



## MEMORANDUM

Agenda Item 15(D)1

TO: Honorable Chairman Jose "Pepe" Diaz and  
Members, Board of County Commissioners

DATE: July 7, 2022

FROM: Honorable Harvey Ruvin, Clerk  
Circuit and County Courts

SUBJECT: Ballot Appointment of  
Members to the Land  
Acquisition Selection  
Committee

Basia Pruna, Director  
Clerk of the Board Division

Please select two (2) nominees from the attached ballot to fill vacancies on the Land Acquisition Selection Committee (LASC) as result of the term expiration of Drs. Mark Kraus and Kevin Whelan.

Section 24-50.6 of the Code provides that the Board of County Commissioners appoint members to the LASC from a list of candidates recommended by the County Mayor. As such, Mayor Daniella Levine Cava has submitted the names of eligible candidates recommended by one or more bona fide environmental, civic, or professional organizations from which a replacement can be selected to fill the vacancies. The nominees presented are as follows:

1. Dr. George E. Fitzpatrick - recommended by David Garcia of the Returned Peace Corps Volunteers of South Florida, Inc.
2. Dr. Stephen E. Davis, III - recommended by Jose Francisco Barros of the Tropical Audubon Society.
3. Mr. Eduardo Varona - recommended by Mayor Tim Meerbot of the Town of Cutler Bay.
4. Mr. Daniel Valle - recommended by Wendy Costa of Richmond Heights 9-12.

The memorandum from Mayor Daniella Levine Cava and the resumes and letters of recommendations have been attached for your review.

BP/sj  
Attachments

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**BALLOT**  
Miami-Dade County, Florida

**July 7, 2022**

**LAND ACQUISITION SELECTION COMMITTEE (LASC)**

**NOMINEES FOR APPOINTMENT**  
**Vote ( ✓ ) for Two (2)**

<b>Dr. George E. Fitzpatrick</b>	<input type="checkbox"/>
<b>Dr. Stephen E. Davis, III</b>	<input type="checkbox"/>
<b>Mr. Eduardo Varona</b>	<input type="checkbox"/>
<b>Mr. Daniel Valle</b>	<input type="checkbox"/>

**Commissioner** \_\_\_\_\_  
(Please *sign ballot*)


**Commission District Number** \_\_\_\_\_

# Memorandum



**Date:** May 19, 2022

**To:** Harvey Ruvin  
Clerk of the Board

**From:** Daniella Levine Cava  
Mayor 

**Subject:** Candidates for Appointment to the Environmentally Endangered Lands Acquisition Selection Committee

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The Land Acquisition Selection Committee (Committee) was established by Chapter 24-50.6 of the Code of Miami-Dade County (Code) to make recommendations to the Board of County Commissioners (Board) regarding land acquisitions for the Environmentally Endangered Lands (EEL) Program, propose expenditures from the EEL Trust Funds, and provide additional guidance to fulfill the purposes of the EEL Program.

The Committee is composed of seven regular members and one alternate member. The term of two committee members, Dr. Mark Kraus, and Dr. Kevin Whelan has ended per section 24-50.6(2)(b) of the Code thereby creating two vacancies. Pursuant to Chapter 24-50 of the Code, I am hereby submitting four candidates that meet the required qualifications. The Board shall vote to appoint two of the four candidates to serve on the Committee as regular members.

The candidates for the member vacancies are:

1. Dr. George E. Fitzpatrick, 531 Hunting Lodge Drive, Miami Springs, Florida 33166
2. Dr. Stephen E. Davis, III, 18001 Old Cutler Road, Suite 625, Palmetto Bay, Florida 33157
3. Eduardo Varona, 8861 SW 196 Drive, Cutler Bay, Florida 33157
4. Daniel Valle, 16004 SW 97 Terrace, Miami, Florida 33196

Chapter 24-50.6 of the Code also provides that preference be given to candidates that have a record of service in environmental or civic affairs in Miami-Dade County and have been recommended by one or more bona fide environmental, civic, or professional organizations, as such:

- Dr. Fitzpatrick has been recommended by David Garcia of the Returned Peace Corps Volunteers of South Florida, Inc.
- Dr. Davis has been recommended by Jose Francisco Barros of the Tropical Audubon Society.
- Mr. Varona has been recommended by Mayor Tim Meerbot of the Town of Cutler Bay.
- Mr. Valle has been recommended by Wendy Costa of Richmond Heights 9-12.

The candidates' resumes and letters of recommendation are attached. Please schedule the selection and appointment for a Board agenda as soon as possible.

