

CURRICULUM VITAE

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December 2018

EDUCATION:

- 1983 Bachelor of Arts: Department of Environmental Sciences and Department of Biology, University of Virginia, Charlottesville, VA 22903
- 1985 Master of Science: Marine Science Program, University of South Carolina, Columbia, SC 29208
- 1989 Doctor of Philosophy: Department of Marine Sciences, Center for Wetland Resources, Louisiana State University, Baton Rouge, LA 70803.

EXPERIENCE:

- 1982-1983 Undergraduate Research Assistant, Department of Biology, University of Virginia. Projects: 1) Effects of acidification on life history traits of freshwater clams; 2) Identification of life-history strategies of a lotic population of freshwater clams (D. Hornbach, advisor)
- 1983-1985 Graduate Research Assistant, Belle W. Baruch Institute for Marine Biology and Coastal Research, University of South Carolina. Projects: 1) Long Term Ecological Research Project, modelling and data synthesis (NSF Grant, H. McKellar, Co-PI); 2) Bly Creek Project, field data collection, data synthesis, and modelling (NSF Grant, H. McKellar, Co-PI).
- 1983-1985 Field projects quantifying total community respiration in a saltmarsh water column, and benthic advection to saltmarsh tidal creeks.
- 1984 Teaching Assistant: Marine Science Program, University of South Carolina. Course taught: Introductory Marine Science.
- 1985-1989 Graduate Research Assistant, Center for Wetland Resources, Louisiana State University. Projects: 1) Carbon and nitrogen cycling in the Barataria Basin, LA (NSF Grant, J. Day, Co-PI); 2) Carbon, nitrogen, and phosphorus exchanges in the Fourleague Bay Estuary, LA (Seagrant, J. Day, Co-PI); 3) Nutrient fluxes in mangrove wetlands (AID Grant, R. Twilley, PI); 4) Nutrient dynamics and exchanges on irregularly flooded seagrass banks (National Audubon Society Grant, G. Powell, Co-PI).
- 1989 Research Associate IV, Coastal Ecology Institute, Louisiana State University. Data synthesis and analysis, report preparation for the Pearl River Cumulative Impacts Project. J.G. Gosselink, supervisor.
- 1989-1992 Assistant Research Professor, Baruch Marine Lab, University of South Carolina. Ecosystems and landscape ecology, estuarine ecology, modelling coastal landscape dynamics (NSF Grant, F. Sklar, Co-PI).
- 1989-present Research Associate, Baruch Institute, University of South Carolina.
- 1991-92 Academic Seat, South Carolina Governor's Wetlands Advisory Committee.
- 1991-1994 Adjunct Professor and Visiting Instructor, Graduate Program in Marine Biology, Grice Marine Lab, College of Charleston. Course taught: BIO 502, Coastal Ecosystems and Modelling.
- 1992-1994 Research Ecologist, National Marine Fisheries Service, Southeast Fisheries Center, Galveston Lab. Ecosystems and landscape ecology, spatial analysis of fisheries data, ecological synthesis, modelling aquatic ecosystem and landscape dynamics.

1993-1996	Adjunct Professor, Department of Wildlife and Fisheries Sciences, Texas A&M University. Course taught: WFSC 689-MARB 489, Coastal Ecosystems and Modelling.
1993-1996	Visiting Professor and Instructor, Department of Marine Biology, Texas A&M University at Galveston. Course taught: MARB 425, Marine Ecology.
1993	Chairperson, Equal Employment Opportunities Committee, Southeast Fishery Science Center, NOAA.
1994-1999	Assistant Professor, Department of Biological Sciences and SERP, Florida International University, Miami, FL.
1994-1995	President, Gulf Estuarine Research Society.
1994-1995	Executive Board Member, Estuarine Research Federation.
1994-1998	Associate Editor for Ecosystems, <u>Estuaries</u> .
1995-1999	Editorial Board Member, <u>Mangroves and Saltmarshes</u> .
1996-1997	Past President, Gulf Estuarine Research Society
1999-2005	Associate Professor, Department of Biological Sciences and SERC, Florida International University, Miami, FL.
2000-2007	Editorial Board Member, <u>Wetland Ecology & Management</u>
2000-2007	Editorial Board Member, <u>Freshwater Systems</u>
2000-2007	Lead Principal Investigator, Florida Coastal Everglades Long-Term Ecological Research Program (FCE LTER)
2002-2006	Executive Committee Member, LTER Network
2005-2008	Professor, Department of Biological Sciences and SERC, Florida International University, Miami, FL.
2005-2007	Editorial Board Member, <u>Wetlands</u>
2007-2008	Program Officer, Ecosystems & LTER Programs, National Science Foundation, Arlington VA
2008-2010	Associate Director for Research, Global Institute of Sustainability, Arizona State University, Tempe AZ 85287
2008-present	Professor, School of Sustainability, Arizona State University, Tempe AZ 85287
2010-2012	Director, Central Arizona-Phoenix Long-Term Ecological Research Program (CAP LTER)
2010-2012	Member, Board of Directors, NEON Inc.
2010-2012	Executive Board Member, LTER Network
2011-2017	Co-Director, Urban Sustainability Research Coordination Network
2013-2014	Chair, School of Sustainability Curriculum Committee
2015-2017	Member, State of Louisiana Coastal Protection and Restoration Science & Engineering Advisory Board
2017-2018	Member, ASU Chemical and Environmental Characterization Advisory Board
2015-present	Associate Editor, <u>Journal of Urban Ecology</u>
2015-present	Undergraduate Director, School of Sustainability
2015-present	Member, Provost's University Undergraduate Standards Committee
2016-present	Member, U.S. Ramsar Convention Committee
2016-present	Handling Editor, <u>Bioscience</u>
2016-present	Director, Central Arizona-Phoenix Long-Term Ecological Research Program (CAP LTER)
2018-present	Guest Editor, Sustainability, Special Issue: The importance of wetlands to sustainable landscapes

HONORS, AWARDS, AND POSITIONS:

1976	Eagle Scout Award, Boy Scouts of America
1982	Undergraduate Research Grant, Department of Biology, University of Virginia
1985	Elected, Sigma Xi Scientific Research Society
1985	Recipient of 4-year Alumni Federation Fellowship, Louisiana State University Alumni Federation
1987	Elected Co-President, Louisiana State University Student Chapter, American Water Resources Association
1987	Student Presentation Award, Ninth Biennial Estuarine Research Federation Meetings
1989	Student Presentation Award, Gulf Estuarine Research Society, Spring Meeting
1989	Student Travel Award, American Society of Limnology and Oceanography, Spring Meeting
1989	Student Travel Award, Estuarine Research Federation, Tenth Biennial Meetings

1989	Lipsey Award for Excellence in Marine Science, Department of Marine Sciences, Louisiana State University, Baton Rouge, LA.
1993-94	Chair, Committee on Equal Employment and Workplace Diversity, Galveston Laboratory, NMFS.
1994-95	President, Gulf Estuarine Research Society. Elected by membership to 2-year term.
2004	FIU University Award for Excellence in Research

PROFESSIONAL AFFILIATIONS:

Ecological Society of America
 Society for Wetland Scientists
 American Society of Limnology and Oceanography

GRANTS FUNDED:

Salt marsh geomorphology and ecological development: Influence upon habitat linkages within and across ecosystem boundaries. NOAA Coastal Ocean Program. April, 1994 - March 1997. \$35,000 to Wetland Ecosystems Ecology Lab (FIU); total of \$289,000 with E.Koepfler, CCU.

