

Katie Glodzik

PhD candidate

INTERDISCIPLINARY ECOLOGY
UNIVERSITY OF FLORIDA, PHELPS LAB
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EDUCATION

University of Florida, Gainesville, FL

PhD Candidate, Interdisciplinary Ecology (anticipated 2017) GPA: 3.81/4.0

Advisor: Dr. David Kaplan

Dissertation (in progress): Impacts of hydrological change to salt marsh vegetation and coastal forest along the Big Bend of Florida

Duke University, Durham, NC

M.E.M. Ecosystem Science and Conservation (2013) GPA: 3.89/4.0

Graduate Certificate in Geospatial Analysis (2013)

Advisors: Dr. Emily Bernhardt, Dr. Patrick Halpin

Masters Project: Biogeochemical consequences of seasalt additions to freshwater wetland soil cores

Boston University, Boston, MA

B.A. Economics, Environmental Analysis and Policy (2007) GPA: 3.73/4.0

Magna Cum Laude, Phi Beta Kappa, Dean's List 2003 – 2007

Thesis: Effective watershed management and an assessment of Laguna de Bay, Philippines regulation

RESEARCH INTERESTS

Saltwater intrusion impacts to coastal wetland structure and vegetation, water resource sustainability, remote sensing of coastal environments, wetland ecology, ecohydrology

PROFESSIONAL EXPERIENCE

University of Florida, Gainesville, FL

Water Institute Graduate Fellow, 2013 – present

- Use field assessment and remote sensing to study saltwater intrusion in Florida Gulf Coast ecosystems: evaluate road impacts to salt marsh salinity and vegetation, statistically analyze changes in regional river discharge, and distinguish between drivers of coastal forest die-off.
- Meet regularly with Water Institute interdisciplinary cohort studying “Impacts of Sea Level Change on Coastal Aquifers, Water Resources, and Ecosystems.” Discuss individual and group projects and state of sea level rise research.

Bernhardt Lab at Duke University, Durham, NC

Lab and Research Technician, 2011 – 2013

- Designed and completed experiment testing artificial seawater effects on biogeochemistry of freshwater wetland soil cores.
- Collected and processed soil and water samples to monitor biogeochemistry of a freshwater coastal wetland experiencing saltwater intrusion.

Industrial Economics, Inc., Cambridge, MA

Research Analyst, 2008 – 2011

- Employed Sea Level Affecting Marshes Model to project wetland migration and loss for Indian River Lagoon, Florida and Delaware Estuary. Co-led workshop in Palatka, FL to present results to government representatives and gather feedback.
- Supported natural resource damage assessments, including co-managing logistics for field sampling in a contaminated wetland in New Jersey and collecting and processing sediments.
- Managed and mapped field sample data for the Deepwater Horizon oil spill and worked in the Gulf Command Center in Louisiana managing shoreline observation data.
- Performed quality assurance for various database and geospatial projects, including a model that predicts coastal community response to sea level rise and calculates associated costs.

Boston University Department of Geography and Environment, Boston, MA

Research Assistant, 2007 – 2008

- Analyzed survey data to model how socioeconomic characteristics and the local built environment predict individual health choices.
- Gathered and processed economic and power generation data for a Computable General Equilibrium model to simulate carbon tax effects in California.

AWARDS AND SCHOLARSHIPS

- Water Institute Fellowship on Impacts of Sea Level Change on Coastal Aquifers, Water Resources, and Ecosystems, University of Florida, 2013 – 2017 (\$25,000/year)
- Grinter Fellowship, University of Florida, 2013 – 2017 (\$2,333/year)
- William Schlesinger Scholarship, Duke University, 2011 – 2013 (\$14,000/year)
- College Prize for Excellence in Geography and Environment, Boston University, 2007
- Alumni-funded Scholarship, Boston University, 2004 – 2007 (\$2000/year)

REPORTS

Kassakian, Jennifer, Katie Glodzik, and Daniel Hudgens. 2011. Impacts of Sea Level Rise to the Indian River Lagoon Estuary: Application of Ecological and Economic Models. Industrial Economics, Inc., for E.P.A. Climate Change Division and St. Johns River Water Management District. p1-22.

Etre, Neal, Ann Shellenbarger Jones, Katie Glodzik, and Daniel Hudgens. 2010. Application of Ecological and Economic Models of the Impacts of Sea-Level Rise to the Delaware Estuary. Industrial Economics, Inc., for U.S. Environmental Protection Agency Climate Change Division and Partnership for the Delaware Estuary. p1-48.

PRESENTATIONS AND POSTERS

*presenter(s) underlined

Glodzik, Katie, Bill Pine, Carrie Reinhardt Adams, and David Kaplan. 2016. Road impacts to salt marsh salinity and vegetation via interrupted surface flow: observations from two Big Bend sites (poster). 5th University of Florida Water Institute Symposium. Mar. 16-17, 2016. Gainesville, FL.

