

Curriculum Vitae

Patrick W. Inglett

Department of Soil and Water Science, University of Florida,
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AREAS OF SPECIALIZATION

- Biogeochemistry of carbon, nitrogen, and phosphorus in aquatic and terrestrial systems.
- Nitrogen cycling in ecosystems including N₂ fixation and denitrification.
- Isotopic techniques including natural abundance and isotope tracing using ¹³C and ¹⁵N.
- Ecosystem health and restoration including nutrient cycle processes and indicators.

EDUCATIONAL BACKGROUND

Ph.D. in Soil and Water Science, University of Florida, 2005.

- Dissertation Title: *Stable Nitrogen Isotopic Ratios as an Indicator of Wetland Eutrophication: A Case Study in the Florida Everglades.*

MS in Soil and Water Science, University of Florida, 1999.

- Thesis Title: *Spatial and Temporal Patterns of Periphyton N₂ Fixation in a Nutrient-Impacted Everglades Ecosystem.*

BS in Applied Biology, Georgia Institute of Technology, 1997.

- Certificate specialization in Earth and Atmospheric Sciences
- Graduation with High Honor

EMPLOYMENT

Dates	Position	Institution/Agency
2021 – pres.	Professor	University of Florida, Gainesville FL
2013 - 2021	Associate Professor	University of Florida, Gainesville FL
2007 - 2013	Assistant Professor	University of Florida, Gainesville FL
2005 - 2006	Post-Doctoral Research Associate	University of Florida, Gainesville FL
1999 - 2003	UF Alumni Fellow	University of Florida, Gainesville FL
1997 - 1999	Graduate Research Assistant	University of Florida, Gainesville FL
1995 - 1997	Undergraduate Research Assistant	Georgia Inst. of Tech., Atlanta GA
1996 - 1996	Undergraduate Teaching Assistant	Georgia Inst. of Tech., Atlanta GA
1992 - 1995	Cooperative Education Trainee	U.S. EPA, Atlanta GA

TEACHING, ADVISING, AND INSTRUCTIONAL ACCOMPLISHMENTS

Instructor-UF Courses

Environmental Biogeochemistry (SWS4223/5224) University of Florida: 2007-present

Environmental Biogeochemistry-Distance Education (SWS4223 *UF Online*) University of Florida: 2009-present

Journal Colloquium in Environmental Science (SWS6920) University of Florida: 2012-present

Advanced Biogeochemistry (SWS6456), University of Florida: 2006, 2018, 2020

Biogeochemistry of Wetlands (SWS6448), University of Florida: 2006, 2009, 2010, 2015

Instructor-Short Courses

Biogeochemistry of Wetlands Short Course: University of Florida: 2003, 2008

Constructed Wetlands for Resource Recovery, Short Course: International Crop Research Institute for the Semi-arid Tropics (ICRISAT), Hyderabad, India. 2014, 2016.

Use of ¹⁵N based Techniques for Quantifying Biological Nitrogen Fixation (BNF) and Nitrogen Use Efficiency: International Atomic Energy Agency (IAEA), Technical Cooperation Project Regional Training Course. Montevideo, Uruguay. 2014

Invited Lecturer

Techniques in Biogeochemistry (SWS 6932), University of Florida: 2010

Lake and Reservoir Management (SWS4932/6932), University of Florida: 2012

Ecology of Spring Ecosystems (ENV 6932K), University of Florida: 2012

Biogeochemistry of Wetlands (SWS 6448), University of Florida: 2002-present

Introduction to Everglades Nutrient Chemistry, Water Quality and Quantity Short Course, Florida Earth Foundation: 2005, 2006, 2007

Soil Plant Relationships (SOS 5050), University of Florida: 2001

Teaching Assistant

Soil Physics (SWS 6932/SWS 4602), University of Florida: 1999, 2000

Wetlands and Water Quality (SWS 4244), University of Florida: 1998

Biogeochemistry of Wetlands (SWS 6448), University of Florida: 1998

Plant Physiology Laboratory (BIOL 4442), Georgia Institute of Technology: 1997

General Ecology Laboratory (BIOL 3337), Georgia Institute of Technology: 1996

Graduate committee activities

Chair/Co-ch Ph.D: (9 total) Cassandra Medvedeff, Xiaolin Liao, Daniel Irick, Debjani Sihi, Mary Lusk, Joshua Papacek, Conor MacDonnell, Kira Sorochkina (current), Clayton Nevins (current)

Chair/Co-ch MS: (16 total) Moshe Doron, Samuel Vacca, Kimberleigh Cayse-Dinkins, Benjamin Hogue, Xiaolin Liao, Ellen Bailey, Jane Hart, Stephanie Heimann-Wester, Dorah Foster, Danielle Koushel, Sara Baker-Liu, Nicole Salvatico, Russell Edwards (current), Devin Leonard (current), Ashton Woods (current)

Member Ph.D: (23 total) Hannah Vander Zanden, Casey Schmidt, Haryun Kim, Jaya Das, Peter Sleszynski, Jing Hu, Rupesh Bhomia, Rajendra Gautam, Yuanyuan Huang, Milagros Jean-Charles, John Ezell, David Fox, Courtney Reijo, Kevin Kohn, Andres Rodriguez, Amanda Desormeaux, Yan Liao, Elliott White, Carla Alonso-Contes (current), Derrick Vaughn (current), Benjamin Stelling (current), Kalindhi Larios (current), Lang Zhou (current)

Member MS: (16 total) Jamie Lewis, Kamaljit Bangor, Dylan Miner, Robert Compitello, Cory Catts, Swati Goswami, John Derbish, Francisca Hinz, Beth Robertson, Yaslin Gonzalez, Eron Raines, Qian Yao Si, David Goldstein (current), David Bright (current), Robert Cox (current), Tan Xu (current)

Undergraduate advising

Advisor for undergraduate Biology majors (University of Florida): (2008-2012)

Supervisor of undergraduate research assistants: (21 total)

Joe Duchene (2008-2009), Christian Blessington (2009), Benjamin Hogue (2009-10), Andrew Brestel (2011-12), Siddarth Anand (2010-11), Nicholas Marzolf (2012-2013), Camille Mekwinski (2013), Saumya Pande (2015), Sara Harper (2016), Sara Baker (2016-17), Katherine Galluscio (2016-17), Lindsey Mikell (2017-2020), Matthew Phipps (2018-2020), Madelene Clark (2019), Chance McLeod (2019), Lukas Pidgeon (2019), Alexander Mason (2019-20), Domenica Santana (2019-20), Cari Bean (2019-20), Charla Merkesteyn (2021), Allison Garland (2021-present)

High School Outreach

2009-present Initiated an outreach program to local high schools where my students and I give presentations on biogeochemistry and important environmental issues (nutrient pollution, greenhouse gases, climate change). Since 2010, 6 students have spoken to ten AP Environmental Science classes (approximately 250 students) at Santa Fe High School, Alachua, Florida.

Textbook Illustrator

2007, 2021 Sole illustrator for Reddy and DeLaune (2008) and Reddy, DeLaune and Inglett (2022) *Biogeochemistry of Wetlands: Science and Applications*. CRC Press. Reproduction of more than 300 graphs and figures, and production of over 100 original illustrations.

Instructional Multimedia Presentations

Environmental Biogeochemistry online course modules (77 modules)

Biogeochemistry and its History: 3 Parts	Earth Systems-Hydrosphere: 6 Parts
Analysis of Cycles and Processes: 5 Parts	Earth Systems-Ecosphere: 7 Parts
Earth Systems-Lithosphere: 5 Parts	Carbon Cycle: 13 Parts
Earth Systems-Atmosphere: 4 Parts	Nitrogen Cycle: 9 Parts

Phosphorus Cycle: 6 Parts
Sulfur Cycle: 6 Parts

Environmental Change: 13 Parts

PUBLICATIONS

Senior/principal author(s) = Underline
Self = bold
Grad Student (G = my direction, g = others)
Intern = i

Post-Doc (P = under my direction, p = others)
Undergraduate = u
Other = &

Books:

1. Reddy, K.R., DeLaune, R.D. and, **Inglett, P.W.** 2022. *Biogeochemistry of Wetlands: Science and Applications*. 2nd Edition. CRC press.

