. Land, O. L. Bass, and T. S. Hector. 2002. Population viability of the Florida panther: a multi-perspective approach. Pages 284-311 in D. McCullough and S. Beissinger, editors. Population viability analysis. University of Chicago Press.
- Harris, L. D., Linda C. Duever, Rebecca P. Meegan, Thomas S. Hector, James L. Schortemeyer, and David S. Maehr. 2001. The biotic province as the minimum critical unit for biodiversity conservation. D. S. Maehr, R.F. Noss, and J.L. Larkin, editors. Large mammal restoration: Ecological and sociological considerations. Island Press, Washington, D.C.
- Maehr, David S, Thomas S. Hector, and L. D. Harris. 2001. The Florida panther: a flagship for regional restoration. Pages 293-312 in D. S. Maehr, R. F. Noss, and J. L. Larkin, editors. Large mammal restoration: ecological and sociological challenges in the 21<sup>st</sup> century. Island Press, Washington, D.C.
- Harris, Larry D., Thomas Hector, Dave Maehr, and Jim Sanderson. 1996. The role of networks and corridors in enhancing the value and protection of parks and equivalent areas. Pages 173-198 in R. G. Wright, editor. National parks and protected areas: their role in environmental areas. Blackwell Science, Cambridge, MA.
- Harris, Larry D., Thomas S. Hector, and Sarah E. Gergel. 1996. Landscape processes and their significance to biodiversity conservation. Pages 319-347 in O.E. Rhodes, R. K. Chesser and M. H. Smith, editors. Population dynamics in ecological space and time. The University of Chicago Press, Chicago, IL.
- Hall, Phil M., Larry D. Harris, and Thomas S. Hector. 1994. Integrating outdoor recreation and wildlife conservation with right-of-way/greenway corridors. Pages 195-229 in Hay, K.G. editor. Greenways, wildlife and natural pipeline corridors. The Conservation Fund, Arlington, VA. 229 pp.

#### Conference Proceedings

- Maehr, D. S., T. S. Hector, and L. D. Harris. 2000. Remedies for a denatured landscape: restoring landscapes for native carnivores. Proceedings of the International Congress on Wildlife Management 2.
- Carr, Margaret H., Thomas S. Hector, and Paul D. Zwick. 1998. Connections at the crossroads: the Florida greenways experiment. Proceedings of the 4<sup>th</sup> Annual Public Interest Environmental Conference, University of Florida, Gainesville, FL.
- Carr, Margaret H., Paul D. Zwick, Thomas S. Hector, Wesley Harrell, Andrea Goethals, and Mark A. Benedict. 1998. Using GIS for identifying the interface between ecological greenways and roadway systems at the state and sub-state scales. Pp. 68-77 In: Proceedings of The International Conference on Wildlife Ecology and Transportation. Ft. Myers, FL.

#### Non Refereed Publications

- Cameron Devitt, S.E., Seavey, J. R., Claytor, S., Hector, T., Main, M., Mbuya, O., Noss, R., Rainyn, C. 2012. Florida Biodiversity Under a Changing Climate, Florida Climate Task Force. <http://www.floridaclimate.org/whitepapers>
- Zwick, P. D., J. Teisinger, M. Carr, R. Steiner and T. Hector. "Where will we Grow? Development of a Florida Growth Potential Model." Florida Engineering Journal, Tallahassee, FL, November, 2002.

#### Technical Reports

- Oetting, J., Hector, T., Volk, M. 2016. Critical Lands and Waters Identification Project (CLIP): 4.0. Final Report. US Fish and Wildlife Service, Vero Beach, FL.
- Morris, J., Hector, T., and O'Brien, M. 2014. Cooperative Conservation Blueprint Strategic Focal Areas. Final Report. Florida Fish and Wildlife Conservation Commission, Tallahassee, FL.
- Noss, R., Reece, J., Hector, T., Volk, M., Oetting, J. 2014. Adaptation to Sea-level Rise in Florida: Biological Conservation Priorities. Final Report. Kresge Foundation, Troy, MI.