Numerical interpretation of Class III narrative nutrient water quality criteria for Everglades Wetlands. ENP, USACOE, SFWMD. January 1996 - December 2002. \$510,000 to Wetland Ecosystems Ecology Lab (FIU); total of \$4,600,000 with R.Jones and J.Trexler, FIU.

Nutrient exchange between Florida Bay and the Everglades' salinity transition zone. SFWMD. August 1995 - December 1998. \$223,000 to Wetland Ecosystems Ecology Lab (FIU); total of \$560,000 with J.Day, LSU.

Investigating ecosystem development in restored HID areas: Techniques and approaches that enhance coordination with other ENP research efforts. ENP. May 1996 - May 1997. 14,275 to Wetland Ecosystems Ecology Lab (FIU).

Effect of modified water deliveries in the C-111 canal basin on the Everglades wetland transition zone: A pilot study for pre-levee removal analysis. CES-FAU. September - December 1997. \$21,750 to Wetland Ecosystems Ecology Lab (FIU).

The impact of accelerated sea level rise on nutrient cycling and productivity in karst and deltaic ecosystems in the Gulf of Mexico and Caribbean area: Ecological and socio-economic implications. NSF-IAI. December 1997-November 1999. \$0 to Wetland Ecosystems Ecology Lab (FIU); total of \$130,000 with J.Day, LSU.

Using transect sampling to relate a phosphorus addition flume study in Shark River Slough to long-term water quality impacts in Everglades National Park Marshes. ENP. October 1998 – May 2000. \$255,000 to Wetland Ecosystems Ecology Lab (FIU) with J.Richards and J.Trexler (DBS), and R.Jones, C.Buzzelli, E.Gaiser, and L.Scinto (SERP).

The effects of modified water delivery in the Southern Everglades: Integrating Taylor Slough and the C-111 ENP Panhandle regions. SFWMD. January 1999 – September 2001. \$390,000 to Wetland Ecosystems Ecology Lab (FIU).

Nutrient exchange between Florida Bay and the Everglades' salinity transition zone – Phase II. SFWMD. December 1998 – September 2001. \$161,400 to Wetland Ecosystems Ecology Lab (FIU); total of \$450,000 with J.Day, LSU.

Coastal Oligotrophic Ecosystems Research - The Coastal Everglades (COERCE LTER). National Science Foundation. May 2000 - April 2006. \$4,200,000.

LTER Research Experience for Undergraduates Supplement to the FCE LTER. National Science Foundation. June 2000. \$19275

LTER Supplemental funding for the FCE Caribbean Initiative International LTER Collaborative Workshop, November 2000. \$14000.

LTER Supplemental funding – REU 2001, Schoolyard LTER 2001, Supplemental Equipment, NSF. April 2001.\$55000.

Southern Everglades Integrated Monitoring and Science Program: An LTER Partnership, SFWMD. June 2001 – May 2004. \$926,000.

Documenting the importance of water flow to Everglades landscape structure and sediment transport in ENP, September 2001 – August 2003. \$560,000.

LTER Supplemental funding for the FCE Caribbean Initiative 2nd International LTER Collaborative Workshop, March 2002. \$5000.

LTER Supplemental funding – REU 2002, Schoolyard LTER 2002, Supplemental Equipment, NSF. April 2002.\$52000.

Southern Everglades Integrated Monitoring and Science Program: An LTER Partnership, ENP. September 2002 – August 2004. \$300,000.

LTER Supplemental funding – REU 2003, Schoolyard LTER 2003, Supplemental Equipment, NSF. April 2003.\$51,996.

LTER Supplemental funding – EdEn Venture Environmental Education Collaboration with Everglades National Park, NSF. July 2003. \$62,500.

LTER Supplemental funding – REU 2004, RET 2004, Schoolyard LTER 2004, Supplemental Equipment, NSF. June 2004, \$73,000.

LTER Supplemental funding – LTER Affiliated Student Group Integration Workshop. June 2004, \$44,000.

Preparing the LTER Network for collaborative science, education and synthesis: A planning proposal. NSF, Co-PI with J.Gosz, S.Collins, B.Benson, and A.Whitmer. \$1,023,151. September 2004 – August 2006.

Monitoring for potential water quality impacts along the eastern boundary of ENP, including Taylor Slough. ENP-CESI. \$720,000. October 2004 – September 2007.

Documenting the importance of water flow to Everglades landscape structure and sediment transport in ENP. ENP-CESI. \$414,000. January 2005 – December 2007.

Responses of mangroves to regional environmental change. ENP-CESI Co-PI with J.Fuentes, V.Engel, and J.Zieman. \$83,500. October 2004 – September 2006.

Understanding *Cladium jamaicense* dynamics over the last century in ENP using simulating modeling and paleoecological data. ENP-CESI Co-PI with C.Saunders, W. Anderson, J. Lynch, and R. Jaffe. \$130,000. October 2004 – September 2007.

Southern Everglades – Monitoring of ecosystem status and trends. SFWMD. \$150,000. September 2005 – September 2006.

Nitrogen Cycling in freshwater and estuarine wetlands of the Taylor Slough and its influence on nitrogen exchange between Taylor River & Florida Bay. NOAA. Co-PI with V.Rivera-Monroy (LSU) & S.E. Davis (TAMU). \$400,000. May 2006 – April 2008.

LTER Supplemental funding – REU 2006, RET 2006, Schoolyard LTER 2006. International Research Supplement, Other Supplements. April 2006, \$78,000.

LTER Supplemental funding – Bridging FCE I and FCE II. April 2006. \$375,000.

Coastal Oligotrophic Ecosystems Research – FCE LTER II. National Science Foundation. November 2006 - October 2012. \$4,920,000.

Central Arizona-Phoenix LTER Program (CAP LTER III). National Science Foundation. December 2010 - November 2016. \$5,880,000.

Hydrology versus ecology: The effectiveness of constructed wetlands for wastewater treatment in a semi-arid climate. AZ Water Resources Research Center. March 2011 – October 2012. \$30,000.

Workshop support for the International Phosphorus Summit at ASU, February 2011. National Science Foundation. February 2011 – January 2014. \$49,000.

RCN-SEES for Urban Sustainability: Research Coordination and Synthesis for a Transformative Future. National Science Foundation. September 2011 – August 2016. \$750,000.

Students authoring intelligent tutoring systems for constructing models of ill-defined dynamic systems. National Science Foundation. Co-PI with K. VanLehn. September 2011 – August 2014. \$550,000.

CAP LTER Program 2011 Supplement. National Science Foundation. September 2011 - August 2012. \$60,000.

A new theory and data product quantifying ecosystem sensitivity to climate change. National Science Foundation. Co-PI with B. Ruddell. April 2013 – March 2015. \$293,000.

Solutions to urban wastewater and stormwater management challenges in Phoenix and Strasbourg France: A “knowledge to action” approach. Walton Sustainable Solutions Initiative Institutional Collaboration Fund. December 2013 – November 2014. \$10,000.

Urbanization in South Africa adjacent to Kruger National Park. Fulbright Fellowship. February 2015. \$8000.

Urbanization in China and the US: A comparative approach. Chinese Academy of Sciences. April 2015. \$10,000.