Book Chapter(s):

1. **Inglett, P.W.**, D. S. Pullucino, and K.R. Reddy. 2021. Anaerobic Soils. *In: Encyclopedia of Soils in the Environment*. 2nd Edition. Elsevier.
2. **Inglett, P.W.** 2015. Periphyton Nitrogenase Activity as an Indicator of Everglades Impact and Change. *In: Entry, Jayachandran, Gottlieb, and Ogram (eds.) Microbiology of the Everglades System*. Science Publishers, CRC Press.
3. **Inglett, P.W.** 2013. Biological Dinitrogen Fixation. Chapter 31, pp. 593-602. *In: DeLaune, Reddy, Richardson, and Megonigal, eds. Methods in Biogeochemistry of Wetlands*, Soil Science Society of America. Madison, WI. 1004 pp.
4. **Inglett, P.W.**, T. Kana, and S. An. 2013. Membrane Inlet Mass Spectrometry Approaches for Measuring Denitrification. Chapter 27, pp. 503-518. *In: DeLaune, Reddy, Richardson, and Megonigal, eds. Methods in Biogeochemistry of Wetlands*, Soil Science Society of America. Madison, WI. 1004 pp.
5. Laursen, A., and **P.W. Inglett**. 2013. System-level measurement of denitrification based on dissolved gas equilibration theory and membrane inlet mass spectrometry. Chapter 29, pp. 539-552. *In: DeLaune, Reddy, Richardson, and Megonigal, eds. Methods in Biogeochemistry of Wetlands*, Soil Science Society of America. Madison, WI. 1004 pp.
6. Inglett, K.S., **P.W. Inglett**, and J. Chanton. 2013. Methanogenesis and Methane Oxidation. Chapter 21, pp. 407-426. *In: DeLaune, Reddy, Richardson, and Megonigal, eds. Methods in Biogeochemistry of Wetlands*, Soil Science Society of America. Madison, WI. 1004 pp.
7. **Inglett, P.W.**, K.R. Reddy, E.M. D'Angelo, and W.G. Harris. 2012. Biogeochemistry of Wetlands. *In: Handbook of Soil Science*. 2nd Ed. 30 pp. CRC Press.
8. **Inglett, P.W.**, K.R. Reddy, and R. Corstanje. 2005. Anaerobic Soils. *In: D. Hillel (ed) Encyclopedia of Soils in the Environment*. pp 72-78. Academic Press.

Refereed Publications:

1. Bera, T., Inglett, K.S., **Inglett, P.W.**, Vardanyan, L., Wilkie, A.C., O'Connor, G.A. and Reddy, K.R., 2021. Comparing first-and second-generation bioethanol by-products from sugarcane: Impact on soil carbon and nitrogen dynamics. *Geoderma*, 384, p.114818.

2. Nevins, C.J., **Inglett, P.W.** & Strauss, S.L.. 2021. Biological soil crusts structure the subsurface microbiome in a sandy agroecosystem. *Plant Soil* 462:311-329.
3. Si, Qian Yao; Lusk, Mary G.; **Inglett, Patrick W.** 2021. "Inorganic Nitrogen Production and Removal along the Sediment Gradient of a Stormwater Infiltration Basin" *Water* 13, no. 3: 320.
4. Rodriguez, A.F., Gerber, S., **Inglett, P.W.**, Tran, N.T., Long, J.R. and Daroub, S.H., 2021. Soil carbon characterization in a subtropical drained peatland. *Geoderma*, 382, p.114758.
5. Nevins, C.J., S.L. Strauss, and **P.W. Inglett**. 2020. Biological soil crusts enhance moisture and nutrients in the upper rooting zone of sandy soil agroecosystems. *Journal of Plant Nutrition and Soil Science* 183, no. 5: 615-626.
6. Lusk, M.G.^G, Toor, G.S. and **Inglett, P.W.** 2020. Organic nitrogen in residential stormwater runoff: Implications for stormwater management in urban watersheds. *Science of The Total Environment*, 707, p.135962.
7. Franzen, D.W., **Inglett, P.W.**, & Gasch, C.K. 2019. Asymbiotic nitrogen fixation is greater in soils under long-term no-till versus conventional tillage. *Soil Sci. Soc. Am. J.* 83:1148-1152.
8. **Inglett, P.W.**, K. Pietro, K.S. Inglett, and J. King. 2019. STA microbial patterns and response to flow. Appendix 5C-1, pp 33-43, In: The South Florida Environmental Report. South Florida Water Management District, West Palm Beach, FL. 88 p.
9. Liao, X.^P, **P.W. Inglett**, V. Nair, A. Canion, D. Dobberfuhl. 2019. Subsurface transport and potential risk of phosphorus to groundwater across different land uses in a karst springs basin, Florida, USA. *Geoderma* 336:97-106.
10. Sihi, D.^G, **P.W. Inglett**, and K.S. Inglett. 2019. Warming rate drives microbial nutrient demand and enzyme expression during peat decomposition. *Geoderma*. 336:12-21.
11. Li, L.^g, He, Z.L., Tfaily, M.M., **Inglett, P.** and Stoffella, P.J., 2018. Spatial-temporal variations of dissolved organic nitrogen molecular composition in agricultural runoff water. *Water Research*, 137:375-383.
12. Sihi, D.^G, **Inglett, P.W.**, Gerber, S. and Inglett, K.S. 2018. Rate of warming affects temperature sensitivity of anaerobic peat decomposition and greenhouse gas production. *Global Change Biology*, 24(1), p.e259-e274.
13. Lusk, M.G.^G, Toor, G.S. and **Inglett, P.W.** 2018. Characterization of dissolved organic nitrogen in leachate from a newly established and fertilized turfgrass. *Water Research*, 131, p.52.
14. Sihi, D.^G, **P.W. Inglett**, and K.S. Inglett. 2016. Carbon quality and nutrient status drive the temperature sensitivity of organic matter decomposition in subtropical peat soils. *Biogeochemistry* 131:103–119.
15. Liao, X.^P, **P.W. Inglett**, and K.S. Inglett. 2016. Seasonal patterns of nitrogen cycling in subtropical short-hydroperiod wetlands: Effects of precipitation and restoration. *Science of the Total Environment* 556:136-145.
16. Sihi, D.^G, S. Gerber, **P.W. Inglett** and K.S. Inglett. 2016. Comparing models of microbial-substrate interactions and their response to warming. *Biogeosciences* 13:1733-1752.
17. Medvedeff, C.A.^G, K.S. Inglett and **P.W. Inglett**. 2015. Can fire residues (ash and char) affect microbial decomposition in wetland soils? *Wetlands* 35:1165-1173.
18. Sihi, D.^G, S. Gerber, **P.W. Inglett** and K.S. Inglett. 2015. Comparing models of microbial-substrate interactions and their response to warming. *Biogeosciences Discussions* 12(13):10857-10897.

19. R.K. Bhomia^g, **P.W. Inglett**, K.R. Reddy. 2015. Soil and phosphorus accretion rates in sub-tropical wetlands: Everglades Stormwater Treatment Areas as a case example. *Science of the Total Environment* 533:297-306.
20. Hu, J.^g, K.S. Inglett, M.W. Clark, **P.W. Inglett** and K.R. Reddy. 2015. Nitrous oxide production and consumption by denitrification in a grassland: effects of grazing and hydrology. *Science of the Total Environment* 532:702-710.
21. Medvedeff, C.A.^G, K.S. Inglett and **P.W. Inglett**. 2015. Patterns and controls of anaerobic soil respiration and methanogenesis following extreme restoration of calcareous subtropical wetlands. *Geoderma* 245-246:74-82.
22. Irick, D.L.^G, B. Gu, Y.C. Li, **P.W. Inglett**, P.C. Frederick, M.S. Ross, A.L. Wright, and S.M.L. Ewe. 2015. Wading bird enrichment of soil nutrients in tree islands of the Florida Everglades. *Science of the Total Environment* 532:40-47.
23. Liao, X.^P, K.S. Inglett and **P.W. Inglett**. 2014. Vegetation and microbial indicators of nutrient status: testing their consistency and sufficiency in restored calcareous wetlands. *Ecological Indicators* 48:358-366.
24. Medvedeff, C.A.^G, K.S. Inglett and **P.W. Inglett**. 2014. Evaluation of direct and indirect phosphorus limitation of methanogenic pathways in a calcareous subtropical wetland soil. *Soil Biology and Biochemistry* 69:343-345.
25. Liao, X.^G and **P.W. Inglett**. 2014. Dynamics of periphyton nitrogen fixation in short-hydroperiod wetlands revealed by high resolution seasonal sampling. *Hydrobiologia* 722:263-277.
26. Dunne, E.J., M.F. Coveney, E.R. Marzolf, V.R. Hoge, R. Conrow, R. Naleway, E.F. Lowe, L.E. Battoe, and **P.W. Inglett**. 2013. Nitrogen dynamics of a large-scale constructed wetland used to remove excess nitrogen from eutrophic lake water. *Ecological Engineering* 61:224-234.
27. Irick, D.L.^G, Y.C. Li, **P.W. Inglett**, W.G. Harris, B. Gu, M.S. Ross, and A.L. Wright. 2013. Characteristics of soil phosphorus in tree island hardwood hammocks of the southern Florida Everglades. *Soil Science Society of America Journal* 77:1048-1056.
28. Osborne, T.Z., L. N. Kobziar, and **P.W. Inglett**. 2013. Fire and water: New perspectives on fire's role in shaping wetland ecosystems. *Fire Ecology* 9:1-5.
29. Liao, X.^G, **P.W. Inglett**, and K.S. Inglett. 2013. Fire effects on nitrogen cycling in native and restored calcareous wetlands. *Fire Ecology* 9:6-20.
30. Medvedeff, C.A.^G, K.S. Inglett, L. Kobziar, and **P.W. Inglett**. 2013. Impacts of fire on microbial carbon cycling in subtropical wetlands. *Fire Ecology* 9:21-37.
31. **Inglett, P.W.** and K.S. Inglett. 2013. Biogeochemical changes during early development of restored calcareous wetland soils. *Geoderma*. 192:132–141.
32. Hogue, B.^G and **P.W. Inglett**. 2012. Characterization of combustion residues obtained from natural and simulated fires of varying intensity. *Science of the Total Environment* 431:9-19.
33. Torres, I.C.^g, **P.W. Inglett**, M. Brenner, W.F. Kenney, and K.R. Reddy. 2012. Stable isotope ($\delta^{13}\text{C}$ & $\delta^{15}\text{N}$) signatures of sediment organic matter in subtropical lakes of different trophic status. *Journal of Paleolimnology* 43:697-706.
34. Liao, X.^G and **P.W. Inglett**. 2012. Periphyton nitrogen fixation in native and restored Everglades marl prairies. *Wetlands* 32:137-148.
35. Inglett, K.S.^P, **P.W. Inglett**, T.Z. Osborne, and K.R. Reddy. 2012. Temperature sensitivity of greenhouse gas production in wetland soils of different vegetation. *Biogeochemistry*. 108:77-90.

