

## **DR. EVELYN E. GAISER**

George M. Barley, Jr. Endowed Chair, Institute of Environment  
Professor, Department of Biological Sciences  
Florida International University  
Miami, FL 33199  
305-348-6145 (phone), 305-348-4096 (fax), gaisere@fiu.edu

### **EDUCATION**

1997 Ph.D. University of Georgia, Athens, Georgia, Institute of Ecology  
1991 M.S. Iowa State University, Ames, Iowa, Department of Animal Ecology  
1989 B.S. Kent State University, Kent, Ohio, Department of Biology gaiser or

### **ACADEMIC AND PROFESSIONAL APPOINTMENTS**

**2018-present** George M. Barley, Jr. Endowed Chair of Everglades Research, Institute of Environment, Florida International University, Miami, FL  
**2014 – 2018** Executive Director, School of Environment, Arts and Society and Associate Dean, College of Arts, Sciences and Education, Florida International University, Miami, FL  
**2012-present** Professor, Department of Biological Sciences, Florida International University, Miami, FL  
**2006-2012** Associate Professor, Department of Biological Sciences, Florida International University, Miami, FL  
**2008-present** Research Associate, Archbold Biological Station, Lake Placid, FL  
**2001- 2006** Assistant Professor, Department of Biological Sciences, Florida International University, Miami, FL  
**1997-2001** Assistant Research Scientist, Southeast Environmental Research Center, Florida International University, Miami, FL  
**1991-1997** Research/Teaching Assistant, Institute of Ecology, University of Georgia, Athens, GA and Savannah River Ecology Lab, Aiken, SC  
**1989-1991** Research/Teaching Assistant, Department of Animal Ecology, Iowa State University, Ames, IA and Iowa Lakeside Laboratory, Milford, IA  
**1987-1988** Research Technician, Ohio Agricultural Research and Development Center, Ohio State University, Wooster, OH

### **ADMINISTRATIVE SERVICE AT FLORIDA INTERNATIONAL UNIVERSITY**

**2014 – 2018** Executive Director, School of Environment, Arts and Society and Associate Dean, College of Arts, Sciences and Education. I served as the academic leader of one of three schools in the College of Arts, Sciences and Education. The School includes 3 departments with 53 degree programs, 5 research centers, the Institute of Environment and a public education and outreach program. I was responsible for executing the school's vision, fundraising, outreach, communications, partner relationships, and building intramural research and education programming.

**SCIENTIFIC PUBLICATIONS** (\* indicates student author under my supervision)**PEER-REVIEWED JOURNAL ARTICLES** ([Google Scholar Profile](#), [ORCID](#))

104. Pilla R.M., C.E. Williamson, B.V. Adamovich, R. Adrian, O. Anneville, S. Chandra, W. Colom-Montero, S.P. Devlin, M.A. Dix, M.T. Dokulil, **E.E. Gaiser**, S.F. Girdner, K.D. Hambright, D.P. Hamilton, K. Havens, D.O. Hessen, S.N. Higgins, T.H. Huttula, H. Huuskonen, P.D.F. Isles, K.D. Joehnk, I.D. Jones, W.B. Keller, L.B. Knoll, J. Korhonen, B.M. Kraemer, P.R. Leavitt, F. Lepori, M.S. Luger, S.C. Maberly, J.M. Melack, S.J. Melles, D.C. Muller-Navarra, D.C. Pierson, H.V. Pislegina, P.D. Plisnier, D.C. Richardson, A. Rimmer, M. Rogora, J.A. Rusak, S. Sadro, N. Salmaso, J.E. Saros, E. Saulnier-Talbot, D.E. Schindler, M. Schmid, S.V. Shimaraeva E.A., Silow L.M., Sitoki R., Sommaruga D., Straile K.E., Strock W., Thiery, M.A. Timofeyev, P. Verburg, R.D. Vinebrooke, G.A. Weyhenmeyer, and E. Zadereev. 2020. Deeper waters are changing less consistently than surface waters in a global analysis of 102 lakes. *Scientific Reports*. <https://doi.org/10.1038/s41598-020-76873-x>
103. Dempsey, C.M., J.A. Brentrup, S. Magyan, L.B. Knoll, H.M. Swain, **E.E. Gaiser**, D.P. Morris, M.T. Granger, and C.E. Williamson. 2020. The relative importance of photodegradation and biodegradation of terrestrially derived dissolved organic carbon across four lakes of differing trophic status. *Biogeochemistry* 17:6327-6340. <https://doi.org/10.5194/bg-17-6327-2020>
102. Doubek, J., O. Anneville, G. Dur, A. Lewandowska, V. Patil, J. Rusak, N. Salmaso, C. Seltmann, D. Straile, P. Urrutia-Cordero, P. Venail, R. Adrian, M. Alfonso, C. DeGasperi, E. De Eyto, H. Feuchtmayr, **E.E. Gaiser**, S. Girdner, J.L. Graham, H. Grossart, J. Hejzlar, S. Jacquet, G. Kirillin, M. Llamas, S. Matsuzaki, E. Nodine, M. Piccolo, D. Pierson, A. Rimmer, L. Rudstam, S. Sadro, H. Swain, S. Thackeray, W. Thiery, P. Verburg, T. Zohary, & J. Stockwell. 2021. The extent and variability of storm-induced temperature changes in lakes measured with long-term and high-frequency data. *Limnology and Oceanography*. <https://doi.org/10.5194/bg-2020-160>
101. Kraemer, B.M., R.M. Pilla, R.L. Woolway, O. Anneville, S. Ban, W. Colom-Montero, S.P. Devlin, M.T. Dokulil, **E.E. Gaiser**, K.D. Hambright, D.O. Hessen, S.N. Higgins, K.D. Jöhnk, W. Keller, L.B. Knoll, P.R. Leavitt, F. Lepori, M.S. Luger, S.C. Maberly, D.C. Müller-Navarra, A.M. Paterson, D.C. Pierson, D.C. Richardson, M. Rogora, J.A. Rusak, S. Sadro, N. Salmaso, M. Schmid, E.A. Silow, R. Sommaruga, J.A.A. Stelzer, D. Straile, W. Thiery, P. Verburg, G.A. Weyhenmeyer, and R. Adrian. 2021. Climate change drives widespread shifts in lake thermal habitat. *Nature Climate Change*. In Press.
100. Sarker, S.K., J.S. Kominoski, **E.E. Gaiser**, L.J. Scinto, and D.T. Rudnick. 2020. Quantifying effects of increased hydroperiod on wetland nutrient concentrations during early phases of freshwater restoration of the Florida Everglades. *Restoration Ecology*. <https://doi.org/10.1111/rec.13231>
99. Berthold\*, D.E., T. Frankovich, **E.E. Gaiser**, and H.D. Laughinghouse IV. 2020. *Fistulifera alcalina* sp. nov. (Naviculales: Bacillariophyceae) a new alkaliphilic

- diatom species from Lake Okeechobee, Florida (USA). *Diatom Research*.  
<https://doi.org/10.1080/0269249X.2020.1801517>
98. **Gaiser, E.E.**, D.M. Bell, M.C.N. Castorani, D.L. Childers, P.M. Groffman, R.C. Jackson, J.S. Kominoski, D.P.C. Peters, S.T.A. Pickett, J. Ripplinger, & J.C. Zinnert. 2020. Long term ecological research and evolving frameworks of disturbance ecology. *BioScience* 70:141-156. <https://doi.org/10.1093/biosci/biz162>
  97. Castaneda-Moya, E., V.H. Rivera-Monroy, R.M. Chambers, X. Zhao, L. Lamb-Wotton, A. Gorsky, **E.E. Gaiser**, T.G. Troxler, J.S. Kominoski, & M. Hiatt. 2020. Hurricanes fertilize mangrove forests in the Gulf of Mexico (Florida Everglades, USA). *Proceedings of the National Academy of Science* 117:4831-4841. <https://doi.org/10.1073/pnas.1908597117>
  96. Servais, S., J.S. Kominoski, C. Coronado-Molina, L. Bauman, S.E. Davis, **E.E. Gaiser**, S. Kelly, C. Madden, V. Mazzei\*, D. Rudnick, F. Santamaria, F.H. Sklar, J. Stachelek, T.G. Troxler, & B.J. Wilson. 2020. Effects of saltwater pulses on soil microbial enzymes and organic matter breakdown in freshwater and brackish coastal wetlands. *Estuaries and Coasts* <https://doi.org/10.1007/s12237-020-00708-1>
  95. Kominoski, J.S., **E.E. Gaiser**, E. Castañeda-Moya, S.E. Davis, S. Dessu, P. Julian II, D.Y. Lee, L. Marazzi, V.H. Rivera-Monroy, A. Sola\*, U. Stingl, S. Stumpf, D. Surratt, R. Travieso, & T.G. Troxler. 2020. Disturbance legacies synchronize fluctuations in nutrient concentrations and bacterial productivity in coastal ecosystems. *Ecology* 101(5) e02988. <https://doi.org/10.1002/ecy.2988>
  94. Dessu, S.B., R.M. Price, J.S. Kominoski, S.E. Davis, A.S. Wymore, W.H. McDowell, & **E.E. Gaiser**. 2019. Percentile-range indexed mapping and evaluation (PRIME): a new tool for long term data discovery and application. *Environmental Modelling and Software* 124:104580. <https://doi.org/10.1016/j.envsoft.2019.104580>
  93. Mazzei\*, V., B. Wilson, S. Servais, S. Charles, J. Kominoski, & E.E. **Gaiser**. 2020. Periphyton as an indicator of saltwater intrusion in freshwater wetlands: insights from experimental manipulations. *Ecological Applications* 30:e02067. <https://doi.org/10.1002/eap.2067>
  92. Charles, S.P., J.S. Kominoski, T.G. Troxler, **E.E. Gaiser**, S. Servais, B.J. Wilson, S.E. Davis, F.H. Sklar, C. Coronado-Molina, C.J. Madden, S. Kelly, & D.T. Rudnick. 2019. Experimental saltwater intrusion drives rapid soil elevation and carbon loss in freshwater and brackish Everglades marshes. *Estuaries and Coasts* 42:1868-1881. <https://doi.org/10.1007/s12237-019-00620-3>
  91. Rivera-Monroy, V.H., T.M. Danielson, E. Castaneda-Moya, B.D. Marx, R. Travieso, X. Zhao, **E.E. Gaiser**, & L.M. Farfan. 2019. Long-term demography and stem productivity of Everglades mangrove forests (Florida, USA): Resistance to hurricane disturbance. *Forest Ecology and Management* 400:79-91. <https://doi.org/10.1016/j.foreco.2019.02.036>
  90. Wilson, B.J., S. Servais, S.P. Charles, V. Mazzei\*, **E.E. Gaiser**, J.S. Kominoski, J.H. Richards, & T.G. Troxler. 2019. Phosphorus alleviation of salinity stress: effects of saltwater intrusion on an Everglades freshwater peat marsh. *Ecology* 100(5):e02672. <https://doi.org/10.1002/ecy.2672>
  89. Servais, S., J.S. Kominoski, S.E. Davis, **E.E. Gaiser**, J. Pachón, & T.G. Troxler. 2019. Effects of nutrient limitation on disturbance recovery in experimental mangrove wetlands. *Wetlands* 39:337-347. <https://doi.org/10.1007/s13157-018-1100-z>

88. Servais, S., J.S. Kominoski, S.P. Charles, **E.E. Gaiser**, V. Mazzei\*, T.G. Troxler, & B.J. Wilson. 2019. Saltwater intrusion and soil carbon loss: Testing effects of salinity and phosphorus loading on microbial functions in experimental freshwater wetlands. *Geoderma* 337:1291-1300. <https://doi.org/10.1016/j.geoderma.2018.11.013>
87. Marazzi, L., **E.E. Gaiser**, M. B. Eppinga, J. P. Sah, L. Zhai, E. Castañeda-Moya, & C. Angelini. 2019. Why do we need to document and conserve foundation species in freshwater wetlands? *Water* 11(2):265. <https://doi.org/10.3390/w11020265>
86. Wilson, B., S. Servais, V. Mazzei\*, L. Bauman, M. Hu, S. Davis, **E.E. Gaiser**, S. Kelly, J. Kominoski, C. Madden, J. Richards, D. Rudnick, F. Sklar, J. Stachelek, & T. Troxler. 2018. Salinity pulses interact with seasonal dry-down to increase ecosystem carbon loss in Florida Everglades coastal marshes. *Ecological Applications* 28:2092-2108. <https://doi.org/10.1002/eap.1798>
85. Wilson, B.J., S. Servais, S.P. Charles, S. E. Davis, **E.E. Gaiser**, J.S. Kominoski, J.H. Richards, & T.G. Troxler. 2018. Declines in plant productivity drive carbon loss from brackish coastal wetland mesocosms exposed to saltwater intrusion. *Estuaries and Coasts* 41:2147-2158. <https://doi.org/10.1007/s12237-018-0438-z>
84. Mazzei\*, V., **E.E. Gaiser**, J. Kominoski, T. Troxler, B. Wilson, S. Servais, L. Bauman, S. Davis, S. Kelly, F. Sklar, D. Rudnick, & J. Stachelek. 2018. Functional and compositional responses of periphyton mats to simulated saltwater intrusion in the southern Everglades. *Estuaries and Coasts* 41: 2105-2119. <https://doi.org/10.1007/s12237-018-0415-6>
83. Marazzi, L., & **E.E. Gaiser**. 2018. Long-term changes in spatially structured benthic diatom assemblages in a major subtropical wetland under restoration. *Inland Waters* 8:434-448. <https://doi.org/10.1080/20442041.2018.1500206>
82. Kominoski, J., **E.E. Gaiser**, & S.G. Baer. 2018. Advancing theories of ecosystem development through long-term ecological research. *BioScience* 68:554-562. <https://doi.org/10.1093/biosci/biy070>
81. Marazzi, L., C.M. Finlayson, P.A. Gell, P. Julian, J.S. Kominoski, & **E.E. Gaiser**. 2018. Balancing wetland restoration benefits to people and nature. *The Solutions Journal* 9(3):1-23. <https://www.thesolutionsjournal.com/article/balancing-wetland-restoration-benefits-people-nature/>
80. Davis, S.E., R. Boucek, E. Castaneda-Moya, S. Dessu, **E.E. Gaiser**, J. Kominoski, J.P. Sah, D. Surratt, & T. Troxler. 2018. Episodic disturbances drive nutrient dynamics along freshwater-to-estuary gradients in a subtropical wetland. *Ecosphere* 9(6):e02296. <https://doi.org/10.1002/ecs2.2296>
79. Mazzei\*, V., & **E.E. Gaiser**. 2018. Diatoms as tools for inferring ecotone boundaries in a coastal freshwater wetland threatened by saltwater intrusion. *Ecological Indicators* 88:190-204. <https://doi.org/10.1016/j.ecolind.2018.01.003>
78. Sola\*, A.D., L.M. Marazzi, M.M. Flores\*, J.S. Kominoski, & **E.E. Gaiser**. 2018. Short-term effects of drying-rewetting and long-term effects of nutrient loading on periphyton N:P stoichiometry. *Water* 10(2):105. <https://doi.org/10.3390/w10020105>
77. Marazzi, L., **E.E. Gaiser**, & F.A.C. Tobias. 2017. Phosphorus scarcity and desiccation stress increase the occurrence of dominant taxa in wetland benthic primary