Central Arizona-Phoenix LTER Program (CAP LTER IV). National Science Foundation. December 2016 - November 2018. \$2,254,000.

Central Arizona-Phoenix LTER Program (CAP LTER IV). National Science Foundation. December 2018 - November 2022. \$4,508,000.

STUDENTS ADVISED:

Matthew Baber, Ph.D. Candidate (**advisor**), Florida International University. **Ph.D. awarded 4/01**

Eric Chapman, PhD (**advisor**), Arizona State University. **Ph.D. awarded 5/15**

Jennifer Cutler, MS (**advisor**), Florida International University. **MS awarded 4/98.**

Susan Dailey, Ph.D. Candidate (**advisor**), Florida International University. **Ph.D. awarded 12/00**

Robert Daoust, MS (**advisor**), Florida International University. **MS awarded 4/98.**

Melissa Davidson, MS (**advisor**), Arizona State University. **MS awarded 5/16.**

Steven Davis, Ph.D. Candidate (**advisor**), Florida International University. **Ph.D. awarded 8/99**

Tiffany Gann, MS (**advisor**), Florida International University. **MS awarded 12/01**

Patrick Gibson, MS (**advisor, with J. Boyer**), Florida International University. **MS awarded 12/05**

David Iwaniec, MS (**advisor**), Florida International University. **MS awarded 8/08**

Greg Juszli, MS (**advisor**), Florida International University, **MS awarded 5/07**

Greg Koch, PhD. (**advisor**), Florida International University, **Ph.D. awarded 8/12**

Kimberly Lewis, MS (**thesis advisor**), Harvard University

Ben MacNeille, MS (**advisor**), Arizona State University. **MS awarded 5/16**

Genevieve Metson, MS (**co-advisor**), Arizona State University. **MS awarded 8/11.**

Nicholas Oehm, MS (**advisor**), Florida International University. **MS awarded 4/98.**

Frank Parker, MS (**advisor**), Florida International University. **MS awarded 8/00.**

Jorge Ramos, PhD (**advisor**), Arizona State University. **Ph.D. awarded 5/17.**

Gustavo Rubio, MS (**advisor**), Florida International University **MS awarded 12/03.**

Christopher Sanchez, MS (**advisor**), Arizona State University

Chris Stevenson, MS (**advisor**), Florida International University. **MS awarded 8/01**

Jared Stoltzfus, PhD (**advisor**), Arizona State University. **Ph.D. awarded 5/16**

Amanda Suchy, PhD (**co-advisor**), Arizona State University. **Ph.D. awarded 12/16**
 Tiffany Troxler, PhD (**advisor**), Florida International University. **Ph.D. awarded 8/05**
 Eric Vahid, MS (**advisor**), Arizona State University
 Ben Warner, PhD (**advisor**), Arizona State University, **Ph.D. awarded 5/14**
 Nicholas Weller, PhD (**advisor**), Arizona State University
 Lea Wilson, MS (**advisor**), Arizona State University, **MS awarded 8/12**
 Kathy Worley (**advisor**), Florida International University **MS awarded 5/02.**

UNIVERSITY-LEVEL COURSES TAUGHT:

- A. Undergraduate level: Ecology (5 times), Ecology Lab (6 times), Marine Ecology (3 times), Marine Ecology Lab (2 times), Undergraduate Seminar (2 times), Research in Tropical Ecosystems (2 times), Wetland Ecology (1 time), Sustainable World (5 times); Sustainable Ecosystems (10 times); Long-Term Research in Urban Systems (3 times); Sustainability Systems Modelling (1 time); Sustainable Wildlife Economy Prep. Seminar (3 times); Challenges of the Wildlife Economy in South Africa (3 times)
- B. Graduate level: Coastal Ecosystems and Modelling (3 times), Modelling Biological Systems (2), Advanced Ecology – Ecosystems & Holism (6 times), Spatial Analysis and GIS (1 time), Marine Ecology (1 time), Introduction to Biological Research (1 time), Wetland Ecology (1 time), Sustainable Ecosystems (3 times); Global Biogeochemical Cycles and Sustainability (1 time); Long-Term Research in Urban Systems (3 times); The Sustainability Review (10 times); Sustainability Systems Modelling (1 time); Sustainable Wildlife Economy Prep. Seminar (1 time); Challenges of the Wildlife Economy in South Africa (1 time); Advancing Ecological Theory (1 time)

INVITED/THEMATIC PAPERS PRESENTED:

- 1985 Nutrient variability and subsystem interactions in a southeastern salt marsh. 8th Biennial Meeting, Estuarine Research Federation, Hanover, NH.
- 1988 Assessment of cumulative impacts in forested wetlands: The Tensas Basin, LA. National Association of Environmental Professionals, Annual Meeting, Orlando, FL.
- 1988 A strategy for quantifying nutrient and materials fluxes in irregularly flooded brackish marshes: Examples from two Louisiana estuaries. 9th Annual Meeting, Society of Wetland Scientists, Washington, D.C.
- 1988 A method for measuring nutrient and material exchanges in the marshes of Louisiana's Gulf coast estuaries. American Water Resources Association, Baton Rouge, LA.
- 1989 The great wetland flux contest: Comparing exchanges of nutrients and materials on intertidal seagrass banks and marshes. Department of Marine Sciences, Louisiana State University, Baton Rouge, LA.
- 1989 Marsh-water column interactions in two Louisiana estuaries: Flux measurements and conceptual implications. University of Georgia Marine Institute, Sapelo Island, GA.
- 1989 Nitrogen exchange processes in forested and coastal wetlands. Division of Pinelands Research, Rutgers University, Camden, NJ.
- 1989 The Chesapeake: An estuary in your back yard. Greater Northern Virginia Kiwanis Club, Annandale, VA.
- 1991 Using landscape level resource management and cumulative impacts strategies to regulate South Carolina's wetland resource. Governor's Wetlands Advisory Committee, South Carolina Department of Health and Environmental Control.
- 1991 A comparison of landscape-level aquatic patterns and water column processes in two estuaries with markedly different watershed characteristics. 11th Biennial International Estuarine Research Federation Conference, San Francisco, CA.
- 1991 Spatial variability in short-term sediment flux in a southeastern Georgia salt marsh estuary. Coastal Wetland Ecology and Management Symposium, New Orleans, LA.
- 1992 Spatial variability and the question of scale in estuarine ecosystems and coastal landscapes. Invited Presentation, Department of Environmental Sciences, University of Virginia, Charlottesville, VA.
- 1992 Biotic and abiotic factors relating pattern and process in wetland ecosystems and coastal landscapes. Department of Environmental Sciences and Engineering, University of North Carolina, Chapel Hill, NC.
- 1992 Interactions between abiotic development and biotic maturation in transgressive wetland ecosystems and coastal landscapes. Institute of Marine Sciences, University of North Carolina, Morehead City, NC.
- 1992 A review of marsh-water column interactions in wetlands along the U.S. Gulf of Mexico. INTECOL's 4th Annual International Wetlands Conference, Columbus, OH.
- 1992 Interactions between abiotic development and biotic maturation in transgressive wetland ecosystems and coastal landscapes. Smithsonian Environmental Research Center, Edgewater, MD.
- 1993 Coupling remote sensing, GIS, and spatial modelling to address ecosystems-scale fishery questions - A conceptual approach. Ninth Annual Workshop on Remote Sensing and GIS for Coastal Management in Louisiana, Lafayette, LA.