36. Vander Zanden, H.^g, K. Bjorndal, A. Bolten, and **P.W. Inglett**. 2011. Marine-derived nutrients from green turtle nests subsidize terrestrial beach ecosystems. *Biotropica*. 44:294-301.
37. Inglett, K.S.^p, **P.W. Inglett**, and K.R. Reddy. 2011. Development of microbial community structure and function during soil development of a calcareous subtropical wetland. *Soil Science Society of America Journal*. 75:1731–1740.
38. **Inglett, P.W.**, V. Rivera-Monroy, and J. Wozniak^g. 2011. Biogeochemistry of nitrogen across the Everglades landscape. *Critical Reviews in Environmental Science and Technology*. 41:187-216.
39. Smith, C.S., L. Serra, Y. Li, **P.W. Inglett**, and K.S. Inglett^p. 2011. The Hole-in-the-Donut wetland restoration project. *Critical Reviews in Environmental Science and Technology*. 41: 723-739.
40. Cheesman, A.^g, **P.W. Inglett**, B. L. Turner, K.R. Reddy. 2010. Phosphorus transformations during decomposition of wetland macrophytes. *Environmental Science and Technology* 44:9265-9271.
41. Wright, A. and **P.W. Inglett**. 2009. Soil Organic C and N storage and distribution of $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ in aggregates of Everglades Histosols. *Soil Science Society of America Journal*. 73:427-433.
42. **Inglett, P. W.**, K. R. Reddy, E.M. D'Angelo, and P.V. McCormick. 2009. Periphyton nitrogenase activity as an indicator of Everglades nutrient impacts. *Wetlands Ecology and Management*. 17:131-144.
43. **Inglett, P.W.**, K. R. Reddy, B. Lorenzen, and S. Newman. 2007. Increased soil $\delta^{15}\text{N}$ following phosphorus enrichment: Historical patterns and tests of two hypotheses in a P-limited wetland. *Oecologia* 153:99-109.
44. Osborne, T.Z., **P.W. Inglett**, and K.R. Reddy. 2007. Linkages between particulate and dissolved organic matter in wetland ecosystems: the role of vegetation type. *Aquatic Botany* 86:53-61.
45. **Inglett, P.W.**, and K.R. Reddy. 2006. Stable C and N isotopic ratios of macrophytes as an indicator of wetland eutrophication: Patterns in the P-affected Everglades. *Limnology and Oceanography* 51: 2380-2387.
46. Sharma, K.^p, **P.W. Inglett**, K.R. Reddy, and A.V. Ogram. 2005. Microscopic examination of photoautotrophic and phosphatase-producing organisms in phosphorus-limited Everglades periphyton mats. *Limnology and Oceanography* 50:2067-2072.
47. **Inglett, P.W.**, E. Viollier, A. N. Roychoudhury, and P. Van Cappellen. 2004. A new idea in marsh coring: The Wedge. *Soil Science Society of America Journal* 68:705-708.
48. **Inglett, P.W.**, K. R. Reddy, and P.V. McCormick. 2004. Periphyton chemistry and nitrogenase activity in a nutrient-impacted Everglades ecosystem. *Biogeochemistry* **67**: 213-233.
49. Viollier, E., **P.W. Inglett**, K. Hunter, A. N. Roychoudhury, P. Van Cappellen. 2000. The ferrozine method revisited: Fe(II)/Fe(III) determination in natural waters. *Applied Geochemistry* 15:785-790.

Proceedings:

50. **Inglett, P.W.**, X. Liao^G, B. Hogue^G, C.A. Medvedeff^G, and T.Z. Osborne. 2013. The effect of fire on plant and soil nutrients in calcareous subtropical wetlands. Pages 59-79. *Proceedings of the 2013 Louisiana Natural Resources Symposium*. Louisiana State University. Baton Rouge, LA.

51. Opsahl, S.P. and **P.W. Inglett**. 2009. Nitrogen sources and sinks in Lake Seminole: Implications for the Apalachicola-Chattahoochee-Flint (ACF) nutrient budget. Pages 199-202, in *Proceedings of the 2009 Georgia Water Resources Conference*, G. D. Carroll (ed.), Institute of Ecology, The University of Georgia, Athens, Georgia.

Non-refereed Publications (28)

1. Reddy, K.R., J. Hu^P, L. Vardanyan^P, R. Bhomia^P, O. Villapando, and **P.W. Inglett**. 2019. Section 5: Temporal Patterns in Physicochemical Properties of Soils and Water Column: Stormwater Treatment Areas-2 and -3/4. In UF-WBL. 2019. Evaluation of Soil Biogeochemical Properties Influencing Phosphorus Flux in the Everglades Stormwater Treatment Areas (STAs). Final Report. Work Order 4600003031-WO01, South Florida Water Management District, West Palm Beach, Fl. 5:1-131.
2. Inglett, K.S., L. Vardanyan^P, T. Bera^P, J. Dombrowski, **P.W. Inglett**, A.L. Wright, and K.R. Reddy. 2019. Section 13: Biogeochemical Processes: Litter Decomposition. In UF-WBL. 2019. Evaluation of Soil Biogeochemical Properties Influencing Phosphorus Flux in the Everglades Stormwater Treatment Areas (STAs). Final Report. Work Order 4600003031-WO01, South Florida Water Management District, West Palm Beach, Fl. 13:1-43.
3. Inglett, P.W., T. Bera^P, and K. S. Inglett. 2019. Section 12: Biogeochemical Properties of Soils in Stormwater Treatment Areas -2 and -3/4. In UF-WBL. 2019. Evaluation of Soil Biogeochemical Properties Influencing Phosphorus Flux in the Everglades Stormwater Treatment Areas (STAs). Final Report. Work Order 4600003031-WO01, South Florida Water Management District, West Palm Beach, Fl. 12:1-74.
4. Inglett, P.W., K. S. Inglett, T. Bera^P, and S. Baker-Liu^G. 2019. Section 11 - Transect Study: Effect of Hydrologic Flow on Benthic Enzyme Activities in Stormwater Treatment Areas -2 and -3/4. In UF-WBL. 2019. Evaluation of Soil Biogeochemical Properties Influencing Phosphorus Flux in the Everglades Stormwater Treatment Areas (STAs). Final Report. Work Order 4600003031-WO01, South Florida Water Management District, West Palm Beach, Fl. 11:1-57.
5. Inglett, P.W., X. Liao^P, D. Dobberfuhl, A. Canion, and D.K. Foster^G. 2017. Nitrogen Biogeochemistry: Sources, Transformations and Loss of Nitrogen from Land Surface to Springs. Report to the St. Johns River Water Management District, Collaborative Research in Springs Protection. Section 4-Work Order No. 1. Palatka, FL. 108 pp.
6. Phlips, E.J., **P.W. Inglett**, J.R. Papacek^G. 2016. IRL Plankton Investigations – Algal nutrient uptake dynamics and nitrogen fixation, microzooplankton grazing, and bacterioplankton/zooplankton quantification. Report to the St. Johns River Water Management District. Contract # 27887. Palatka, FL. 105 pp.
7. Inglett P.W., K.S. Inglett, X. Liao^P, K. Pietro and J. King. 2016. Transect Study: Enzyme Activities in Soils and Water Column of Stormwater Treatment Area 2 and 3/4. Annual Report submitted to the South Florida Water Management District. Task 7b Work Order # 4600003031-WO01. West Palm Beach, FL. 33 pp.
8. Osborne, T.Z., A.M.K. Bochnak, B. Vandam^S, S. Duffy^S, L. Keenan, K.S. Inglett, **P.W. Inglett**, and D. Sihi^G. 2013. Hydrologic Effects on Soil Stability – Loss, Formation, and Nutrient Fluxes. Final Report to the Saint Johns River Water Management District. 114 pp.
9. Inglett, P.W., K.S. Inglett^P, C.A. Medvedeff^G, B. Hogue^G, X. Liao^G, W.G. Harris, and K.R. Reddy. 2013. Soil Biogeochemistry with Special Application for Restoration of