- producer communities. *Aquatic Ecology* 51:571-589.  
<https://doi.org/10.1007/s10452-017-9637-0>
76. Danielson, T.M., V.H. Rivera-Monroy, E. Castañeda-Moya, H. Briceño, R. Travieso, B.D. Marx, **E.E. Gaiser**, & L. Farfán. 2017. Assessment of Everglades mangrove forest resilience: Implications for above-ground net primary productivity and carbon dynamics. *Forest Ecology and Management* 404:115-125.  
<https://doi.org/10.1016/j.foreco.2017.08.009>
75. Naja, G.M., D.L. Childers, & **E.E. Gaiser**. 2017. Water quality implications of hydrologic restoration alternatives in the Florida Everglades, USA. *Restoration Ecology* 25:S48-S58. <https://doi.org/10.1111/rec.12513>
74. Mazzei\*, V., & **E.E. Gaiser**. 2017. Scale and spatial consistency of specialization in an endemic and abundant freshwater diatom from the Caribbean Basin. *Freshwater Science* 36:542-554. <https://doi.org/10.1086/693105>
73. Marazzi, L., **E.E. Gaiser**, V J. Jones, F.A.C. Tobias, & A.W. MacKay. 2017. Algal richness and life-history strategies are influenced by hydrology and phosphorus in two major subtropical wetlands. *Freshwater Biology* 62:274-290.  
<https://doi.org/10.1111/fwb.12866>
72. Malone, S.L., J. Barr, J.D. Fuentes, S.F. Oberbauer, C.L. Staudhammer, **E.E. Gaiser**, & G. Starr. 2016. Sensitivity to low-temperature events: Implications for CO<sub>2</sub> dynamics in subtropical coastal ecosystems. *Wetlands* 36:957–967.  
<https://doi.org/10.1007/s13157-016-0810-3>
71. Lammertsma, E.I., T.H. Donders, C. Pearce, H. Cremer, **E.E. Gaiser**, & F. Wagner-Cremer. 2015. Sensitivity of wetland hydrology to external climate forcing in central Florida. *Quaternary Research* 84:287-300.  
<https://doi.org/10.1016/j.yqres.2015.09.003>
70. Nodine\*, E., & **E.E. Gaiser**. 2015. Seasonal differences and response to a tropical storm reflected in diatom assemblage changes in a southwest Florida watershed. *Ecological Indicators* 57:139-148. <https://doi.org/10.1016/j.ecolind.2015.04.035>
69. **Gaiser, E.E.**, E.P. Anderson, E. Castañeda-Moya, L. Collado-Vides, J.W. Fourqurean, M.R. Heithaus, R. Jaffé, D. Lagomasino, N. Oehm, R.M. Price, V.H. Rivera-Monroy, R. Roy Chowdhury, & T. Troxler. 2015. New perspectives on an iconic landscape from comparative international long-term ecological research. *Ecosphere* 6(10):1-18. <https://doi.org/10.1890/ES14-00388.1>
68. Hamilton, D., C. Carey, L. Arvola, P. Arzberger, C. Brewer, J. Cole, **E.E. Gaiser**, P. Hanson, B. Ibelings, E. Jennings, T. Kratz, F. Lin, C. McBride, D. Motta Marques, K. Muraoka, A. Nishri, B. Qin, J. Read, K. Rose, E. Ryder, K. Weathers, G. Zhu, D. Trolle, & J. Brookes. 2014. A Global Lake Ecological Observatory Network (GLEON) for synthesizing high-frequency sensor data for validation of deterministic ecological models. *Inland Waters* 5:49-56.  
<https://doi.org/10.5268/IW-5.1.566>
67. Tallis, H., J. Lubechenco, ... **E.E. Gaiser**, plus 238 coauthors. 2014. Working together: A call for inclusive conservation. *Comment to Nature* 515:27-28.  
<https://doi.org/10.1038/515027a>
66. Lee\*, S., **E.E. Gaiser**, B. Van De Vijver, M. Edlund, & S. Spaulding. 2014. Morphology and typification of *Mastogloia smithii* and *M. lacustris*, with descriptions of two new species from the Florida Everglades and the Caribbean

- region. *Diatom Research* 2:325-350.  
<https://doi.org/10.1080/0269249X.2014.889038>
65. Nodine\*, E., & **E.E. Gaiser**. 2014. Distribution of diatoms along environmental gradients in the Charlotte Harbor, Florida (USA), Estuary and its watershed: implications for bioassessment of salinity and nutrient concentrations. *Estuaries and Coasts* 37:864-879. <https://doi.org/10.1007/s12237-013-9729-6>
64. **Gaiser, E.E.**, P. Sullivan, F.A.C. Tobias, A.J. Bramburger, & J.C. Trexler. 2014. Boundary effects on benthic microbial phosphorus concentrations and diatom beta diversity in a hydrologically-modified, nutrient-limited wetland. *Wetlands* 34:55-64. <https://doi.org/10.1007/s13157-011-0149-8>
63. Sokol, E.R., J.M. Hoch, **E.E. Gaiser**, & J.C. Trexler. 2014. Metacommunity structure along resource and disturbance gradients in Everglades wetlands. *Wetlands* 34:135-146. <https://doi.org/10.1007/s13157-013-0413-1>
62. Koch\*, G.R., S. Hagerthey, D.L. Childers, & **E.E. Gaiser**. 2014. Examining seasonally pulsed detrital transport in the coastal Everglades using a sediment tracking technique. *Wetlands* 34:123-133. <https://doi.org/10.1007/s13157-013-0388-y>
61. Sullivan, P.L., R.M. Price, J.L. Schedlbauer, A. Saha, & **E.E. Gaiser**. 2014. The influence of hydrologic restoration on groundwater-surface water interactions in a karst wetland, Everglades (FL, USA). *Wetlands* 34:23-35. <https://doi.org/10.1007/s13157-013-0451-8>
60. Weathers, K., P. Hanson, P. Arzberger, J. Brentrup, J. Brookes, C. Carey, **E.E. Gaiser**, D. Hamilton, G. Hong, B. Ibelings, V. Istavanovics, E. Jennings, B. Kim, T. Kratz, F. Lin, K. Muraoka, C. O'Reilly, K. Rose, E. Ryder, & G. Zhu. 2013. The Global Lake Ecological Observatory Network: The Evolution of Grassroots Network Science. *Limnology and Oceanography Bulletin* 23:71-73. <https://doi.org/10.1002/lob.201322371>
59. Troxler, T., **E.E. Gaiser**, J. Barr, J. Fuentes, R. Jaffé, D. Childers, L. Collado-Vides, V. Rivera-Monroy, E. Castañeda-Moya, W. Anderson, R. Chambers, M. Chen, C. Coronado-Molina, S. Davis, V. Engel, C. Fitz, J. Fourqurean, T. Frankovich, J. Kominoski, C. Madden, S. Malone, S. Oberbauer, P. Olivas, J. Richards, C. Saunders, J. Schedlbauer, F. Sklar, T. Smith, J. Smoak, G. Starr, R. Twilley, & K. Whelan. 2013. Integrated carbon budget models for the Everglades terrestrial-coastal-oceanic gradient: current status and needs for inter-site comparisons. *Oceanography* 26:98-107. <https://doi.org/10.5670/oceanog.2013.51>
58. Abbey-Lee, R.N., **E.E. Gaiser**, & J.C. Trexler. 2013. Relative roles of dispersal dynamics and competition in determining the isotopic niche breadth of a wetland fish. *Freshwater Biology* 58:780-792. <https://doi.org/10.1111/fwb.12084>
57. Solomon, C.T., D.A. Bruesewitz, D.C. Richardson, K.C. Rose, M.C. Van de Bogert, P.C. Hanson, T.K. Kratz, B. Larget, R. Adrian, B.L. Babin, C. Hiu, D.P. Hamilton, **E.E. Gaiser**, S. Hendricks, V. Istvánovics, A. Laas, D.M. O'Donnell, M.L. Pace, E. Ryder, P.A. Staehr, T. Torgersen, M.J. Vanni, K.C. Weathers, & G. Zhu. 2013. Ecosystem respiration: drivers of daily variability and background respiration in lakes around the globe. *Limnology and Oceanography* 58:849-866. <https://doi.org/10.4319/lo.2013.58.3.0849>
56. Wachnicka\*, A., **E.E. Gaiser**, L. Wingard, H. Briceño, & P. Harlem. 2013. Impact of late Holocene climate variability and anthropogenic activities on Biscayne Bay

- (Florida, U.S.A): evidence from diatoms. *Palaeogeography, Palaeoclimatology, Palaeoecology* 371:80-82. <https://doi.org/10.1016/j.palaeo.2012.12.020>
55. Lee\*, S., **E.E. Gaiser**, & J. Trexler. 2013. Diatom-based models for inferring hydrology and periphyton abundance in a subtropical karstic wetland: Implications for ecosystem-scale bioassessment. *Wetlands* 33:157-173. <https://doi.org/10.1007/s13157-012-0363-z>
  54. Wachnicka\*, A., **E.E. Gaiser**, & L. Collins. 2013. Correspondence of historic salinity fluctuations in Florida Bay, USA, to atmospheric variability and anthropogenic changes. *Journal of Paleolimnology* 49:103-115. <https://doi.org/10.1007/s10933-011-9534-9>
  53. Wachnicka\*, A., L. Collins, & **E.E. Gaiser**. 2013. Response of diatom assemblages to 130 years of environmental change in Florida Bay (USA). *Journal of Paleolimnology* 49: 83-101. <https://doi.org/10.1007/s10933-011-9556-3>
  52. Sanchez\*, C., **E.E. Gaiser**, C. Saunders, A. Wachnicka\*, & N. Oehm. 2013. Exploring siliceous subfossils as a tool for inferring past water level and hydroperiod in Everglades marshes. *Journal of Paleolimnology* 49:45-66. <https://doi.org/10.1007/s10933-012-9624-3>
  51. Quillen\*, A., **E.E. Gaiser**, & E. Grimm. 2013. Diatom-based paleolimnological reconstruction of regional climate and local land-use change from a protected sinkhole lake in southern Florida, U.S.A. *Journal of Paleolimnology* 49:15-30. <https://doi.org/10.1007/s10933-011-9558-1>
  50. Bramburger, A., J. Munyon\*, & **E.E. Gaiser**. 2013. Water quality and wet season diatom assemblage characteristics from the Tamiami Trail pilot swales sites. *Phytotaxa* 127:163-182. <http://dx.doi.org/10.11646/phytotaxa.127.1.16>
  49. Schedlbauer, J., J. Munyon\*, S. Oberbauer, **E.E. Gaiser**, & G. Starr. 2012. Controls on ecosystem carbon dioxide exchange in short- and long-hydroperiod Florida Everglades freshwater marshes. *Wetlands* 32:801-812. <https://doi.org/10.1007/s13157-012-0311-y>
  48. La Hée\*, J., & **E.E. Gaiser**. 2012. Benthic diatom assemblages as indicators of water quality in the Everglades and three tropical karstic wetlands. *Freshwater Science* 31: 205-221. <https://doi.org/10.1899/11-022.1>
  47. Dunalska, J., D. Górniak, B. Jaworska, & **E.E. Gaiser**. 2012. Effects of temperature on organic matter transformation in trophically-diversified lake ecosystems. *Ecological Engineering* 49:27-34. <https://doi.org/10.1016/j.ecoleng.2012.08.023>
  46. Dodds, W., C. Robinson, **E.E. Gaiser**, G. Hansen, H. Powell, J. Smith, N. Morse, S. Gregory, T. Bell, T. Kratz, & W. McDowell. 2012. Surprises and insights from long-term aquatic data sets. *BioScience* 62:709-721. <https://doi.org/10.1525/bio.2012.62.8.4>
  45. Wozniak, J.R., D.L. Childers, W.T. Anderson, **E.E. Gaiser**, D.T. Rudnick, & C.J. Madden. 2012. Potential N processing by southern Everglades freshwater marshes: Are Everglades marshes passive conduits for nitrogen? *Estuarine and Coastal Shelf Science* 96:60-68. <https://doi.org/10.1016/j.ecss.2011.08.024>
  44. Kara, E., P. Hanson, D. Hamilton, M. Hipsey, K. McMahan, J. Read, L. Winslow, J. Dedrick, K. Rose, C. Carey, S. Bertilsson, D. Motta-Marques, L. Beversdorf, T. Miller, C. Wu, Y-F Hsieh, **E.E. Gaiser**, & T. Kratz. 2012. Time-scale dependence in numerical simulations: Assessment of physical, chemical, and biological

- predictions in a stratified lake at temporal scales from hours to months. *Environmental Modelling and Software* 35:104-121. <https://doi.org/10.1016/j.envsoft.2012.02.014>
43. Koch\*, G.R., D.L. Childers, P.A. Staehr, R.M. Price, S.E. Davis, & **E.E. Gaiser**. 2012. Hydrological conditions control P loading and aquatic metabolism in an oligotrophic, subtropical estuary. *Estuaries and Coasts* 35:292-307. <https://doi.org/10.1007/s12237-011-9431-5>
  42. Jennings, E., S. Jones, L. Arvola, P. A. Staehr, E.E. **Gaiser**, I. D. Jones, K. C. Weathers, G. A. Wyhenmeyer, C-Y. Chiu, & E. de Eyto. 2012. Impacts of weather related events in lakes: an analysis based on high frequency data. *Freshwater Biology* 57:589-601. <https://doi.org/10.1111/j.1365-2427.2011.02729.x>
  41. Sargeant, B., **E.E. Gaiser**, & J. Trexler. 2011. Indirect and direct controls of macroinvertebrates and small fish by abiotic factors and trophic interactions in the Florida Everglades. *Freshwater Biology* 56:2334-2346. <https://doi.org/10.1111/j.1365-2427.2011.02663.x>
  40. Read, J.S., D. Hamilton, I. Jones, K. Muraoka, R. Kroiss, C. Wu, & **E.E. Gaiser**. 2011. Derivation of lake mixing and stratification indices from high-resolution lake buoy data. *Environmental Modelling and Software* 26:1325-1336. <https://doi.org/10.1016/j.envsoft.2011.05.006>
  39. Wachnicka\*, A., **E.E. Gaiser**, & J. Boyer. 2011. Autecology and distribution of diatoms in Biscayne Bay, Florida (USA): implications for biomonitoring and paleoenvironmental studies. *Ecological Indicators* 11:622-632. <https://doi.org/10.1016/j.ecolind.2010.08.008>
  38. **Gaiser, E.E.**, P. McCormick, & S. Hagerthey. 2011. Landscape patterns of periphyton in the Florida Everglades. *Critical Reviews in Environmental Science and Technology* 41(S1):92-120. <https://doi.org/10.1080/10643389.2010.531192>
  37. Hagerthey, S., B. Bellinger, K. Wheeler, M. Gantar, & **E.E. Gaiser**. 2011. Everglades periphyton: A biogeochemical perspective. *Critical Reviews in Environmental Science and Technology* 41(S1):309-343. <https://doi.org/10.1080/10643389.2010.531218>
  36. Liu, G., M. Naja, P. Kalla, D. Scheidt, **E.E. Gaiser**, & Y. Cai. 2011. Legacy and fate of mercury and methylmercury in the Florida Everglades. *Environmental Science and Technology* 45:496-501. <https://doi.org/10.1021/es101207f>
  35. **Gaiser, E.E.**, J. La Hée\*, F. Tobias, & A. Wachnicka\*. 2010. *Mastogloia smithii* Thwaites ex Wm. Smith: A structural engineer of calcareous mats in karstic subtropical wetlands. *Proceedings of the Academy of Natural Sciences, Philadelphia* 160:99-112. <https://doi.org/10.1635/053.160.0111>
  34. Wachnicka\*, A., **E.E. Gaiser**, L. Collins, T. Frankovich & J. Boyer. 2010. Distribution of diatoms and development of diatom-based inferences of environmental change in Florida Bay and adjacent coastal wetlands of South Florida. *Estuaries and Coasts* 33:1080-1098. <https://doi.org/10.1007/s12237-010-9283-4>
  33. Sargeant, B., J. Trexler, & **E.E. Gaiser**. 2010. Biotic and abiotic determinants of intermediate-consumer trophic diversity in the Florida Everglades. *Marine and Freshwater Research* 61:11-22. <https://doi.org/10.1071/MF08322>
  32. **Gaiser, E.E.**, N. Deyrup, R. Bachmann, L. Battoe, & H. Swain. 2009. Multidecadal climate oscillations detected in a transparency record from a subtropical Florida