- Oetting, J., Hctor, T., Volk, M. 2014. Critical Lands and Waters Identification Project (CLIP): 3.0. Final Report. US Fish and Wildlife Service, Vero Beach, FL.
- Hctor, T., Oetting, J., Noss, R.F., Volk, M., Reece, J. 2014. Predicting and Mitigating the Impacts of Sea Level Rise and Land Use Change on Imperiled Species and Natural Communities. Final Report. Florida Fish and Wildlife Conservation Commission, Tallahassee, FL.
- Hctor, T., J. Oetting, R.F. Noss, M. Volk, and J. Reece. 2014. Predicting and mitigating the impacts of sea level rise and land use change on imperiled species and natural communities. Final Report. Florida Fish and Wildlife Conservation Commission, Tallahassee, FL.
- Hctor, T., M. Volk, and M. Spontak. 2013. Updating the Florida Ecological Greenways Network. Final Report. Florida Fish and Wildlife Conservation Commission, Tallahassee, FL.
- Knight, G., M. O'Brien, J. Oetting, A. Knight, and T. Hctor. 2012. Re-evaluating Florida's ecological conservation priorities in the face of sea level rise. Pilot project of the Yale Mapping Framework. Presented online at <http://yale.databasin.org/pages/fnaiandfsu> (accessed 15 March 2013).
- Oetting, J., T. Hctor, and B. Stys. 2012. Critical Lands and Waters Identification Project (CLIP): Version 2.0. Technical Report, January 2012. Report for the Florida Fish and Wildlife Conservation Commission, Tallahassee.
- Hctor, T. and S. Beyeler. 2010. Regional gopher tortoise habitat model report. Report for the USFWS, Jacksonville, FL.
- Hctor, T.S., J. Oetting, and S. Beyeler. 2008. Critical Lands and Waters Identification Project: Report on completion of the CLIP Version 1.0 Database. Report for the Century Commission for a Sustainable Florida, Tallahassee.
- Hctor, T. 2006. Developing updated statewide potential habitat and habitat significance maps for the Florida black bear. Final Report, Florida Fish and Wildlife Conservation Commission, Tallahassee, FL.
- Lozar, R. C., C. Ehlschlaeger, J. Westervelt, H. Balbach, H.R. Akcakaya, T. Hctor, C. Goodison, W.W. Hargrove, F.M. Hoffman, and W. Rose. 2006. Habitat fragmentation handbook for installation planners: Status and options. U.S. Army Corps of Engineers, Engineer Research and Development Center, TR-06-36.
- Hctor, T., M. Carr, and J. Teisinger. 2005. Reprioritization of the Florida Ecological Greenways Network based on the New Base Boundaries Adopted in 2004. Final Report. Office of Greenways and Trails, Florida Department of Environmental Protection, Tallahassee.
- Hctor, T. 2004. Update of the Florida Ecological Greenways Network. Final Report. Office of Greenways and Trails, Florida Department of Environmental Protection, Tallahassee.
- Hctor, T. Ginevra Lewis, and Matt Marsik. 2004. Protecting Critical Ecosystems: Current EPA Regional Activities and Future Agency Opportunities. Final Report. U.S. Environmental Protection Agency, Office of Policy and Economic Innovation, Washington, D.C.
- Hctor, T. S., M. H. Carr, C. Goodison, P. D. Zwick, J. Green, P. Hernandez, C. McCain, K. Whitney, and J. Teisinger. 2002. Final report: Southeastern Ecological Framework. Environmental Protection Agency Region 4, Atlanta, Georgia.
- Hctor, T. S., J. Teisinger, M. H. Carr, P. D. Zwick. 2002. Identification of Critical Linkages within the Florida Ecological Greenways Network. Final Report. Office of Greenways and Trails, Florida Department of Environmental Protection. Tallahassee.
- Carr, Margaret H., Thomas S. Hctor, Paul D. Zwick, Christy McCain, Ryan Morrell and Jason Teisinger. 2002. A Report on Tasks Completed for the Florida Office of Greenways and Trails 2001 – 2002, Florida Department of Environmental Protection, Tallahassee.
- Carr, Margaret H., Thomas S. Hctor, Crystal Goodison, Paul D. Zwick, et al. 2002. Southeastern Ecological Framework, U.S. Environmental Protection Agency Region 4, Atlanta.
- Maehr, David S., Thomas S. Hctor, Luther J. Quinn, and Judy S. Smith. 2001. Black bear habitat management guidelines for Florida. Technical Report No. 17. Florida Fish and Wildlife Conservation Commission, Tallahassee, FL.
- Hctor, Thomas S., Jason Teisinger, Margaret H. Carr and Paul D. Zwick. 2001. Ecological Greenways Network Prioritization for the State of Florida, Florida Department of Environmental Protection, Tallahassee.
- Carr, Margaret H., Paul D. Zwick, Thomas Hctor and Mark A. Benedict. 1999. Final Report – Phase II – Florida Statewide Greenways System Planning Project, Florida Department of Environmental Protection, Tallahassee.