- Lands in the Hole-in-the-Donut Region of the Florida Everglades. Report to the U.S. Department of the Interior, Everglades National Park, Homestead, FL. 510 pp.
10. Clark, M.W., **P.W. Inglett** and K. Dinkins^G. 2012. Mobile Pilot Units Algal Turf Scrubber® (ATSTM): Assessment of Function and Testing of Processes to Enhance Efficiency based on Santa-Fe River. Final Report to the Santa-Fe River Water Management District. 96 pp.
 11. **Inglett, P.W.**, K.S. Inglett^P, C.A. Medvedeff^G, B. Hogue^G, X. Liao^G, W.G. Harris, and K.R. Reddy. 2011. Elevation and flooding effects on Biogeochemical Carbon, Phosphorus, and Nitrogen Cycles in Lands in the Hole-in-the-Donut Region of the Florida Everglades. Report to the U.S. Department of the Interior, Everglades National Park, Homestead, FL. 158 pp.
 12. **Inglett, P.W.**, K.S. Inglett^P, W.G. Harris, and K.R. Reddy. 2009. Relationship Between Farming History and the Biogeochemical Status of Lands in the Hole-in-the-Donut Region of the Florida Everglades. Report to the U.S. Department of the Interior, Everglades National Park, Homestead, FL. 120 pp.
 13. **Inglett, P.W.**, K.S. Inglett^P, and K.R. Reddy. 2008. Biogeochemical Processes and Implications for Nutrient Cycling. p 139-178 *In*: Brown, et al. Summary and Synthesis of the Available Literature on the Effects of Nutrients on Spring Organisms and Systems. Final Report to the Florida Department of Environmental Protection, Tallahassee, FL. 376 pp.
 14. Inglett, K.S., **P.W. Inglett**, and K.R. Reddy. 2007. Microbial Enzyme Activity in Wekiwa Springs. Report to the St. John's River Water Management District. 34 pp.
 15. **Inglett, P.W.**, K.S. Inglett, and K.R. Reddy. 2006. Tracing Carbon and Nitrogen through the Everglades Food Web: An Isotope Addition Pilot Study, Isotopic Analyses of Watercolumn, Biomass, and Phospholipids. Report to the South Florida Water Management District. 44 pp.
 16. Inglett, K.S., M.W. Clark, **P.W. Inglett**, K.R. Reddy, A.V. Ogram, J.M. Smith, and H. Castro. 2006. Linkages Between Microbial Community Composition, Function and Revegetation in the Hole-In-The-Donut. Final Report to the U.S. Department of the Interior, Everglades National Park, Homestead, FL. 203 pp.
 17. Reddy, K.R., M.M. Fisher, H. Pant, **P. Inglett**, J.R. White. 2001. Indian River Lagoon hydrodynamics and water quality model: Nutrient storage and transformations in sediments - Final Report to the St. Johns River Water Management District.

Departmental Newsletters

18. **Inglett, P.W.** 2018. "Wetland Ecosystems" *Myakka-SWS Department Newsletter*. Vol 18, No. 3. https://soils.ifas.ufl.edu/media/soilsifasufledu/sws-main-site/pdf/newsletters/Myakka_Newsletter_Fall_2018_web.pdf
19. **Inglett, P.W.** 2018. "Opening the Black Box: Linking Nutrient Storage and Stability with Microbial Activity in Constructed Wetlands". *Myakka-SWS Department Newsletter*. Vol 18, No. 1. <https://soils.ifas.ufl.edu/media/soilsifasufledu/sws-main-site/pdf/newsletters/spring-2018.pdf>
20. **Inglett, P.W.** 2016. "Nuisance Algal Blooms: Causes and Consequences in the Northern Indian River Lagoon, Florida." *Myakka-SWS Department Newsletter*. Vol 16, No. 2. <https://soils.ifas.ufl.edu/media/soilsifasufledu/sws-main-site/pdf/newsletters/summer-2016.pdf>

21. **Inglett, P.W.** 2014. “A Brief History of Biogeochemistry” *Myakka-SWS Department Newsletter*. Vol 14, No. 3. <https://soils.ifas.ufl.edu/media/soilsifasufledu/sws-main-site/pdf/newsletters/fall-2014.pdf>
22. **Inglett, P.W.** 2014. “Stable Isotope Biogeochemistry” *Myakka-SWS Department Newsletter*. Vol 14, No. 3. <https://soils.ifas.ufl.edu/media/soilsifasufledu/sws-main-site/pdf/newsletters/fall-2014.pdf>
23. **Inglett, P.W.** 2013. “Wetland Biogeochemistry Laboratory” *Myakka-SWS Department Newsletter*. Vol 13, No. 1. <https://soils.ifas.ufl.edu/media/soilsifasufledu/sws-main-site/pdf/newsletters/spring-2013.pdf>
24. **Inglett, P.W.** 2011. “Restoration of Wetlands and Aquatic Ecosystems” *Myakka-SWS Department Newsletter*. Vol 11, No. 1. <https://soils.ifas.ufl.edu/media/soilsifasufledu/sws-main-site/pdf/newsletters/spring-2011.pdf>
25. Osborne, T. and **Inglett, P.W.** 2011. “Earth, Water, and Fire” *Myakka-SWS Department Newsletter*. Vol 11, No. 1. <https://soils.ifas.ufl.edu/media/soilsifasufledu/sws-main-site/pdf/newsletters/spring-2011.pdf>
26. **Inglett, P.W.** 2011. “Wetland Biogeochemistry Core Laboratory” *Myakka-SWS Department Newsletter*. Vol 11, No. 1. <https://soils.ifas.ufl.edu/media/soilsifasufledu/sws-main-site/pdf/newsletters/spring-2011.pdf>
27. **Inglett, P.W.** 2009. “Measurement of Denitrification using Membrane Inlet Mass Spectrometer (MIMS)” *Myakka-SWS Department Newsletter*. Vol 9, No. 1. <https://soils.ifas.ufl.edu/media/soilsifasufledu/sws-main-site/pdf/newsletters/spring-2009.pdf>

Peer-reviewed State Extension Publications

28. Nevins, C.J.^G, S.L. Strauss, and **P.W. Inglett**. 2020. An Overview of Key Soil Nitrogen Cycling Transformations. *EDIS*, 2020(3).

PRESENTATIONS AT CONFERENCES/MEETINGS

Self = bold Grad Student (G = my direction, g = others) Intern = i Other = &
 Post-Doc (P = under my direction, p = others) Undergraduate = u

Invited Speaker: Last 5 years (41 total since 2003)

1. **Inglett, P.W.**, T. Bera^P, and K.S. Inglett. (2021) More than Indicators: Enzymes in Constructed Wetlands. Greater Everglades Ecosystem Restoration Conference. Virtual Meeting, April 19-28.
2. **Inglett, P.W.** and K.S. Inglett. (2021) Advances on Enzymatic Stoichiometry Regulating Macro-Elemental Cycling in Wetlands. 13th International Symposium on Biogeochemistry of Wetlands. Virtual Meeting, March 22-25.
3. **Inglett, P.W.**, T. Bera^P, and K.S. Inglett. (2019) Soil Biogeochemistry and Microbial Processes. P-Flux Final Summary Meeting, South Florida Water Management District. July, West Palm Beach FL.
4. Inglett, K.S., L. Vardanyan^P, T. Bera^P, J. Dombrowski, **P.W. Inglett**, A.L. Wright, and K.R. Reddy. (2019). Litter Decomposition. P-Flux Final Summary Meeting, South Florida Water Management District. July, West Palm Beach FL.