- lake. *Limnology and Oceanography* 54:2228–2232.  
<https://doi.org/10.4319/lo.2009.54.6.2228>
31. **Gaiser, E.E.**, R. Bachmann, L. Battoe, N. Deyrup, & H. Swain. 2009. Effects of climate variability on transparency and thermal structure in subtropical, monomictic Lake Annie, Florida. *Fundamental and Applied Limnology* 175:217-230.  
<https://doi.org/10.1127/1863-9135/2009/0175-0217>
  30. **Gaiser, E.E.** 2009. Periphyton as an indicator of restoration in the Everglades. *Ecological Indicators* 9:S37-S45. <https://doi.org/10.1016/j.ecolind.2008.08.004>
  29. Frankovich, T., A. Armitage, A. Wachnicka\*, **E.E. Gaiser**, & J. Fourqurean. 2009. Nutrient effects on seagrass epiphyte community structure in Florida Bay. *Journal of Phycology* 45:1010-1020. <https://doi.org/10.1111/j.1529-8817.2009.00745.x>
  28. **Gaiser, E.E.**, R. Doren, P. McCormick, S. Newman, J. Richards, & J. Trexler. 2008. Comment on “Estimating Ecological Thresholds for Phosphorus in the Everglades.” *Environmental Science and Technology* 42:6770-6771.  
<https://doi.org/10.1021/es800347t>
  27. Liu, G., Y. Cai, P. Kalla, D. Scheidt, J. Richards, L. Scinto, **E.E. Gaiser**, & C. Appleby. 2008. Mercury mass budget estimates and cycling seasonality in the Florida Everglades. *Environmental Science and Technology* 42:1954-1960.  
<https://doi.org/10.1021/es7022994>
  26. Wachnicka\*, A.H., & **E.E. Gaiser**. 2007. Characterization of *Amphora* and *Seminavis* (Bacillariophyceae) from South Florida, U.S.A. *Diatom Research* 22:387-455.  
<https://doi.org/10.1080/0269249X.2007.9705722>
  25. Tobias, F.A.C., & **E.E. Gaiser**. 2006. Taxonomy and distribution of taxa in the genus *Gomphonema* from the Florida Everglades, U.S.A. *Diatom Research* 21: 379-405.  
<https://doi.org/10.1080/0269249X.2006.9705677>
  24. Gottlieb, A., J. Richards, & **E.E. Gaiser**. 2006. Comparative study of periphyton community structure in long and short hydroperiod Everglades marshes. *Hydrobiologia* 569:195-207. <https://doi.org/10.1007/s10750-006-0132-1>
  23. **Gaiser, E.E.**, A. Zafiris\*, P. Ruiz, F. Tobias, & M. Ross. 2006. Tracking rates of ecotone migration due to salt-water encroachment using fossil mollusks in coastal south Florida. *Hydrobiologia* 569:237-257. <https://doi.org/10.1007/s10750-006-0135-y>
  22. Frankovich, T., **E.E. Gaiser**, J. Zieman, & A. Wachnicka\*. 2006. Spatial and temporal distributions of epiphytic diatoms growing on *Thalassia testudinum* Banks ex König: relationships to water quality. *Hydrobiologia* 569:259-271.  
<https://doi.org/10.1007/s10750-006-0136-x>
  21. Dorn, N., J. Trexler, & **E.E. Gaiser**. 2006. Exploring the role of large predators in marsh food webs: evidence for a behaviorally-mediated trophic cascade. *Hydrobiologia* 569:375-386. <https://doi.org/10.1007/s10750-006-0143-y>
  20. Thomas, S., **E.E. Gaiser**, & F.A.C. Tobias. 2006. Effects of shading on calcareous benthic periphyton in a short-hydroperiod oligotrophic alkaline wetland (Everglades, FL, U.S.A.). *Hydrobiologia* 569:209-221.  
<https://doi.org/10.1007/s10750-006-0133-0>
  19. Ewe, S., **E.E. Gaiser**, D. Childers, V. Rivera-Monroy, D. Iwaniec, J. Fourqurean, & R. Twilley. 2006. Spatial and temporal patterns of aboveground net primary

- productivity (ANPP) in the Florida Coastal Everglades LTER (2001-2004). *Hydrobiologia* 569:459-474. <https://doi.org/10.1007/s10750-006-0149-5>
18. Xu, Y., A. Wachnicka, **E.E. Gaiser**, & R. Jaffé. 2006. Occurrence of C<sub>25</sub> highly branched isoprenoids in Florida Bay: Paleoenvironmental indicators of diatom-derived organic matter. *Organic Geochemistry* 37:728-739. <https://doi.org/10.1016/j.orggeochem.2006.02.001>
  17. Thomas, S., **E.E. Gaiser**, M. Gantar, & L. Scinto. 2006. Quantifying the responses of calcareous periphyton crusts to rehydration: A microcosm study (Florida Everglades). *Aquatic Botany* 84:317-323. <https://doi.org/10.1016/j.aquabot.2005.12.003>
  16. **Gaiser, E.E.**, J. Richards, J. Trexler, R. Jones, & D. Childers. 2006. Periphyton responses to eutrophication in the Florida Everglades: Cross-system patterns of structural and compositional change. *Limnology and Oceanography* 51:617-630. [https://doi.org/10.4319/lo.2006.51.1\\_part\\_2.0617](https://doi.org/10.4319/lo.2006.51.1_part_2.0617)
  15. Davis, S., **E.E. Gaiser**, W. Loftus, & A. Huffman. 2005. Southern marl prairies conceptual ecological model. *Wetlands* 25:821-831. [https://doi.org/10.1672/0277-5212\(2005\)025\[0821:SMPCEM\]2.0.CO;2](https://doi.org/10.1672/0277-5212(2005)025[0821:SMPCEM]2.0.CO;2)
  14. **Gaiser, E.E.**, K. Rosenfeld, D. Ebert-May, E. Weber, & A. McConney. 2005. Pathways to Scientific Teaching: Here today, not gone tomorrow? *Understanding extinction. Frontiers in Ecology and the Environment* 7:452-453. [https://doi.org/10.1890/1540-9295\(2004\)002\[0323:PTST\]2.0.CO;2](https://doi.org/10.1890/1540-9295(2004)002[0323:PTST]2.0.CO;2)
  13. Gottlieb, A., J. Richards, & **E.E. Gaiser**. 2005. Effects of desiccation duration on the community structure and nutrient retention of short and long-hydroperiod Everglades periphyton mats. *Aquatic Botany* 82:99-112. <https://doi.org/10.1016/j.aquabot.2005.02.012>
  12. **Gaiser, E.E.**, J. Trexler, J. Richards, D. Childers, D. Lee, A. Edwards, L. Scinto, K. Jayachandran, G. Noe, & R. Jones. 2005. Cascading ecological effects of low-level phosphorus enrichment in the Florida Everglades. *Journal of Environmental Quality* 34:717-723. <https://doi.org/10.2134/jeq2005.0717>
  11. **Gaiser, E.E.**, M. Brooks, W. Kenney, C. Schelske, & B. Taylor. 2004. Interpreting the hydrologic history of a temporary pond using siliceous microfossils. *Journal of Paleolimnology* 31:63-76. <https://doi.org/10.1023/B:JOPL.0000013280.72275.81>
  10. Donar, C., K. Condon, M. Gantar, & **E.E. Gaiser**. 2004. A new technique for examining the physical structure of Everglades floating periphyton mat. *Nova Hedwigia* 78: 107-119. <https://doi.org/10.1127/0029-5035/2004/0078-0107>
  9. **Gaiser, E.E.**, L. Scinto, J. Richards, K. Jayachandran, D. Childers, J. Trexler, & R. Jones. 2004. Phosphorus in periphyton mats provides best metric for detecting low-level P enrichment in an oligotrophic wetland. *Water Research* 38:507-516. <https://doi.org/10.1016/j.watres.2003.10.020>
  8. Thomas, S., **E.E. Gaiser**, M. Gantar, A. Pinowska, L. Scinto, & R. Jones. 2002. Growth of calcareous epilithic mats in the margin of natural and polluted hydrosystems: phosphorus removal implications in the C-111 basin, Florida Everglades, USA. *Lake and Reservoir Management* 18:323-329. <https://doi.org/10.1080/07438140209353939>
  7. Noe, G., D. Childers, A. Edwards, **E.E. Gaiser**, K. Jayachandran, D. Lee, J. Meeder, J. Richards, L. Scinto, J. Trexler, & R. Jones. 2001. Short-term changes in

- phosphorus storage in an oligotrophic Everglades wetland ecosystem receiving experimental nutrient enrichment. *Biogeochemistry* 59:239-267.  
<https://doi.org/10.1023/A:1016090009874>
6. **Gaiser, E.E.**, B. Taylor, & M. Brooks. 2001. Establishment of wetlands on the southeastern Atlantic Coastal Plain: Paleolimnological evidence of a mid-Holocene hydrologic threshold from a South Carolina pond. *Journal of Paleolimnology* 26:373-391. <https://doi.org/10.1023/A:1012645302945>
  5. **Gaiser, E.E.**, & J. Johansen. 2000. Freshwater diatoms from Carolina bays and other isolated wetlands on the Atlantic Coastal Plain of South Carolina, U.S.A., with descriptions of seven taxa new to science. *Diatom Research* 15:75-130.  
<https://doi.org/10.1080/0269249X.2000.9705487>
  4. **Gaiser, E.E.**, T. Philippi, & B. Taylor. 1998. Distribution of diatoms among intermittent ponds on the Atlantic Coastal Plain: development of a model to predict drought periodicity from surface sediment assemblages. *Journal of Paleolimnology* 20:71-90. <https://doi.org/10.1023/A:1007969500673>
  3. **Gaiser, E.E.**, & K. Lang. 1998. Distribution of cladoceran zooplankton among prairie pothole wetlands in northwest Iowa. *Lake and Reservoir Management* 14:37-51.  
<https://doi.org/10.1080/07438149809354108>
  2. **Gaiser, E.E.**, & R. Bachmann. 1994. Seasonality, substrate preference and attachment sites of epizoic diatoms on cladoceran zooplankton. *Journal of Plankton Research* 16:53-68. <https://doi.org/10.1093/plankt/16.1.53>
  1. **Gaiser, E.E.**, & R. Bachmann. 1993. The ecology and taxonomy of epizoic diatoms on Cladocera. *Limnology and Oceanography* 38:628-637.  
<https://doi.org/10.4319/lo.1993.38.3.0628>

## BOOKS

Childers, D.L., **E.E. Gaiser**, & L.A. Ogden (eds.) 2019. *The Coastal Everglades: The Dynamics of Social-Ecological Transformation in the South Florida Landscape*. Oxford University Press. ISBN: 9780190869007

## CHAPTERS IN BOOKS

17. Childers, D.L., **E.E. Gaiser**, & L.A. Ogden. 2019. Preface. In Childers, D.L., E.E. Gaiser, and L.A. Ogden (eds.) *The Coastal Everglades: The Dynamics of Social-Ecological Transformation in the South Florida Landscape*. Oxford University Press.
16. Childers, D.L., **E.E. Gaiser**, & L.A. Ogden. 2019. Chapter 1. In Childers, D.L., E.E. Gaiser and L.A. Ogden (eds.) *The Coastal Everglades: The Dynamics of Social-Ecological Transformation in the South Florida Landscape*. Oxford University Press.
15. Ogden, L.A., J.C. Trexler, D.L. Childers, **E.E. Gaiser**, & K.Z.S. Schwartz. 2019. Chapter 2: The Everglades as Icon. In Childers, D.L., E.E. Gaiser and L.A. Ogden (eds.) *The Coastal Everglades: The Dynamics of Social-Ecological Transformation in the South Florida Landscape*. Oxford University Press.

14. Davis, S.E., E. Castañeda-Moya, R. Boucek, R.M. Chambers, L. Collado-Vides, H.C. Fitz, J.D. Fuentes, **E.E. Gaiser**, M.R. Heithaus, J.S. Rehage, V.H. Rivera-Monroy, J.P. Sah, F.H. Sklar, & T. Troxler. 2019. Chapter 7: Exogenous Drivers - What has Disturbance Taught Us? In Childers, D.L., E.E. Gaiser and L.A. Ogden (eds.) *The Coastal Everglades: The Dynamics of Social-Ecological Transformation in the South Florida Landscape*. Oxford University Press.
13. **Gaiser, E.E.**, L.A. Ogden, D.L. Childers, & C. Hopkinson. Chapter 9: Re-Imagining Ecology through an Everglades Lens. 2019. In Childers, D.L., E.E. Gaiser, & L.A. Ogden (eds.) *The Coastal Everglades: The Dynamics of Social-Ecological Transformation in the South Florida Landscape*. Oxford University Press.
12. **Gaiser, E.E.** 2016. The Benefits of Long-Term Environmental Research, Friendships, and Boiled Peanuts. In Willig, M., & L. Walker (Eds.) *Long-Term Environmental Research: Changing the Nature of Scientists*. Chapter 17. Oxford Press.
11. Gann, D., J. Richards, S. Lee\*, & **E.E. Gaiser**. 2015. Detecting and monitoring calcareous periphyton mats in the greater Everglades using passive remote sensing methods. In Entry, J., K. Jayachandran, A. Gottlieb, & A. Ogram (Eds.) *Microbiology of the Everglades Ecosystem*. Science Publishers. pp. 350-372.
10. **Gaiser, E.E.**, A. Gottlieb, S. Lee\*, & J. Trexler. 2015. The importance of species-based microbial assessment of water quality in freshwater Everglades wetlands. In Entry, J., K. Jayachandran, A. Gottlieb, & A. Ogram (Eds.) *Microbiology of the Everglades Ecosystem*. Science Publishers. Pp. 115-130.
9. Gottlieb, A., **E.E. Gaiser**, & S. Hagerthey. 2015. The effects of development, and water management infrastructure and operations on hydrology, nutrient loading, and conductivity in the Florida Everglades, and concurrent changes in periphyton mat community structure and function. In Entry, J., K. Jayachandran, A. Gottlieb, & A. Ogram (Eds.) *Microbiology of the Everglades Ecosystem*. Science Publishers. pp. 131-154.
8. Trexler, J.C., **E.E. Gaiser**, J.S. Kominoski, & J. Sanchez. 2015. The role of periphyton mats in consumer community structure and function in calcareous wetlands: lessons from the Everglades. In Entry, J., K. Jayachandran, A. Gottlieb, & A. Ogram (Eds.) *Microbiology of the Everglades Ecosystem*. Science Publishers. pp. 155-179.
7. **Gaiser, E.E.**, J.C. Trexler, & P.R. Wetzel. 2012. The Everglades. In Batzer, D., & A. Baldwin (Eds.), *Wetland Habitats of North America: Ecology and Conservation Concerns*. University of California Press, Berkeley. pp. 231-252.
6. Cooper, S., **E.E. Gaiser**, & A. Wachnicka\*. 2010. Estuarine paleoecological reconstructions using diatoms. In Smol, J. and E. Stoermer (Eds.), *The Diatoms: Applications in Environmental and Earth Sciences*. Cambridge. pp. 324-345.
5. **Gaiser, E.E.**, & K. Rühland. 2010. Diatoms as indicators of environmental change in wetlands and peatlands. In Smol, J., & E. Stoermer (Eds.), *The Diatoms: Applications in Environmental and Earth Sciences*. Cambridge. pp. 473-496.
4. Hall, R., S. Thomas\*, & **E.E. Gaiser**. 2007. Measuring freshwater primary production and respiration. In Fahey, T., & A. Knapp (Eds.), *Principles and Standards for Measuring Primary Production*. Oxford University Press, UK. pp. 175-203.

3. **Gaiser, E.E.**, A. Wachnicka\*, P. Ruiz, F. Tobias, & M. Ross. 2004. Diatom indicators of ecosystem change in coastal wetlands. In Bortone, S. (Ed.), *Estuarine Indicators*. CRC Press, Boca Raton, FL. pp. 127-144.
2. Ross, M., **E.E. Gaiser**, J. Meeder, & M. Lewin. 2001. Multi-taxon analysis of the "white zone", a common ecotonal feature of South Florida coastal wetlands. In Porter, J., & K. Porter (Eds.), *The Everglades, Florida Bay, and Coral Reefs of the Florida Keys*. CRC Press, Boca Raton, FL. pp. 205-238.
1. Childers, D., R. Jones, J. Trexler, C. Buzzelli, J. Boyer, A. Edwards, **E.E. Gaiser**, K. Jayachandaran, D. Lee, J. Meeder, J. Pechmann, J. Richards, & L. Scinto. 2001. Quantifying the effects of low level phosphorus enrichment on unimpacted Everglades wetlands with in situ flumes and phosphorus dosing. In Porter, J., & K. Porter (Eds.), *The Everglades, Florida Bay, and Coral Reefs of the Florida Keys*. CRC Press, Boca Raton, FL. pp. 127-152.

#### EDITED SPECIAL JOURNAL ISSUES

5. Vanderbilt, K., & **E.E. Gaiser**. 2017. The International Long Term Ecological Research Network: A platform for collaboration. *Ecosphere* 8(2):e01697. <https://doi.org/10.1002/ecs2.1697>
4. Boucek, R., **E.E. Gaiser**, H. Liu, & J. Rehage. 2016. A review of sub-tropical community resistance and resilience to extreme cold spells. *Ecosphere* 7(10):e01455. <https://doi.org/10.1002/ecs2.1455>
3. Sullivan\*, P., **E.E. Gaiser**, D. Surratt, D. Rudnick, S. Davis, & F. Sklar. 2014. Wetland ecosystem response to hydrologic restoration and management: The Everglades and its urban-agricultural boundary. *Wetlands* Vol. 34(S1):1-8. <https://doi.org/10.1007/s13157-014-0525-2>
2. Anderson, W., & **E.E. Gaiser**. 2013. Paleoenvironmental change in wetlands of the Florida Everglades, southeast USA. *Journal of Paleolimnology* 49(S1):1-3. <https://doi.org/10.1007/s10933-012-9665-7>
1. Trexler, J., **E.E. Gaiser**, & D. Childers. 2006. Interaction of hydrology and nutrients in controlling ecosystem function in oligotrophic coastal environments of South Florida. *Hydrobiologia* 569(1):1-2. <https://doi.org/10.1007/s10750-006-0118-z>

#### BOOK REVIEWS

2. **Gaiser, E.E.** 2011. Review: Lodge, T. 2010. *The Everglades Handbook: Understanding the Ecosystem*. 3<sup>rd</sup> Edition. CRC Press. *Wetlands* 32:445-446.
1. **Gaiser, E.E.** 2000. Review: Stoermer, E., & J. Smol. 1999. *The Diatoms: Applications for the Environmental and Earth Sciences*. Cambridge University Press *Limnology and Oceanography* 45:860-863.