## Attachments

c: Geri Bonzon-Keenan, County Attorney  
Gerald K. Sanchez, First Assistant County Attorney  
Jess M. McCarty, Executive Assistant County Attorney  
Office of the Mayor Senior Staff  
Lourdes M. Gomez, Director, Department of Regulatory and Economic Resources  
Josenrique Cueto, Deputy Director, Department of Regulatory and Economic Resources  
Rashid Istambouli, Assistant Director, Department of Regulatory and Economic Resources  
Basia Pruna, Director, Clerk of the Board  
Eugene Love, Agenda Coordinator  
Jennifer Moon, Chief, Office of Policy and Budgetary Affairs  
Yinka Majekodunmi, Commission Auditor

**George E. Fitzpatrick**  
**531 Hunting Lodge Drive**  
**Miami Springs, Florida 33166**  
**Telephone: 954-683-1998**  
**E-mail: fitz@ufl.edu**

**EDUCATION**

B.A. (1968), The College of New Jersey, Ewing, NJ  
M.A. (1972), The College of New Jersey, Ewing, NJ  
Ph.D. (1975), Rutgers University, New Brunswick, NJ

**ACADEMIC  
EXPERIENCE**

2011-present	<b>Professor Emeritus of Environmental Horticulture</b> , University of Florida
2000-2004	<b>Program Coordinator</b> , University of Florida Academic Program at Homestead
1995-2011	<b>Professor of Environmental Horticulture</b> , University of Florida
1991-2000	<b>Program Coordinator</b> , University of Florida Academic Program at Fort Lauderdale
1998-98	<b>Visiting Instructor</b> , University of the Virgin Islands, St. Croix, U.S. Virgin Islands
1995-95	<b>Visiting Instructor</b> , Universidad de Costa Rica, San Jose, Costa Rica
1984-95	<b>Associate Professor of Environmental Horticulture</b> , University of Florida
1979-84	<b>Assistant Professor of Environmental Horticulture</b> , University of Florida
1976-79	<b>Assistant Research Scientist</b> , Entomology and Nematology, University of Florida
1975-76	<b>Postdoctoral Research Associate</b> in Forest Entomology, Mississippi State University

**PROFESSIONAL  
AFFILIATIONS**

American Society for Horticultural Science  
Florida State Horticultural Society  
International Society of Arboriculture  
International Palm Society

**PROFESSIONAL  
SERVICE**

North South Institute, Technical Advisory Board member, 2009-present

Florida State Horticultural Society, Co-Editor, *Proceedings of the Florida State Horticultural Society*, 2015-2018. Associate Editor, 1986-94

American Society for Horticultural Science Certified Horticulturist Board. Board member, 2006-2016

Editorial Board Member, *Compost Science and Utilization*, 1993-2011

American Society for Horticultural Science Horticultural Landmarks Screening Committee. Member, 2004-2012; Chair, 2008-2009; 2010-2012

Florida State Horticultural Society Student Outstanding Paper Award Selection Committee. Member, 2007-2010

American Society for Horticultural Science Education Publication Award Committee. Chair, 2002-2004

American Society for Horticultural Science Collegiate Activities Committee Member, 2001-2004

Horticulture Certification Board member, American Registry of Certified Professionals in Agronomy, Crops and Soils, 1991-94; American Society for Horticultural Science, 1997-2000

American Society for Horticultural Science Consumer Horticulture Working Group, Chair, 1991-93

American Society for Horticultural Science Extension Advisory Committee Member, 1991-93

## **HONORS AND AWARDS**

**NACTA Teaching Award of Merit**, North American Colleges and Teachers of Agriculture, 2009

**Academy of Teaching Excellence**, College of Agricultural and Life Sciences, University of Florida, 2008

**Outstanding Undergraduate Advisor of the Year Award**, College of Agricultural and Life Sciences, University of Florida, 2001

**Teaching Incentive Program Award**, University of Florida, 1996

**Rufus Chaney Award for Research Excellence**, U.S. Composting Council, 1995

**Outstanding Paper Award**, Florida State Horticultural Society, 1984

Election to the **Society of the Sigma Xi**, Rutgers University Chapter, 1975

## **COURSES TAUGHT**

Survey of Arboriculture ORH 4932, 2004-2010  
Landscape Practices and Arboriculture, ORH 4235C, 1989-1998  
Landscape and Turfgrass Management, ORH 4236C, 1999-2005  
Principles of Composting Technology PLS 4404C, 1991-2010  
Advanced Composting Technology PLS 5405C, 2002-2010  
Environmental Plant Identification and Use ORH 3513C, 2004-2011  
Palm Production and Culture ORH 4321C, 2004-2011  
Palm Biology and Culture ORH 5322C, 2006-2011  
Introductory Nursery Management ORH 3254C, 1997-2001  
Florida Native Landscaping ORH 3815C, 2003-2010  
Nursery Operations and Management, ORH 4253C, 1994-1997  
Horticulture Seminar, ORH 4932, 1987-1998

## SELECT RECENT PUBLICATIONS

### Book, Editor

Fitzpatrick, George E. (ed.). 2013. Horticulturist's Certification Study Guide, Second printing. American Society for Horticultural Science Press, Alexandria, Va. 154 p.