5. **Inglett, P.W.** (2018) Hydrologic Flow Effects on Microbial Stoichiometry and Enzyme Activity in the Everglades Stormwater Treatment Areas. 12th International Symposium on Biogeochemistry of Wetlands. April 23-26, Coral Springs, FL.
6. **Inglett, P.W.** (2018) Warming Rate Drives Microbial Nutrient Limitation and Enzyme Expression. 12th International Symposium on Biogeochemistry of Wetlands. April 23-26, Coral Springs, FL.
7. **Inglett, P.W.**, A. Canion, X. Liao^P, and D. Dobberfuhl. (2018) Identifying N Sources and Transformations in the Silver Spring Springshed, USA. University of Florida Water Institute Symposium. February 6-7, Gainesville, FL.
8. **Inglett, P.W.**, S. Baker^G, K.S. Inglett, P. Julian^G, and J. King. (2018) Moving Right Along: Effects of Flow on Microbial Processes in the STAs. Restoration Strategies Technical Representatives Meeting. South Florida water Management District, May 24, West Palm Beach, FL.
9. **Inglett, P.W.**, and K.S. Inglett. (2017) Soil Biogeochemistry and Microbial Processes. P-Flux Workshop, South Florida Water Management District. November 3, West Palm Beach FL.
10. **Inglett, P.W.**, K.R. Reddy, and O. Villapando. (2017) The History of the Everglades Stormwater Treatment Areas. Soil Science Society of America International Annual Meeting. October 22-25. Tampa, FL.
11. **Inglett, P.W.**, K.A. Rice^G, and K.S. Inglett. (2017) Decomposition and Nutrient Stability in Constructed Wetland Soils of Submergent and Emergent Vegetation. Soil Science Society of America International Annual Meeting. October 22-25. Tampa, FL.
12. **Inglett, P.W.**, E.J. Philips, J. Papacek^G, S. Badylak, M. Lasi and C. Jacoby. (2016) Bottom up controls of recent bloom events in the Indian River Lagoon. American Water Resources Association Annual Meeting. November 16, Orlando, FL.
13. **Inglett, P.W.**, D. Sishi^G, S. Gerber. (2016) What's in Store: Peatlands as Sinks and Sources of C Greenhouse Gases. ASA, CSSA, & SSSA International Annual Meetings, November, Phoenix, AZ.
14. **Inglett, P.W.**, A. Canion, and D. Dobberfuhl. (2016) Springshed Nitrogen Biogeochemistry. 2nd Annual Meeting Collaborative Research Initiative on Sustainability and Protection of Springs (CRISPS) / SJRWMD Springs Protection Initiative, September 9, Gainesville, FL.
15. **Inglett, P.W.**, and K.S. Inglett. (2016) Soil Biogeochemistry and Microbial Processes. P-Flux Workshop, South Florida Water Management District. October 18, West Palm Beach FL.
16. **Inglett, P.W.**, and J.R. Papacek^G. (2016) Algal nutrient uptake dynamics and nitrogen fixation. Indian River Lagoon Technical Meeting. February 15, Harbor Branch Oceanographic Institute.
17. **Inglett, P.W.** (2016) What's in Store: C Cycling in Wetlands and the Response to Temperature. UF Center for Wetlands Seminar Series. University of Florida, Gainesville, FL.

Contributed Talks and Posters: Last 5 years (148 total)

1. Sapkota, Y.^G, J.R. White, K. Xu, K. Maiti, and **P.W. Inglett**. (2021) Temporal variability in soil organic matter accretion rates in coastal deltaic wetlands under

- changing depositional environments. SSSA International Annual Meetings, November 7-10. Salt Lake City UT.
2. Nevins, C.J.^G, **P.W. Inglett**, and S.L. Strauss. (2021) Biological soil crusts impact nutrient cycling and soil microbiome in agroecosystems. SSSA International Annual Meetings, November 7-10. Salt Lake City UT.
 3. Nevins, C.J.^G, **P.W. Inglett**, and S.L. Strauss. (2021) Tree crop uptake and partitioning of ¹⁵Nitrogen from biological soil crust. SSSA International Annual Meetings, November 7-10. Salt Lake City UT.
 4. Sorochkina, K.^G, Strauss S.L., **Inglett P.W.** (2021) Seasonal biocrust nitrogen fixation, nutrient cycling, and community composition in two perennial Florida agroecosystems. SSSA International Annual Meetings, November 7-10. Salt Lake City UT.
 5. Sorochkina, K.^G, Strauss S.L., **Inglett P.W.** (2021) Nitrogen fixation response of greenhouse grown agroecosystem biocrusts to nitrogen and phosphorus fertilizer addition. SSSA International Annual Meetings, November 7-10. Salt Lake City UT.
 6. Bera, T.^P, **P.W. Inglett**, K.S. Inglett, and O. Villapando. (2021) Microbial Biomass and Enzyme Stoichiometries as Indicators of Nutrient Limitation in Florida Constructed Wetlands Regulating Nutrient Cycling in Wetlands. SSSA International Annual Meetings, November 7-10. Salt Lake City UT.
 7. Sapkota, Y.^g, J.R. White, K. Xu, K. Maiti, and **P.W. Inglett**. (2021) Understanding the Past Organic Matter Depositional Environment in Coastal Louisiana. 13th International Symposium on Biogeochemistry of Wetlands. Virtual Meeting, March 22-25.
 8. MacDonnell, C.^G, Bydalek, F.^g, Osborne, T., Thornton, A., Barbour, S., Leonard, D.^G, Makinia, J. and **Inglett, P.W.** (2021) Use of a phosphorus wastewater recovery product (struvite) to enhance subtropical seagrass restoration. EMSET 2021. Virtual conference. June 10-11th.
 9. Nevins, C.J.^G, S.L. Strauss and **P.W. Inglett**. (2020) Effects of biocrust presence on plant-available nitrogen and the soil microbiome in the citrus rooting zone. *4th UF Plant Science Symposium*, January 28, Gainesville, FL.
 10. **Inglett, P.W.**, Santana, D.^u, and Bean C.^u (2020) Vegetation effects on greenhouse gas production in subtropical wetland soils of the national ecological observatory network. *7th UF Water Institute Symposium*. February 25-26, Gainesville, FL.
 11. **Inglett, P.W.**, Santana, D.^u, and Bean C.^u (2020) Vegetation effects on greenhouse gas production in subtropical wetland soils of the national ecological observatory network. *4th Plant Science Symposium*. January 30-31, Gainesville, FL
 12. Sorochkina, K., **Inglett P.W.**, and Strauss S.L. (2020) Nitrogen Fixation Activity and Microbial Nutrient Content of Biocrusts in Florida Citrus and Grape. Board of Agriculture and Natural Resources (BANR) of the National Academies of Science, Engineering, and Medicine (NASEM) 75th Anniversary Event Pathways Towards the Next Generation of Agriculture and Natural Resources in Florida, January 16-16, Gainesville, FL.
 13. Nevins, C.J.^G, **P.W. Inglett**, and S.L. Strauss. (2020) Effect of biological soil crusts on plant-available nitrogen and the soil microbiome in the rooting layers of citrus agroecosystems. Board of Agriculture and Natural Resources (BANR) of the National Academies of Science, Engineering, and Medicine (NASEM) 75th Anniversary event Pathways Towards the Next Generation of Agriculture and Natural Resources in Florida, January 16-16, Gainesville, FL.

14. MacDonnell, C.^G, Bydalek, F.^g, Thornton, A., Osborne, T., and **Inglett, P.W.** (2020). Plant performance and nutrient effects of conventional and sustainable fertilizers in seagrass restoration. *Southwest Florida Water Resources Conference*. January 24, Fort Myers, FL.
15. Si, Qianyao^g, M. G. Lusk, **P.W. Inglett**, and J. Bonzongo. (2019) How Do Urban Stormwater Infiltration Basins Treat Nitrogen Along a Hydrologic Flow Path Gradient? *SSSA International Annual Meetings*, November 9-13, San Antonio, TX.
16. Alonso-Contes, C.^g, Gerber, S., Duerr, I., Bliznyuk, N. and **Inglett, P.** (2019) December. Development and Implementation of SiMER, a Methane Emissions Model with Broad Applications. In *AGU Fall Meeting 2019*. AGU.
17. Franzen, D.W., **P.W. Inglett**, A. Wick, and C. Gasch. (2019) Spatial Variability of Asymbiotic N-Fixer Activity in No-till Soils. *SSSA International Annual Meetings*, November 9-13, San Antonio, TX.
18. Nevins, C.J.^G, **P.W. Inglett**, and S.L. Strauss. (2019) Effect of Biological Soil Crusts on Plant-Available Nitrogen and the Soil Microbiome in the Rooting Layers of Citrus Agroecosystems. *SSSA International Annual Meetings*, November 9-13, San Antonio, TX.
19. Colopietro, D.J.^g, J. Pachon^g, A.R. Bacon, **P.W. Inglett**, K. Anderson^g, L. Reynolds, and C. Rohan. (2019) Texture of Organic Soil Material: Optimizing Actual Quantifications of Particle Size with Laser Diffraction. *SSSA International Annual Meetings*, November 7-10, Salt Lake City, UT.
20. MacDonnell, C.^G, Barry, S., Patterson, R., Thomas, S. Osborne, T., and **Inglett, P.W.** (2019). A bird's eye glance at seagrass scar restoration. UF Soil and Water Sciences-Pop Talk. May 3, Gainesville, FL.
21. MacDonnell, C.^G, Bydalek, F.^g, Thornton, A., Osborne, T., and **Inglett, P.W.** (2019). Plant performance and nutrient effects of conventional and sustainable fertilizers in seagrass restoration. *Gulf and Caribbean Fisheries Institute Conference*. November 4-8, Punta Cana, Dominican Republic.
22. Nevins C.J.^G, **Inglett P.W.**, and Strauss S.L. (2019) Effect of biological soil crusts on plant-available nitrogen and the soil microbiome in the rooting layers of citrus agroecosystems. Poster presentation at the University of Florida South Florida Graduate Research Symposium, July, Homestead, Florida.
23. Nevins C.J.^G, **Inglett P.W.**, and Strauss, S.L. (2019) Investigating biological soil crusts and nutrient availability in citrus agroecosystems. Poster presentation at the University of Florida Plant Science Symposium, Gainesville, Florida.
24. MacDonnell, C.^G, Barry, S., Patterson, R., Thomas, S. Osborne, T., and **Inglett, P.W.** (2019). Seagrass scar restoration and research. Elegance of Science Meeting. April 3, Gainesville, FL.
25. Rai, D.^G, S. Sandhu^g, K.S. Inglett, **P.W. Inglett**, M.A. Silveira, and S. Gerber. (2019) DNDC Simulation of Soil Carbon Dynamics in Subtropical Native Rangelands of Florida Requires Adjustments in Both Growth and Decomposition Parameterization. *SSSA International Annual Meetings*, January 6-9, San Diego, CA.
26. **Inglett, P.W.**, S. Baker-Liu^G, T. Bera^P, K.S. Inglett, and J. King. (2019) Effects of Hydrologic Flow and Vegetation Type on Enzyme Activity in Constructed Wetland Soils. *SSSA International Annual Meetings*, January 6-9, San Diego, CA.