#### OTHER CREATIVE PEER-REVIEWED WORKS

2. **Gaiser, E.E.** 2012. Think like a diatom. *Word and World* 32: 21-25.

1. **Gaiser, E.E.** 2009. Two biologists on church and faith: A call for building partnerships. *Word and World* 29: 85-87.

## **ORGANISMS DESCRIBED**

### Heterokontophyta: Bacillariophyceae (Diatoms):

*Fistulifera alcalina* sp. nov. Berthold, Frankovich, Gaiser, & Laughinghouse 2020  
*Mastogloia calcarea* sp. nov. Lee, Gaiser, Van de Vijver, Edlund, & Spaulding 2014  
*Mastogloia pseudosmithii* sp. nov. Lee, Gaiser, Van de Vijver, Edlund, & Spaulding 2014  
*Amphora americana* sp. nov. Wachnicka & Gaiser 2007  
*Amphora archibaldii* sp. nov. Wachnicka & Gaiser 2007  
*Amphora caribbea* sp. nov. Wachnicka & Gaiser 2007  
*Amphora crenulate* sp. nov. Wachnicka & Gaiser 2007  
*Amphora florida* sp. nov. Wachnicka & Gaiser 2007  
*Amphora gramenorum* sp. nov. Wachnicka & Gaiser 2007  
*Amphora indentata* sp. nov. Wachnicka & Gaiser 2007  
*Amphora lacinia* sp. nov. Wachnicka & Gaiser 2007  
*Amphora lunulate* sp. nov. Wachnicka & Gaiser 2007  
*Amphora luteum* sp. nov. Wachnicka & Gaiser 2007  
*Amphora montgomeryi* sp. nov. Wachnicka & Gaiser 2007  
*Amphora pseudoproteus* sp. nov. Wachnicka & Gaiser 2007  
*Amphora pseudotenuissima* sp. nov. Wachnicka & Gaiser 2007  
*Amphora scutella* sp. nov. Wachnicka & Gaiser 2007  
*Amphora spriggerica* sp. nov. Wachnicka & Gaiser 2007  
*Amphora subtropica* sp. nov. Wachnicka & Gaiser 2007  
*Amphora tegetum* sp. nov. Wachnicka & Gaiser 2007  
*Amphora vadosini* sp. nov. Wachnicka & Gaiser 2007  
*Amphora acuta* var. *parva* var. nov. Wachnicka & Gaiser 2007  
*Amphora cymbifera* var. *heritierarum* var. nov. Wachnicka & Gaiser 2007  
*Seminavis cryptorapha* sp. nov. Wachnicka & Gaiser 2007  
*Seminavis deliculata* sp. nov. Wachnicka & Gaiser 2007  
*Seminavis witkowskii* sp. nov. Wachnicka & Gaiser 2007  
*Eunotia pocosinensis* sp. nov. Gaiser & Johansen 2000  
*Eunotia sarraceniae* sp. nov. Gaiser & Johansen 2000  
*Pinnularia turfosphila* sp. nov. Gaiser & Johansen 2000  
*Pinnularia bigibba* sp. nov. Gaiser & Johansen 2000  
*Pinnularia bigibba* var. *gracilis* var. nov. Gaiser & Johansen 2000  
*Pinnularia subgibba* var. *lanceolata* var. nov. Gaiser & Johansen 2000  
*Stauroneis anceps* var. *subrostrata* var. nov. Gaiser & Johansen 2000

## **RESEARCH SEMINARS AND CONFERENCE TALKS**

### **INVITED SEMINARS AND PLENARY PRESENTATIONS**

2020 **Gaiser, E.** Plenary: Long-term trends in Everglades National Park. Everglades Coalition. Captiva, FL.

- 2019 **Gaiser, E.** Plenary: Climate change fortunes from plants in glass houses. Annual Meeting of the Phycological Society of America. Ft. Lauderdale, FL.
- 2019 **Gaiser, E. & L. Marazzi.** Foundation species in benthic microbial systems. Foundation Species Distributed Graduate Seminar. LTER Cross-Site Symposium.
- 2019 **Gaiser, E.** Plenary: The Wonderful Wizard of Wind. Greater Everglades Ecosystem Restoration Conference. Coral Springs, FL.
- 2018 **Gaiser, E.** Plenary: Surface tensions: Harnessing the connecting power of water for a sustainable future. Association for the Science of Limnology and Oceanography. Victoria, BC.
- 2018 **Gaiser, E.** Effects of water management on periphyton dynamics along the boundary of Everglades National Park. South Florida Natural Resource Center. Homestead, FL.
- 2018 **Gaiser, E.** Plenary: Cooperation during booms and busts: ingredients for dynamic development in ecology. Odum School of Ecology 50<sup>th</sup> Alumni Reunion. University of Georgia. Athens, GA.
- 2018 **Gaiser, E.** Hurricanes as Resilience Builders. National Science Foundation LTER Symposium. Washington, DC.
- 2017 **Gaiser, E.** Progress in long-term, networked science for society: Perspectives from the small. National Science Foundation. Arlington, VA.
- 2016 **Gaiser, E.** Sea Level Solutions Center: A catalyst for integrating natural sciences into urban planning. FIU Sea Level Solutions Center Public Launch. Miami, Florida.
- 2016 **Gaiser, E.** Expecting the unexpected: Pandora's box of paradox in an upside-down estuary. Everglades Research Center. Florida Gulf Coast University, Naples, Florida.
- 2015 **Gaiser, E.** Advancing limnological theory through the Global Lakes Ecological Observatory Network. Iowa Lakeside Laboratory. Milford, Iowa.
- 2015 **Gaiser, E.** Expecting the unexpected: Pandora's box of paradox in an upside-down estuary. Cary Institute for Ecosystem Studies. Millbrook, New York.
- 2014 **Gaiser, E.** Plenary: Biodiversity resilience in a changing world: the importance of little glass canaries in coal mines. International Diatom Symposium. Nanjing, China.
- 2013 **Gaiser, E.** Plenary: Understanding an iconic landscape through comparative international long-term ecological research. Annual Meeting of the International Long-Term Ecological Research Network. Seoul, Korea.
- 2013 **Gaiser, E.** Unraveling the biogeography of karstic wetland diatoms from Canada to the tropics. Iowa Lakeside Laboratory. Milford, IA.
- 2012 **Gaiser, E.** Sensor deployment and operations. Organization for Biological Field Stations Meeting. Archbold Biological Station. Lake Placid, FL.
- 2012 **Gaiser, E.** Evidence for multi-decadal climate controls on South Florida Ecosystems. Department of Paleoecology. Utrecht University. Utrecht, The Netherlands.
- 2012 **Gaiser, E.** Florida Coastal Everglades Long-Term Ecological Research Program. Department of Biological Sciences, Western Kentucky University. Bowling Green, KY.
- 2012 **Gaiser, E.** Expecting the unexpected: Paradox in an upside-down estuary. Department of Ecology, Evolution and Organismal Biology. Iowa State University. Ames, Iowa.
- 2011 **Gaiser, E.** Expecting the unexpected: Pandora's box of paradox in an upside-down estuary. Department of Biological Sciences, Florida International University, Miami, FL.
- 2011 **Gaiser, E.** Legacies and scenarios of socio-ecological change in a novel, vulnerable landscape. Department of Biological Sciences, Kent State University, Kent, Ohio.

- 2011 **Gaiser**, E. Expecting the unexpected: Pandora's box of paradox in an upside-down estuary. Department of Biological Sciences, University of Miami, Miami, FL.
- 2011 **Gaiser**, E. Expecting the unexpected: Pandora's box of paradox in an upside-down estuary. Department of Ecology and Environmental Sciences. Umeå Universitet, Umeå, Sweden.
- 2011 **Gaiser**, E. Florida Coastal Everglades Long Term Ecological Research. Finnish Environment Institute, Helsinki, Finland.
- 2011 **Gaiser**, E. Expecting the unexpected: Pandora's box of paradox in an upside-down estuary. Department of Biological Sciences, Cleveland State University, Cleveland, Ohio.
- 2010 **Gaiser**, E. Expecting the unexpected: Pandora's box of paradox in an upside-down estuary. Department of Environmental Studies, Utrecht University, Utrecht, Netherlands.
- 2010 **Gaiser**, E. Expecting the unexpected: Pandora's box of paradox in an upside-down estuary. Department of Biology, Utrecht University, Utrecht, Netherlands.
- 2010 **Gaiser**, E. Expecting the unexpected: Pandora's box of paradox in an upside-down estuary. University of Michigan Biological Station, Douglas Lake, Michigan.
- 2010 **Gaiser**, E. Pandora's box of paradox: expecting the unexpected in an upside-down estuary. University of Florida Tropical Research and Education Center, Homestead, Florida.
- 2010 **Gaiser**, E. 2010. Pandora's box of paradox: expecting the unexpected in an upside-down estuary. University of Florida, Gainesville, Florida.
- 2009 **Gaiser**, E. Pandora's box of paradox: expecting the unexpected in an upside-down estuary. Ave Maria University. Ave Maria, Florida.
- 2009 **Gaiser**, E., V. Rivera-Monroy, S. Davis, V. Engle & J. Fuentes. Effects of hurricanes on state changes in the Florida Everglades. Caribbean Hurricane Research Network meeting. Merida, Mexico.
- 2009 **Gaiser**, E. Pandora's box of paradox: expecting the unexpected in an upside-down estuary. University of Georgia Odum School of Ecology Graduate Student Symposium. Athens, GA.
- 2009 **Gaiser**, E. & L. Ogden. Florida Coastal Everglades Long-Term Ecological Research program. LTER Network Graduate Education Course. University of Georgia, Athens, GA.
- 2006 **Gaiser**, E. 2006. Ecological research in the FIU Department of Biology. FIU-Universidad Nacional Autónoma de México Marine Sciences Meeting. Merida, Yucatan, Mexico.
- 2005 **Gaiser**, E. Cascading ecological effects of low-level phosphorus enrichment and abatement in the Florida Everglades. Illinois Natural History Survey, University of Illinois, Champaign, IL.
- 2004 **Gaiser**, E. Establishing a phosphorus criterion to protect the Everglades: cascading ecological imbalances suggest a critical minimum standard. Harvard Forest, Harvard University, Petersham, MA.
- 2004 **Gaiser**, E. Establishing a phosphorus criterion to protect the Everglades: cascading ecological imbalances suggest a critical minimum standard. University of Georgia, Athens, GA.
- 2003 **Gaiser**, E. Establishing a phosphorus criterion to protect the Everglades: cascading ecological imbalances suggest a critical minimum standard. Nova Southeastern University Oceanographic Institute, Delray Beach, FL.



- 2003 **Gaiser, E.** Establishing a phosphorus criterion to protect the Everglades: cascading ecological imbalances suggest a critical minimum standard. Department of Fisheries and Aquatic Sciences, University of Florida, Gainesville, FL.
- 2003 **Gaiser, E.** Establishing a phosphorus criterion to protect the Everglades: cascading ecological imbalances suggest a critical minimum standard. Department of Biology, Southern Illinois University, Carbondale, IL.
- 2001 **Gaiser, E.** Periphyton in the Florida Everglades: effects of hydroperiod and nutrients on structural and functional dynamics. University of Miami, Department of Biology, Miami, FL.

#### **ORAL PRESENTATIONS AT SCIENTIFIC MEETINGS**

- 2020 **Gaiser, E., & F. Tobias.** Long-term studies of calcareous benthic diatom assemblages in the Florida Everglades. Diatom Web Academy. Virtual presentation.
- 2020 **Gaiser, E., J. Trexler, J. Kline, F. Tobias, & R. Travieso.** Long-term dynamics of periphyton along the Eastern boundary of Everglades National Park. South Florida Natural Resource Center Seminar Series. Homestead, FL.
- 2020 **Gaiser, E.** Diatom sentinels ensure clean freshwater supplies in a threatened coastal wetland. Western Kentucky University. Bowling Green, KY.
- 2019 **Gaiser, E., V. Mazzei, L. Marazzi, & E. Massa.** Comparing three methods for determining phosphorus thresholds for Everglades diatoms. North American Diatom Symposium. Eatonton, GA.
- 2019 **Gaiser, E., E. Castaneda-Moya, J. Kominoski, J. Rehage, T. Troxler, & K. Zhang.** Hurricanes interact with disturbance legacies to effect ecosystem resilience. Annual Meeting of the Ecological Society of America. Louisville, KY.
- 2018 **Gaiser, E.** Research updates from the GLEON theory group. Global Lakes Ecological Observatory Network Annual Meeting. Rottnest Island, Australia.
- 2018 **Gaiser, E., T. Crowl, J. Kominoski, N. Oehm, N. Ogle, D. Ogurcak, B. Schonhoff, & R. Teutonico.** Experiential learning in subtropical ecology at the urban-wildland interface. Ecological Society of America Meeting. New Orleans, LA.
- 2017 **Gaiser, E. & B. Ibelings.** Research updates from the GLEON theory group. Global Lakes Ecological Observatory Network Annual Meeting. Mohonk Lake, NY.
- 2017 **Gaiser, E.** The role of core species in regulating diatom network assembly. North American Diatom Symposium. South Bass Island, Ohio.
- 2017 **Gaiser, E., I. Corsi, E. Nodine, & H. Swain.** Long-term rainfall cycles control lake plankton dynamics, diversity and metabolism in a low latitude lake: an analog for future high latitude lakes. Annual Meeting of the American Society for Limnology and Oceanography. Honolulu, Hawaii.
- 2017 **Gaiser, E., M. Naja, D. Childers & C. Fitz.** Water quality implications of hydrologic restoration alternatives in the Florida Everglades: A periphyton perspective. Greater Everglades Ecosystem Restoration Conference. Coral Springs, FL.
- 2016 **Gaiser, E.** Combining paleoecological, observational, and high-frequency information sources to improve predictions of ecosystem resilience. National Conference on Ecosystem Restoration. Coral Springs, Florida.

- 2015 **Gaiser**, E. Periphyton responses to flow restoration: distribution, community composition, and edibility. Greater Everglades Ecosystem Restoration Conference. Coral Springs, Florida.
- 2014 **Gaiser**, E. How is LTER advancing our understanding of the dynamics and controls of primary productivity in a changing world? LTER Network Science Council Meeting. Manhattan, Kansas.
- 2014 **Gaiser**, E. & B. Ibelings. Research updates from the GLEON theory group. Global Lakes Ecological Observatory Network Annual Meeting. Orford, Quebec.
- 2014 **Gaiser**, E. Establishing ecological targets in ecosystems with cascading threshold responses to nutrient pollution. Joint Aquatic Sciences Meeting. Portland, OR.
- 2014 **Gaiser**, E. Advancing limnological theory through the Global Lakes Ecological Observatory Network. Southeast Environmental Research Center Brown Bag Seminar. Miami, FL.
- 2013 **Gaiser**, E. Linking high-resolution datasets to phytoplankton community change. Annual Meeting of the Global Lakes Ecological Observatory Network. Bahia Blanca, Argentina.
- 2013 **Gaiser**, E. Understanding an iconic landscape through comparative international long-term ecological research. LTER Science Council Meeting. Las Cruces, NM.
- 2013 **Gaiser**, E. Combining long-term observational and paleolimnological records to distinguish climate from local land use signals in a reference watershed. South Florida Paleoecology Mini-Symposium. Miami, FL.
- 2013 **Gaiser**, E. Commonalities in the diatom flora and benthic habitat structure of Caribbean karst and Canadian alvar wetlands. North American Diatom Symposium. Bar Harbor, ME.
- 2013 **Gaiser**, E., A. Quillen & H. Swain. Combining long-term observational and paleolimnological records to distinguish climate from local land use signals in a reference watershed. American Society for Limnology and Oceanography Annual Meeting. New Orleans, LA.
- 2012 **Gaiser**, E. Ecosystem-wide assessment of Everglades restoration using periphyton. International Association for Ecology Wetlands Conference. Orlando, FL.
- 2011 **Gaiser**, E. Update of the GLEON Limnological Theory group. Global Lake Ecological Observatory Network Annual Meeting. Lake Sunapee, NH.
- 2011 **Gaiser**, E. Update on the Lake Annie sensor network at Archbold Biological Station. Semi-Annual Meeting of the Global Lake Ecological Observatory Network. Ramot, Israel.
- 2011 **Gaiser**, E. Update on the Lake Annie sensor network at Archbold Biological Station. Semi-Annual Meeting of the Global Lake Ecological Observatory Network. Ramot, Israel.
- 2011 **Gaiser**, E. Advanced in theoretical limnology: predicting phytoplankton assembly shifts from high-resolution environmental data. Semi-Annual Meeting of the Global Lake Ecological Observatory Network. Ramot, Israel.
- 2011 **Gaiser**, E. Advanced in theoretical limnology: predicting phytoplankton assembly shifts from high-resolution environmental data. Workshop of the Global Lake Ecological Observatory Network. Kastanienbaum, Switzerland.
- 2010 **Gaiser**, E. How to incorporate variability in community sensitivity in detecting ecological responses to management-driven shifts in hydrology and water quality. Greater Everglades Ecosystem Restoration Conference, Naples, FL.