### Selected Book, Chapter Author or Coauthor

Fitzpatrick, George E. and Susan Steinberg Wright. 2010. Landscape Design and Maintenance. Chapter 1, pp. 1-15 in Fitzpatrick, George E. (ed.). 2010. Horticulturist's Certification Study Guide. American Society for Horticultural Science Press, Alexandria, Va. 154 p.

Panter, Karen L., Mary Lamberts, Janet C. Cole and George E. Fitzpatrick. 2010. Production of Fruits, Vegetables, Turf and Ornamental Plants. Chapter 2, pp. 17-38 in Fitzpatrick, George E. (ed.). 2010. Horticulturist's Certification Study Guide. American Society for Horticultural Science Press, Alexandria, Va. 154 p.

Fitzpatrick, George E. 2010. Monitoring and Testing. Chapter 5, pp. 73-80 in Fitzpatrick, George E. (ed.). 2010. Horticulturist's Certification Study Guide. American Society for Horticultural Science Press, Alexandria, Va. 154 p.

Lamberts, Mary and George E. Fitzpatrick. 2010. Diagnosing and Managing Plant Problems. Chapter 6, pp. 81-102 in Fitzpatrick, George E. (ed.). 2010. Horticulturist's Certification Study Guide. American Society for Horticultural Science Press, Alexandria, Va. 154 p.

### Selected Peer Reviewed Journal Publications

Van Treese II, Jeffrey W., Andrew K. Koeser, George E. Fitzpatrick, Michael T. Olexa and Ethan J. Allen. 2017. A review of the impact of roadway vegetation on drivers' health and well-being and the risks associated with single-vehicle crashes. *Arboricultural Journal*. DOI:10.1080/03071375.2017.1374591

Sanagorski, Laura A. and George E. Fitzpatrick. 2014. Introducing tree structural defect recognition to youth: an exploration of feasibility through a comparison of two teaching methods. *HortTechnology* 24(1):124-131.

Fitzpatrick, George E., Eva C. Worden and Wagner A. Vendrame. 2005. Historical development of composting technology during the 20<sup>th</sup> century. *HortTechnology* 15(1):48-51.

## Civic and Governmental Service

Member, Florida Department of Environmental Protection Technical Advisory Group for the Review and Revision of the Florida Compost Rule (F.A.C. 62-709), 2007-2010

Land Preservation Advisory Board to the Board of County Commissioners of Broward County, Florida. Member, 2001-2009, Vice Chair, 2004-2006, Chair, 2006-2008

Victoria Park Civic Association. Member, 1979-2013, Member, Board of Directors, 1979-84, President, 1981-1982; 1987-1989

Council of Fort Lauderdale Area Civic Associations. Representative from Victoria Park Civic Association, 1981-84; 1987-89, First Vice President, 1982-1983, President, 1983-1984; 1988-1990

International Swimming Hall of Fame, Fort Lauderdale, Florida. Museum Construction Committee. Chair, 1989-1991

City of Fort Lauderdale General Obligation Bond Committee  
Committee Member, 1986-1987

Environmental Coalition of Broward County. Toxics Task Force Member, 1979-1981, President, 1983-1985

Broward County Environmental Quality Control Board. Board Member, 1981-87, Vice Chair, 1982-1984, Chair, 1984-1986

Urban Wilderness Advisory Board to the Board of County Commissioners of Broward County, Florida. Member, 1978-1983, Vice Chair, 1979-1982, Chair, 1982-1983

Water Resources Advisory Board to the Board of County Commissioners of Broward County, Florida. Board Member, 1980-1989

City of Fort Lauderdale Technical Advisory Committee for Sludge Processing. Board member, 1981-1982

## INTERNATIONAL ACTIVITIES

October, 2018. **Spain.** Horticultural Study Tour of the Andalusia Region. Visited horticultural operations in southern Spain, including citrus, olives, almonds and vegetable crops in protected culture. This program was sponsored by University of Florida Extension.

June, 2017. **Dominican Republic.** Craft Instructor at Vacation Bible School at Iglesia Episcopal Divina Providencia, San Antonio de Guerra. This program was co-sponsored by St. Stephens Episcopal Church, Coconut Grove, Florida.

March, 2013. **Honduras.** Farm Study Tour sponsored by the North South Institute. Visited farms in Roatan; evaluated mango production systems.

July, 2011. **Commonwealth of Dominica.** Conducted a one-week short course on principles of composting for the Dominica Organic Agriculture Movement, sponsored by the Florida Association for Volunteer Action in the Caribbean and the Americas (FAVACA) and funded by the United States Agency for International Development.

January, 2011. **Jamaica.** Farm Study Tour sponsored by the North South Institute. Visited farms in St. Anne's Parish; evaluated banana and mango production systems.

June, 2009. **St. Vincent and the Grenadines;** visited the Botanical Garden at Georgetown, consulted with Ministry of Agriculture extension specialists, Evaluated vegetable crop production systems.