- 1993 Subsystem interactions in estuarine ecosystems and coastal landscapes. Department of Biology, University of Southwestern Louisiana, Lafayette, LA.
- 1993 The importance of tidal range and geologic age as controllers of marsh-water column interactions. 12th Biennial International Estuarine Research Federation Conference, Hilton Head, SC.
- 1993 Habitat interactions in salt marsh estuaries and coastal landscapes. Skidaway Institute of Oceanography, University of Georgia, Savannah, GA.
- 1994 Subsystem interactions in salt marsh estuaries and coastal landscapes. University of Texas Marine Science Institute, Port Aransas, TX.
- 1994 Measuring materials exchanges on intertidal seagrass banks in Florida Bay using throughflow flumes. American Society of Limnology and Oceanography, Miami, FL.
- 1994 Successional development of wetland ecosystems in transgressive coastal landscapes. Department of Biology, University of Miami, Miami, FL.
- 1994 The successional evolution of estuarine wetlands in transgressive coastal settings. Research Lab Seminar, Fairchild Tropical Garden, Miami, FL.
- 1994 Statistical treatment of scale-dependent aquatic transect data. Everglades Research Group, South Florida Water Management District, West Palm Beach, FL.
- 1995 Interactions of structure and function in the development of wetland ecosystems. Tropical Research and Education Center, Institute of Food and Agricultural Sciences, University of Florida, Homestead, FL.
- 1995 Nutrient exchange between Florida Bay and its salinity transition zone. Everglades Research Group, South Florida Water Management District, West Palm Beach, FL.
- 1996 Everglades research pertinent to ecological modelling efforts in south Florida. ATLSS-ELM Modeling Coordination Workshop, South Florida Water Management District, West Palm Beach, FL.
- 1996 Nutrient processing and exchange in northern Florida Bay mangrove forests. Third Workshop on South Florida Nutrient Dynamics, Key Largo, FL.
- 1996 Nutrient transformations and flux in the mangrove forests of Florida Bay. Invited Dean's Seminar, Virginia Institute of Marine Science, College of William and Mary, Yorktown, VA.
- 1996 The ecological implications of water management policies along the Everglades-Florida Bay margin. Invited Seminar, FIU Graduate Environmental Engineering Seminar Series.
- 1996 Wetland-water column interactions and the biogeochemistry of estuary-watershed coupling around the Gulf of Mexico. Invited seminar, Workshop for Authors, Biogeochemistry of Gulf of Mexico Estuaries, Louisiana Universities Marine Consortium, Cocodrie, LA.
- 1996 Nutrient exchange between Florida Bay and the Everglades transition zone. 1996 Florida Bay Science Conference, Key Largo, FL.
- 1997 Data synthesis, integration, and modelling in conjunction with the FIU phosphorus dosing flume study. 1997 Florida Dept. Environmental Protection Workshop on Class III Water Quality Criteria Research.
- 1997 Salinity controls on nutrient flux in south Florida mangrove wetlands. University of South Carolina Invited Marine Science Lecturer Series.
- 1997 Biogeochemical cycling in Everglades wetlands: Of marshes and Mangroves. SERP Brown Bag Seminar, Florida International University, Miami, FL.
- 1998 Water quality research in Everglades wetlands: A look at two ongoing projects. Department of Environmental Studies Graduate Seminar Series.
- 1998 An overview of research into water quality issues associated with Everglades restoration efforts. 11th Annual Science & Engineering Lecture Series, Jacksonville University.
- 1998 A review of marsh and estuarine flux studies from the south Atlantic and Gulf of Mexico. Concepts and Controversies in Tidal Marsh Ecology Conference, Vineland, NJ.
- 1998 Vascular plant and soil responses to biogeochemical changes in the water column of two Everglades wetlands. American Society of Limnology and Oceanography/Ecological Society of America, St. Louis, MO.
- 1999 Possible effects of global climate change on coastal wetlands of the Gulf of Mexico and Caribbean Sea. IAI Working Group on Coastal Effects of Global Change, Merida, Mexico.
- 1999 The influence of Southern Everglades wetlands on nutrient inputs to Florida Bay. Florida Bay Science Conference, Key Largo, FL.
- 2000 Regional Controls of Population and Ecosystem Dynamics in an Oligotrophic Wetland-dominated Coastal Landscape - The New Florida Coastal Everglades LTER Project. LTER All Scientists Meeting, Snowbird, UT.
- 2000 The history of hydrologic modifications in south Florida. LTER All Scientists Meeting, Snowbird, UT.
- 2000 Ecosystem-level responses to increased freshwater inputs in the C-111 basin of the southern Everglades. SFWMD Research Progress Seminar.
- 2000 Regional controls of population and ecosystem dynamics in an oligotrophic wetland-dominated coastal landscape - Introducing a New Long Term Ecological Research (LTER) project in the Coastal Everglades. CETroB Symposium, Miami FL.
- 2000 Introducing a New Long Term Ecological Research (LTER) project in the Coastal Everglades. LTER Network Office Seminar, Albuquerque, NM.
- 2002 Introducing the Florida Coastal Everglades LTER Program", Fairchild Tropical Garden Research Seminar, Miami, FL.
- 2002 Introducing the Florida Coastal Everglades LTER Program with a focus on freshwater marsh primary productivity and water quality dynamics", Department of Biology and National Wetlands Research Center, Lafayette, LA.