- 2010 **Gaiser, E.** Regulation of oligotrophy by periphyton in karstic wetlands. Annual Meeting of the American Society of Limnology and Oceanography, Santa Fe, NM.
- 2009 **Gaiser, E.** Method development on calculating water column stability from high resolution thermal data. Global Lake Ecological Observatory Network meeting. Hamilton, New Zealand.
- 2009 **Gaiser, E.** *Mastogloia smithii* Thwaites ex Wm. Smith: A structural engineer of calcareous mats in karstic subtropical wetlands. North American Diatom Symposium. Milford, IA.
- 2009 **Gaiser, E.** Synchronized legacies of tropical storms on solute concentrations and primary production from uplands to coast in an expansive subtropical watershed. Biannual Meeting of the Coastal and Estuarine Research Foundation. Portland, OR.
- 2009 **Gaiser, E. & J. Munyon.** Effects of scale on the paradox of production in an oligotrophic wetland. Annual Meeting of the Ecological Society of America. Albuquerque, NM.
- 2009 **Gaiser, E. & J. La Hée.** Factors governing composition and production of freshwater stromatolitic mats in subtropical calcareous wetlands of the Caribbean. Albuquerque, NM.
- 2008 **Gaiser, E. & H. Swain.** Six months of high frequency limnological data from Lake Annie, Florida. Global Lake Ecological Observatory Network meeting. Norttälje, Sweden.
- 2008 **Gaiser, E, M. Ross, P. Ruiz, A. Wachnicka & A. Zafiris.** Effects of gradient compression on the habitat mosaic of remnant coastal wetlands in a subtropical, urban landscape. Annual Meeting of the Society for Wetland Scientists. Washington, DC.
- 2008 **Gaiser, E.** 2008. Gradients of anthropogenic impact on periphyton abundance and composition in the Florida Coastal Everglades. American Society of Limnology and Oceanography Ocean Sciences Meeting. Orlando, FL.
- 2008 **Gaiser, E., J. La Hée, J. Trexler, C. Ruehl & W. Loftus.** Factors governing composition and production of freshwater stromatolitic mats in subtropical calcareous wetlands of the Caribbean. Annual Meeting of the Ecological Society of America. Milwaukee, WI.
- 2008 **Gaiser, E. & J. La Hée.** Landscape-scale patterns of periphyton abundance and composition in the Florida Everglades. Greater Everglades Ecosystem Restoration Conference. Naples, FL.
- 2008 **Gaiser, E.** Landscape patterns of periphyton distribution in the Everglades. Greater Everglades Ecosystem Restoration Conference. Naples, FL.
- 2008 **Gaiser, E., N. Deyrup, R. Bachmann, L. Battoe & H. Swain.** Effects of changes in precipitation on transparency and thermal structure in subtropical, monomictic Lake Annie, Florida. Annual Meeting of the American Society of Limnology and Oceanography. St. John's, Newfoundland.
- 2008 **Gaiser, E. & H. Swain.** Deployment of continuous monitoring sensors on Lake Annie, FL. Global Lake Ecological Observatory Network meeting. Archbold Biological Station, FL.
- 2007 **Gaiser, E. & J. La Hée.** Taxonomic and morphological variability in diatoms endemic to modern stromatolitic microbial mats of Caribbean wetlands. North American Diatom Symposium. Pellston, MI.
- 2007 **Gaiser, E., N. Deyrup, R. Bachmann, L. Battoe & H. Swain.** Long-term shifts in water transparency alter thermal responses to climate change in a subtropical, monomictic

- seepage lake. 30<sup>th</sup> Congress of the International Association of Theoretical and Applied Limnology. Montreal, Quebec.
- 2007 **Gaiser**, E. Linking spatial and temporal patterns of benthic algal primary production to climate and water management drivers in the Florida Coastal Everglades Long-Term Ecological Research Program. North American Benthological Society Annual Meeting. Columbia, SC.
- 2007 **Gaiser**, E. & S. Thomas. Freshwater periphyton communities in the Greater Everglades: modeling responses to hydrology and water quality. National Conference on Ecosystem Restoration. Kansas City, MO.
- 2007 **Gaiser**, E. & D. Childers. State of the Program report. Florida Coastal Everglades Long-Term Ecological Research program Annual All Scientists Meeting. Miami, FL.
- 2007 **Gaiser**, E., J. Fourqurean, D. Childers, R. Monroy-Rivera & S. Davis. 2007. Primary production in the Florida Coastal Everglades Long-Term Ecological Research Program. Florida Coastal Everglades Long-Term Ecological Research program Annual All Scientists Meeting. Miami, FL.
- 2007 **Gaiser**, E. Patterns of periphyton production in the Florida Coastal Everglades Long-Term Ecological Research program. South Florida and Caribbean Cooperative Ecosystems Studies Unit Annual Meeting, Miami, FL.
- 2007 **Gaiser**, E., N. Deyrup, R. Bachmann, L. Battoe & H. Swain. A 23-year record of cascading limnological effects of a shifting light environment in a monomictic seepage lake in central Florida. Global Lakes Ecological Observatory Network meeting. Lammi Biological Station, Finland.
- 2006 **Gaiser**, E. Why is periphyton so abundant in the Everglades? Florida Ecology and Evolution Society Annual Meeting. Archbold Biological Station, FL.
- 2006 **Gaiser**, E., R. Bachmann, N. Deyrup, L. Battoe & H. Swain. A 20-year limnological dataset from Lake Annie, FL. Archbold Biological Station, Lake Placid, FL.
- 2006 **Gaiser**, E., D. Iwaniec, T. Frankovich, S. Thomas & S. Ewe. Benthic algal productivity in the Florida Coastal Everglades. Long-Term Ecological Research Program All Scientists Meeting. Estes Park, CO.
- 2006 **Gaiser**, E., N. Deyrup, R. Bachmann, L. Battoe & H. Swain. A 23-year record of cascading limnological effects of a shifting light environment in a monomictic seepage lake in central Florida. Ecological Society of America. Annual Meeting. Memphis, TN.
- 2006 **Gaiser**, E. & S. Thomas. Freshwater periphyton communities of the Florida Everglades: An update on performance measures. Greater Everglades Ecosystem Restoration Science Annual Meeting. Orlando, FL.
- 2006 **Gaiser**, E., A. Zafiris, P. Ruiz, F. Tobias & M. Ross. Tracking rates of salt-water encroachment using fossil mollusks in coastal south Florida. Florida Bay and Adjacent Marine Systems Science Conference. Duck Key, FL.
- 2005 **Gaiser**, E. Marine benthic diatoms of Bocas Del Toro, Panama. 18<sup>th</sup> North American Diatom Symposium. Mobile, AL.
- 2005 **Gaiser**, E., A. Wachnicka, R. Jaffe, Y. Xu & J. Fourqurean. 2005. Paleoenvironmental history of Florida Bay: Interpretations of diatom trends and linkages to other ecological proxies. North American Benthological Society. Annual Meeting. New Orleans, LA.
- 2005 **Gaiser**, E. Periphyton in the Everglades marl prairie. Cape Sable Seaside Sparrow Symposium. Everglades National Park, FL.

- 2005 **Gaiser**, E. Tracking rates of ecotone migration due to saltwater encroachment in the Biscayne Bay Coastal Wetlands. CERP Biscayne Bay AAT RECOVER Workshop. Boca Raton, FL.
- 2004 **Gaiser**, E. Cascading ecological effects of low-level phosphorus enrichment and abatement in the Florida Everglades. National Conference on Ecosystem Restoration. Orlando, FL.
- 2004 **Gaiser**, E., A. Zafiris & M. Ross. Using paleoecology to calculate rates of migration of coastal vegetation zones due to salt-water encroachment in South Florida. Ecological Society of America. Annual Meeting. Portland, OR.
- 2003 **Gaiser**, E., A. Wachnicka, A. Zafiris, P. Ruiz & M. Ross. Paleoecological determination of effects of saltwater encroachment on community migration in coastal South Florida wetlands. Ecological Society of America. Annual Meeting. Savannah, GA.
- 2003 **Gaiser**, E., A. Edwards, K. Jayachandran, R. Jones, D. Lee, T. Philippi, J. Richards, L. Scinto & J. Trexler. Experimental phosphorus enrichment in Everglades National Park: I. Approach and Methods. Greater Everglades Ecosystem Restoration Science Conference. Tampa Bay, FL.
- 2003 **Gaiser**, E., D. Childers, K. Jayachandran, R. Jones, D. Lee, G. Noe, T. Philippi, J. Richards, L. Scinto & J. Trexler. Experimental phosphorus enrichment in Everglades National Park: III. Application to large-scale pattern of enrichment in Everglades Marshes. Greater Everglades Ecosystem Restoration Science Conference. Tampa Bay, FL.
- 2002 **Gaiser**, E. & M. Ross. Water flow through coastal wetlands. Biscayne Bay Coastal Wetlands Science Meeting. Miami, FL.
- 2002 **Gaiser**, E. Using diatoms to create performance measures in Biscayne coastal wetlands. Biscayne Bay Coastal Wetlands Science Meeting. Miami, FL.
- 2002 **Gaiser**, E., D. Childers & R. Jones. Effects of hydrologic and nutrient alterations on periphyton biomass and composition across the Everglades landscape, Florida, USA. American Society of Limnology and Oceanography. Annual Meeting. Victoria, BC.
- 2001 **Gaiser**, E. *Gomphonema* of the Florida Everglades. National Water Quality Assessment Taxonomy Workshop. Academy of Natural Sciences, Philadelphia, PA.
- 2001 **Gaiser**, E. & R. Jones. Predicting phosphorus from diatom species composition in the Everglades: effects of unstable phosphorus optima. 16<sup>th</sup> North American Diatom Symposium. Ely, MN.
- 2001 **Gaiser**, E., M. Brooks, W. Kenney, C. Schelske & B. Taylor. Climatic interpretation of alternations between flooded and ponded states in the Holocene history of a temporary pond in South Carolina, USA. American Society of Limnology and Oceanography. Annual Meeting. Albuquerque, NM.
- 2000 **Gaiser**, E., L. Scinto, J. Richards, D. Childers, J. Trexler, K. Jayachandran & R. Jones. Nutrients sequestered in microbial mats reflect remote source water quality in Everglades National Park. Greater Everglades Ecosystem Restoration Science Conference. Naples, FL.
- 2000 **Gaiser**, E., R. Jones & J. Stober. Using diatoms for risk assessment in the Everglades. Greater Everglades Ecosystem Restoration Science Conference. Naples, FL.
- 2000 **Gaiser**, E., J. Boyer, D. Childers, J. Fourqurean, J. Richards, M. Ross & R. Twilley. 2000. Trends in primary production at the Florida Coastal Everglades (FCE) LTER:

- Existing data and future plans. NSF Long Term Ecological Research Program All Scientists Meeting. Snowbird, UT.
- 1999 **Gaiser**, E. & M. Ross. Diatom indicators of salt-water encroachment in South Florida coastal mangrove wetlands. 15<sup>th</sup> North American Diatom Symposium. Pingree Park, CO.
- 1999 **Gaiser**, E., J. Richards and R. Jones. Effects of low-level phosphorus enrichment on Everglades periphyton. Ecological Society of America. Annual Meeting. Spokane, WA.
- 1999 **Gaiser**, E., M. Ross, J. Meeder & M. Lewin. Multi-taxon analysis of the "white zone", a common ecotonal feature of South Florida coastal wetlands. Florida Bay Ecosystem Science Conference. Key Largo, FL.
- 1999 **Gaiser**, E., S. DeCelles & J. Richards. Seasonality and succession of periphyton communities in Everglades National Park, Florida. American Society of Limnology and Oceanography. Annual Meeting. Santa Fe, NM.
- 1997 **Gaiser**, E. Paleolimnological Reconstruction of Holocene Environments in Wetland Ponds of the Upper Atlantic Coastal Plain using Siliceous Microfossils. 14<sup>th</sup> North American Diatom Symposium. Pellston, MI.
- 1997 **Gaiser**, E. Development of a diatom-based transfer function to infer pond permanence from fossil assemblages in intermittent ponds of South Carolina. American Society of Limnology and Oceanography. Annual Meeting. Santa Fe, NM
- 1996 **Gaiser**, E. & B. Taylor. Development of a model for inferring drought periodicity from diatoms in ephemeral ponds of the Atlantic Coastal Plain. Ecological Society of America. Annual Meeting. Providence, RI.
- 1996 **Gaiser**, E. & B. Taylor. Paleolimnological reconstruction of Holocene environments in Carolina Bays and upland wetland ponds of the Atlantic Coastal Plain. Association of Southeastern Biologists. Annual Meeting. Statesborough, GA.
- 1995 **Gaiser**, E. Distribution of diatoms along hydrologic gradients within and among Carolina bays of the Upper Atlantic Coastal Plain. 17<sup>th</sup> Southeastern Phycological Colloquy. Charleston, SC.
- 1995 **Gaiser**, E. & B. Taylor. Development of a diatom training set for the reconstruction of hydrologies in Carolina bays of the Upper Atlantic Coastal Plain. 13<sup>th</sup> North American Diatom Symposium. Milford, IA.
- 1995 **Gaiser**, E. & B. Taylor. Paleolimnological reconstruction of Holocene environments in wetland ponds of the Upper Atlantic Coastal Plain. Ecological Society of America. Annual Meeting. Snowbird, UT.
- 1994 **Gaiser**, E. Development of a long-term limnological data base for lakes of Manitoulin Island, Ontario. Institute of Ecology Hydrobiology Symposium. Athens, GA.
- 1993 **Gaiser**, E. & R. Bachmann. Seasonality and taxonomy of epizoic diatoms on planktonic cladocerans in three Iowa lakes. Ecological Society of America. Annual Meeting. Madison, WI.
- 1993 **Gaiser**, E. Holocene diatoms of Carolina Bay wetlands. American Society of Limnology and Oceanography and the Society of Wetland Scientists. Annual Meeting. Edmonton, Alberta, Canada.
- 1991 **Gaiser**, E. & R. Bachmann. The ecology and taxonomy of epizoic diatoms on Cladocera. Ecological Society of America. Annual Meeting. San Antonio, TX.

## RESEARCH GRANTS/CONTRACTS

**GRANTS AS PRINCIPLE INVESTIGATOR AT FLORIDA INTERNATIONAL UNIVERSITY**

- 2021-2024 Supplement to FCE LTER IV. Research Experience for Teachers. **Gaiser, E., J. Fourqurean, K. Grove, J. Kominoski, & J. Rehage.** National Science Foundation. \$60,000.
- 2021-2022 Vegetation and periphyton monitoring and vegetation mapping of the L-31E flow way and Cutler wetlands. **Gaiser, E., & M. S. Ross.** South Florida Water Management District. \$92,147. CA#4600004370-9500008905.
- 2021-2024 FCE LTER IV: Coastal Oligotrophic Ecosystems Research. **Gaiser, E., J. Fourqurean, K. Grove, J. Kominoski, J. Rehage.** National Science Foundation. \$4,750,800. DEB-2025954
- 2020-2021 Supplement to FCE LTER IV. Research Experience for Teachers. **Gaiser, E., J. Fourqurean, K. Grove, J. Kominoski, & J. Rehage.** National Science Foundation. \$60,000.
- 2019-2020 Vegetation and periphyton monitoring, Biscayne Coastal Wetlands Component. **Gaiser, E., & M.S. Ross.** South Florida Water Management District. \$36,994.
- 2019-2020 Baseline vegetation and periphyton monitoring. **Gaiser, E., & M. S. Ross.** South Florida Water Management District. \$10,646.
- 2018-2021 FCE LTER IV: Drivers of Abrupt Change in the Florida Coastal Everglades. **Gaiser, E., J. Fourqurean, K. Grove, J. Kominoski, J. Rehage.** National Science Foundation. \$2,254,000
- 2018-2021 Supplement to FCE LTER IV. Research Experience for Teachers. **Gaiser, E., J. Fourqurean, K. Grove, J. Kominoski, & J. Rehage.** National Science Foundation. \$9,999.
- 2017-2019 RAPID: Hurricane Irma: How do ecosystem perturbations interact to influence long-term resilience mechanisms? **Gaiser, E., J. Kominoski, E. Castaneda, T. Troxler, M. Heithaus, J. Rehage, and K. Zhang.** National Science Foundation. \$178,159.
- 2017-2020 Vegetation and periphyton monitoring Biscayne Bay Coastal Wetlands Project, L-31E component. **Gaiser, E. & M. Ross.** South Florida Water Management District. \$135,900.
- 2016-2021 Periphyton and vegetation monitoring for adaptive management of the Upper Taylor Slough (UTS) hydrological changes. **Gaiser, E.** South Florida Water Management District. \$313,849.
- 2016-2019 Supplement to FCE LTER III. Research Experience for Teachers. Research Experience for High School Students. **Gaiser, E., R. Jaffe, M. Heithaus, L. Ogden and R. Price.** National Science Foundation. \$17,000.
- 2015-2020 Urban Resilience to Extremes Sustainability Research Network. **Gaiser, E., T. Troxler, and J. Kominoski.** National Science Foundation Subaward from Arizona State University (C. Redman, N. Grimm). \$623,320.
- 2015-2019 Supplement to FCE LTER III. Research Experience for Teachers. Research Experience for High School Students. **Gaiser, E., R. Jaffe, M. Heithaus, L. Ogden and R. Price.** \$17,000.
- 2015-2019 Supplement to FCE LTER III. **Gaiser, E., R. Jaffe, M. Heithaus, L. Ogden and R. Price.** National Science Foundation. \$179,000.