June, 2009. **Commonwealth of Dominica.** Visited the Botanical Gardens at Roseau, consulted with scientific staff of Caribbean Agricultural Research and Development Institute (CARDI) and North-South Institute. Visited the Hillsborough Horticultural Centre, consulted with the horticultural staff of the Windward Islands Banana Development and Exporting Company Ltd. (WIBDECO).

April-May, 2008. **Paraguay.** Assisted a cooperative association of Guarani indigenous people living in rural northeastern Paraguay in developing methods to extend the post harvest interval of the leaves of the caranday palm *Copernicia alba*. This project was sponsored by the Agricultural Council for Development International/Volunteers for Cooperative Assistance (ACDI-VOCA) and funded by the United States Agency for International Development.

March, 2008. **St. Lucia.** Visited the Ministry of Agriculture, consulted with extension specialists; evaluated vegetable crop production systems.

March, 2008. **Commonwealth of Dominica.** Visited the Botanical Gardens at Roseau, consulted with scientific staff of the Caribbean Agricultural Research and Development Institute (CARDI).

August, 1995. **Costa Rica.** Served as instructor in charge of the course *Basic Composting Technology* at the Centro de Investigaciones Agronomicas, Universidad de Costa Rica. This assignment was sponsored by the Florica Institute, in cooperation with the Government of Costa Rica.

July, 1993. **United Arab Emirates.** Presented seminars on compost production, evaluated tomato and cucumber production in greenhouse systems using pad and fan cooling. Evaluated mango and citrus production. This assignment was sponsored by Burr Engineering, Inc., in cooperation with the Government of the United Arab Emirates.

August, 1990. **Italy.** Delegate to the International Horticultural Congress, Firenze. Presented research results on horticultural substrate management.

October, 1988. **Colombia.** Delegate to the Interamerican Society for Tropical Horticulture Conference in Santa Marta. Presented findings of my research on alternative irrigation systems and fertilization management. Evaluated mango production systems at sites in the vicinity of Santa Marta.

October, 1987. **Bahamas.** Consultant to Taino Farms, Freeport, Grand Bahama Island. Field inspections and evaluation of nutritional program and soil issues for papaya production.

October, 1983. **Mexico.** Horticulture Study Tour sponsored by the American Society for Horticultural Science. Visited fruit crop production sites in the States of Coahuila, Nuevo Leon and Tamaulipas. Evaluated citrus production at sites in the lower elevations and pecan and apple production at the higher elevations.



March 15, 2021

Ms. Janet Gill  
Department of Regulatory and Economic Resources  
Environmentally Endangered Land Program  
701 N.W. 1<sup>st</sup> Court 5<sup>th</sup> Floor  
Miami, Florida 3313

Dear Ms. Gill,

I am writing this letter to strongly recommend George Fitzpatrick for an appointment to the Land Acquisition Selection Committee. There could be no doubt as to his qualification for the position.

I have known George personally for a number of years and besides having extensive knowledge in Environmental, Agriculture, and Resource Management issues; his friendliness, respect and honesty should prove invaluable to your Committee.

While pointing out the competence in his professional career, I would also like to mention he has for many years been very helpful as a Volunteer to our Returned Peace Corp Group. For many years George has served as a volunteer Naturalist when our Group hosts their annual Florida Everglades outing with under privileged children.

Without hesitation I would highly recommend Mr. Fitzpatrick for appointment to your committee.

Respectfully,

A handwritten signature in blue ink that reads "David Garcia". The script is cursive and fluid.

David Garcia

President  
Returned Peace Corps Volunteers of South Florida  
Dgarcia53@yahoo.com

**Curriculum Vitae for:  
Stephen E. Davis, III, Ph.D.**

*VP of Communications & Engagement, Senior Ecologist* - The Everglades Foundation  
18001 Old Cutler Road, Suite 625, Palmetto Bay, FL 33157  
Phone: 979-571-4739    E-mail: [sdavis@evergladesfoundation.org](mailto:sdavis@evergladesfoundation.org)

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**A. Training and Positions**

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**EDUCATION:**

- |      |   |
|------|---|
| 1999 | PhD: Department of Biological Sciences, Florida International University (FIU), Miami, FL 33199. <i>Dissertation Title:</i> The Exchange of Carbon, Nitrogen, and Phosphorus in Dwarf and Fringe Mangroves of the Oligotrophic Southern Everglades. (D.L. Childers, Dissertation Advisor) |
| 1995 | MS: Department of Biological and Environmental Sciences, Morehead State University (MSU), Morehead, KY 40351. <i>Thesis Title:</i> Water Quality Analysis of Seven Eastern Kentucky Reservoirs (B.C. Reeder, Thesis Advisor)  |
| 1993 | BS: Majors in Biology and Environmental Science, Minor in Chemistry. Georgetown College (GC), Georgetown, KY  |