- 2002 An LTER-based multidisciplinary investigation of how water flow and sediment transport relate to wetland processes and Everglades Restoration. American Society of Limnology & Oceanography Plenary/Tutorial presentation, Victoria, BC, Canada.
- 2002 Introducing the Florida Coastal Everglades LTER Program with a focus on freshwater marsh primary productivity and water quality dynamics”, Department of Environmental Sciences, University of Virginia, Charlottesville, VA.
- 2002 How water flow relates to wetland processes and Everglades restoration, or “getting the water really right” in the river of grass. Society of Wetland Scientists Special Symposium, Gainesville, FL.
- 2002 Linkages between the FCE LTER Program and the ENP CESI Research Program. National Academy of Sciences CROGEE Review Panel meeting, Key Largo, Florida.
- 2003 Relating water flow to wetland processes and Everglades restoration in the River of Grass. Dept. Biology, University of Miami, Miami, FL.
- 2003 Relating water flow to wetland processes and Everglades restoration, or “getting the water really right” in the river of grass. IFAS, University of Florida, Homestead, FL.
- 2003 Ecological and hydrologic sciences meet socio-economics in the restoration of the Everglades. LTER Network Mini-Symposium, National Science Foundation Headquarters, Arlington, VA.
- 2003 Connecting Florida Bay with the upstream landscape via the FCE LTER Program. Florida Bay-GEER Conference, Tampa FL.
- 2003 Connecting the Everglades with the Gulf of Mexico: What we’ve learned from the FCE LTER Program. Society of Wetland Scientists Conference, New Orleans, LA.
- 2003 Coastal ecological research in oligotrophic upside-down estuaries: the FCE LTER Program. Virginia Institute of Marine Science, Gloucester Point, VA.
- 2004 Factors Controlling Ecosystem Productivity and Land-Ocean Interactions in Oligotrophic Upside-down Estuaries of the Florida Everglades. American Society of Limnology & Oceanography, Honolulu, HI.
- 2004 Factors Controlling Ecosystem Productivity and Land-Ocean Interactions in Oligotrophic Upside-down Estuaries of the Florida Everglades. Center for Marine Sciences, University of North Carolina-Wilmington.
- 2004 Freshwater supply by the Everglades as a critical ecosystem service at the FCE LTER. NCEAS Ecosystem Services Working Group, Santa Barbara CA.
- 2004 Using long-term data to relate environmental drivers to ecological process: Case studies from the Florida Coastal Everglades LTER, Harvard Forest, Cambridge MA.
- 2004 Using Long-Term Data to Relate Environmental Drivers to Ecological Process: Case Studies from the FCE LTER Program. Florida International University Department of Biological Sciences Seminar Series, Miami, Florida
- 2005 Relating precipitation and water management to nutrient concentrations in the oligotrophic “upside-down” estuaries of the Florida Everglades. ESA-INTECOL Conference, Montreal, Quebec.
- 2005 Relating precipitation and water management to nutrient concentrations in the oligotrophic “upside-down” estuaries of the Florida Everglades. Estuarine Research Federation 18th Biennial Conference, Norfolk, Virginia.
- 2006 Coupling Human and Natural Interactions in the Dynamic Coastal Landscape of the Florida Everglades. Central Arizona-Phoenix (CAP) Urban LTER Annual Symposium, Phoenix, AZ.
- 2006 Coupling Human and Natural Interactions in the Dynamic Coastal Landscape of the Florida Everglades. Archbold Biological Station, Lake Placid FL.
- 2006 Coupling Human and Natural Interactions in the Dynamic Coastal Landscape of the Florida Everglades. Ashland University, Ashland OH.
- 2006 Humans and the Everglades: Too close for comfort? Presentation to 100 high school students from the Ashland OH region.
- 2006 Biogeochemical patterns and processes in the oligotrophic “upside down” estuaries of the Florida Coastal Everglades. ASLO Conference, Victoria, BC, Canada.
- 2006 Closing the loop between the ecological and social sciences: Examples from the Florida Coastal Everglades LTER Program. National Science Foundation, Arlington VA.
- 2009 Indirect ecosystem services of water in aridland cities. ESA Millenium Conference, Athens GA.
- 2010 Integrative research: Examples from sustainability and the LTER Network. NSF workshop on Landscapes in the Anthropocene – Exploring the Human Connections, Univ. Oregon, Eugene OR.
- 2010 Pathways to Phosphorus Security: A Long-Term Perspective. International Water Association Leading Edge Technologies Conference, Phoenix AZ.
- 2010 How internal processes affect resilience to state change in high-disturbance wetland ecosystems. Sevilleta Field Station and LTER Program, NM.
- 2010 How internal processes affect resilience to state change in high-disturbance wetland ecosystems. Sam Houston State University, Huntsville TX.
- 2011 Multi-scalar effects of urban stormwater infrastructure in a semi-arid urban catchment: Hydrologic responses. ASLO Conference, San Juan PR.
- 2011 Urban Sustainability Challenges and Solutions: Are there unifying theories that transcend individual cities? Presentation to the Minister of the Environment and his public audience, Santo Domingo, Dominican Republic.
- 2011 13+ years of urban ecological research in the Phoenix metropolitan area. ASU Polytechnical Campus, Gilbert AZ.

- 2011 13+ years of urban ecological research in the Phoenix metropolitan area. Arizona Department of Environmental Quality, Phoenix AZ.
- 2012 Is phosphorus the Rodney Dangerfield of sustainability challenges? Plenary Presentation at the University of Florida Water Institute Symposium, Gainesville FL.
- 2012 Is phosphorus the Rodney Dangerfield of sustainability issues? Georgetown University, Washington DC.
- 2012 A primer on sustainability, sustainability science, and sustainable challenges and solutions. Workshop on Water Sustainability in the Tempisque-Bebedero Watersheds of Costa Rica. Palo Verde OTS Field Station, Costa Rica.
- 2012 Ecosystem services and educational opportunities provided by an aridland wetland urban treatment wetland in Phoenix AZ. INTECOL Wetlands Conference, Orlando FL.
- 2012 Urban systems research in Phoenix and across an international network. National Academy of Sciences Working Group on Urban Sustainability. Tempe AZ.
- 2012 Sustaining water demands to urban ecosystems in the southwest US. Ecological Society of America. Portland OR.
- 2012 Advancing urban sustainability theory and action: Challenges and opportunities. Urban Sustainability Workshop, Strasbourg France.
- 2012 Stormwater management, hydrologic connectivity, and multi-purpose urban greenways in Phoenix AZ USA. Urban Greenways Workshop, Paris France.
- 2012 Advancing urban sustainability theory and action: Challenges and opportunities. Symposium on Urban Ecology & Sustainability in China and the West, Shanghai China.
- 2012 Sustainability science, education, and action: Tales of water from a desert city. Georgetown University, Washington DC.
- 2013 A knowledge-to-action research story from a hard-working urban wetland. CAP LTER All Scientist Meeting and Poster Session, Scottsdale AZ.
- 2013 Urban Sustainability in Action: First Phoenix, then the world! Kansas State University, Manhattan KS.
- 2013 When plant-mediated water flows increase biogeochemical efficiency in an aridland urban treatment wetland, and pleasantly surprise the engineers. Ecological Society of America, Minneapolis MN.
- 2013 Expanding from urban ecology into urban sustainability, and from research to action. INTECOL & British Ecological Society, London UK.
- 2014 Lessons from a hard-working urban wetland ecosystem in Phoenix: The Tres Rios constructed treatment wetland system. USDA Agricultural Research Service, Maricopa AZ.
- 2014 Advancing urban sustainability theory and action: Challenges and opportunities. National Socio-Ecological Synthesis Center, Annapolis MD.
- 2014 Wetland ecosystem research at the City of Phoenix Tres Rios constructed treatment wetland. City of Phoenix Water Services Department, Phoenix AZ.
- 2014 Working urban wetlands: Where green and blue infrastructure meet to solve problems. ENGEES, University of Strasbourg, Strasbourg France.
- 2014 Control of water and solute movement by plants in “working” urban wetlands. Department of Oceanography & Coastal Sciences, Louisiana State University, Baton Rouge LA.
- 2015 The energy-water nexus in Phoenix: A story of trade-offs or heads in the sand. National Council for Science & the Environment. Washington DC.
- 2015 Challenges for sustainability when urbanization does make a city. Wits Rural Facility & Timbavati Health Complex, Acornhoek, South Africa.
- 2015 Urban sustainability in the Global South: Urban isn’t just about about cities. Tulane University, Center for Bio-Environmental Research.
- 2015 Challenges for sustainability when urbanization does make a city. Chengdu University, Chengdu China.
- 2015 Moving from an ecology of cities to an ecology for cities to promote urban sustainability: The importance of systemic inertias. Chinese Academy of Sciences, Beijing China.
- 2015 Tomorrow’s cities: Infrastructure to enhance urban sustainability. Tempe Center for the Arts, Tempe AZ.
- 2015 I. The world’s shortest primer on urban ecology & sustainability; II. My retirement speech, 2030. Ohio State University, Columbus OH.
- 2016 Urban systems science in the 21st century: Because *Homo sapiens* matters. Planetary Design: Climate 3.0 workshop, Tempe AZ.
- 2016 Tomorrow’s cities: Infrastructure to enhance urban sustainability. CAP LTER All Scientists Meeting, Tempe AZ.
- 2016 Water infrastructure in the Valley of the Sun. Phoenix Art Museum. Phoenix AZ.
- 2016 Turquoise infrastructure in cities: How a constructed treatment wetland provides key ecosystem services in Phoenix AZ USA. INTECOL Wetlands Conference, Changshu, China.
- 2017 Sustainability and environmental restoration. Greater Everglades Ecosystem Restoration Conference, Ft. Lauderdale FL.

