

Tiffany G. Troxler, Ph.D.

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Research Associate & Florida Coastal Everglades LTER Project Collaborator

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Research Associate, Institute for Regional Conservation, 22601 SW 152nd Ave., Miami, FL, 33170

Education

2005 Doctor of Philosophy: Department of Biological Sciences, Florida International University, Miami, FL 33199

“Investigating Ecosystem Responses to Hydrologic Change and Mechanisms for Nitrogen Sequestration in Seasonally Flooded Tree Islands of the Southern Everglades”

2001 Master of Science: Department of Biological Sciences, Florida International University, Miami, FL 33199

“Investigating Tree Island Community Response to Increased Water Flow on Seasonally Flooded Tree Islands in the Southern Everglades”

1997 Bachelor of Science: Department of Environmental Studies, Florida International University, Miami, FL 33199

1993 Bachelor of Arts: Department of Anthropology, Tulane University, New Orleans, LA 70118; Minor: Department of Ecology, Evolution, and Organismal Biology

Research Interests

Wetland and coastal ecology; biogeochemistry; landscape biogeochemical processes; pattern and process controlling plant community structure; plant-soil interactions; conservation, management and restoration of wetland and coastal landscapes

Professional Experience

Teaching Experience

2007 – present NCEAS Distributed Graduate Student Seminar – Functional Ecology

2007 NSF Research Experience for Undergraduates Program Mentor

2007 Adjunct Faculty - General Ecology Lecture

2006 NSF Research Experience for Undergraduates Program Mentor

2006 – present FCE LTER Schoolyard Program Mentor

2005	NSF Research Experience for Undergraduates Program Mentor
2004 - 2005	National Oceanic and Atmospheric Administration Environmental Science Research Internship Program Mentor
2004	Adjunct Faculty – Field Applications in Restoration Ecology
2003 – 2004	Graduate Research Assistantship –Florida Coastal Everglades Long Term Ecological Research (FCE LTER) Program
2002 – 2003	Teaching Assistantship - Department of Biological Sciences – Ecology Lab
2002	Adjunct Faculty – Field Applications in Restoration Ecology
2001 – 2002	Graduate Research Assistantship – Southeastern Environmental Research Center
2000 – 2001	Teaching Assistantship - Department of Biological Sciences – Biology Lab
1999 – 2000	Graduate Research Assistantship – Southeastern Environmental Research Center
1998 – 1999	Teaching Assistantship - Department of Biological Sciences – Ecology Lab

Professional Organizations, Publications and Presentations

Professional Organizations with primary service role (last five years)

Jul 2005 – Sep 2006	US LTER Network All Scientist’s Meeting, Program Committee, poster committee chair
Feb 2004 – Apr 2005	Co-Chair U. S. LTER Graduate Student Collaborative Research Symposium Committee
Jun 2002 – Apr 2005	Co-Chair U. S. LTER Network Graduate Student Committee
Feb 2001 – Mar 2004	Board Member Society for Ecological Restoration (SER) Coastal Plain Chapter
Feb 2001 – Mar 2004	At-Large Representative SER Coastal Plain Chapter
Feb 2001- Feb 2003	Membership Committee Chair SER Coastal Plain Chapter
Aug 2001 – Feb 2002	SER Coastal Plain Chapter Conference Committee
Nov 1999 – May 2000	FNPS State Conference Committee
Aug 2002 – Dec 2003	Vice President Biology Graduate Student Association
Apr 2001 – Dec 2003	President FCE LTER Graduate Student Organization

Other Professional Organizations

Jan 1999 – Dec 2005	Society of Wetland Scientists
Jan 1999 – Dec 2005	Estuarine Research Federation
Oct 1996 – Dec 2005	Florida Native Plant Society (FNPS)
Dec 1997 – Jan 1999	Natural Areas Association
Jul 1997 – Jan 1999	Cape Florida Restoration Project, volunteer

Publications

Gann, T. T. 2002. Response of Everglades tree islands to increased freshwater flow (Florida). *Ecological Restoration* 20: 211-212.

Troxler Gann, T. and D. L. Childers. 2006. Relationships between hydrology and soils describe vegetation patterns in seasonally flooded tree islands of the southern Everglades, Florida. *Plant and Soil* 279: 273-288.

Troxler Gann, T., D. L. Childers and D. N. Rondeau. 2005. Ecosystem nutrient dynamics and hydrologic variation in tree islands of the southern Everglades. *Forest Ecology and Management* 214: 11-27.

Anderson, W.T., L. Sternberg, M.C. Pinzon, **T. Gann-Troxler**, D.L. Childers, and M. Duever, 2005. Carbon isotopic composition of cypress trees from South Florida and changing hydrologic conditions. *Dendrochronologia* 23(1):1-10.

