

Drew Hiatt

Agronomy Department, University of Florida
Gainesville, FL, 32611, dhiatt@ufl.edu, (775) 790-4303

Education

University of Florida School of Natural Resources and the Environment PhD, Interdisciplinary Ecology	2023 - Present
University of Florida School of Natural Resources and the Environment M.S., Interdisciplinary Ecology	2013 - 2016
University of Nevada, Reno College of Business B.S., Economics and Business Management (double major), with honors	2005 - 2010

Professional Appointments/Employment:

Graduate Research Assistant University of Florida 1/2023 – Present
Objective: Evaluating the mechanism and impacts of plant invasions. Leading the following projects:

- The role of post introduction hybridization and local adaptation to frost tolerance with Brazilian peppertree (*Schinus terebinthifolia*)
- Hotspots of plant invasions in the contiguous United States, understanding the drivers of invasive plant richness and identification of vulnerable habitats nationwide

Research Scientist/Project Manager University of Florida 11/2020 – 12/2024
Objective: Understanding the mechanism of post-hurricane plant invasions in Everglades National Park.

- Utilize QGIS software to prioritize invasive plant populations to sample (that span a gradient of hurricane intensity)
- Take aerial photos to approximate abundance of the invader for training points for satellite based detection methods
- Assist in the use of hyperspectral imaging system which enables identification to species level across coordinated field transects

Assistant Project Manager University of Florida 12/2016 – 11/2020
Objective: Understanding the interactive effects of climate change, fire regimes, and plant invasions on tick-borne disease risk at Department of Defense installations.

- Collaboratively design and develop vegetation monitoring protocol
- Train and oversee personnel in plant identification, (including threatened/endangered as well as non-native invasive species), dung surveys, and tick trapping
- Developed fire return interval maps for site visit planning and field navigation using QGIS software

- Conduct and oversee vegetation inventories in adverse conditions, including extreme heat and difficult terrain
- Maintain and manage data in Excel/Access
- Analyze data using R and SAS statistical software
- Prepare summary reports for land managers

Graduate Research Assistant University of Florida 12/2013 – 12/2016

Led research projects to quantify the economic costs of invasive plant management in Florida's natural areas for the Florida Fish and Wildlife Conservation Commission; investigate the phenotypic plasticity of invasive plant populations and co-occurring native species; and to evaluate the ecological niche of *Dichrostachys cinera*.

- Mentored an international graduate student
- Developed and managed a relational database (>100,000 records)
- Designed, implemented, and analyzed common garden experiments (field and greenhouse)
- Assisted in data collection and invasive plant monitoring and removal from a long-term experiment looking at interactions between drought and plant invasions

Graduate Teaching Assistant University of Florida 6/2013 – 12/2013

Natural Resource & Environmental Economics,
Natural Resource Policy,

- Developed educational materials, lectured on selective topics
- Revised video/PowerPoint files for integration to UF online

Estimator / Project Manager A & K Earth Movers, Inc. 1/2002 – 8/2012

Prepared time, cost, and labor estimates for projects and services by analyzing blueprints, specifications, proposals, and other documentation. Estimated projects with the TRPA (Tahoe Regional Planning Agency) utilizing best management practices in order to meet the requirements of both the scope of work and the responsibility of working in a protected environmental area.

- Produced cost estimates for civil engineering projects using Excel
- Developed, modified, and implemented custom Excel templates to streamline estimation process comparably to commercial estimation software
- Managed budgets through project completion
- Supervised and managed personnel and equipment
- Operate various types of heavy construction equipment (Excavators, Backhoe loader etc.)

Presentations:

Hiatt, D., John, G. P., Williams, D., and S. L. Flory., September 2025. "Post-introduction intraspecific hybridization enhances frost tolerance of an invasive shrub." Ecology and Management of Alien Plant Invasions bi-annual conference. Lincoln, New Zealand

Hiatt, D., John, G. P., Williams, D., and S. L. Flory., March 2025. "Post-introduction intraspecific hybridization enhances frost tolerance of an invasive shrub." Florida Invasive Species Council Annual Conference.

Hiatt, D., Dillon, W., Cabrera S., Gardner A.M., Allan B., Dietze, M., and Flory S.L., February 2023. “Mechanistic pathways of tick exposure risk in native and invaded plant communities” EPI Research Day, Emerging Pathogens Institute. Gainesville, FL

Hiatt, D., Serbesoff-King, K., Lieurance, D., Gordon, D. R., & Flory, S.L. October 2020. “Allocation of invasive plant management expenditures for conservation: Lessons from Florida, USA.” North America Invasive Species Management Association (NAISMA) Online Annual Conference.