**POSITIONS/APPOINTMENTS:**

- |              |   |
|--------------|---|
| 2020         | Vice President of Communications & Engagement, The Everglades Foundation, Palmetto Bay, FL.   |
| 2019-2020    | Communications Director, The Everglades Foundation, Palmetto Bay, FL.   |
| 2018-present | Courtesy Associate Professor, School of Environment Arts and Society, College of Arts, Sciences and Education at Florida International University, Miami, FL. |
| 2017-present | Senior Ecologist, The Everglades Foundation, Palmetto Bay, FL.  |
| 2014-2018    | Courtesy Faculty, Department of Biological Sciences: Florida International University, Miami, FL.   |
| 2009-2016    | Wetland Ecologist: The Everglades Foundation, Palmetto Bay, FL.   |
| 2007-2011    | Associate Professor: Department of Wildlife & Fisheries Sciences Texas A&M University, College Station, TX.   |
| 2001-2007    | Assistant Professor: Department of Wildlife & Fisheries Sciences Texas A&M University, College Station, TX.   |
| 1999-2001    | Post-doctoral Research Associate, Southeast Environmental Research Center and Florida Coastal Everglades LTER, Florida International University, Miami, FL.   |

**EXPERIENCE:**

- Science communication and facilitation
- Multi-PI project management
- Expert witness
- Personnel management
- Grant-writing

- Small-grants program management
- Graduate and undergraduate level teaching/mentoring
- Research proposal review and panel service
- Experimental mesocosm and microcosm studies
- Large-scale water quality and water level monitoring networks

## B. Teaching and Mentoring

### COURSES TAUGHT AT TEXAS A&M UNIVERSITY:

- WFSC 628: Wetland Ecology: every fall semester from 2001 to 2008
- WFSC 428: Wetland Ecosystem Management: spring semesters 2004 to 2009
- WFSC 489: Special Topics in Wetland Ecosystems (spring 2002 and 2003)
- WFSC 489: Special Topics in Tropical Coastal Ecology (Study Abroad in Belize; Summer 2002)
- Mangrove Ecology (taught to undergraduate students in Puerto Rico; Summer 2003)
- WFSC 689: Seminar in Ecology and Evolutionary Biology (Spring 2002)

### GRADUATE STUDENTS:

#### Committee Chair or Co-Chair

1. **Christina Bernal** (Chair): M.S. non-thesis; 2006-2008
  - Graduate Diversity Fellowship in Water Management and Hydrological Sciences Program
2. **Rachel Butzler** (Chair): M.S. candidate; 2002-2006
  - Thesis: "Spatial and Temporal Patterns of *Lycium carolinianum* Walt., the Carolina Wolfberry, in Salt Marshes of Aransas National Wildlife Refuge, Texas"
  - Sustainable Coastal Margin Program Graduate Fellowship (2002); Texas Water Resources Institute Mills Scholarship (2003); Texas Aquatic Plant Management Society Scholarship (2004); Texas A&M Wildlife & Fisheries Sciences "Best Masters Student" (2005); John Knauss Fellowship in Marine Policy (2005)
3. **Tyson Hart** (Chair): M.S. student; 2004-2007
  - Thesis: "Ecological Assessment of Nine Created Wetlands at the Big Brown Mine, Fairfield, TX"
  - TXU Environmental Fellowship (2004-2006); Co-PI of TXU Research Grant (\$71,000)
4. **Jenelle Hill** (Chair): M.S. non-thesis; 2006-2008
5. **George Gable** (co-Chair with D. Roelke): M.S. student; 2004-2007
  - Thesis: "Temporal and Spatial Effects of Reduced Tidal Exchanges and Freshwater Inflows on Physical, Chemical, and Biological Parameters in Mesquite Bay, TX"
  - EEB Travel Grant award to attend 2006 GERS Meeting in Corpus Christi, TX
6. **Carrie Miller** (co-Chair with D. Roelke): M.S. student; 2004-2007
  - Thesis: "Factors Influencing Algal Biomass in Hydrologically Dynamic Salt Ponds in a Subtropical Marsh"
  - Texas A&M Regent's Fellowship; EEB Travel Grant award to attend 2006 GERS Meeting; Graduate Student Research Award at 2006 GERS Meeting; WFSC Best Masters Student Award 2007
7. **Melissa Romigh** (Chair): M.S. student; 2002-2005
  - Thesis: "Organic Carbon Flux at the Mangrove Soil-Water Column Interface in the Florida Coastal Everglades"
  - Texas A&M Regent's Fellow (2002-2003); Texas Water Resources Institute Mills Scholarship (2003); Florida Coastal Everglades LTER student travel award (2003); ASLO student travel award (2004)

### GRADUATE COMMITTEES (33 FINISHED; 18 PhD)

Name	Dept./Institution	MS or PhD	Graduation Year
Bryan Allison	GEOG/TAMU	MS	05
Joshua Breithaupt	Env.Sci./USF	PhD	16
Jenipher Cate	MARB/TAMUG	MS	08
Jenny Cochran	WFSC/TAMU	MS	08