Wetzel, P. R., A. G. van der Valk, S. Newman, D. E. Gawlik, **T. Troxler Gann**, C. A. Coronado-Molina, D. L. Childers, F. H. Sklar. 2005. Nutrient Redistribution Key to Maintaining Tree Islands in the Florida Everglades. *Frontiers in Ecology and the Environment* 3: 370-376.

Troxler-Gann, T. G. Patterns of phosphorus, nitrogen and ¹⁵N along a peat development gradient in a coastal mire, Panama. *Journal of Tropical Ecology*, accepted.

Troxler-Gann, T.G. and D.L. Childers. Ecosystem oligotrophy is enhanced with increased freshwater flow in Everglades peatland tree islands. *Ecosystems*, in revision.

Troxler-Gann, T.G. and D.L. Childers. Litter decomposition promotes differential feedbacks in an oligotrophic southern Everglades wetland. *Plant Ecology*, in review.

Presentations (with titles of those given in last six years)

May 2007 Broward Native Plant Society, Ft. Lauderdale, FL – “Everglades Tree Islands – model ecosystems for landscape-scale research”

**Invited Speaker*

Apr 2007 10th International Symposium on Wetland Biogeochemistry, Chesapeake Bay Symposium, Annapolis, MD – “The wet season nitrogen budget of an Everglades tree island: potential role in wetland landscape biogeochemical fluxes”

**Invited Speaker*

Mar 2007 FCE LTER Network All Scientists Meeting, Miami, FL – poster – “Bacterial diversity, enzyme activities, and soil CO₂ flux along a soil P gradient in a coastal peatland, Panama”

Mar 2007 FCE LTER Network All Scientists Meeting, Miami, FL – poster – “Nutrient patterns of dwarf *Rhizophora mangle* and *C. jamaicense* along the southeastern Everglades ecotone”

- Oct 2006 University of Florida, Tropical Research and Education Center, Homestead, FL – oral – “Everglades Tree Islands – model ecosystems for landscape-scale research”
**Invited Speaker*
- Sept 2006 LTER Network All Scientists Meeting, Estes Park, CO – “Biogeochemical Complexity among LTER sites – the what, where and how”
**Working Group Leader*
- Sept 2006 LTER Network All Scientists Meeting, Estes Park, CO – poster - “Biogeochemical Connectivity in a Complex Wetland Landscape: Nitrogen Sequestration by an Everglades Tree Island”
- June 2006 Greater Everglades Ecosystem Restoration Conference, Orlando, FL – oral- “Ecosystem responses to hydrologic change in Everglades tree islands”
- June 2006 Greater Everglades Ecosystem Restoration Conference, Orlando, FL – poster - “Biogeochemical Connectivity in a Complex Wetland Landscape: Nitrogen Sequestration by an Everglades Tree Island”
- Apr 2006 University of Miami Biology Departmental Seminar, Miami, FL – “Ecosystem Responses to Hydrologic Change and Mechanisms of Nitrogen Retention in Everglades Tree Islands”
**Invited speaker*
- Mar 2006 Florida Coastal Everglades LTER All Scientists Meeting, Miami, FL – poster - “Biogeochemical Connectivity in a Complex Wetland Landscape: Nitrogen Sequestration by an Everglades Tree Island”
- Mar 2006 LTER mini-symposium, National Science Foundation, Washington, D.C. – “Ecosystem responses to hydrologic change in Everglades tree islands: Findings and future directions”
**Invited speaker*
- Nov 2005 Estuarine Research Federation, Norfolk, VA – Oral – “Coupling Oligotrophy and Peat Development in a Coastal Freshwater Swamp of Panama”
- Sep 2005 South Florida Water Management District – Oral - “Investigating Ecosystem Responses to Hydrologic Change and Mechanisms for Nitrogen Sequestration in Seasonally Flooded Tree Islands of the Southern Everglades”
**Invited Speaker*
- Aug 2005 Ecological Society of America, Montreal, Canada – Poster – “Investigating Groundwater Flow in an Everglades Tree Island”
- Mar 2005 Florida Coastal Everglades LTER Meeting – Poster – “Investigating Groundwater Flow in an Everglades Tree Island”
- Mar 2005 International Wetland Biogeochemistry Symposium, Baton, Rouge, LA – Oral – “Coupling Oligotrophy and Peat Development in a Coastal Freshwater Swamp of Panama”
- Jul 2004 Association of Tropical Biology and Conservation, Miami, FL – Oral - “Coupling Oligotrophy and Peat Development in a Coastal Freshwater Swamp of Panama”