Hiatt, D., Dillon, W., Cabrera S., Gardner A.M., Allan B., Dietze, M., and Flory S.L., August 2019. “Grass invasion enhances survival of a human disease vector by altering microclimate conditions” Ecological Society of America (ESA) Annual Conference. Louisville, KY.

Flory, S.L., Dillon W., Fahey, C., Alba, C., **Hiatt, D.** November 2018. “Interactive effects of plant invasions, drought, and fire on longleaf pine communities” International Conference on Biological Invasions and Global Change. Henan, China.

Dillon W., **Hiatt, D.**, Gardner, A.M., Allan, B., Dietze, M., and Flory, S.L. August 2018. “Examining relationships between fire, plant invasions, and tick-borne disease risk in the southeast United States” Ecological Society of America (ESA) Annual Conference. New Orleans, LA.

Hiatt, D., Serbesoff-King, K., Lieurance, D., Gordon, D. R., & Flory, S.L. August 2017. “Economic cost of invasive plant management in Florida’s natural areas” Ecological Society of America (ESA) Annual Conference. Portland, OR.

Dillon W., **Hiatt, D.**, Allan, B., Dietze, M., and Flory, S.L. August 2017. “Effects of an invasive grass on fire intensity” Ecological Society of America (ESA) Annual Conference. Portland, OR.

Hiatt, D., & Flory, S.L. August 2016. “Invasive plant populations and co-occurring native species vary in phenotypic plasticity” Ecological Society of America (ESA) Annual Conference. Ft. Lauderdale, FL

Hiatt, D. March 2016. “Economic cost of invasive plant management in Florida’s natural areas” Florida Exotic Pest Plant Council (FLEPPC) Annual Symposium. Melbourne, FL

Hiatt, D. April 2015. “Variation in competitive ability and phenotypic plasticity of an invasive grass (preliminary results)” Florida Exotic Pest Plant Council (FLEPPC) Annual Symposium. Melbourne, FL

Hiatt, D. March 2015. “Economic cost of invasive plant management in Florida’s natural areas (preliminary data)” Florida Fish and Wildlife Conservation Commission Research Symposium. Orlando, FL

Publications:

11. **Hiatt, D.**, & Flory, S. L. (in prep). Uncovering the hidden reaction norm: non-linearities in plastic responses to multiple stressors. To be submitted to *New Phytologist*.

10. Flory, S.L., S.J. Ryan, Y.V. Taneja, M. Muñoz, **D. Hiatt**, C.A. Lippi, B.F. Allan. (2025). Impacts of plant invasions on tick-borne disease risk. *BioScience*.
<https://doi.org/10.1093/biosci/biaf153>
9. **Hiatt, D.**, Dillon, W., Gardner, A., Cabrera, S., Allan, B. F., Dietze, M., & Flory, S. L. (2025). Mechanistic pathways of tick exposure risk in native and invaded plant communities. *Ecology*.
<https://doi.org/10.1002/ecy.70233>
8. Meerdink, S., **Hiatt, D.**, Flory, S. L., & Zare, A. (2024). Dealing with imperfect data for invasive species detection using multispectral imagery. *Ecological informatics*, 79, 102432.
<https://doi.org/10.1016/j.ecoinf.2023.102432>
7. Flory, S.L., Dillon, W., **Hiatt, D.** (2022). Interacting global change drivers suppress a foundation tree species. *Ecology Letters*. <https://doi.org/10.1111/ele.13974>
6. Cabrera, S., **Hiatt, D.**, Dillon, Whalen. W., Clark, T., Allan, B. F., & Flory, S. L. (2021). Observations of wild turkey nesting in cogongrass. *The Southeastern Naturalist*.
<https://doi.org/10.1656/058.020.0119>
5. Dillon, W., **Hiatt, D.**, and Flory, S.L. (2021). Experimental method for testing the effects of fuel structure on fire intensity. *Forest Ecology and Management*.
<https://doi.org/10.1016/j.foreco.2020.118884>
4. **Hiatt, D.**, & Flory, S.L. (2020). Populations of a widespread invader and co-occurring native species vary in phenotypic plasticity. *New Phytologist*. <https://doi.org/10.1111/nph.16225>
3. **Hiatt, D.**, Serbesoff-King, K., Lieurance, D., Gordon, D. R., & Flory, S.L. (2019). Allocation of invasive plant management expenditures for conservation: Lessons from Florida, USA. *Conservation Science and Practice*, e51. <https://doi.org/10.1111/csp2.51>
2. Dillon W., Lieurance D., **Hiatt, D.**, Clay, K., & Flory, S.L. (2018). Native and invasive woody species differentially respond to forest edges and forest successional age. *Forests*, 381(9) 7-24.
<https://doi.org/10.3390/f9070381>
1. Estrada, J. A., Wilson, C. H., **Hiatt, D.**, & Flory, S. L. (2017). Different factors drive emergence and persistence in an invasive grass. *International Journal of Plant Sciences*, 178(5), 406-410.
<https://doi.org/10.1086/691142>