- Margaret H. Carr, Paul D. Zwick, Thomas Hctor and Mark A. Benedict. 1998. Interim Report - Phase II - Florida Statewide Greenways System Planning Project, Florida Department of Environmental Protection, Tallahassee.
- Carr, Margaret H., Paul D. Zwick, Thomas Hctor and Mark A. Benedict. 1996. Final Report - Phase I - Florida Statewide Greenways System Planning Project, Florida Department of Environmental Protection, Tallahassee.
- Hctor, Thomas S., and Larry D. Harris, primary authors. 1995. Conserving native ecosystems and landscapes. Pages 53-65 in Florida Greenways Commission. Florida Greenways: Creating a Statewide Florida Greenway Network, The Florida Greenways Commission, Tallahassee, FL.
- Harris, Larry D. and Thomas S. Hctor. 1992. Cross Florida Greenbelt State Recreation and Conservation Area Management Plan. Volume IV. Report on biological issues. University of Florida, Gainesville.
- Hctor, Thomas S. 1992. Conservation buffer zones: protecting preserves, biological diversity, and ecological integrity. M.F.R.C. Technical paper, University of Florida, Gainesville, 59 pages.

#### Book Reviews

- Hctor, Thomas S., and L. D. Harris. 1998. Panthers in the landscape. *Conservation Biology* 12(6):1426-1427.
- Harris, L. D. and Thomas S. Hctor. 1994. Greenway ecology, the prolegomenon. *Conservation Biology* 8(2):603-605.

#### **CONFERENCE PRESENTATIONS AND SEMINARS**

- Hctor, T. 2017. Regional conservation planning. University of Florida Geography Department seminar, November 2018.
- Hctor, T, and M. Volk. 2017. The Florida strategic plan for sustaining military readiness through conservation partnerships. University of Florida College of Design, Construction and Planning research seminar, October 2017.
- Hctor, T. 2017. Florida fragmentation and ecological connectivity: landscape-scale efforts to protect biodiversity in a high growth state. Invited keynote speaker, Florida Gulf Coast University Biodiversity Conference, March 2017, Fort Myers, FL.
- Hctor, T., 2017. Smart and healthy built environments: research of the Center for Landscape Conservation Planning. Invited speaker, College of Design, Construction and Planning Research Symposium, January 2017, Gainesville, FL.
- Hctor, T. 2016. Florida connectivity conservation. Invited keynote speaker, Florida Native Plant Society Annual Conference, May 2016, Daytona Beach, FL.
- Hctor, T. 2016. The significance of the Big Bend region for conservation in Florida and future threats. Friends of Lower Suwannee and Cedar Keys NWR Annual Meeting, March 19, 2016, Suwannee, FL.
- Hctor, T., Volk, M. 2016. The Florida Strategic Plan for Sustaining Military Readiness through Conservation Partnerships. Presentation at the College of Design Construction and Planning Annual Research Symposium. Gainesville, FL.
- Hctor, T. 2016. Florida panther and Florida black bear conservation: goals, planning tools, and relevance to Everglades restoration. Everglades Coalition Conference, January 8-10, 2016, Coral Gables, FL.
- Noss, R., Reece, J., Volk, M., Hctor, T., Oetting, J., Zwick, P., Carr, M. 2015. Population growth and sea-level Rise on a collision course in Florida. Symposium "Ecological Economics and Planetary Stewardship: Making Up for Lost Time". Presentation at the 2015 ESA Annual Meeting, August 9-14 in Baltimore, MD.
- Hctor, T.S. 2015. Florida Wildlife Corridors. Florida Native Plant Society Tarflower Chapter, February 2015, Orlando, FL.
- Hctor, T.S. 2014. GIS Landscape Prioritization Methods in the Florida Ecological Greenways Network and Critical Lands and Waters Identification Project. National Fish and Wildlife Foundation Longleaf Pine Ecosystem Research Symposium. December 2014, Atlanta, GA.
- Hctor, T.S. 2014. Florida panther habitat and conservation efforts in south Florida. Center for Biological Diversity Panther Symposium. March 2014, Gainesville, FL.
- Hctor, T.S. 2014. Ecological planning efforts in Florida and northeast Florida. South Anastasia Communities Association, February 2014, St. Augustine, FL.