- 2014-2012 FCE LTER II: Coastal Oligotrophic Ecosystems Research. **Gaiser, E.**, R. Jaffe, M. Heithaus and R. Price. National Science Foundation. \$4,919,999.
- 2012-2019 FCE LTER III: Coastal Oligotrophic Ecosystems Research. National Science Foundation. **Gaiser, E.**, R. Jaffe, M. Heithaus, L. Ogden and R. Price. \$5,880,000.
- 2011-2014 Assessing near-field and landscape scale ecological effects of the Modified Water Deliveries and Comprehensive Everglades Restoration Plan Projects in Northeast Shark River Slough, Everglades National Park. **Gaiser, E.**, J. Trexler, J. Richards, L. Scinto and A. Bramburger. Department of Interior, National Park Service. \$366,000.
- 2011-2012 Supplement to FCE LTER II. **Gaiser, E.**, R. Jaffe, M. Heithaus, L. Ogden and R. Price. National Science Foundation. \$112,620.
- 2010-2012 Supplement to FCE LTER II. **Gaiser, E.**, R. Jaffe, M. Heithaus, L. Ogden and R. Price. National Science Foundation. \$158,000.
- 2009-2012 Supplement to FCE LTER II. **Gaiser, E.**, R. Jaffe, M. Heithaus, L. Ogden and R. Price. National Science Foundation. \$138,000.
- 2009-2010 Effects of Tamiami Trail swale creation on ecosystem structure and nutrient delivery to Everglades National Park. **Gaiser, E.**, J. Trexler, J. Richards and L. Scinto. Department of Interior, National Park Service. \$314,000.
- 2008-2012 Supplement to FCE LTER II. **Gaiser, E.**, R. Jaffe, M. Heithaus, L. Ogden and R. Price. National Science Foundation. \$108,000.
- 2008-2011 Developing periphyton-based hydrologic indicators for the Everglades marl prairie. **Gaiser, E.** Department of Interior, National Park Service. \$90,000.
- 2007-2012 Supplement to FCE LTER II. **Gaiser, E.**, R. Jaffe, M. Heithaus, L. Ogden and R. Price. National Science Foundation. \$103,764.
- 2006-2012 Supplement to FCE LTER II. **Gaiser, E.**, R. Jaffe, M. Heithaus, L. Ogden and R. Price. National Science Foundation. \$10,000.
- 2006-2008 Developing ecosystem response indicators to hydrologic and nutrient modifications in Northeast Shark River Slough, Everglades National Park. **Gaiser, E.**, J. Trexler, L. Scinto and D. Childers. Department of the Interior, National Park Service. \$407,261.
- 2005-2008 Phosphorus retention and sub-surface movement through the S-332 detention basins on the eastern boundary of Everglades National Park. **Gaiser, E.**, J. Trexler, L. Scinto and R. Price. Department of the Interior, National Park Service. \$418,320.
- 2004-2005 Analysis of algae of the Wekiva Spring drainage, FL. **Gaiser, E.** St. John's River Water Management District. \$11,725.
- 2004-2005 Diatom-based water quality performance metrics for Biscayne Bay. **Gaiser, E.** Department of Interior the, National Park Service. \$43,000.
- 2003-2004 Water flow through coastal wetlands. **Gaiser, E.** & M. Ross. Department of the Interior, National Park Service. \$15,000.
- 2003-2004 Determine rates and biological consequences of salt-water encroachment in coastal wetlands in Biscayne National Park. **Gaiser, E.** Department of the Interior, National Park Service. \$86,766.
- 2003-2004 Water quality in Biscayne Bay. Diatom Component. **Gaiser, E.** United States Geological Survey. \$12,000.



- 2003-2004 Linking hydrology to biological recovery after cessation of long-term phosphorus enrichment at the experimental dosing facility in Everglades National Park. **Gaiser**, E., J. Trexler and J. Richards. Department of the Interior, National Park Service. \$67,000.
- 2002-2003 Numerical interpretation of Class III Nutrient Water Criteria for Everglades wetlands. **Gaiser**, E., Jones, R., D. Childers, J. Trexler and J. Richards. Department of the Interior, National Park Service and the South Florida Water Management District. \$560,000.
- 2002-2005 Characterization of periphyton response to hydroperiod in marl prairie wetlands in the Everglades. **Gaiser**, E. Department of the Interior, National Park Service. \$295,130.
- 2001-2003 Water flow through coastal wetlands. **Gaiser**, E. & M. Ross. Department of the Interior, National Park Service. \$180,000.

#### GRANTS AS CO-PRINCIPLE INVESTIGATOR AT FLORIDA INTERNATIONAL UNIVERSITY

- 2016-2020 Assessing near-field and landscape scale ecological effects of the Modified Water Deliveries and Comprehensive Everglades Restoration Plan Projects in Northeast Shark River Slough, Everglades National Park. Kominoski, J., **Gaiser**, E., J. Trexler, and L. Scinto. Department of Interior, National Park Service. \$578,492. (\$135,000 to Co-PI Gaiser).
- 2016-2020 Aquatic fauna and periphyton production data collection. Trexler, J. and E. **Gaiser**. U.S. Army Corps of Engineers. CA#912HZ-20-2-0018. \$1,784,907 (\$671,831 to Co-PI Gaiser).
- 2016-2020 Monitoring performance measures of the Broward County Water Preserve Areas. Trexler, J. and E. **Gaiser**. U.S. Army Corps of Engineers. \$134,366 (\$48,973 to Co-PI Gaiser).
- 2016-2018 The effects of projected sea-level rise on Everglades coastal ecosystems: Evaluating the potential for and mechanisms of peat collapse using integrated mesocosm and field manipulations. Troxler, T., F. Sklar, C. Coronado, E. **Gaiser**, J. Kominoski, S. Davis, C. Madden, S. Kelly, and J. Stachelek. Florida SeaGrant. \$180,000. (\$15,000 to Co-PI Gaiser).
- 2014-2019 Assessing near-field and landscape scale ecological effects of the Modified Water Deliveries and Comprehensive Everglades Restoration Plan Projects in Northeast Shark River Slough, Everglades National Park. Scinto, L., J. Trexler, J. Richards, and E. **Gaiser**. Department of Interior, National Park Service. \$300,000 (\$150,000 to Co-PI Gaiser).
- 2014-2016 The effects of projected sea-level rise on Everglades coastal ecosystems: Evaluating the potential for and mechanisms of peat collapse using integrated mesocosm and field manipulations. Troxler, T., F. Sklar, C. Coronado, E. **Gaiser**, J. Kominoski, S. Davis, C. Madden, S. Kelly, and J. Stachelek. Florida SeaGrant. \$180,000. (\$15,000 to Co-PI Gaiser).
- 2012-2013 Phase 2: History of ecological regime shifts in Biscayne Bay (Florida, USA) related to climate change and anthropogenic activities on the SE Florida mainland. Wachnicka A., and E. **Gaiser**. U.S. Geological Survey, Reston, Virginia, USA. (\$45,000).

- 2011-2013 Phase 1: History of ecological regime shifts in Biscayne Bay (Florida, USA). Wachnicka A., and E. **Gaiser**. U.S. Geological Survey, Reston, Virginia, USA. (\$25,000).
- 2011-2015 Aquatic fauna and periphyton production data collection. Trexler, J. and E. **Gaiser**. U.S. Army Corps of Engineers. CA#912HZ-11-2-0048. \$1,578,900 (\$601,900 to Co-PI Gaiser).
- 2010-2012 Causes and trends of enrichment in upper Taylor Slough, Everglades National Park. Jaffé, R., E. **Gaiser** and J. La Hée. Department of Interior, National Park Service. Post-doctoral Fellowship Grant. \$90,000.
- 2009-2012 Double Exposures: Socio- ecological vulnerabilities in the Miami-Dade Urban Region. Urban Long-Term Research Exploratory Grant. Hollander, G., L. Ogden, M. Ross, J. Heffernan and E. **Gaiser**. National Science Foundation. \$300,000 (\$50,000 to Co-PI Gaiser).
- 2008-2012 Aquatic fauna and periphyton production data collection. Trexler, J. and E. **Gaiser**. South Florida Water Management District. CA#4600001083. \$650,705 (\$247,268 to Co-PI Gaiser).
- 2005-2008 Monitoring, modeling and assessment of the Everglades ecosystem: R-EMAP Phase III. U.S. Environmental Protection Agency. Richards, J., T. Philippi, J. Trexler, E. **Gaiser**, Y. Cai, L. Scinto and D. Childers. \$90,536.
- 2004-2005 Lake Harney sediment accumulation and past water quality. Anderson, W., E. **Gaiser** and L. Scinto. St. John's River Water Management District. \$98,000.
- 2003-2008 Aquatic fauna and periphyton production data collection. Trexler, J. and E. **Gaiser**. South Florida Water Management District. CA#C-C040130. \$1,135,064 (\$431,324 to Co-PI Gaiser).
- 2001-2004 Lake Monroe sediment accumulation and past water quality. Anderson, W., E. **Gaiser** and L. Scinto. St. John's River Water Management District. \$131,610. (\$50,000 to Co-PI Gaiser).
- 2001-2003 Periphyton design and analysis for the C-51 (STA 1 – East) Project. Jones, R., E. **Gaiser**, M. Gantar and L. Scinto. U.S. Army Corps of Engineers. \$792,000. (\$350,000 to Co-PI Gaiser).
- 2000-2002 Evaluation of the potential use of periphyton-dominated storm water treatment areas for phosphorus reduction in the southern Everglades. Jones, R., E. **Gaiser**, M. Gantar and L. Scinto. Department of the Interior, National Park Service. \$580,000. (\$250,000 to Co-PI Gaiser).
- 1999-2001 Research integration of natural advanced treatment technologies. Jones, R., E. **Gaiser**, M. Gantar and L. Scinto. South Florida Water Management District. \$570,000. (\$100,000 to Co-PI Gaiser).
- 1999-2001 Southern Biscayne Bay watershed historical creek characterization. Meeder, J., M. Ross and E. **Gaiser**. South Florida Water Management District. \$74,000. (\$35,000 to Co-PI Gaiser).
- 1998-1999 Using transect sampling to relate a phosphorus addition flume study to long-term water quality impacts in Everglades marshes. Childers, D., C. Buzzelli, E. **Gaiser**, R. Jones, J. Richards, L. Scinto and J. Trexler. Department of the Interior, National Park Service. \$241,000. (\$120,000 to Co-PI Gaiser).
- 1997-2002 Numerical interpretation of Class III narrative nutrient water quality criteria for Everglades wetlands. R. Jones, J. Trexler, D. Childers, D. Lee, J. Richards, K.

Jayachandran, E. **Gaiser** and L. Scinto. Department of the Interior, National Park Service and the South Florida Water Management District. \$4,600,000. (\$120,000 to Co-PI Gaiser).

#### GRANTS RECEIVED AS A GRADUATE STUDENT

- 1995-1997 Paleolimnological reconstruction of Holocene environments in wetland ponds of the Upper Atlantic Coastal Plain. National Science Foundation - Dissertation Improvement Grant. \$5,750.
- 1996 Jessup and McHenry Scholarship, The Academy of Natural Sciences, Philadelphia. \$1,200.
- 1995 Ruth Patrick Scholarship, The Academy of Natural Sciences, Philadelphia. \$1,200.
- 1993 Jessup and McHenry Scholarship, The Academy of Natural Sciences, Philadelphia. \$1,200.
- 1990-1991 Diatoms living on cladocerans: An analysis of a new symbiosis discovered in Iowa lakes. Iowa Science Foundation. \$1,200.
- 1990 Thomas H. MacBride Scholarship, University of Iowa. \$1200
- 1989-1990 Iowa Lakeside Laboratory Scholarship, Iowa State University. \$1200
- 1989-1990 Premium for Academic Excellence Scholarship, Iowa State University. \$11,000

#### GRANTS AND FELLOWSHIPS TO UNDERGRADUATE STUDENTS, GRADUATE STUDENTS, AND POST-DOCTORAL SCIENTISTS

- 2019 North American Diatom Symposium Student Travel Award to Meredith Emery (M.S. Student). \$250.
- 2019 North American Diatom Symposium Student Travel Award to Kristy Sullivan (M.S. Student). \$250.
- 2019 The Becker Family Graduate Research Fellowship, Friends of Iowa Lakeside Laboratory, to Meredith Emery (M.S. Student). \$3,000.
- 2019 LacCore/CSDCO Visiting Graduate Student Program Fellowship to Meredith Emery (M.S. Student). \$5,000.
- 2018 Jane Goodall Endowed Scholarship, Iowa Lakeside Laboratory to Kristy Sullivan (M.S. Student). \$500.
- 2018 ForEverglades Fellowship, Everglades Foundation, to Eric Massa (M.S. Student). \$12,000.
- 2017 Judith Parker Travel Scholarship to Kristen Dominguez (Undergraduate Student). \$500.
- 2017 William V. Storch Award of the Florida Chapter of the American Water Resources Association, to Kristen Dominguez (Undergraduate Student). \$2,000.
- 2017 Dissertation Year Fellowship, Florida International University, to Viviana Mazzei (Ph.D. Student). \$25,000.
- 2016 ForEverglades Fellowship, Everglades Foundation, to Viviana Mazzei (Ph.D. Student). \$20,000.
- 2016 Student Government Association Scholarship, Florida International University, to Viviana Mazzei (Ph.D. Student). \$500.

- 2015 North American Diatom Symposium Student Award to Emily Nodine (Ph.D. Student). \$500.
- 2015 William V. Storch Award of the Florida Chapter of the American Water Resources Association, to Ileana Corsi (Undergraduate Student). \$2,000.
- 2014 Hannah T. Croasdale Fellowship (Phycological Society of America) to Nicholas Schulte (M.S. Student). \$500.
- 2014 Hannah T. Croasdale Fellowship (Phycological Society of America) to Viviana Mazzei (Ph.D. Student). \$500.
- 2014 Paul C. Silva Student Grant for Travel or Research (International Phycological Society) to Viviana Mazzei (Ph.D. Student). \$500.
- 2013 Hannah T. Croasdale Fellowship (Phycological Society of America) to Sylvia Lee (Ph.D. Student). \$500.
- 2014 Dissertation Year Fellowship, Florida International University, to Sylvia Lee (Ph.D. Student). \$16,000.
- 2014 Dissertation Year Fellowship, Florida International University, to Amanda Quillen (Ph.D. Student). \$16,000.
- 2013 Dissertation Year Fellowship, Florida International University, to Emily Nodine (Ph.D. Student). \$16,000.
- 2013 Global Lakes Ecological Observatory Network Travel Award to Emily Nodine (Ph.D. Student). \$2,000.
- 2012 North American Diatom Symposium Student Award to Sylvia Lee (Ph.D. Student). \$500.
- 2012 North American Diatom Symposium Student Award to Emily Nodine (Ph.D. Student). \$500.
- 2012 North American Diatom Symposium Student Award to Nicholas Schulte (M.S. Student). \$500.
- 2012 Global Lakes Ecological Observatory Network Fellowship to Emily Nodine (Ph.D. Student).
- 2012 National Research Center Fellowship to Anna Wachnicka (Post-doctoral Scientist). \$165,000.
- 2012 Barry Goldwater Scholar to Christopher Sanchez (High School Student, Undergraduate Student).
- 2011 Dissertation Year Fellowship, Florida International University, to Gregory Koch (Ph.D. Student). \$25,000.
- 2011 Department of Interior Critical Ecosystems Ecosystems Study Initiative Postdoctoral Grant to Josette La Hée (post-doc), \$90,000.
- 2011 ForEverglades Fellowship, Everglades Foundation, to Sylvia Lee (Ph.D. Student). \$20,000.
- 2010 Global Lakes Ecological Observatory Network Student Travel Fellowships to Gregory Koch (Ph.D. Student). \$6,000.
- 2010 Everglades Foundation Student Fellowship to Sylvia Lee (Ph.D. Student). \$20,000.
- 2009 Hannah T. Croasdale Fellowship (Phycological Society of America) to Emily Nodine (Ph.D. Student). \$500.
- 2009 ForEverglades Fellowship, Everglades Foundation, to Gregory Koch (Ph.D. Student). \$20,000.