Sandra Bibiana Correa	WFSC/TAMU	PhD	12
Kim Crumpler (Hart)	FRSC/TAMU	MS	06
Jeremiah Dye	ENTO/TAMU	MS	05
Daniele Ebnother	GEOG/TAMU	MS	06
Wei-Ta Fang	RLEM/TAMU	PhD	04
Yang Feng	OCNG/TAMU	PhD	11
Marbelys Garriga	E&E/FIU	PhD	
Darcy Gibbons	MARB/TAMUG	MS	03
Lara Hinderstein	MARB/TAMUG	PhD	09
David Hoeinghaus	WFSC/TAMU	PhD	06
Greg Koch	BIO/FIU	PhD	12
Alyce Lee	OCNG/TAMU	PhD	09
Steve Lichlyter	GEOG/TAMU	MS	06
Paula Lorente	LAUP/TAMU	PhD	16
Stephanie MacDonald	OCNG/TAMU	MS	06
Israel Medina	OCNG/TAMU	PhD	11
Carmen Montaña	WFSC/TAMU	PhD	12
Jose Vicente Montoya	WFSC/TAMU	PhD	08
Jeff Morin	OCNG/TAMU	PhD	07
Nena Phillips	RLEM/TAMU	MS	06
Stephanie Powers	WFSC/TAMU	MS	10
Katie Roach	WFSC/TAMU	PhD	12
Clint Robertson	WFSC/TAMU	MS	07
Virginia Shervette	WFSC/TAMU	PhD	06
Matt Simmons	RLEM/TAMU	PhD	07
Christie Taylor	MARB/TAMUG	MS	08
Lisa Welsh (Williamson)	GEOG/TAMU	MS	07
Carolyn Wilson	OCNG/TAMU	MS	09
Steven Zeug	WFSC/TAMU	PhD	07
Saijin Zhang	MARS/TAMUG	PhD	10

#### UNDERGRADUATE MENTORING:

1. **Rachael Johnson** (2012, 14) Intern Univ. of Miami; World Heritage evaluation of Everglades National Park
2. **Julio Pachon** (2013) REU Florida International Univ.; Sea-level rise and nutrient effects on mangrove peat
3. **Gabriel Miller** (2011), EF Fellow with B.Sc. from Brown University; Mangrove ecotone water quality
4. **Lisa Gardner** (2011), EF Fellow, Ph.D. student from Univ. of Florida; Sea-level rise effects on mangrove peat
5. **Saam Aiken** (2011), EF Intern, undergraduate at Trinity College; Sea-level rise effects on mangrove peat
6. **Marissa Greco** (2010), Rockefeller Leadership Fellow from Dartmouth College; Environmental policy
7. **L. David Lewis** (2009), Intern from Texas A&M University; Mangrove water quality
8. **Regina Perry** (2007), REU from Texas A&M Univ.; Influence of light and biological processes in governing the transformation of nutrients and lignin leached from red mangrove leaves.
9. **Rene Aguilera** (2006), REU from Univ. of New Mexico; Importance of labile organic carbon in governing early mangrove leaf decay.
10. **Christopher Llewellyn** (2005-06), REU from Texas A&M University; Conducted greenhouse experiment to understand the effects of inundation and salinity on *Lycium carolinianum*, a perennial halophyte.
11. **Bruce Simons** (2002) REU from Texas A&M Corpus Christi; Assessing benthic invertebrate community structure in created and natural salt marshes in Galveston Bay (TX) and North Inlet (SC)

#### POST-DOCTORAL RESEARCH ASSOCIATE:

**Dr. Jeffrey Wozniak:** 2007-2009, Associate Professor at Sam Houston State University

### C. Service and Outreach Activities

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#### STATE/NATIONAL/INTERNATIONAL SERVICE (PAST 10 YEARS):

2019	Recipient of Everglades Coalition Grassroots Organizing award for Science Communications pertaining to Everglades restoration.
2018-present	Coordinating Editor: <i>Restoration Ecology</i>
2016-present	Advisory Board: FIU College of Arts, Sciences, and Education
2016	co-led World Heritage site assessment of Wood Buffalo National Park, representing IUCN
2016	Organized and Moderated Florida Bay Forever Forum in Islamorada, FL
2015	Advisory Board: FIU School of Environment, Arts, and Society
2014	Developed and co-taught Everglades Service-to-Action Workshop with Former U.S. Senator and Florida Governor Bob Graham at Univ. Florida
2013-present	Greater Everglades Ecosystem Restoration Conference Program Committee
2013	Trainer: LTER Science communications workshop at Univ. New Mexico
2012-present	Florida Coastal Everglades (FCE)-LTER Internal Executive Committee
2012-present	Co-lead: FCE-LTER Biogeochemistry Working Group
2011-present	South Florida National Parks Trust, Florida Bay Stewardship Fund Committee
2009-present	Tours and briefings on Everglades Restoration to more than 100 groups, including stakeholders, business groups, elected officials & staff from all levels of government.