- Hector, T.S. 2013. Panther, bears, and wildlife corridors in Florida. Florida Gulf Coast University Science Seminar Series, November 2013, Ft. Myers, FL.
- Hector, T.S. 2013. Invited keynote speaker. The Florida Ecological Greenways Network and the Florida Wildlife Corridor. Florida Native Plant Society Annual Conference, May 2013, Jacksonville, FL.
- Guthrie, J.M., and T.S. Hector. 2013. Florida Forever land conservation objectives and the Florida Wildlife Corridor. Florida Department of Environmental Protection Acquisition and Restoration Council Meeting. February 15, 2013. Tallahassee, FL.
- Hector, T.S. 2013. The Florida Wildlife Corridor Expedition and its conservation significance. Conservation Trust for Florida Annual Meeting, January 2013, Micanopy, FL.
- Guthrie, J.M., and T.S. Hector. The black bear of south-central Florida and the Florida Wildlife Corridor opportunity. Space Coast Chapter – Audubon Society January Meeting. January 18, 2013. Rockledge, FL.
- Hector, T.S. 2012. The Florida Ecological Greenways Network and the Florida Wildlife Corridor. Sante Fe Chapter of the Audubon Society, November 2012, Melrose, FL.
- Guthrie, J.M., and T.S. Hector. 2012. Connectivity for wide-ranging carnivores: the Florida Wildlife Corridor opportunity. The Florida Panther Festival. November 10, 2012. Naples, FL.
- Guthrie, J.M. and T.S. Hector. 2012. Maintaining connectivity in the working landscape: the black bear and the Florida Wildlife Corridor. Lake Wales Ridge Environmental Working Group, Bok Tower Gardens, August 2012, Lake Wales, FL.
- Hector, T.S. 2012. Larry Harris and the History of the Florida Wildlife Corridor Movement. Florida Wildlife Corridor Expedition Event, April 2012, Osceola National Forest, Olustee, FL.
- Hector, T.S. 2012. Wildlife Corridor History, Design, and Implementation in Florida. Florida Wildlife Corridor Expedition Event, February 2012, Archbold Biological Station, Lake Placid, FL.
- Hector, T.S., R. Noss, J. Oetting, M. Volk, J. Reece. 2011. Sea Level Rise: Biodiversity Impacts and Adaptation Strategies, November 2011, Gainesville, FL. Poster Session for the State University System Climate Change Workshop.
- Hector, T. S. 2011. Large-scale Implications of Sea Level Rise on Conservation Priority Areas in Florida. Climate Information for Managing Risks Conference, May 2011, Orlando, FL. Invited Symposium Speaker.
- Hector, T.S. 2011. Landscape-scale and Connectivity Conservation Efforts in South Florida. Invited Keynote Speaker. 26th Annual Everglades Coalition Conference, January 2011, Weston, FL.
- Hector, T.S. 2010. Florida Green Infrastructure Design. Invited Speaker. Strategic Conservation Planning Using a Green Infrastructure Approach Workshop organized by the Conservation Fund, November 2010, Panama City, FL.
- Hector, T.S., J. Oetting, and B. Stys. 2010. Critical Lands and Waters Identification Project. Invited Symposium Speaker. Central Florida GIS Workshop, September, 2010, Daytona Beach, FL.
- Hector, T.S. 2010, The Florida Ecological Greenways Network. Invited speaker. Acquisition and Restoration Council, May 2010, Tallahassee, FL.
- Hector, T.S., P.D. Zwick, and M. Carr. 2010. Invited Speaker. Large-scale Implications of SLR on Conservation Priority Areas and Human Settlement in Florida. Invited Presentation at the Florida Institute of Conservation Science's Keeping Our Heads Above Water: Surviving the Challenges of Sea-Level Rise in Florida Workshop, Archbold Biological Station, Lake Placid, Florida January 18-20, 2010.
- Hector, T.S. 2009. Florida Wildlife Corridor planning and the relevance of the Highlands-Glades Florida black bear population. South-Central Florida Black Bear Workshop. December 2009, Venus, FL.
- Hector, T.S. 2009. Delineating and protecting connectivity in Florida and the Southeast. Invited speaker. North American Chapter of Conservation Biology Conference, October 2009, Flagstaff, AZ.
- Hector, T.S. 2009. Status of conservation in Florida. Invited Panel Speaker. Panel Discussion at the Florida Native Plant Society Conference, May 2009, Ft. Lauderdale, FL.
- Hector, T.S., M. Carr, and P. Zwick. 2009. Invited Speaker. Implications of sea level rise projections in south-central Florida. Presentation to the Lake Wales Ridge Ecosystem Working Group, May 2009, Lake Wales, FL.
- Hector, T.S., J. Oetting, B. Stys, and M. Endries. 2009. Ecosystem service and green infrastructure assessment in the Florida Critical Lands and Waters Identification Project. U.S. Chapter of the International Association of Landscape Ecology Symposium, April 2009, Snowbird, UT.