Glodzik, Katie, Bill Pine, Carrie Reinhardt Adams, and David Kaplan. 2016. Road impacts to salt marsh salinity and vegetation via interrupted surface flow: observations from two Big Bend sites (poster). Big Bend Science Symposium. Feb. 28, 2016. Gainesville, FL.

Glodzik, Katie. 2014. Suwannee River discharge changes since 1942. 16th Annual Gulf Sturgeon Research Workshop. Nov. 12-14, 2014. Lake City, FL.

Glodzik, Katie, Sean Sharp, and Rachel Bouchillon. 2014. Altered Hydrology in a Coastal Wetland Modifies Salinity and Soil Organic Matter (poster). University of Florida Water Institute Symposium. Feb. 11-12, 2014. Gainesville, FL.

Glodzik, Katie, Sean Sharp, and Rachel Bouchillon. 2014. Saltwater Intrusion Impacts to Coastal Wetland Soil Organic Matter. North Florida Marine Science Symposium. Jan. 16-17, 2014. St. Augustine, FL.

Glodzik, Katie, Ashley Helton, and Emily Bernhardt. 2013. Biogeochemical Consequences of Saltwater Intrusion to Freshwater Wetland Soil. Joint meeting of Society of Wetland Scientists South Atlantic Chapter, Florida Association of Environmental Soil Scientists, and Southwest Chapter of the Florida Association of Environmental Professionals. Oct. 6-9, 2013. Tampa, FL.

Kassakian, Jennifer and Katie Glodzik. 2010. The Impacts of Sea Level Rise to the Indian River Lagoon Estuary (Florida): Preliminary Results and Gathering Feedback. Workshop for clients and stakeholders from St. Johns River and South Florida Water Management Districts, NASA, U.S. Fish and Wildlife Service. Dec. 2-3, 2010. Palatka, FL.

Glodzik, Katie and Ann Shellenbarger Jones. 2009. Habitat Equivalency Modeling for Wetland Migration from Sea Level Rise. Recruiting event for Industrial Economics, Inc. Jan. 30, 2009. Cambridge, MA.

Banerjee, Amlan, Jeana Frost, Katie Glodzik, Joan Walker. 2008. Individual-level Models Linking the Built Environment and Nutrition. Annual meeting of Association of American Geographers. Apr. 8-12, 2008. Boston, MA.

Glodzik, Katie. 2007. Introduction to Global Positioning Systems and Geo-caching Exercise. July 18, 2007. Class for Summer Pathways, a science program for high school females. Boston, MA.

EXTRA-CURRICULAR LEADERSHIP

- President, Student Association of Wetland Scientists, Duke University, 2012-2013
- Vice President, Nicholas Naturalists, Duke University, 2012-2013
- Teaching Assistant, Professional Communications, Duke University, 2012
- Member, Recruiting Committee, Industrial Economics, Inc., 2009-2011
- Recycling Coordinator and Environmental Assistant to the Provost, Boston University, 2004-2007

RECENT PUBLIC OUTREACH

- Presented *Saltwater Intrusion Impacts to Coastal Ecosystems and Options for Mitigation* with Elliot White (University of Florida) at Cedar Key Public Library Lecture Series. Feb. 11, 2016. Cedar Key, FL.
- Co-led *Paddle the Estuary*, a kayak tour of marshes and tidal creeks at Withlacoochee Gulf Preserve Bioblitz. Mar. 16, 2014. Yankeetown, FL.
- Presented *Saltwater Intrusion Impacts to Cabbage Palm Trees* at a public open house at Seahorse Key Marine Laboratory. Nov. 23, 2013. Cedar Key, FL.
- Co-led *Florida Springs Tour*, a kayak and snorkeling trip, at Science Writers 2013 meeting. Nov. 15, 2013. Fort White, FL.

SKILLS

- **Computer:** ArcGIS V. 9 and 10, ENVI, SeaDAS, Access, R, Python, Excel, PC-ORD
- **Field:** Collection of sediment cores, porewater, and gas samples; wetland vegetation surveys; groundwater monitoring; water quality assessment; stream profiles; wetland delineation
- **Laboratory Equipment:** Gas, ion chromatograph; lachate; total carbon, nitrogen analyzer
- **CPR and First Aid:** Most recent certification in Apr. 2014
- **Boating:** USGS Over-the-Water Safety training (2014); air-boat (novice) and skiff (intermediate)

REFERENCES

Dr. David Kaplan (PhD advisor)
Assistant Professor, Department of Environmental Engineering Sciences
University of Florida
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Dr. Carrie Reinhardt Adams (PhD committee member)
Associate Professor, Department of Environmental Horticulture
University of Florida
Rm. 107 Bldg. 68, PO Box 110675
Gainesville, FL 32611
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Dr. Emily Bernhardt (masters advisor)
Professor, Department of Biology
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