- Jul 2004 International Wetland Ecology Congress (INTECOL), Utrecht, Netherlands – Oral – “Nutrient Mineralization and Accumulation During Litter Decomposition in Seasonally Flooded Tree Islands of the Southern Everglades”
- Mar 2004 Florida Coastal Everglades LTER Meeting – Poster – “Nutrient Cycling, Litter Accumulation, and Decomposition in Seasonally Flooded Tree islands of the Southern Everglades”
**Best Poster Presentation Award*
- Jan 2004 Smithsonian Tropical Research Institute, Bocas del Toro, Panamá - “Ecosystem Characterization and Hydrologic Dynamics of Seasonally Flooded Tree Islands in the Southern Everglades”
**Invited Speaker*
- Sep 2003 Estuarine Research Federation, Seattle, WA – interactive poster – “Estimating annual carbon exports from seasonally flooded tree islands in the southern Everglades”
- Sep 2003 LTER All Scientists Meeting, Seattle, WA- Poster - “Estimating annual carbon exports from seasonally flooded tree islands in the southern Everglades”
- Aug 2003 Society for Wetland Scientists, New Orleans, LA – Poster - “Nutrient cycling, litter accumulation, and decomposition in seasonally flooded tree islands of the southern Everglades”
**Honorable Mention*
- Jul 2003 Florida Native Plant Society, Miami, FL – “Ecology and flora of Everglades tree islands”
**Invited Speaker*
- Jun 2003 Comprehensive Everglades Restoration Program Sub-Group Meeting, Everglades National Park Krome Center, Homestead, FL
**Invited Speaker*
- Apr 2003 Greater Everglades Ecosystem Restoration Meeting, Naples, FL – Oral – “Investigating the response of tree island function to increased water flow in a southern Everglades ecosystem”
- Jan 2003 FIU Biology Symposium, Miami, FL – Oral - “Nutrient cycling, litter accumulation, and decomposition in seasonally flooded tree islands of the southern Everglades”
**Best Oral Presentation Award - Ph.D. Category*
- Jan 2003 Florida Coastal Everglades LTER Meeting, Miami, FL – Poster – “Nutrient Cycling, Litter Accumulation, and Decomposition in Seasonally Flooded Tree Islands of the Southern Everglades”
- Aug 2002 Ecological Society of America, Tucson, AZ – Oral – “Ecosystem characterization and hydrologic dynamics of seasonally flooded tree islands in the southern Everglades”
- Feb 2002 FCE LTER All Scientists Meeting, Miami, FL – Poster – “Ecosystem Characterization and Hydrologic Dynamics of Seasonally Flooded Tree Islands in the Southern Everglades”

- Jan 2002 FIU Biology Symposium, Miami, FL – Oral – “Ecosystem characterization and hydrologic dynamics of seasonally flooded tree islands in the southern Everglades”
- Nov 2001 Estuarine Research Federation, St. Petersburg, FL – Poster – “Investigating tree island community response to increased water flow in a southern Everglades ecosystem”
- Oct 2001 Society for Ecological Restoration, Niagara Falls, Ontario – Oral – “Investigating Tree Island Community Response to Increased Water Flow in a Southern Everglades Ecosystem”
- Aug 2001 Ecological Society of America, Madison, WI – Oral – “Relationships between hydrology and soils describe vegetation patterns in seasonally flooded tree islands of the southern Everglades, Florida”
- Feb 2001 FIU Tropical Biology Symposium, Miami, FL – Poster – “Investigating Tree Island Response to Increased Water Flow in a Southeastern Everglades Ecosystem”

**Best Poster Presentation Award - M.S. Category*

Fellowships and Grants

- 2007 National Science Foundation, supplement funds for international travel - \$5000
- 2006 South Florida Water Management District, West Palm Beach , FL, Calculating Nutrient and Hydrologic Fluxes in a Tree island, \$150,000
- 2006 Smithsonian Tropical Research Institute Short-term Post-Doctoral Research Fellowship, \$2000
- 2004 FIU University Graduate School – Dissertation Year Fellowship, \$18,000
- 2004 National Science Foundation Supplemental Grant - LTER Graduate Student Collaborative Research Symposium, \$45,000
- 2004 LTER Network Office – Working Group grant, \$5000
- 2004 FIU Graduate Student Association – Research Grant, \$1000
- 2004 FIU Latin American and Caribbean Center and Center for Transnational and Comparative Studies Tinker Field Research Grant, \$1500
- 2004 FIU Graduate Student Association – Conference Travel Grant, \$500
- 2004 Smithsonian Tropical Research Institute Short-term Pre-Doctoral Research Fellowship, \$1000
- 2003 LTER Network Office – Research Grant, \$500
- 2003 FIU Graduate Student Association - Conference Travel Grant, \$500
- 2003 FIU Graduate Student Association – Research Grant, \$1000
- 2002 FIU Graduate Student Association - Conference Travel Grant, \$500
- 2002 FIU Graduate Student Association – Research Grant, \$1000
- 2001 FIU Graduate Student Association - Conference Travel Grant, \$500
- 2000 FIU Tropical Biology Program - Conference Travel Grant, \$500
- 1999 FIU Tropical Biology Program – Research Grant, \$1000

1999 FIU Tropical Biology Program - Conference Travel Grant, \$500