Peer-review Journal Referee: *Aquatic Botany; Archiv Für Hydrobiologie; Biogeochemistry; Biota Neotropica; Ecological Engineering; Ecological Processes; Ecology; Ecosphere; Environmental Research Letters; Eos; Estuaries; Estuaries & Coasts; Estuarine, Coastal & Shelf Science; Frontiers in Ecology and the Environment; Hydrobiologia; Indian Journal of Marine Science; International Journal of Biodiversity Science & Management; Journal of Coastal Research; JGR-Atmospheres; JGR-Biogeosciences; Limnology & Oceanography; Mangroves & Salt Marshes; Marine Ecology Progress Series; Marine Environmental Research; Marine Pollution Bulletin; PLoS-One; Rangeland Ecology & Management; Southeastern Naturalist; Texas Journal of Science; Turkish Journal of Botany; Wetland Ecology & Management; Wetlands*

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### D. Research and Funding

#### RESEARCH STATEMENT:

My scientific research focuses on understanding the interrelationships between ecosystem structure and function and considers the various biotic and abiotic drivers of aquatic environments across a range of spatial and temporal scales. Most of my studies have applied aspects that pertain to ecological restoration and ecosystem development and health as modified by eutrophication, hydrological alteration or sea level rise.

#### GRANTS & CONTRACTS (LAST 5 YEARS):

2018-2019: "The effects of projected sea-level rise on Everglades coastal ecosystems: Enhancing and continuing experiments to evaluate peat collapse and landscape vulnerability" (co-PI; Florida Sea Grant): \$200,000.

2016-2017: "Mechanisms of Peat Collapse in Everglades Coastal Ecosystems: Phase II Salinity Manipulations and Surface Elevation Change" (co-PI; Florida Sea Grant): \$200,000.

2015-present: Cape Sable Restoration (lead; National Fish & Wildlife Foundation): \$2 million.

[http://www.nfwf.org/whoweare/mediacenter/pr/Pages/gccgp-fl-cape\\_pr\\_15-0827.aspx#.Vd9VZngQLck](http://www.nfwf.org/whoweare/mediacenter/pr/Pages/gccgp-fl-cape_pr_15-0827.aspx#.Vd9VZngQLck)

2014-2015: "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" (co-PI; Florida Sea Grant): \$200,000.

2012-2018: "FCE III, Coastal Oligotrophic Ecosystems Research; Phase III funding for the Florida Coastal Everglades LTER Program" (collaborator; NSF): \$4.9 million.