- 2009 North American Diatom Symposium Student Award to Anna Wachnicka (Ph.D. Student). \$500.
- 2009 Jessup and McHenry Scholarship, The Academy of Natural Sciences, Philadelphia to Anna Wachnicka (Ph.D. Student). \$1,200.
- 2009 North American Diatom Symposium Student Award to Amanda Quillen (Ph.D. Student). \$500.
- 2009 Intel International Science and Engineering Fair, Second Place in Plant Sciences to Christopher Sanchez (High School Student). \$1500.
- 2009 Florida Institute of Technology Scholarship to Christopher Sanchez (High School Student). \$40,000.
- 2009 North American Diatom Symposium Student Award to Sylvia Lee (Ph.D. Student). \$500.
- 2009 North American Diatom Symposium Student Award to Emily Nodine (Ph.D. Student). \$500.
- 2008 Global Lakes Ecological Observatory Network Student Travel Fellowship to Jay Munyon (Ph.D. Student). \$2,000.
- 2008 ForEverglades Fellowship, Everglades Foundation, to Jay Munyon (M.S. Student). \$10,000.
- 2007 Dissertation Year Fellowship, Florida International University, to Josette La Hée (Ph.D. Student). \$25,000.
- 2007 Judith Parker Travel Scholarship to Josette La Hée (Ph.D. Student). \$500.
- 2007 Grants-In-Aid-Of-Research in Phycology from the Phycological Society of America, to Josette La Hée (Ph.D. Student). \$500.
- 2006 Iowa Lakesdie Laboratory Merit Scholarhip to Josette La Hée (Ph.D. Student). \$1,000.
- 2006 Christina Menendez Fellowship for Everglades Research to Josette La Hée (Ph.D. Student). \$1,000.
- 2006 Latin American and Caribbean Center Research Travel Grant to Josette La Hée (Ph.D. Student). \$1,000.
- 2005 Garden Club of America Scholarship to Josette La Hée (Ph.D. Student). \$5,000.

## **INFORMAL SCIENCE EDUCATION AND PUBLIC ENGAGEMENT**

### **FORMAL K-12 EDUCATION**

**Florida Coastal Everglades LTER Schoolyard:** I supervise the K-12 education and outreach program that includes a Research Experience program, where I have served as mentor of high school students and teachers.

**Research Experiences for High School Students:** Provided research opportunities for high school students in my research lab including through near-peer mentoring, resulting in placements in the Intel International Science Fair, several university scholarships, and one peer-reviewed publication (Sanchez et al. 2013).

- 2010-2012 Chris Sanchez – “Exploring siliceous microfossils as a tool for inferring past water level and hydroperiod in Everglades marshes.” First Place Botany Intel International Science Fair. Published results.
- 2014-2016 Sara Osorio – “Effects of coastal drainage restoration on diatom assemblages.” First Place Botany Regional Science Fair.

**Research Experiences for Teachers:** Provided research opportunities for teachers in my laboratory resulting in Everglades-based lesson plans using Long Term Ecological Research Network data.

## BLOGS

- *Diatom of the Month*: <http://youngisdr.blogspot.com/p/diatom.html> (began in my lab and now led by the International Society of Diatom Research)
- *Wading Through Research*: <http://floridacoastaleverglades.blogspot.com/> (began under my leadership for the FCE LTER program)

## NEWSLETTERS

*News from the Sloughs*: <https://fcelter.fiu.edu/news/index.html>

## NEWS ARTICLES AND OP EDs (2017-PRESENT)

- Staletovich, J. 2020. Coastal Everglades, deprived of fresh water, near unhealthy ‘tipping point.’ *The Miami Herald*. <https://www.miamiherald.com/news/local/environment/article132530084.html>
- Staletovich, J. 2019. New study says Everglades water is harming keys corals. Not everyone agrees. *WLRN Public Radio*. <https://www.wlrn.org/environment/2019-07-23/new-study-says-everglades-water-is-harming-keys-corals-not-everyone-agrees>
- Staletovich, J. 2019. If a lake could sing, what would it sound like? This scientist found the answer in big data. *WLRN Public Radio*. <https://www.wlrn.org/environment/2019-06-04/if-a-lake-could-sing-what-would-it-sound-like-this-scientist-found-the-answer-in-big-data>
- Miller, K. 2019. Everglades cleanup: Florida wants to drop federal oversight but is it ready? *Palm Beach Post*. <https://www.palmbeachpost.com/news/20190116/everglades-cleanup-florida-wants-to-drop-federal-oversight-but-is-it-ready>
- Geraldino, D. 2018. What’s stopping the vulnerable Everglades from being healed? *PBS News Hour*. <https://www.pbs.org/newshour/show/whats-stopping-vulnerable-everglades-healed>
- Harvey, C. 2017. The Everglades have always been hit by hurricanes. Thanks to climate change, Irma could be a different matter. *The Washington Post*. <https://www.washingtonpost.com/news/energy-environment/wp/2017/09/16/the-everglades-have-always-been-hit-by-hurricanes-thanks-to-climate-change-irma-could-be-a-different-matter/>
- Gross, S. 2017. Ron DeSantis names Florida blue-green algae task force. *Tampa Bay Times*. <https://www.tampabay.com/florida-politics/buzz/2019/04/29/ron-desantis-names-florida-blue-green-algae-task-force/>

**DOCUMENTARIES**

Everglades Under Attack. *Fusion Media Network*. <http://interactive.fusion.net/everglades/>

**EXHIBITS AND PANELS BY COLLABORATING ARTISTS**

- 2018 {In Water} Hibiscus Gallery Pinecrest Gardens. Xavier Cortada. <https://cortadaprojects.org/event/epoch-exhibit-at-gardens-gallery-2-2-3/>
- 2018 LTER All Scientists Meeting/Next General Synthesis: Successes and Strategies Workshop: Integration of the Environmental Sciences, Arts, and Humanities across the LTER Network. Xavier Cortada. <https://cortadaprojects.org/event/lter-all-scientists-meeting-next-generation-synthesis-successes-and-strategies/>
- 2017 Why Plants in Glass Houses Matter: Art and Science of Diatoms, Microscopic Algae. Xavier Cortada. Naples Botanical Garden Havery Kapnick Education and Research Center. <https://cortadaprojects.org/event/why-plants-in-glasshouses-matter/>
- 2017 Diatoms. Cortada Art Studio Gallery. Xavier Cortada. Bird Road Art District. <https://cortadaprojects.org/event/diatoms-exhibit-at-cortada-art-studio-gallery/>
- 2016 In Deep with Diatoms. Panel Discussion. Xavier Cortada. Glenn Hubert Library. Florida International University. <https://cortadaprojects.org/event/panel-discussion-in-deep-with-diatoms/>
- 2016 In Deep with Diatoms. Tropical Botanic Artists. Florida Keys Eco-Discovery Center. Key West, FL. <http://tropicalbotanicartists.com/news-2016a.html>
- 2016 In Deep with Diatoms. Tropical Botanic Artists. Glenn Hubert Library. FIU Biscayne Bay Campus. North Miami, FL. <http://tropicalbotanicartists.com/news-2016a.html>
- 2015 *Encocnema evergladianum*. Pauline Goldsmith. Hartsfield-Jackson International Airport. Atlanta, GA. [http://www.goldsmithgalleries.com/gg\\_originalart.html](http://www.goldsmithgalleries.com/gg_originalart.html)
- 2015 In Deep with Diatoms. Tropical Botanic Artists. Frost Art Museum, Florida International University, Miami, FL. <https://frost.fiu.edu/exhibitions-events/events/2015/02/in-deep-with-diatoms.html>
- 2015 In Deep with Diatoms. Tropical Botanic Artists. Biscayne National Park, Homestead, FL. <http://www.tropicalbotanicartists.com/15-in-deep-bnp.html>
- 2015 CLIMA 2016 Panel: South Florida's Rising Seas Impact. Xavier Cortada. Milander Center for Arts & Entertainment. <https://cortada.com/events/2015/CLIMA>
- 2015 Art-Science Practice. Xavier Cortada. Presentation at the White House Office of Science and Technology Policy with Director Dr. John Holdren. <https://cortadaprojects.org/event/talk-at-white-house-on-art-science-practice/>
- 2015 In Deep with Diatoms. Frost Art Museum. Xavier Cortada. Gallery Exhibition and Panel Discussion. <https://cortadaprojects.org/event/in-deep-with-diatoms/>
- 2015 Just Below the Surface: 1915 (The Founding of Miami Beach). Xavier Cortada. Miami Beach Centennial Anniversary. <https://cortadaprojects.org/2015/JustBelowTheSurface>
- 2014 Anthropocene: Art and Nature in a Manufactured Era. Xavier Cortada. Artists in Residence in the Everglades. University of Miami CAS Gallery. <https://cortadaprojects.org/2014/diatom/>
- 2014 In Deep with Diatoms. Tropical Botanic Artists. Konza Prairie Biological Station. Manhattan, KS.

- <http://www.tropicalbotanicartists.com/14-konza-lter.html>
- 2014 In Deep with Diatoms. Tropical Botanic Artists. Deering Estate Festival of the Arts. The Deering Estate at Cutler. Miami, FL. <http://www.tropicalbotanicartists.com/14-in-deep-deering.html>

#### PERMANENT INSTALLATIONS BY COLLABORATING ARTISTS

- Diatom Court by Xavier Cortada. Pinecrest Gardens, FL. <https://www.pinecrestgardens.org/fine-arts/art-in-the-gardens/florida-is-nature>
- Florida is...Sunshine by Xavier Cortada. Florida Turnpike Turkey Lake Plaza. <https://cortada.com/florida-is/sunshine/?mode=grid>
- Diatom Fountain by Xavier Cortada. Smathers Plaza, Little Havana, Miami, FL. <https://cortada.com/2017/diatomfountain>
- Diatom Mural by Xavier Cortada. Jack Orr Plaza, Miami-Dade Housing Authority, Overtown, FL. <https://cortadaprojects.org/2016/diatomMural>

#### MUSIC COMPOSITIONS AND PRESENTATIONS

- Gaiser**, E.E. (composer) & M. Norris (arrangement). 2016. Lake Annie Song. <https://newsarchives.fiu.edu/2016/06/lake-annie-finds-its-rhythm>
- Gaiser**, E.E. 2016. Lakes write music. Science is listening. TEDxFIU event. Florida International University. <https://www.youtube.com/watch?v=m7fCmHG3h7k>

#### PUBLIC PRESENTATIONS

- 2020 **Gaiser**, E. Communicating science through arts engagement. Social Action Workshop. University of Miami, Miami, FL.
- 2019 **Gaiser**, E. Sea-level rise and the Everglades. Hinshaw & Culbertson, LLP, Third Annual Sea-Level Rise Conference. Miami, FL.
- 2018 **Gaiser**, E. Panelist: How Science Fits In. Everglades Summit. Everglades Foundation. Washington, D.C.
- 2018 **Gaiser**, E. The art of science. Mixtape Mondays. Patricia & Phillip Frost Art Museum. Miami, FL.
- 2018 **Gaiser**, E. Putting plant blindness under the microscope: why plants in glass houses matter. Pinecrest Garden Club. Miami, FL.
- 2017 **Gaiser**, E. Algae as beacons of environmental change in the Everglades and beyond: the importance of little glass “canaries in coal mines.” Speaking Sustainably Series, The Deering Estate, Miami, FL.
- 2016 **Gaiser**, E. Plenary: Putting plant blindness under the microscope: why plants in glass houses matter. Annual Meeting of the American Public Garden Association. Miami, FL.
- 2015 **Gaiser**, E. Miami 2100: Coastal wetlands and sea level rise resilience. Coral Gables Museum. Coral Gables, Florida.
- 2015 **Gaiser**, E. Expecting the unexpected: Pandora’s box of paradox in an upside-down estuary. The Kampong. Coconut Grove, Florida.
- 2015 **Gaiser**, E. Coastal wetlands and sea level rise resilience. Miami Beach Centennial Environmental Summit. Miami Beach, Florida.



- 2014 **Gaiser, E.** Biodiversity resilience in a changing world: the importance of little glass canaries in coal mines. Native Plant Society. Miami, Florida.
- 2013 **Gaiser, E.** Diatoms of karst rock pools. Misery Bay Science Center. Misery Bay, Ontario.
- 2013 **Gaiser, E., N. Deyrup, R. Bachmann, L. Battoe, & H. Swain.** Using long-term observational datasets from lakes to understand climate and land-use change influences on hydrology on the Lake Wales Ridge. Lake Wales Ridge Ecosystem Working Group Meeting. Avon Park. FL.
- 2012 **Gaiser, E.** Expecting the unexpected: Paradox in an upside-down estuary. Ocean Life Lecture Series. School for Environment, Arts and Society. Florida International University. Key Largo, FL.
- 2012 **Gaiser, E.** Florida Coastal Everglades Long-Term Ecological Research Program – Status Update. Deering Estate. Miami, FL.
- 2005 **Gaiser, E.** Class III Water Quality Criterion for Everglades wetlands. South Florida Water Management District RECOVER Evaluation Meeting. Davie, FL
- 2002 **Gaiser, E.** Class III Water Quality Criterion for Everglades Wetlands. Florida Department of Environmental Protection presentation to the Environmental Regulation Commission. Tallahassee, FL.
- 2002 **Gaiser, E.** Periphyton of the Florida Everglades. South Florida Native Plant Society Meeting. Fairchild Tropical Gardens. Miami, FL.
- 2002 **Gaiser, E.** Recommendations for wetland restoration based on paleoecological targets. Biscayne Bay Coastal Wetlands Public Forum, Miami, FL.

#### **PROFESSIONAL DEVELOPMENT IN SCIENCE COMMUNICATION**

- 2018 Participant, Science Communication Experience, Alan Alda Center for Communicating Science

#### **TEACHING EXPERIENCE AT FLORIDA INTERNATIONAL UNIVERSITY**

##### **COURSES**

BSC6971	Master's Thesis
BSC7980	PhD Dissertation
BSC6913	Student Research Lab (Graduate)
BSC4914	Student Research Lab (Undergraduate)
BSC5935	Special Topics in Biology
PCB3043	Ecology
PCB3043L	Ecology Lab
PCB4301	Freshwater Ecology
PCB4301L	Freshwater Ecology Lab
PCB5301	Limnology
PCB5301L	Limnology Lab
BSC5994	Protist Workshop
ESC5162	Microfossil Workshop
BSC4912	Biodiversity of Bocas del Toro
BSC6926	Topics in Biology (Graduate)

- Distributed graduate seminar (LTER)
- LTER Readings
- Creative Science Communications

#### **UNDERGRADUATE RESEARCH PROJECTS AT FIU\***

2017-2019	Samantha Hormiga: Periphyton abundance patterns in the Everglades
2015-2017	Andres Sola: Controls on periphyton stoichiometry in the Everglades
2015-2016	Kristen Dominguez: Responses of phytoplankton to spring turnover
2013-2015	Ileana Corsi: Seasonal dynamics of phytoplankton in a monomictic lake
2009-2012	Anna Scharnagl: Benthic algal dynamics in the Florida Everglades
2008-2010	Jorge Carrero: Distribution of soft algae across Everglades nutrient gradients
2007-2008	Edward Metzger: Distribution dynamics of periphyton in the Everglades
2007-2010	Catherine Hamilton: Long-term dynamics of periphyton in the Everglades
2006-2007	Amanda Morales: Periphyton biomass distribution in the Everglades
2005-2006	Ana Castellanos: Periphyton abundance in the eastern Everglades
2004-2005	Irina Goldenberg: Periphyton distribution across the Greater Everglades
2004-2005	Carlos Tudela: Periphyton biomass distribution in the Florida Everglades
2004-2006	Filipe Zuniga: Periphyton distribution in the Everglades marl prairie
2003-2004	Diansy Zincke: Production and dynamics of Everglades periphyton
2003-2004	Kathleen Kelley: Periphyton dynamics in Biscayne Coastal Wetlands
2001-2003	Angie Zafiris, Paleoecological reconstruction of Biscayne Bay using mollusks

\*Includes only students who worked more than one full semester on specific projects in the lab. More than 150 students have participated in lab or field work for shorter time periods since 2001.

#### **GRADUATE STUDENTS DIRECTED AS MAJOR PROFESSOR**

##### Completed

- Berthold, David. 2021. Growth of diatom *Fistulifera alcalina* in bacterial co-culture and comparative mitogenomics of *Fistulifera* species. Ph.D. Dissertation. Department of Biological Sciences, Florida International University.
- Sullivan, Kristy. 2020. Long-term and seasonal drivers of phytoplankton assembly in a subtropical monomictic lake. M.S. Thesis. Department of Biological Sciences, Florida International University.
- Massa, Eric. 2019. Effects of phosphorus on benthic diatom network structure. M.S. Thesis. Department of Biological Sciences, Florida International University.
- Mazzei, Viviana. 2018. Diatoms as tools for inferring changing environmental gradients in coastal freshwater wetlands threatened by saltwater intrusion. Ph.D. Dissertation. Department of Biological Sciences, Florida International University.
- Schulte, Nicholas. 2016. Controls on benthic microbial community structure and assembly in a karstic coastal wetland. M.S. Thesis. Department of Biological Sciences, Florida International University.