- 2017 Long-term urban ecological change: Slow rates, lags, and legacies. Ecological Society of America Conference, Portland OR.
- 2018 Water-related research in the CAP LTER Program. Arizona Hydrological Society, Tempe AZ.
- 2018 Urban ecological infrastructure as a bridge between urban ecology and landscape ecology. International Association of Landscape Ecology Conference, Chicago IL.
- 2018 Urban ecological infrastructure and ecosystem services in Phoenix. Generous Cities Summit, Tempe AZ.
- 2018 Social-ecological connectivity in urban ecosystems: What have we learned from 20 years of LTER research in Phoenix? Ecological Society of America Conference, New Orleans LA.
- 2018 Investigating urban ecology and sustainability through the lens of Urban Ecological Infrastructure. Georgia State University, Atlanta GA.
- 2018 40 years of long-term ecological research and 20 years of long-term urban research in the U.S. University of Montpellier, France.
- 2018 Solving urban sustainability challenges with Urban Ecological Infrastructure. University of Montpellier, France.
- 2018 Urban systems science is completely dependent on high-quality LULCC data. University of Montpellier, France.

PAPERS PRESENTED:

- 1983 The effects of pH on survivorship and growth rate in the fingernail clam *Musculium partumeium* (Say) (Bivalvia: Pisidiidae), Virginia Academy of Science Meeting, Fairfax, VA.
- 1984 A simulation model of salt marsh water column dynamics, Southeastern Estuarine Research Society Meeting , Beaufort, SC.
- 1984 Data synthesis and preliminary results from a model of salt marsh water column dynamics, Long Term Ecological Research Site Conference, Georgetown, SC.
- 1985 Subtidal advective water flux as a potentially important nutrient input to southeastern salt marsh estuaries, 40th Annual Meeting, American Society of Limnology and Oceanography, Minneapolis, MN.
- 1986 The use of habitat-specific simulation models of estuarine nitrogen cycling for ecosystem management in the Mississippi Deltaic Plain. 10th Annual Meeting, The Coastal Society, New Orleans, LA.
- 1987 Primary production and marsh-water column exchanges along the salinity gradients of two Louisiana estuaries. 9th Biennial Meeting, Estuarine Research Federation Conference, New Orleans, LA.
- 1987 A method for directly quantifying nutrient and material exchanges between wetlands and the water column in microtidal Gulf Coast estuaries. Gulf Estuarine Research Society, 9th Biennial Meeting, Estuarine Research Federation, New Orleans, LA.
- 1988 Cumulative impact assessment in bottomlands of the Tensas Basin, LA: Hydrologic and water quality changes related to forest clearing. Int. Assoc. Landscape Ecology, Annual Meeting, Albuquerque, NM.
- 1988 Marsh creation in coastal Louisiana using sediment fences: Project design and preliminary results. 9th Annual Meeting, Society of Wetland Scientists, Washington, D.C.
- 1989 Nutrient exchange dynamics on a regularly exposed intertidal seagrass bank in Florida Bay, FL. Spring Meeting, Gulf Estuarine Research Society, Cocodrie, LA.
- 1989 Relating ephemeral wetland loss in Louisiana estuaries to periodic climatological forcing by El Niño-Southern Oscillation events. Annual Meeting, American Society of Limnology and Oceanography, Fairbanks, AL.
- 1989 Water levels and wetland loss: Long-term functional losses related to "habitat dilution" and short-term "ephemeral" losses related to environmental forcing. 10th Biennial International Estuarine Research Federation Conference, Baltimore, MD.
- 1989 Intertidal seagrass banks as critical estuarine habitat: Evidence from a nutrient exchange study in Florida Bay, FL. 10th Biennial International Estuarine Research Federation Conference, Baltimore, MD.
- 1990 A new design for relating landscape-level pattern and ecosystem processes using remotely sensed data and simulation models. Annual Meeting, American Society of Limnology and Oceanography, Williamsburg, VA.
- 1990 Pattern and process at the landscape level are detected by simultaneous analysis across both spatial and temporal scales. Fall Meeting, Southeastern Estuarine Research Society, Jekyll Island, GA.
- 1990 Examining subsystem interactions in a Southeastern salt marsh estuary using a dynamic budget model. Long Term Ecological Research Special Topics seminar, Columbia, SC.
- 1990 A technique for simultaneous detection of spatial and temporal variability at the landscape level. Special seminar, Graduate Program in Marine Biology, College of Charleston, Charleston, SC.
- 1991 Generating hypotheses about a salt marsh estuarine ecosystem using a dynamic nutrient budget model. Spring Meeting, Southeastern Estuarine Research Society, Gulf Breeze, FL.
- 1991 Distinguishing spatial and temporal variability in aquatic transect data using a Variable Resolution Pattern Similarity Test. International Association of Landscape Ecology World Congress 1991, Ottawa, Canada.
- 1991 Spatial variability in marsh-open water interactions in a southeastern Georgia salt marsh estuary. 11th Biennial International Estuarine Research Federation Conference, San Francisco, CA.
- 1992 Spatial and temporal variability in long-term sediment elevation changes in three mid-Atlantic estuaries. Southeastern Estuarine Research Society and Atlantic Estuarine Research Society Joint Conference, Topsail Beach, NC.