- Hector, T.S., M. Carr, and P. Zwick. 2009. Invited Speaker. Implications of future growth and sea level rise projections in Florida. Presentation to the Heartland 2060 Regional Visioning work group, May 2009, Sebring, FL.
- Hector, T.S., and J. Oetting. 2008. Existing and future identification of ecosystems services in the Critical Lands and Waters Identification Project. Invited Speaker. Florida's Cooperative Conservation Blueprint Workshop at the ACES Conference on Ecosystem Services: 2008: Using Science for Decision Making in Dynamic Systems, December 2008, Naples, FL.
- Hector, T.S., and J. Oetting. 2008. Development and Future of the Florida Critical Lands and Waters Identification Project. Invited Speaker. Public Land Acquisition & Management Conference, December 2008, Jacksonville, FL.
- Hector, T.S. 2008. Green infrastructure planning in Florida. Invited Speaker. Maryland State Development Plan Workshop, October 2008, Annapolis, MD.
- Noss, R., T. Hector, M. Volk, S. Beyeler, J. Oetting, J. Weiss, and J. Overpeck. 2008. Characteristics of terrestrial climate sensitive species and necessity of adaptive land corridors. Florida's Wildlife: On the Frontline of Climate Change Summit, October 2008, Orlando, FL.
- Noss, R., T. Hector, M. Volk, S. Beyeler, J. Oetting, J. Weiss, and J. Overpeck. 2008. Between the devil and the deep blue sea: determining priorities in highly dynamic land-sea interfaces. Society for Conservation Biology 2008 Annual Meeting, July 2008, Chattanooga, TN.
- Hector, T. S. 2008. Protecting Florida and northeast Florida green infrastructure. Invited Keynote Speaker. Northeast Florida Connectivity Summit, April 2008, Jacksonville, FL.
- Hector, T. S. 2008. Critical Lands and Waters Identification Project. Presentation to the Century Commission for a Sustainable Florida, April 2008, Tallahassee, FL.
- Hector, T. S. 2007. Florida conservation planning in a transportation and land use planning context. 1000 Friends of Florida Transportation and Land Use Symposium, December 2007, Sarasota, FL.
- Hector, T. S. 2007. Protecting Florida's green infrastructure. Invited Speaker. Mark Benedict Memorial Symposium, December 2007, Naples, FL.
- Hector, T. S. 2007. Critical Lands and Waters Identification Project. Presentation to the Century Commission for a Sustainable Florida, December 2007, Orlando, FL.
- Hector, T. S. 2007. Identification of conservation priorities for the Florida black bear through habitat and connectivity modeling. Presentation to the Florida Fish and Wildlife Conservation Commission Florida Black Bear Management Plan Working Group, October 2007, Gainesville, FL.
- Hector, T. S. 2007. Connectivity and green infrastructure planning in Florida. Florida Fish and Wildlife Conservation Commission Stakeholders' Fish and Wildlife Forum, June 2007, Orlando, FL.
- Hector, T. S. 2007. Florida and Southeastern U.S. Conservation Planning. Presentation to the Wildlands Project executive staff, May 2007, Orlando, FL.
- Hector, T. S. 2007. Regional landscape for conserving Babcock Ranch in Southwest Florida. Presentation to the Babcock Ranch Steering Committee, April 2007, Punta Gorda, FL.
- Hector, T. S. 2007. Connectivity for wildlife in Florida. Invited Speaker. Florida Native Plant Society 27th Annual Conference, April 2007, Gainesville, FL.
- Hector, T. S. 2007. Connectivity analysis methods in regional conservation assessments. Invited symposium speaker for symposium at the 22<sup>nd</sup> Annual Symposium of the U.S. Association of the International Association for Landscape Ecology, April 2007, Tucson, AZ.
- Hector, T.S. 2006. The Florida Ecological Greenways Network and protecting a statewide Florida black bear metapopulation. Defenders of Wildlife Carnivore Conference, November 2006, St. Petersburg, FL.
- Hector, T.S. 2006. The Florida Ecological Greenways Network: protecting biodiversity, and ecosystem services. Florida Native Plant Society seminar, November 2006, Gainesville, FL.
- Hector, T.S. 2006. The Florida Ecological Greenways Network: protecting bears, biodiversity, and ecosystem services. Natural Areas Association Conference, September 2006, Flagstaff, AZ.
- Hector, T. S. 2006. Connectivity considerations. 1000 Friends of Florida Designing for Wildlife Workshop, September 2006, Gainesville, FL.
- Hector, T. S. 2006. The Florida Ecological Greenways Network: prioritization, implementation, and policy developments. River Fest, February 2006, Palatka, FL.
- Hector, T. S. 2005. Protecting connectivity for the Florida black bear. Florida Black Bear Festival, October 2005, Umatilla, FL.