27. Bera, T.^P, K.S. Inglett, **P.W. Inglett**, J. Hu^P, and O. Villapando. (2019) Enzyme Stoichiometry Regulating Nutrient Cycling in Wetlands: Effect of Vegetation. SSSA International Annual Meetings, January 6-9, San Diego, CA.
28. Bera, T.^P, L. Vardanyan^P, K.S. Inglett, K.R. Reddy, G.A. O'Connor, **P.W. Inglett**, and A.C. Wilkie. (2019) Biofuel By-Products as Soil Amendments: Influence on Carbon Dynamics. SSSA International Annual Meetings, January 6-9, San Diego, CA.
29. Nevins, C.J.^G, **P.W. Inglett**, and S. Strauss. (2019) Investigating biological soil crusts and nutrient availability in citrus agroecosystems. *University of Florida Plant Science Symposium*, Gainesville, Florida.
30. MacDonnell, C.^G, Bydalek, F.^g, Thornton, A., Osborne, T., and **Inglett, P.W.** (2018). A comparison of the biogeochemical and fitness effects of nutrient fertilization on subtropical seagrass beds. *Science by the Shore*. September 22, St. Augustine, FL.
31. Desormeaux, A.^g, M.D. Annable, D. Dobberfuhl, **P.W. Inglett**, and J.W. Jawitz. (2018) Landscape-scale nitrogen budget informed by in situ measurements of nitrate attenuation. *International Meeting of the American Geophysical Union*. 10-14 December, Washington, D.C.
32. MacDonnell, C.^G, F. Bydalek, A. Thornton, T. Osborne, and **P.W. Inglett**. (2018). Plant fitness and nutrient effects of conventional and sustainable fertilizers in seagrass restoration. Poster presented at: 19th Annual Soil and Water Sciences Research Forum, University of Florida, Gainesville, FL.
33. Sandhu S.S.^g, K.S. Inglett, **P.W. Inglett**, M.L. Silveira, and S. Gerber. (2018) Seasonal Variations in Soil Enzyme Activities and Carbon Fractions in Sub-Tropical Grazing Lands
34. Desormeaux, A.^g, M.D. Annable, D. Dobberfuhl, **P.W. Inglett**, and J.W. Jawitz. (2018) Landscape-scale nitrogen budget informed by in situ measurements of nitrate attenuation. Poster presented at the 19th Annual Soil and Water Sciences Research Forum. University of Florida. Gainesville, FL.
35. Nevins, C.J.^G, **Inglett, P.W.**, and S. Strauss. (2018) Investigating biological soil crusts and nutrient availability in citrus agroecosystems. Poster presented at the 19th Annual Soil and Water Sciences Research Forum. University of Florida. Gainesville.
36. Sorochkina, K.S.^G, **Inglett, P.W.**, and S. Strauss. (2018) Nitrogen fixation potential and cyanobacterial composition of biocrusts in an agricultural ecosystem. Poster presented at the 19th Annual Soil and Water Sciences Research Forum. University of Florida Gainesville, FL.
37. Strauss, S., C.L. Reardon, and **P.W. Inglett**. (2017) Biological Soil Crust Occurrence and Nitrogen Cycling in an Agroecosystem. Soil Science Society of America *In: Agronomy Abstracts*, Madison, WI.
38. Baker, S.^G, **P.W. Inglett**, X. Liao^P, K.S. Inglett, and J. King. (2017) Effects of Hydrologic Flow on Enzyme Activity in Constructed Wetland Soils. Soil Science Society of America *In: Agronomy Abstracts*, Madison, WI.
39. Sandhu, S.^g, K.S. Inglett, D. Rai^G, **P.W. Inglett**, M.A. Silveira, and S. Gerber. (2017) Improved Management Practices in Grasslands Can Alter the Biogeochemical Processes and Carbon Storage in Spodosols. Soil Science Society of America *In: Agronomy Abstracts*, Madison, WI.
40. Rai, D.^G, S. Sandhu^g, K.S. Inglett, **P.W. Inglett**, M.A. Silveira, and S. Gerber. (2017)

- Effect of Management Intensification on Deep Soil Carbon in a Subtropical Rangeland. Soil Science Society of America *In: Agronomy Abstracts*, Madison, WI.
41. Galluscio, K.^{u&}, **P.W. Inglett**, and T.Z. Osborne. (2017) Nitrogen Stable Isotopic Ratios in Everglades Soils: Spatial Patterns and Environmental Factors. Soil Science Society of America *In: Agronomy Abstracts*, Madison, WI.
 42. **Inglett, P.W.**, K.R. Reddy, and O. Villapando. (2017) The History of the Everglades Stormwater Treatment Areas. Soil Science Society of America *In: Agronomy Abstracts*, Madison, WI.
 43. **Inglett, P.W.**, K.A. Rice^G, and K.S. Inglett. (2017) Decomposition and Nutrient Stability in Constructed Wetland Soils of Submergent and Emergent Vegetation. Soil Science Society of America *In: Agronomy Abstracts*, Madison, WI.
 44. **Inglett, P.W.**, E.J. Philips, J. Papacek^G, S. Badylak, M. Lasi and C. Jacoby. (2016) Bottom up controls of recent bloom events in the Indian River Lagoon. *In: Abstracts of the American Water Resources Association Annual Meeting*. November 16.
 45. **Inglett, P.W.**, D. Sihi^G, S. Gerber. (2016) Invited-What's in Store: Peatlands as Sinks and Sources of C Greenhouse Gases. Soil Science Society of America *In: Agronomy Abstracts*, Madison, WI.
 46. Rice, K.^G, S. Baker^u, X. Liao^P, K. Pietro, K.S. Inglett, and **P.W. Inglett**. (2016) Looking Inside the Black Box: Enzyme Processes in Constructed Wetlands. 17th Soil and Water Science Research Forum. September 16, Gainesville, FL.
 47. Foster, D.K.^G, A. Canion, D. Dobberfuhl, and **P.W. Inglett**. (2016) Building a Profile for Soil Nitrogen. Soil Science Society of America Annual Meeting. Phoenix, AZ, November 6-9.
 48. Foster, D.K.^G, A. Canion, D. Dobberfuhl, and **P.W. Inglett**. (2016) Catching Nitrate at the Source?: Potential for Soil and Vadose Zone Denitrification in the Silver Springs springshed. 17th Soil and Water Science Research Forum. September 16, Gainesville, FL.
 49. Papacek, J.R.^G, Philips, E.J., Lasi, M.A. and **P.W. Inglett**. (2016) A survey of nitrogen fixation potential in a subtropical estuary (Indian River Lagoon, FL). Poster presentation at the Soil & Water Science Annual Research Forum. September 16, Gainesville, FL.
 50. Papacek, J.R.^G, Philips, E.J., Lasi, M.A. and **P.W. Inglett**. (2016) A survey of nitrogen fixation potential in a subtropical estuary (Indian River Lagoon, FL). Poster presentation at 2016 ASLO Summer Meeting. June 7, Santa Fe, NM.
 51. Papacek, J.^G, Philips, E., Lasi, M. and **P.W. Inglett**. (2016) A survey of nitrogen fixation in the northern Indian River Lagoon, Florida. Poster presentation at the University of Florida Water Institute Symposium. February 16, Gainesville, FL.
 52. Papacek, J.^G, Philips, E., Lasi, M. and **P. Inglett**. (2016) A survey of nitrogen fixation in the northern Indian River Lagoon, Florida. Poster presentation at the Indian River Lagoon Symposium. February 11, Fort Pierce, FL.
 53. Liao, X.^P, and **P.W. Inglett**. (2016) Function Lags Behind Structure: Evaluating a Restoration Project in a Subtropical Calcareous Wetland of Florida Everglades. The 9th INTECOL International Wetlands Conference, Changshu, China.
 54. Liao, X.^P, and **P.W. Inglett**. (2016) Can nitrogen stable isotope (¹⁵N) reflect nutrient status during restoration? A case study of calcareous wetlands in the Florida Everglades. The 9th INTECOL International Wetlands Conference, Changshu, China.