- 1993 Geomorphology and subsystem interactions in a transgressive salt marsh. American Society of Limnology & Oceanography and Society of Wetland Scientists 1993 Annual Meeting, Edmonton, Alberta, Canada.
- 1995 Relating Structure and Function Across Spatial Scales in Estuarine Ecosystems. Gulf Estuarine Research Society, Lafayette, LA.
- 1995 Using multiple spatial indices to relate structure and function in estuarine ecosystems. 13th Biennial International Estuarine Research Federation Conference, Corpus Christi, TX.
- 1997 Salinity and organic matter transformations as controls on wetland-water column interactions in a south Florida mangrove forest. Gulf Estuarine Research Society, Ocean Springs, MS.
- 1997 Quantifying the effects of low-level nutrient enrichment on pristine Everglades wetlands *in situ* flumes and phosphorus dosing. Ecological Society of America, Albuquerque, NM.
- 1997 The exchange of nutrients and materials at the prop root-water interface in red mangroves. Estuarine Research Federation, Providence, RI.
- 1998 How freshwater Everglades wetlands mediate changes in water flow and nutrient loadings to the Florida Bay estuary. Gulf Estuarine Research Society, Galveston TX.
- 1999 How freshwater Everglades wetlands mediate the quality of recently enhanced water inflows to the Florida Bay estuary. Gulf Estuarine Research Society, Baton Rouge, LA.
- 1999 Quantifying the effects of enhanced water inflows on wetlands throughout the Southern Everglades. Wetland Biogeochemistry Symposium, Ft. Lauderdale, FL.
- 2000 Regional Controls of Population and Ecosystem Dynamics in an Oligotrophic Wetland-dominated Coastal Landscape - Introducing a New Long Term Ecological Research (LTER) project in the Coastal Everglades, International Association of Landscape Ecology, Ft.Lauderdale, FL.
- 2000 Ecosystem-level effects of enhancing water inflows to wetlands of the Southern Everglades. INTECOL International Wetlands Conference, Quebec City, Quebec, Canada.
- 2000 Regional Controls of Population and Ecosystem Dynamics in an Oligotrophic Wetland-dominated Coastal Landscape - Introducing a New Long Term Ecological Research (LTER) project in the Coastal Everglades. Greater Everglades Ecosystem Restoration Symposium, Naples, FL.
- 2001 Spatial and temporal variability in nutrient loading and exchanges in a hydrologically restored Southern Everglades marsh. Estuarine Research Federation, St.Petersburg, FL.
- 2002 Isolating biogeochemical and hydrologic effects of increasing freshwater inputs to Southern Everglades wetlands using long-term records of sawgrass productivity. Ecological Society of America, Tucson AZ.
- 2003 Relating water flow to wetland processes and Everglades Restoration: Getting the water REALLY right in the River of Grass. GEER Conference, Tampa FL.
- 2003 Using the existing US LTER Network to promote scientific collaboration and cooperation across the Caribbean: The FCE LTER Caribbean Initiative. Association of Caribbean Marine Labs Conference, Port of Spain, Trinidad.
- 2004 How hydrologic restoration may affect the charismatic macrophyte of the Everglades (sawgrass). INTECOL Wetlands Conference, Utrecht, The Netherlands.
- 2004 The Importance of Socio-ecological Research Linkages in the Rehabilitation of Human-dominated Landscapes: Examples from the Florida Everglades. National Conference on Ecological Restoration, Orlando FL.
- 2005 Incorporating Socio-ecological Considerations into Environmental Restoration Efforts: Examples from the Florida Everglades. Wetland Biogeochemistry Conference, Baton Rouge, LA.
- 2009 Everglades Environmental History: Integrating ecological and historical approaches. World Congress on Environmental History, Copenhagen Denmark.
- 2010 How Internal Processes Affect Resilience to State Change in High-Disturbance Wetland Ecosystems. International Conference on Flood Pulsed Wetlands, Maun, Botswana.
- 2010 Phosphorus, food, and future challenges: Sustainable solutions to avoiding famine through closing the human phosphorus cycle. Ecological Society of America, Pittsburg PA.
- 2011 How internal processes affect resilience to state change in high-disturbance wetland ecosystems. International Conference on Resilience Science, Tempe AZ.
- 2011 The Dynamics of Water in Arid Cities, Part I: Overview of the Central Arizona-Phoenix (CAP) LTER research at the water-climate nexus. Ecological Society of America, Austin TX.
- 2013 A constructed treatment wetland provides key urban ecosystem services even in a hot, dry climate. Ecological Society of America, Minneapolis MN.
- 2014 Serendipitous efficiencies in ecosystem service provision by a constructed treatment wetland in a hot, dry city. Joint Aquatic Sciences Meeting, Portland OR.
- 2014 Moving from the ecology of cities to ecology for cities: Integrating urban ecology, design, and decision-making for urban sustainability. Ecological Society of America, Sacramento CA.
- 2014 Moving from an ecology *of* cities to an ecology *for* cities to promote urban sustainability: A global approach and a novel transdisciplinary strategy. I-LTER All Scientist Meeting of the Americas, Valdivia Chile.
- 2015 Turquoise infrastructure in cities: How a constructed treatment wetland provides key urban ecosystem services in Phoenix AZ. Ecological Society of America, Baltimore MD.
- 2016 A research framework for exploring urban ecology and sustainability that is based on “design with nature” infrastructure. Ecological Society of America, Ft. Lauderdale FL.

- 2016 A research framework for exploring urban ecology and sustainability that is based on “design with nature” infrastructure and a reconceptualization of urban ecosystem services. International LTER Conference, Skukuza, South Africa.

PUBLICATIONS (REFEREED):