- Hector, T. S. 2005. What are we trying to protect and how in Florida? Sierra Club workshop, May 2005 Olustee, FL.
- Hector, T. S. 2004. The Southeastern Ecological Framework and protecting critical ecosystems in EPA Regions. U.S. EPA Office of Environmental Information Conference, December 2004, Miami, FL.
- Hector, T.S. 2004. Identifying and protecting ecological networks and critical ecosystems. Invited symposium speaker, Natural Areas Association Conference, October 2004, Chicago, IL.
- Hector, T. S. 2004. Regional conservation planning applications for identifying and protecting ecological networks. 1000 Friends of Florida planning workshop, July 2004, Panama City, FL.
- Hector, T. S., M. Carr, and P. Zwick. 2004. Delineation, prioritization, and protection of the Florida Ecological Greenways Network. The 19<sup>th</sup> Annual Symposium of the U.S. Association of the International Association for Landscape Ecology. March 2004, Las Vegas, NV.
- Hector, T.S. 2004. Planning information for protecting Florida's biodiversity. Defenders of Wildlife transportation planning workshop, March 2004, Orlando, FL.
- Hector, T. S., M. Carr, P. Zwick, C. Goodison, K. Whitney, C. Berish, J. Richardson, R. Durbrow, and D. Maehr. 2003. Delineation of an ecological network to facilitate conservation planning in the southeastern U.S.A. 6th International Association for Landscape Ecology World Congress, Darwin, Australia, July 2003.
- Hector, T. S. 2003. Defining and protecting Florida's green infrastructure. Ninth Annual Public Interest Environmental Conference, Gainesville, FL, February 2003.
- Hector, T. S., Margaret H. Carr, Paul D. Zwick, Crystal Goodison, and Dave S. Maehr. 2002. The relevance of ecological networks to the conservation and restoration of wide-ranging species and biodiversity as a whole in Florida and the Southeastern United States. The Wildlife Society Conference, Bismarck, ND, September 2002.
- Hector, T. S., C. Goodison, M. Carr, P. Zwick, J. Green, L. McCain, P. Hernandez, R. Durbrow, J. Richardson, C. Berish, K. Whitney, and W. Robinson Rieth. 2002. Application of a GIS model to identify an ecological network for conservation planning in the southeastern United States. Society for Conservation GIS Conference, Borrego Springs, CA, July 2002.
- Hector, T. S. 2002. The case for connecting critical ecosystems. EPA Region/ORD Critical Ecosystems Workshop, Keystone, CO, June 2002.
- Hector, T. S., and C. Goodison. 2002. Targeting priorities through characterization of the Southeastern Ecological Framework. EPA Region/ORD Critical Ecosystems Workshop, Keystone, CO, June 2002.
- Hector, T. S. 2002. The ecological character and conservation priorities of north-central Florida. Eighth Annual Public Interest Environmental Conference, Gainesville, FL, March 2002.
- Hector, T. S. 2001. Identification of areas of regional ecological significance in the Southeastern Ecological Framework. Sustainable Forestry and Sustainable Communities Workshop, Consultative Group on Biological Diversity and the Turner Foundation, Charlotte, NC, December 2001.
- Hector, T.S. 2001. Using GIS in regional conservation planning in Florida and St. Johns County Florida. Presentation to the St. Johns County Sierra Club, November 2001.
- Hector, T. S., C. Goodison, M. Carr, P. Zwick, K. Whitney, and W. Robinson Rieth. 2001. Application of a GIS model to identify an ecological network for conservation planning in the southeastern United States. Natural Areas Association Conference, Cocoa Beach, FL, September 2001.
- Hector, T.S. 2001. Using GIS in regional conservation planning in Florida. Presentation to the Duval County Sierra Club, June, 2001.
- Hector, T.S. 2001. Using GIS in regional conservation planning in Florida. Presentation to the Alachua County Planning Work Group, February 2001.
- Hector, T. S. 2001. Florida's Ecological Network Project. Environmental Law Institute's National Biodiversity Symposium, Status of the States: Innovative State Strategies for Biodiversity Conservation, Washington, D.C.
- Meegan, R. P., D. S. Maehr, and T. S. Hector. 2000. Corridors, Landscape Linkages, and Conservation Planning for the Florida Panther (*Puma concolor coryi*). Greater Everglades Ecosystem Restoration Science Conference, Naples, FL.
- Hector, T., M. Carr, and P. Zwick. 2000. Identifying an ecological reserve network in the southeastern United States. The Third Conference of the Society of Conservation GIS, Borrego Springs, CA.
- Hector, T., M. Carr, and P. Zwick. 2000. Identifying ecological reserve networks in Florida and the Southeastern United States. Society for Conservation Biology Annual Meeting, Missoula, MT.