55. Liao, X.^P, **P.W. Inglett**, A. Canion, D. Dobberfuhl (2016) Identifying the Hot Spots of Denitrification and Nitrogen Transformation Across Different Land Uses in the Silver Spring Springshed, USA. 17th Soil and Water Science Research Forum. September 15, Gainesville, FL.
56. Li, L.^g, Z. He, **P.W. Inglett**, M. M. Tfaily and P. J. Stoffella (2016). Dissolved organic nitrogen in runoff/storm water from Agricultural Fields. ASA, CSSA & SSSA International Annual Meetings. Phoenix, AZ, November 6-9.
57. Li, L.^g, Z. He, **P.W. Inglett**, M. M. Tfaily and P. J. Stoffella (2016). Dissolved organic nitrogen in runoff/storm water from Agricultural Fields. 17th Soil and Water Science Research Forum. September 15, Gainesville, FL.

CONTRACTS AND GRANTS

Funded Externally

Funding Period	Funding Agency: Project Title	Funded Amount (Inglett Share)	Role
2021-2024	USDA: Intercropping Winter Leguminous Cover Crops for Sustainable Energy Cane Production	\$341,991 (\$25,077)	Co-PI
2021-2024	SFWMD: Evaluation of Soil Biogeochemical Properties Influencing Phosphorus Flux in the Everglades	\$823,225 (\$661,631)	PI
2020-2021	SFWMD: Quantifying the Recalcitrance and Lability of Phosphorus within Stormwater Treatment Areas	\$530,000 (\$146,027)	Co-PI
2018-2022	USDA: Improving sustainability in agroecosystems using biological soil crusts	\$442,102 (\$200,000)	Co-PI
2016-2020	USDA: Climate Sensitivity of Microbial Processes and Implication for C Sequestration and Greenhouse	\$746,931 (\$133,003)	Co-PI
2015-2019	SFWMD: Evaluation of Soil Biogeochemical Properties Influencing Phosphorus Flux in the Everglades	\$1,400,770 (\$461,204)	Co-PI
2017-2018	US Sea Grant: Strategies to Improve Seagrass Restoration and Resilience	\$2,000 (\$2,000)	PI
2014-2017	SJRWMD: IRL Plankton Investigations – Algal nutrient uptake dynamics and nitrogen fixation...	\$332,000 (\$160,227)	Co-PI
2014-2017	SJRWMD: Springs Protection Initiative: Springshed Nitrogen Biogeochemistry Transport and Rates	\$2,027,199 (\$298,500)	Co-PI
2011-2012	SFWMD: Kissimmee River Sediment and Floodplain Soil Nutrient Assessment: Laboratory Analysis	\$55,660 (55,660)	PI
2011	SFWMD: Characterization of P Forms in Recently Accreted Materials of the Stormwater Treatment Areas	\$24,806 (\$24,806)	PI
2010-2011	IAEA: Biogeochemical Processes Affecting Nutrient Accretion in Wetlands	\$28,436 (\$13,561)	Co-PI
2009-2011	SRWMD/Hydromentia: Algal Turf Scrubber: Assessment of Functioning and Testing to Improve Efficiency	\$87,500 (\$43,750)	Co-PI

2009-2010	SFWMD: Soil Characterization in Selected Stormwater Treatment Areas To Determine Soil Accretion Rates ...	\$50,000 (\$43,750)	Co-PI
2008-2012	USDOI: Soil Biogeochemistry in the Hole-in-the-Donut Region with Applications for Restoration Management	\$479,523 (\$479,523)	PI
2007-2008	FDEP: Synthesis of Available Literature on Nutrient Effects in Spring Systems	\$226,954 (\$30,602)	Co-PI
2005-2006	SFWMD: Everglades Foodweb Isotopic Tracing Study	\$59,450 (\$59,450)	PI

Funded Internally

Date	Award/Title	Funded Amount	Role
2019	IFAS Experiment Station Research Equipment and Infrastructure Funding: Stable Isotope Ratio Mass Spectrometer	\$75,000	PI
2016-17	UF/IFAS Ordway Swisher Jumpstart Awards: Linking methane fluxes with remotely sensed soil moisture and modeling	\$43,298	Co-PI
2016	IFAS Experiment Station Equipment and Infrastructure Matching Program	\$8,000	PI
2014	IFAS Experiment Station Research Equipment and Infrastructure Funding: Portable Greenhouse Gas Analyzer	\$75,000	PI
2014-15	Soil and Water Science Seed Funding Program	\$15,000	PI
2011	IFAS Experiment Station Equipment Matching Program	\$16,209	PI
2010	CALS Distance Education Minigrant: Using a Tablet PC to Create a Real-time Chalkboard System for DE Course Delivery	\$2,900	PI
2008	IFAS Research Innovation Fund Award - Excess Nitrogen Removal in Landscapes: Using Advanced Techniques to determine the Role of ...	\$50,000	PI

Abbreviations: USDA-United States Department of Agriculture, USDOI-United States Department of the Interior; IAEA-International Atomic Energy Agency; FDEP-Florida Department of Environmental Protection, SFWMD-South Florida Water Management District, SRWMD-Suwannee River Water Management District; NSF-National Science Foundation, SJRWMD-St. Johns River Water Management District; IFAS-Institute of Food and Agricultural Sciences, CALS-College of Agriculture and Life Sciences

UNIVERSITY GOVERNANCE AND SERVICE

University of Florida

- 2020 - 2022 Elected to UF Faculty Senate
- 2020 – pres. Academic advisor for Pi Kappa Phi fraternity, Alpha Epsilon chapter
- 2019 – pres. Faculty advisor for Global Connections student organization
(<https://www.ufglobalconnections.com/>)
- 2013 – pres. Student Conduct and Conflict Resolution Committee (Chair trained)
- 2012 – pres. College of Agriculture and Life Sciences Curriculum Committee (Vice-chair 2018-2019, Chair 2019-2020)
- 2010 – pres. College of Agriculture and Life Sciences Honors Program Committee

2013 – 2019 Executive Committee for the Biology Major (Chair, 2016-2017)
 2019 – pres. IFAS Shared Services Faculty Ambassador

UF Soil and Water Science Department

2018 – pres. Organizer – Departmental Research Forum
 2018 Search and screen committee – Department Chair
 2017 – 2018 Search and screen committee – Soil Microbiologist position
 2017 Search and screen committee – Coastal Biogeochemist position
 2016 Search and screen committee – Coastal Ecologist position
 2015 Search and screen committee – Environmental Pedologist position
 2011 – pres. Teaching Committee
 2011 – 2012 Departmental representative for McCarty Hall A renovation.
 2010 – pres. College of Agriculture and Life Sciences Honors Coordinator
 2010 – pres. Undergraduate Programs Committee/Curriculum Committee
 2010 Search and Screen Committee - Landscape Biogeochemist position.
 2008 – 2009 Core Research Laboratories Committee
 2008 – 2009 Graduate Programs Committee
 2007 Awards and Scholarships Committee
 2007 – pres. Director of the Wetland Biogeochemistry Core Laboratory: directly responsible for supervision of 2 full-time and two part-time technicians, and management of external analytical contracts (\$75k per year) from local (consulting firms), state (Water Management Districts), and federal (e.g., US Geological Survey, NSF-National Ecological Observatory Network) entities.
 2005 – 2006 Manager of the Soil and Water Science Light Stable Isotope Laboratory Facility
 2000 Graduate student member of Department Chair search and screen committee
 1998 – 1999 Graduate student representative to the faculty

Faculty Mentoring Committees (2): Ashley Smyth (2017-present), Julie Meyer (2019-present)

ACTIVITIES IN THE PROFESSION

Memberships

2002 – pres. Association for the Sciences of Limnology and Oceanography
 2000 – pres. Society of Wetland Scientists
 - Planning Board, Biogeochemistry of Wetlands Symposium (2017-2018)
 2003 – pres. Soil Science Society of America
 - Appointed Member, Membership Growth and Retention Task Force Committee (2020-2022)
 - Lloyd R. Frederick Soil Teaching Travel Study Award Committee (2019-2020)
 - Invited panelist: “Career Path Opportunities for Students, Post-Docs, and Early Career Members”, SSSA Annual Meeting (2017)

- Program Development Committee, SSSA Wetland Soils Division, Annual Meeting (2017)
 - Chair, Wetland Soils Division (2017)
 - W.H. Patrick, Jr. Memorial Lectureship Committee (2009-2012)(2016-2018, Chair 2018)
 - Clark Soil Biology Scholarship Committee (2007-2009)
 - Emil Truog Award Selection Committee (2006-2007; Chair, 2007)
- 2002 – pres. American Geophysical Union
2000 – pres. Sigma Xi
2000 – pres. Gamma Sigma Delta
1995 – pres. Beta Beta Beta

Editor of Scientific Journal

- 2017 – pres. Associate editor, *Geoderma*
2012 – 2015 Associate Editor, *Journal of Environmental Quality*
2012 Guest associate editor for *Fire Ecology Journal*

Editorial Review Board Member

- 2014 – pres. *Current Cast: A weekly water science and conservation radio show* funded by the Mitsubishi Corporation Foundation for the Americas:
www.currentcast.org.