- Hornbach, D.J. and D.L.Childers, 1986. Life history variations in a stream population of *Musculium partumeium* (Bivalvia: Pisidiidae). Jour. North Am.Benthol. Soc. 5:263-271.
- Hornbach, D.J. and D.L.Childers, 1987. The effects of acidification on life-history traits of the freshwater clam *Musculium partumeium* Say, (Bivalvia: Pisidiidae). Can. Jour. Zool. 65:113-121.
- Childers, D.L. and H.N.McKellar, Jr., 1987. A simulation of salt marsh water column dynamics. Ecol. Mod. 36:211-238.
- Childers, D.L. and J.W.Day, Jr., 1988. A flow-through flume technique for quantifying nutrient and materials fluxes in microtidal estuaries. Est. Coast. Shelf Sci. 27(5):483-494.
- Whiting, G. and D.L.Childers, 1989. Subtidal advective water as a potentially important nutrient input to southeastern U.S.A. salt marsh estuaries. Est. Coast. Shelf Sci. 28:417-431.
- Gosselink, J.G.,L.C.Lee, R.Boumanns, D.Burdick, D.Childers, D.Cushman, S.Fields, S.Hamilton, M.Koch, G.P.Shaffer, N.Taylor, and J.Visser, 1989. Cumulative impact assessment and management in bottomlands of the Tensas Basin, LA. In: J.C.Lefevre [ed.] Conservation and Development: The Sustainable use of Wetland Resources. Proc. 3rd Int. Wetl. Conf., Rennes, France. p. 53-54.
- Childers, D.L. and J.G.Gosselink, 1990. Assessment of cumulative impacts to water quality in a forested wetland landscape. Jour. Environ. Qual. 19(3):455-464.
- Gosselink, J.G., Gary P.Shaffer, Lyndon C.Lee, David Burdick, Daniel Childers, Nancy Liebowicz, Susan Hamilton, Roel Boumanns, Douglas Cushman, Sherri Fields, Marguerite Koch, and Jenneke Visser, 1990. Can we manage cumulative impacts? Experience from a forested wetland watershed. Bioscience 40(8):588-600.
- Childers, D.L. and J.W.Day, Jr., 1990. Marsh-water column interactions in two Louisiana estuaries. I. Sediment dynamics. Estuaries 13(3):393-403.
- Childers, D.L. and J.W.Day, Jr., 1990. Marsh-water column interactions in two Louisiana estuaries. II. Nutrient dynamics. Estuaries 13(3):404-417.
- Childers, D.L., J.W.Day, Jr., and R.L.Muller, 1990. Relating climatological forcing to coastal water levels in Louisiana estuaries and the potential importance of El Niño-Southern Oscillation events. Climate Res. 1(1):31-42.
- Childers, D.L. and J.W.Day, Jr., 1991. The dilution and loss of wetland function associated with conversion to open water. Wetl. Ecology and Manage. 3:163-171.
- Sklar, F.H., R.Costanza, D.L.Childers, E.B.DeBellevue, M.S.Jacobsen, T.Maxwell, and M.L.White, 1992. Developments in regional scale simulation and analysis: Case studies from coastal wetland ecosystems. In: R.B.Singh [ed.], Environmental Monitoring--Application of Remote Sensing and GIS.
- Dame, R., D.L.Childers, and E.T.Koepfler, 1992. A geohydrologic continuum theory for the spatial and temporal evolution of marsh-estuarine ecosystems. Neth. J. Sea Res. 30:63-72.
- Childers, D.L., H.N.McKellar, Jr., R. Dame, F.Sklar, and E.Blood, 1993. A dynamic nutrient budget of subsystem interactions in a salt marsh estuary. Est. Coast. Shelf Sci. 36:105-131.
- Childers, D.L., S.Cofer-Shabica, and L.Nakashima, 1993. Spatial and temporal variability in marsh-water column interactions in a Georgia salt marsh. Mar. Ecol. Prog. Ser. 95(1,2):25-38.
- Childers, D.L., F.H.Sklar, B.Drake, and T.Jordan, 1993. Seasonal measurements of sediment elevation in three Mid-Atlantic estuaries. Jour. Coastal Res. 9(4):986-1003.
- Cofer-Shabica, S., L.D.Nakashima, J.W.Day, Jr., and D.L.Childers, 1993. Assessment of technological approaches to measuring wetlands changes and their implications for developing management strategies. In: [O.T.Magoon, W.S.Wilson, H.Converse, and L.T.Tobin, eds.] Coastal Zone '93, ASCE, New York, NY. p. 2126-2137.
- Childers, D.L., 1994. Fifteen years of marsh flumes - A review of marsh-water column interactions in Southeastern USA estuaries. In: [W.Mitsch, ed.] Global Wetlands. Elsevier Publ., Amsterdam p. 277-294.
- Childers, D.L., F.H.Sklar, and S.E.Hutchinson, 1994. The collection and statistical treatment of scale-dependent aquatic transect data in estuarine landscapes. Landscape Ecol. 9(2):127-141.
- Day, J.W., C.J.Madden, R.R. Twilley, R.F. Shaw, B.A. McKee, M.J. Dagg, D.L. Childers, R.C. Raynie, and L.J. Rouse, 1995. The influence of Atchafalaya River discharge on Fourleague Bay, Louisiana (USA). In [K.R.Dyer and R.J.Orth, eds.] Changes in Fluxes in Estuaries, ECSA 22/ERF Symposium Series, Olsen and Olsen Publ, Fredensborg, Denmark. pp.151-160.
- Daoust, R. and D.L.Childers, 1998. Quantifying aboveground biomass and estimating productivity in nine Everglades wetland macrophytes using a non-destructive allometric approach. Aquatic Botany. 62:115-133.
- Childers, D.L., S.Davis, V.Rivera-Monroy, and R.R.Twilley, 1999. Wetland-water column interactions and the biogeochemistry of estuary-watershed coupling around the Gulf of Mexico. In [T.S. Bianchi and R.Twilley, eds.]: Biogeochemistry of Gulf of Mexico Estuaries. John Wiley & Sons, New York, NY. pp. 211-235.
- Daoust, R. and D.L.Childers, 1999. Controls on emergent macrophyte composition, abundance, and productivity in freshwater Everglades wetland communities. Wetlands 19:262-275.
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- Childers, D.L., J.W. Day, Jr., and H.N. McKellar, Jr, 2000. Twenty more years of marsh and estuarine flux studies: Revisiting Nixon (1980). In: [M.P. Weinstein and D.Q. Kreeger, eds.] Concepts and Controversies in Tidal Marsh Ecology, p. 385-414.
- Childers, D.L., R.D. Jones, J. Trexler, C. Buzzelli, S. Dailey, A.L. Edwards, E. Gaiser, K. Jayachandaran, A. Kenne, D. Lee, J. Meeder, J. Pechman, A. Renshaw, J. Richards, M. Rugge, L. Scinto, P. Sterling, and W. Van Gelder, 2001. Quantifying the effects of low-level phosphorus enrichment on unimpacted Everglades wetlands with *in situ* flumes and phosphorus dosing. In: [K. Porter and J. Porter, eds.], The Everglades Hydroscape, St. Lucie Press. P. 127 – 152.
- Davis, S.E. III, D.L. Childers, J.W. Day, Jr., D.T. Rudnick, and F.H. Sklar, 2001. Wetland-water column exchanges of carbon, nitrogen, and phosphorus in a Southern Everglades dwarf mangrove. Estuaries 24(4):610-622.
- Davis, S.E. III, D.L. Childers, J.W. Day, Jr., D.T. Rudnick, and F.H. Sklar, 2001. Nutrient dynamics in vegetated and unvegetated areas of a southern Everglades mangrove creek. Est. Coast. Shelf Sci. 52:753-768
- Noe, G., D.L. Childers, and R.D. Jones, 2001. Phosphorus biogeochemistry and the impacts of phosphorus enrichment: Why are the Everglades so unique. Ecosystems 4(7):603-624.
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- Davis, S.E. III, D.L. Childers, J.W. Day, Jr., D.T. Rudnick, and F.H. Sklar, 2003. Factors affecting the concentration and flux of materials in two southern Everglades mangrove wetlands. Marine Ecology Progress Series 253:85-96.
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- Beck, M.W., K.L. Heck, K.W. Able, D.L. Childers, D.B. Eggleston, B.M. Gillanders, B.S. Halpern, C.G. Hays, K. Hoshino, T.J. Minello, R.J. Orth, P.F. Sheridan, and M.P. Weinstein, 2003. The role of nearshore ecosystems as fish and shellfish nurseries. Issues in Ecology 11:1-12.
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- Noe, G.B., L.J. Scinto, J. Taylor, D.L. Childers, and R.D. Jones. 2003. Phosphorus cycling and partitioning in an oligotrophic Everglades wetland ecosystem: A radioisotope tracing study. Freshwater Biology 48:1993-2008.
- Gaiser, E.E., L. J. Scinto, J. H. Richards, K. Jayachandran, D. L. Childers, J. C. Trexler, and R. D. Jones, 2004. Phosphorus in periphyton mats provides the best metric for detecting low-level P enrichment in an oligotrophic wetland. Water Res. 38:507-516.
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- Davis, S.E., J.E. Cable, D.L. Childers, C. Coronado-Molina, J.W. Day, C.D. Hittle, C.J. Madden, D. Rudnick, E. Reyes, F. Sklar, 2004. Importance of Episodic Storm Events in Controlling Ecosystem Structure and Function in a Gulf Coast Estuary. Jour. Coastal Res. 20(4):1198-1208.
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- Davis, S.M., D.L. Childers, J. Lorenz, and T.E. Hopkins, 2006. A conceptual model of ecological interactions in the mangrove estuaries of the Florida Everglades. Wetlands 25(4):832-842.
- Rubio, G. and D.L. Childers, 2006. Decomposition of *Cladium jamaicense*, *Eleocharis* sp., and *Juncus roemerianus* in the estuarine ecotones of the Florida Everglades. Estuaries 29(2):1-12.
- Knapp, A.K., J.M. Briggs, and D.L. Childers, 2007. Estimating aboveground net primary production in grassland and herbaceous dominated systems. In: [T.J. Fahey & A.K. Knapp, eds.] Principles and Standards for Measuring Net Primary Production in Long-term Ecological Studies.
- Childers, D.L., 2006. A synthesis of long-term research by the Florida Coastal Everglades LTER Program. Hydrobiologia 569(1):531-544.
- Childers, D.L., D. Iwaniec, D. Rondeau, G. Rubio, E. Verdon, and C. Madden. 2006. Primary productivity in Everglades marshes demonstrates the sensitivity of oligotrophic ecosystems to environmental drivers. Hydrobiologia 569(1):273-292.
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