- Hector, T., M. Carr, and P. Zwick. 2000. Ecological reserve networks in Florida and the Southeastern United States: road issues and opportunities. The 15<sup>th</sup> Annual Symposium of the U.S. Association of the International Association for Landscape Ecology. Ft. Lauderdale, FL. Invited special session speaker.
- Hector, T. 2000. Designing reserve networks and principles for prioritizing land protection efforts. Presentation to the St. Johns County Land Acquisition and Management Board. St. Augustine, FL, February 23, 2000.
- Hector, T. 2000. Identifying and designing ecological reserve networks. The Nature Conservancy International Science and Stewardship Conference. Beyond Our Borders: Conservation at Multiple Scales. Orlando, Florida. Invited speaker.
- Hector, T. 2000. Designing reserve networks and principles for prioritizing land protection efforts. Presentation to the Alachua County Sierra Club. Gainesville, FL, February 6, 1999.
- Hector, T. 1999. Designing reserve networks and principles for prioritizing land protection efforts. Presentation to the Alachua County Land Conservation Advisory Committee. Gainesville, FL, December 6, 1999.
- Hector, T. 1999. Establishing effective biodiversity conservation: ecological networks and strategic land management. Public Land Acquisition and Management Annual Partnership Conference. Panama City, FL. Invited speaker.
- Hector, T. 1999. Protecting Florida's natural heritage with regional landscape planning and integrated community design. University of Florida Department of Landscape Architecture 2<sup>nd</sup> Biennial Landscape Architecture Symposium. Designing Livable Communities: Techniques for Florida's Future. Invited speaker.
- Hector, T., M. Carr, and P. Zwick. 1999. Identification of ecological networks in Florida and the southeast United States using regional conservation planning and Geographic Information Systems. 26<sup>th</sup> Annual Natural Areas Conference. Conservation Planning: From Sites to Systems. Tucson, AZ.
- Hector, T., M. Carr, and P. Zwick. 1999. Identifying and designing a Florida ecological network. The 2<sup>nd</sup> Symposium for the Conservation of Florida's Turtles and Tortoises. St. Petersburg, FL. Invited speaker.
- Hector, T., M. Carr, and P. Zwick. 1999. Identification and realization of a Florida ecological network: the Florida Greenways Project and GIS decision support modeling within a political context. International Association of Landscape Ecology 5<sup>th</sup> World Congress, Snowmass, Colorado. Invited special symposium speaker.
- Hector, T., M. Carr, P. Zwick, J. Green, K. Whitney, and P. Hernandez. 1999. Application of a GIS model to identify areas of ecological significance and an ecological network in the southeastern United States. The Second Conference of the Society of Conservation GIS, Idyllwild, CA.
- Hector, Thomas S., Margaret H. Carr, and Paul D. Zwick. 1999. A GIS-based landscape approach for the identification of a statewide integrated conservation system in Florida. The Florida Chapter of the Wildlife Society Conference, Orlando, FL.
- Hector, Thomas S. 1998. A GIS-based approach for the identification of a statewide ecological conservation system in Florida. Department of Forestry Seminar, University of Kentucky, Lexington, KY.
- Deuver, L., and Thomas S. Hector. 1998. Using mapping charettes to identify ecological reserve networks. The First Conference of the Wildlands Project, Estes Park, CO.
- Hector, Thomas S., Margaret H. Carr, Mark A. Benedict, and Paul D. Zwick. 1998. A GIS-based landscape approach for the identification of a statewide integrated conservation system in Florida. The First Conference of the Society of Conservation GIS, Idyllwild, CA.
- Hector, Thomas S., Margaret H. Carr, Mark A. Benedict, and Paul D. Zwick. 1998. A GIS-based landscape approach for the identification of a statewide integrated conservation system in Florida. Linkages in Ecosystem Science, Management, and Restoration, Natural Resources Forum '98, University of Florida, Gainesville, FL.
- Hector, Thomas S., Margaret H. Carr, Mark A. Benedict, and Paul D. Zwick. 1998. A GIS-based landscape approach for the identification of a statewide integrated conservation system in Florida. United States Regional Association of the International Association for Landscape Ecology, 13<sup>th</sup> Symposium, Lansing, Michigan.