Reviewer for Scholarly Journals

American Water Resources Association, Applied Geochemistry, Aquatic Botany, Biogeochemistry, Limnology and Oceanography, Contaminant Hydrology, Ecosystems, Global Change Biology, Ecological Indicators, Geoderma, JGR-Biogeosciences, Nature, Journal of Environmental Quality, Soil Science Society of America Journal, Wetlands Ecology and Management, Wetlands, Ecological Engineering, PLOS ONE, Soil and Water Conservation

Consulting

- 2008 - Jones Ecological Research Center, Newton, GA. Development of proposal to assess the role of lakes as sources of organic matter for nitrogen removal in watersheds. Coordinated regional planning initiative to focus efforts in the ACF River basin for watershed linkages with Apalachicola Bay.
- 2009 - Jones Ecological Research Center, Newton, GA. Research project in the Apalachicola- Chattahoochee-Flint (ACF) River basin and the importance of the Lake Seminole reservoir as a regulator of water quality to the Gulf of Mexico

Other Activities

- 2020 – Soil Science Society of America panel to devise national strategy for graduate student accessibility to large datasets during the COVID pandemic.
- 2020 – USDOD - Army Research Office – proposal review: Subsurface Biogeochemical Processes in Coastal Wetlands - Impacts on Water Quality.
- 2020 - McIntire-Stennis project proposal review.

- 2019 - Proposal Review: Towards Smart C Sequestration Networks: Short-term risks of greenhouse gas emissions and long-term opportunities... (NWA.1160.18.182). Netherlands Organisation for Scientific Research.
- 2018 - Reviewer: Faculty tenure application packet (H. Pant, Lehman College CUNY).
- 2018 - Organizer for 2-part special session on “Wetland Enzymes in a Changing Environment”. 12th International Symposium on Biogeochemistry of Wetlands. April 23-26, Coral Springs, FL.
- 2017 - Organizer for session on Constructed Wetlands: Past, Present and Future. SSSA Annual Meeting. November 7-9. Tampa, FL.
- 2017 - Program Development Committee, SSSA Wetland Soils Division, Annual Meeting, 2017, Tampa, FL.
- 2017 - Proposal Review: USDA SBIR- *ad hoc*: Genetically-enhanced Nitrogen Fixation with Algal Biofilms. January.
- 2016 - Organizer for session on COP21: Wetland Soils as Sink and Sources of Greenhouse Gases. SSSA Annual Meeting. November 7-9. Phoenix, AZ.
- 2015 - Organizer for session on enzymes in Everglades systems at the Greater Everglades Ecosystem Restoration Conference, Lake Buena Vista, FL, USA.
- 2015 - Proposal Review: Royal Society - DFID Africa Capacity Building Initiative - Programme Grant - Characterisation of terrestrial sources and sinks of carbon in Eastern and Southern African biomes.
- 2014 - Instructor: International Atomic Energy Agency (IAEA), Technical Cooperation Project Regional Training Course on the Use of ¹⁵N based Techniques for Quantifying Biological Nitrogen Fixation (BNF) and Nitrogen Use Efficiency (NUE).
- 2014 - Instructor: Constructed Wetlands for Resource Recovery Short Course presented at International Crop Research Institute for the Semi-arid Tropics, Hyderabad, India.
- 2012 - Organizer for session on fire effects in wetlands at the 9th INTECOL International Wetlands Conference, Orlando, FL, USA.
- 2012 - Co-sponsor of special issue of Fire Ecology Journal focused on fire in wetlands: “Fire: Shaping Wetland Ecosystems from Microbes to Wildlife”
- 2012 - Proposal Review: Louisiana’s 2012 Coastal Master Plan Nitrogen Uptake Model
- 2010 - Organizer for session on denitrification at the 11th Annual Wetland Biogeochemistry Symposium joint with the Society of Wetland Scientists, June 21-26, Madison, WI.
- 2009 - CRIS Project Proposal Review: Sources, Fates and Consequences of Nitrogen in Florida’s Watersheds
- 2008 - Participant in NSF RCN Workshop for Denitrification. May 27-30. University of Maryland, Horn Point Laboratory, Cambridge, MD.

HONORS

Personal Honors

- 2017 - University of Florida Term Professorship
- 2013 - Outstanding Associate Editor, Journal of Environmental Quality
- 2008 - UF/IFAS Research Innovation Fund Award
- 2006 - Emil Truog Soil Science Award, Soil Science Society of America
- 2005 - PhD Award for Graduate Student Excellence in Soil and Water Sciences
- 2004 - Best Poster Presentation, Soil and Water Sciences Department Graduate Research Forum
- 2002 - Best Oral Presentation, Soil and Water Sciences Department Graduate Research Forum
- 2000 - University of Florida College of Agricultural and Life Sciences Award of Excellence for Outstanding Research (Best Thesis-1999)
- 2000 - Best Oral Presentation, Soil and Water Sciences Department Graduate Research Forum
- 2000 - Sam Polston Scholarship for Outstanding Performance in Graduate Studies, UF Department of Soil and Water Sciences
- 1999 - Soil and Water Sciences Outstanding Graduate Student Award, UF Department of Soil and Water Sciences
- 1999 - Sam Polston Scholarship for Outstanding Performance in Graduate Studies, UF Department of Soil and Water Sciences

Advised Student Honors

- 2019 - Debjani Sihar: Best Student Authored Paper (Soil Ecology Society)
Conor MacDonnell: Wetland Biogeochemistry Laboratory Graduate Fellowship (UF Department of Soil and Water Sciences), American Water Resources Association Travel Award
Clayton Nevins: Yara Scholarship (Florida Fertilizer and Agrochemical Assoc.), Clark Soil Biology Scholarship (Soil Science Society of America), Sam Polston Fellowship (UF Department of Soil and Water Sciences), Wetland Biogeochemistry Laboratory Graduate Fellowship (UF Department of Soil and Water Sciences), University of Florida Grinter Fellowship; 3rd Place Poster (UF-South Florida Graduate Research Symposium)
- 2018 - Conor MacDonnell: William K. Bill Robertson Graduate Fellowship (UF Soil and Water Sciences Department), Wetland Biogeochemistry Laboratory Graduate Fellowship (UF Department of Soil and Water Sciences)
Clayton Nevins: Doris Lowe and Earl and Verna Lowe Scholarship (UF College of Ag and Life Sciences), Grinter Fellowship (University of Florida), William K. Bill Robertson Graduate Fellowship (UF Soil and Water Sciences Department)
- 2017 - Conor MacDonnell: US Sea Grant Scholars Program Award
Sara Baker-Liu: Best Oral Presentation (ASA-CSSA-SSSA International Annual Meeting, Wetland Soils Division)
- 2016 - Debjani Sihar: Best Dissertation (UF Soil and Water Sciences Department)
- 2015 - Josh Papacek: Wetland Biogeochemistry Laboratory Graduate Fellowship (UF Department of Soil and Water Sciences)

- Dorah Foster: Best Poster Presentation (UF Soil and Water Sciences Department Graduate Research Forum)
- 2014 - Debjani Sihi: A.S. Herlong, Sr. Scholarship (University of Florida), Outstanding CALS international student (University of Florida International Center), Second place oral presentation (2014 ASA-CSSA-SSSA International Annual Meeting, Wetland Soils Division)
- 2013 - Debjani Sihi: William Robertson Fellowship (UF Soil and Water Sciences Department), Third place oral presentation (2013 ASA-CSSA-SSSA International Annual Meeting, Wetland Soils Division), Outstanding CALS International Student (University of Florida International Center), University of Florida William C. and Bertha M. Cornett Fellowship, University of Florida Grinter Fellowship
- 2012 - Daniel Irick: Vic Carlisle Pedology Award (UF Department of Soil and Water Sciences), Best Oral Presentation (ASA-CSSA-SSSA International Annual Meeting, Forest Soils Division)
Debjani Sihi: UF Grinter Fellowship
- 2011 - Benjamin Hogue, MS Award for Graduate Student Excellence - Best Thesis 2011 (UF Soil and Water Sciences Department)
- 2010 - Xiaolin Liao, UF Grinter Fellowship
- 2009 - Xiaolin Liao, UF Grinter Fellowship