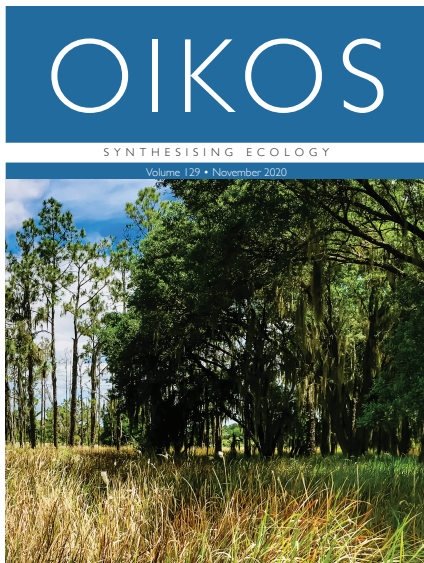
Media Coverage:

2019: Allocation of invasive plant management expenditures for conservation: Lessons from Florida, USA:

- NPR- WJCT Public Media: <https://news.wjct.org/post/city-miami-mayor-francis-suarez-broward-county-startup-industry-florida-invasive-plant-species>
- WPTV (NBC): <https://www.wptv.com/news/protecting-paradise/florida-invests-millions-to-tackle-invasive-plant-species>

- The Nature Conservancy: <https://www.nature.org/en-us/newsroom/florida-invasive-plants-study/?sf103079543=1>

Cover Photos:



Oikos: November 2020 Vol.129

Grants, Awards, and Honors:

Grants

USDA/ USAF

“Effects of post-introduction intraspecific hybridization on frost tolerance and biocontrol efficacy for Brazilian peppertree” (2024 - 2025), Amount \$170,000

Everglades National Park

“Hurricane effects on the distribution and management of plant invasions in coastal habitats” (2020 - 2023), Amount: \$239,813

Florida Exotic Pest Plant Council (FLEPPC)

Julia Morton Invasive Plant Research Grant, “Invasive plant populations and co-occurring native species vary in phenotypic plasticity” (2014), Amount: \$2,000

Awards

- EMAPI (Ecology and Management of Alien Plant Invasions) bi-annual conference. Lincoln, New Zealand: 1st place Student Research Presentation (2025)
- FISC (Florida Invasive Species Council) Annual Symposium: 1st place Student Research Presentation (2025)
- FLEPPC (Florida Exotic Pest Plant Council) Annual Symposium: 1st place Student Research Presentation, (2015)
- Nevada Millennium Scholarship, (2005 - 2010)
- Marion Mallory Jr. College of Business Scholarship, (2009)
- Bank of America Scholarship, (2009)

Honors

- Member of the Sigma Xi Academic Honor Society, (2024 - present)

- Member of the Delta Epsilon Iota Academic Honor Society, (2010)
- Dean's list, University of Nevada, Reno recipient, (2005 - 2010)

Outreach/Active Membership/ Professional Service:

Florida Invasive Species Council, (2015-present)
 Ecological Society of America, Invasion Ecology Section, (2016-present)
 President of the University of Florida Forestry Graduate Student Organization, (2014-2015)
 Graduate of Breakthrough Training (Leadership Development), (2012)

Representative Professional Activities and Service

External Reviewer: *Ralph E. Powe Junior Faculty Enhancement Award, University of Mississippi (2020)*

Ad hoc reviewer: *Ecology Letters, New Phytologist, Oecologia, Biological Invasions, International Journal of Plant Science, Journal of Plant Ecology, Ecosystems, Journal of Mountain Science*

Field/Technical Skills:

MS Office (Word, PowerPoint, Excel, Access)
 Statistical software (Minitab, R, SAS)
 QGIS, handheld GPS (Garmin), Image analysis software (ImageJ, APS Assess)
 Campbell Scientific Hydrosense II (soil moisture probe)
 Decagon Device Ind. ACCUPAR LP-80 (Photosynthetically active radiation PAR meter)
 LI-COR LI-3100 Leaf Area Meter

Hiking, backpacking, camping in adverse conditions
 4-wheel drive vehicle operation
 Field identification of plant species (native and non-native species)
 Plant censusing (using quadrats, transects and line point estimates)