- Carr, Margaret H., Thomas S. Hoctor, and Paul D. Zwick. 1998. Connections at the Crossroads: The Florida Greenways Experiment. Connections: The 4<sup>th</sup> Annual Public Interest Environmental Conference, Gainesville, FL.
- Carr, Margaret H., Paul D. Zwick, and Thomas S. Hoctor. 1998. Using GIS for identifying greenways and interfaces with transportation systems. International Conference on Wildlife Ecology and Transportation. Ft. Myers, FL.
- Hoctor, Thomas S. 1997. Application of reserve design principles for balancing agricultural and ecological management on public lands and in regional conservation systems. Florida Land Acquisition and Management Conference: Promoting Partnerships in Preservation and Conservation, Sarasota, FL.
- Hoctor, Thomas S., Margaret H. Carr, Mark A. Benedict, and Paul D. Zwick. 1997. A GIS-based landscape approach for the identification of a statewide integrated conservation system in Florida. Third International Conference on the Science and Management of Protected Areas, Calgary, Alberta, Canada.
- Benedict, Mark, A., Thomas S. Hoctor, Margaret H. Carr, and Paul D. Zwick. 1997. A GIS-based landscape approach to the conservation of Florida's native ecosystems. United States Regional Association of the International Association for Landscape Ecology, 12<sup>th</sup> Symposium, Durham, North Carolina.
- Hoctor, Thomas S. 1996. The ecological effects of roads. Road Activist's Workshop, Ocala National Forest, March, 1996.