9. Nodine, Emily. 2015. Evidence of climate variability and tropical cyclone activity from diatom assemblage dynamics in coastal southwest Florida. Ph.D. Dissertation. Department of Biological Sciences, Florida International University.
8. Lee, Sylvia. 2014. Mechanisms of diatom assembly in a hydrologically-managed subtropical wetland. Ph.D. Dissertation. Department of Biological Sciences, Florida International University.
7. Isherwood, Ewan. 2013. The effect of contemporary hydrologic modification on vegetation community composition distinctness in the Florida Everglades. M.S. Thesis. Department of Biological Sciences, Florida International University.
6. Koch, Gregory. 2011. Dynamics of ecosystem metabolism and flocculent detritus transport in estuarine Taylor River. Ph.D. Dissertation. Department of Biological Sciences, Florida International University.
5. La Hée, Josette. 2010. The influence of phosphorus on periphyton mats from the Everglades and three tropical karstic wetlands. Ph.D. Dissertation. Department of Biological Sciences, Florida International University.
4. Munyon, Jay. 2009. The effects of hydrology and phosphorus on Everglades productivity. M.S. Thesis. Department of Biological Sciences, Florida International University.
3. Quillen, Amanda. 2009. Diatom-based paleolimnological reconstruction of Quaternary environments in a Florida sinkhole lake. Ph.D. Dissertation. Department of Biological Sciences, Florida International University.
2. Wachnicka, Anna. 2009. Quantitative diatom-based reconstruction of paleoenvironmental conditions in Florida Bay and Biscayne Bay, U.S.A. Ph.D. Dissertation. Department of Biological Sciences, Florida International University.
1. Bachman, Pamela. 2009. Physiological performance measures and tolerance limits of estuarine indicator species in South Florida. Ph.D. Dissertation. Department of Biological Sciences, Florida International University.

### In Progress

4. Meredith Emery, M.S., began 2018
3. Thomas Shannon, Ph.D., began 2019
2. Katie Stansbury, M.S., began 2019
1. Paige Kleindl, Ph.D., began 2020

### **GRADUATE STUDENT COMMITTEES SERVED**

Shelby Servais, Ph.D., Biological Sciences, 2018  
Jessica Sanchez, Ph.D., Biological Sciences, 2018  
Michelle Thompson, Ph.D., Biological Sciences, 2018  
Ross Boucek, Ph.D., Biological Sciences, 2017  
Lilly Margaret Eluvanthinal, Ph.D., Biological Sciences, 2017  
Sarah Bornhoeft, M.S., Biological Sciences, 2016  
Carrie Rebenack, Ph.D., Earth & Environment, 2016  
Jerry Berry, Ph.D., Biological Sciences, 2014  
Robin Abbey-Lee, Ph.D., Biological Sciences, 2013  
Rebecca Garvoille, Ph.D., Global and Sociocultural Studies, 2012

Raul Urgelles, M.S., Biological Sciences, 2010  
 Clifton Ruehl, Ph.D., Biological Sciences, 2010  
 Rudolf Von May, Ph.D., Biological Sciences, 2010  
 Jie Cheng, Ph.D. Earth Sciences, 2009  
 Clayton Williams, Ph.D. Biology, 2008  
 David Iwaniec, M.S. Biology, 2008  
 Bryan P. Carroll, M.S. Earth Sciences, 2006  
 Jeffrey Wozniak, Ph.D. Biology, 2006  
 Matthew Rogers, M.S. Biology, 2006  
 Sreepat Jain, Ph.D. Earth Sciences, 2006  
 Charles Goss, M.S. Biology, 2006  
 Alison Stone, M.S. Environmental Studies, 2005  
 Andrew Gottlieb, Ph.D. Biology, 2003

### **POSTDOCTORAL SCIENTISTS MENTORED**

2018-2019 Viviana Mazzei (Currently: Mendenhall Fellow, United States Geological Survey, Orlando, FL.)  
 2015-2019 Luca Marazzi (Currently: Earthwatch Europe, Science Policy and Innovation, London, England.)  
 2012-2013 Pamela Sullivan (Currently: Associate Professor, Oregon State University, Corvallis, OR.)  
 2009-2012 Ania Wachnicka (Currently: Lead Scientist, South Florida Water Management District, West Palm Beach, FL.)  
 2010-2011 Amartya Saha (Currently: Ecohydrologist, Archbold Biological Station, Venus, FL.)  
 2009-2011 Andrew Bramburger (Currently: Watershed Hydrology and Ecology Research Division, Environment and Climate Change Canada, Ontario, CA.)  
 2009-2010 Josette La Hée (Currently: Vertex Aquatic Solutions, Pompano Beach, FL.)  
 2001-2004 Serge Thomas (Currently: Associate Professor, Florida Gulf Coast University, Ft. Myers, FL.)  
 2000-2001 Christopher Donar (Currently: Assistant Professor, University of Alaska, Ketchikan, AK.)

### **PROFESSIONAL DEVELOPMENT**

2004-2006 Participant, National Science Foundation Faculty Institutes for Reforming Science Teaching

### **PROFESSIONAL, UNIVERSITY, AND PUBLIC SERVICE**

#### **SERVICE TO FLORIDA INTERNATIONAL UNIVERSITY**

2020-Present Director, South Florida-Caribbean, Cooperative Ecosystem Studies Unit  
 2020-Present Member, *Next Horizon* 2025 Strategic Plan Implementation Committee  
 2018-2020 Member, *Next Horizon* 2025 Strategic Plan Finances Committee

2018-Present Administrator, FIU-Florida Power & Light Memorandum of Understanding  
 2017-Present Member, Internal Advisory Committee, ADVANCE Program  
 2015-2016 Member, Capital Campaign Advisory Committee  
 2014-2018 Representative, National Council of Environmental Deans and Directors  
 2014-Present Administrator, FIU-Everglades Foundation Memorandum of Understanding  
 2014-Present Administrator, FIU-Deering Estate Foundation Memorandum of Understanding  
 2013-Present Member, Boating Safety Committee  
 2007-2012 Member, Research Council

#### **SERVICE TO THE COLLEGE OF ARTS, SCIENCES AND EDUCATION**

2014-2018 Member, Strategic Planning Committee  
 2014-2018 Member, Council of Chairs and Directors  
 2014-2020 Faculty Mentor, Dr. Elizabeth Anderson  
 2008-2014 Faculty Mentor, Dr. Jennifer Rehage  
 2005 Member, College of Arts and Science Reorganization Committee

#### **SERVICE TO THE DEPARTMENT OF BIOLOGICAL SCIENCES**

2020-Present Member, Personnel Committee  
 2020 Member, Phycologist Search Committee  
 2018 Member, Search Committee, Goldberg Professor of Tropical Ecology  
 2017-Present Faculty Mentor, Sparkle Malone  
 2016-Present Faculty Mentor, Alessandro Catenazzi  
 2012-2014 Member, Personnel Committee  
 2012 Chair, Ecosystems Ecologist Search Committee  
 2012-2018 Faculty Mentor, John Kominoski  
 2010-2013 Faculty Mentor, John Withey  
 2010 Member, Urban Ecologist Search Committee  
 2006-2010 Member, Facilities Committee  
 2009-2012 Faculty Mentor, Jim Heffernan  
 2009 Chair, Ecosystem Ecologist Search Committee  
 2008-2014 Member, Graduate Committee  
 2008 Chair, Visiting Ecologist Search Committee  
 2004-2008 Chair, Vehicle Committee  
 2003-2005 Chair, Library Committee  
 2002-2003 Chair, Seminar Committee  
 2002 Member, Library Committee

#### **SERVICE TO THE INSTITUTE OF ENVIRONMENT**

2014 Chair, SERC Director Search Committee  
 2005-2007 Member, SERC Public Relations Committee

#### **SERVICE AS A GRADUATE STUDENT**

- 1995 President, Graduate Student Organization, Savannah River Ecology Lab  
 1990 President, Graduate Student Organization, Animal Ecology, Iowa State University

### **VISITING RESEARCHERS HOSTED**

- 2018 Nancy Grimm, Arizona State University  
 2017 Hilary Swain, Archbold Biological Station  
 2017 Gavin Schmidt, NASA  
 2016 Joshua Ginsberg, Cary Institute of Ecosystem Studies  
 2014 Matt Ashworth, University of Texas  
 2013 Kohji Muraoka, University of Waikato, New Zealand  
 2013 Rike Wagner-Cremer, Utrecht University  
 2013 Timme Donders, Utrecht University  
 2013 Mark Edlund, St. Croix Watershed Research Center  
 2011 Emmy Lammertsma, Utrecht University  
 2011 Loes Bree, Utrecht University  
 2010 Saku Anttila, Finnish Environmental Institute  
 2009 Elizabeth Bergey, University of Oklahoma  
 2008 Andrew Bramburger, St. Lawrence River Institute  
 2007 Klara Kubeckova, Visiting Fullbright Scholar  
 2006 Eugene Stoermer, University of Michigan  
 2003 John Avise, University of California, Irvine

### **PROFESSIONAL SERVICE**

#### Advisory Committees and Executive Boards

- 2020-Present External Advisor, Algal Taxonomy Technical Working Group, National Ecological Observatory Network  
 2012-2015 Member, Executive Board, Long Term Ecological Research Network  
 2012-2015 Member, Executive Board, International Association of Diatom Research  
 2009-2018 Member, Steering Committee, Global Lake Ecological Observatory Network  
 2009-2011 Member, Advisory Committee, National Ecological Observatory Network Southeast Domain  
 2007-Present Member, Science Council, Long Term Ecological Research Network

#### Journal Editorial Service

- 2017 Guest Editor, *Ecosphere*  
 2016 Guest Editor, *Ecosphere*  
 2015 Guest Editor, *Ecosphere*  
 2014-2015 Associate Editor, *Frontiers in Ecology and the Environment*  
 2013 Guest Editor, *Wetlands*  
 2012 Guest Editor, *Journal of Paleolimnology*  
 2012-Present Associate Editor, *Wetlands*  
 2006 Guest Editor, *Hydrobiologia*

Journal and Book Chapter Reviews (number of reviews)

*Aquatic Biology* (3), *Aquatic Ecology* (5), *Aquatic Sciences* (1), *Archiv fur Hydrobiologie* (3), *Biogeochemistry* (1), *Biogeosciences* (2), *Canadian Journal of Fisheries and Aquatic Sciences* (1), *Diatom Research* (11), *Ecological Applications* (2), *Ecological Engineering* (1), *Ecological Indicators* (15), *Ecological Monographs* (1), *Ecology* (1), *Ecology Letters* (1), *Ecosphere* (12), *Ecosystems* (1), *Environmental Science and Technology* (6), *Estuaries and Coasts* (5), *Estuarine, Coastal and Shelf Science* (2), *Freshwater Biology* (14), *Freshwater Science* (9), *Frontiers of Ecology and the Environment* (1), *Global Change Biology* (1), *Holocene* (1), *Hydrobiologia* (44), *Inland Waters* (2), *Journal of Biogeography* (1), *Journal of Applied Ecology* (1), *Journal of Applied Phycology* (1), *Journal of Ecology* (1), *Journal of Geophysical Research* (1), *Journal of Great Lakes Research* (1), *Journal of Paleolimnology* (31), *Journal of Phycology* (1), *Journal of Plankton Research* (3), *Limnology and Oceanography* (10), *Nova Hedwigia* (2), *Oecologia* (3), *Oxford University Press* (1), *Phycologia* (1), *PLoS One* (2), *Taylor and Francis Press* (1), *Trends in Ecology and Evolution* (1), *Quaternary Research* (1), *Water* (2), *Water Research* (2), *Wetlands* (49)

Grant Proposal Reviews and Panels

National Science Foundation Reviews (67), National Science Foundation Panels (16), United States Environmental Protection Agency Reviews (10), United States Environmental Protection Agency Panel (2)

Professional Scientific Meetings Hosted/Chaired

- 2020 Host, Annual FCE-LTER All Scientists Meeting, Miami, FL.
- 2019 Host, Annual FCE-LTER All Scientists Meeting, Miami, FL.
- 2019 Co-Host, Phycological Society of America Meeting, Ft. Lauderdale, FL.
- 2018 Host, Annual FCE-LTER All Scientists Meeting, Miami, FL.
- 2017 Host, Annual FCE-LTER All Scientists Meeting, Miami, FL.
- 2016 Host, Annual FCE-LTER All Scientists Meeting, Miami, FL.
- 2015 Host, Annual FCE-LTER All Scientists Meeting, Miami, FL.
- 2014 Co-Chair, Long Term Ecological Research Program Science Council Meeting, Manhattan, KS.
- 2014 Host, Annual FCE-LTER All Scientists Meeting, Miami, FL.
- 2013 Co-Chair, National Science Foundation LTER Network Mini-Symposium, Washington, DC
- 2013 Host, Annual FCE-LTER All Scientists Meeting, Miami, FL.
- 2013 Co-Chair, Long Term Ecological Research Program Science Council Meeting, Jornada, NM.
- 2013 Host, South Florida Paleoecology Symposium, Florida International University.
- 2012 Host, Annual FCE-LTER All Scientists Meeting, Miami, FL.
- 2012 Co-Chair, Long Term Ecological Research Program Science Council Meeting, Eugene, OR.
- 2011 Host, Annual FCE-LTER All Scientists Meeting, Miami, FL.

- 2010 Host, Annual FCE-LTER All Scientists Meeting, Miami, FL.
- 2009 Host, Annual FCE-LTER All Scientists Meeting, Miami, FL.
- 2009 Host, Caribbean Hurricane Research Network Meeting, Miami, FL.
- 2008 Host, Annual FCE-LTER All Scientists Meeting, Miami, FL.
- 2008 Co-Host, 6<sup>th</sup> Global Lake Ecological Observatory Network Meeting, Archbold Biological Station, FL.
- 2007 Host, Annual FCE-LTER All Scientists Meeting, Miami, FL.
- 2003 Host, 17<sup>th</sup> North American Diatom Symposium, Islamorada, FL.

### **PUBLIC SERVICE**

- 2020 Expert Witness, Palm Beach County vs. Florida Department of Transportation
- 2019-Present Member, Blue-Green Algae Task Force, State of Florida
- 2018 Expert Witness, Palm Beach County vs. Florida Department of Transportation
- 2016 Expert Witness, Palm Beach County vs. Florida Department of Transportation
- 2014-Present Member, Board of Directors, Deering Foundation
- 2006 Judge, Miami-Dade County Science Fair
- 2001-2005 Member, Everglades Integrative Assessment Team, South Florida Water Management District
- 2001-2008 Advisor, Environmental Regulatory Committee, Florida Department of Environmental Protection

### **PROFESSIONAL HONORS, PRIZES, FELLOWSHIPS**

- 2020 Inducted Member, Academy of Science, Engineering and Medicine of Florida
- 2020 FIU College of Arts, Sciences and Education Award for Excellence in Research
- 2018 FIU College of Arts, Sciences and Education Award for Excellence in Research
- 2017 Champion Partner Award, Deering Foundation
- 2014 Sustainability Award, Florida International University
- 2014 Provost's Award for Excellence in Research and Creative Activities
- 2013 Top Scholars Recognition, Florida International University
- 2012 Provost's Award for Excellence in Research and Creative Activities
- 2008 Provost's Award for Excellence in Faculty Scholarship
- 2008 Provost's Award for Excellence in Teaching
- 2005 Provost's Award for Excellence in Research
- 1995 Outstanding Graduate Research Award, Sigma Xi, SRA Chapter
- 1993 Best Student Publication, Institute of Ecology, University of Georgia
- 1989 Dexter Outstanding Undergraduate Student Award, Kent State University

### **AWARDS TO GRADUATE STUDENTS (NON-FELLOWSHIP/SCHOLARSHIP)**

- 2021 FIU Real Triumphs Graduate, David Berthold
- 2021 Best Poster Presentation, FIU Biosymposium, Katie Stansbury
- 2014 Best Poster Presentation, FCE LTER All Scientists Meeting, Nicholas Schulte
- 2012 3<sup>rd</sup> Place in Environment, Earth, Energy, and Ecology. Graduate Professional Student Scholarly Forum. Sylvia Lee.



- 2012 Honorable Mention, INTECOL Society of Wetland Scientists. Sylvia Lee
- 2006 Best Student Poster Award, Anna Wachnicka, FCE LTER All Scientists Meeting
- 2005 Best Student Poster Award, Josette La Hée, Department of Biological Sciences, FIU