## E. Peer-Reviewed Publications

### PEER-REVIEWED JOURNAL ARTICLES (STUDENT CO-AUTHORS UNDERLINED)

1. Davis, S.E. and B.C. Reeder. **2001**. A spatial analysis of water quality in eastern Kentucky reservoirs. *Aquatic Ecosystem Health and Management*. 4(4):463-477.
2. Davis, S.E., 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.
3. Davis, S.E., D.L. Childers, J.W. Day, Jr., D.T. Rudnick, and F.H. Sklar. **2001**. Nutrient dynamics in vegetated and non-vegetated areas of a southern Everglades mangrove creek. *Estuarine, Coastal and Shelf Science*. 52:753-765.
4. Bontempi, P., S.E. Davis, C. Del Castillo, D. Roelke, K.O. Winemiller. **2002**. Transformation of allochthonous dissolved organic carbon in a tropical blackwater river as measured by fluorescence analysis: Application to foodweb ecology. *SPIE* 16:1-6.
5. Davis, S.E., D.L. Childers, J.W. Day, 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.
6. Davis, S.E., C. Coronado-Molina, D.L. Childers, and J.W. Day, Jr. **2003**. Temporal variability in C, N, and P dynamics associated with red mangrove (*Rhizophora mangle* L.) leaf decomposition. *Aquatic Botany*. 75:199-215.
7. Sutula, M.A., B.P. Perez, E. Reyes, D.L. Childers, S.E. Davis, J.W. Day, D. Rudnick, and F. Sklar, **2003**. Factors affecting spatial and temporal variability in material exchange between the Southeastern Everglades wetlands and Florida Bay (USA). *Estuarine, Coastal and Shelf Science*. 57:757-781.
8. Davis S.E., J. Cable, C. Childers, C. Coronado, J. Day, C. Hittle, C. Madden, E. Reyes, D. Rudnick, and F. Sklar. **2004**. Importance of episodic storm events in controlling ecosystem structure and function in a Gulf Coast estuary. *Journal of Coastal Research*. 20(4):1198-1208.
9. Butzler, R. and S.E. Davis. **2006**. Growth Patterns of Carolina Wolfberry (*Lycium carolinianum*) in the Salt Marshes of Aransas National Wildlife Refuge, TX. *Wetlands*. 26(3): 845-853.
10. Childers, D.L., J.N. Boyer, S.E. Davis, C. Madden, D. Rudnick, and F. Sklar. **2006**. Nutrient concentration patterns in the oligotrophic "upside-down" estuaries of the Florida Everglades. *Limnology and Oceanography*. 51(1):602-616.
11. Davis, S.E., D.L. Childers, and G.B. Noe. **2006**. The Contribution of Leaching to the Rapid Release of Nutrients and Carbon in the Early Decay of Oligotrophic Wetland Vegetation. *Hydrobiologia*. 569:87-97.
12. Roelke, D.L., J. Cotner, J. Montoya, C. Del Castillo, S.E. Davis, J. Snider, G. Gable, and K.O. Winemiller. **2006**. Optically determined sources of allochthonous organic matter and metabolic characterizations in a tropical oligotrophic river and associated lagoon. *Journal of N. American Benthological Society*. 25(1):185-197.
13. Romigh, M.M., S.E. Davis, V. Rivera-Monroy, and R. Twilley. **2006**. Flux of Organic Carbon in a Riverine Mangrove Forest in the Florida Coastal Everglades. *Hydrobiologia*. 569:505-516.
14. Davis, S.E. and D.L. Childers. **2007**. Importance of water source in controlling leaf leaching losses in a dwarf red mangrove (*Rhizophora mangle* L.) wetland. *Estuarine, Coastal, and Shelf Science*. 71(1-2):194-201.
15. Hoeinghaus, D. and S.E. Davis. **2007**. Size-based trophic shifts of salt-marsh dwelling blue crabs elucidated by dual stable C and N isotope analyses. *Marine Ecology Progress Series*. 334:199-204.
16. Rivera-Monroy, V., K. de Mutsert, R. Twilley, E. Castañeda, M. Romigh, and S.E. Davis. **2007**. Patterns of nutrient exchange in a riverine mangrove forest in the Shark River Estuary, Florida, USA. *Hidrobiològica*. 17(2):169-178.
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18. Brody, S.D., S.E. Davis, W.E. Highfield, and S. Bernhardt. **2008**. A spatial-temporal analysis of wetland alteration in Texas and Florida: Thirteen years of impact along the coast. *Wetlands*. 28(1):107-116.
19. Miller, C.J., D.L. Roelke, S.E. Davis, H.P. Li, and G. Gable. **2008**. The Role of Inflow Magnitude and Frequency on Plankton Communities from the Guadalupe Estuary, Texas, USA: Findings from Microcosm Experiments. *Estuarine, Coastal, and Shelf Science*. 80(1):67-73.
20. Davis, S.E., B. Allison, M. Driffill, and S. Zhang. **2009**. Influence of vessel-induced drawdown currents on tidal creek hydrodynamics in Aransas National Wildlife Refuge (TX, USA): implications on sediment dynamics. *Journal of Coastal Research*. 25(2):359-365.
21. Miller, C.J., S.E. Davis, D.L. Roelke, H.P. Li, and M. Driffill. **2009**. Factors Influencing Algal Biomass in Intermittently-Connected, Subtropical Coastal Ponds. *Wetlands*. 29(2):759-771.
22. Castañeda-Moya, E., R.R. Twilley, V.H. Rivera-Monroy, K. Zhang, S.E. Davis, and M. Ross. **2010**. Spatial patterns of sediment deposition in mangrove forests of the Florida Coastal Everglades after the passage of Hurricane Wilma. *Estuaries and Coasts*. 33:45-58.
23. Hart, T. and S.E. Davis. **2011**. Wetland development in a previously mined landscape of East Texas, USA. *Wetlands Ecology and Management*. 19(4):317-329. (featured abstract in *Ecological Restoration* 29(4):406).
24. Naja, G., R. Rivero, S.E. Davis, and T. Van Lent. **2011**. Hydrochemical effects of limestone rock mining. *Water Air and Soil Pollution*. 217(1):95-104.
25. Rivera-Monroy, V.H., R.R. Twilley, S.E. Davis, et al. **2011**. The role of the Everglades mangrove ecotone region (EMER) in regulating nutrient cycling and wetland productivity in south Florida. *Critical Reviews in Environmental Science and Technology*. 41(S1):633-669.
26. Koch, G.R., D.L. Childers, P.A. Staehr, R. Price, S.E. Davis, and E. Gaiser. **2012**. Hydrological conditions control P loading and aquatic metabolism of an oligotrophic, subtropical estuary. *Estuaries and Coasts*. 35(1):292-307.
27. Wozniak, J.R., T.M. Swannack, R. Butzler, C. Llewellyn, and S.E. Davis. **2012**. River inflow, estuarine salinity, and Carolina Wolfberry fruit abundance: linking abiotic drivers to Whooping Crane food. *Journal of Coastal Conservation*. 16:345-354.
28. Roelke, D.L., N.J. Hayden, H. Li, C.J. Miller, S.E. Davis, A. Quigg, and Y. Buyukates. **2013**. Assessing the effects of inflow pulses and cumulative inflows on phytoplankton assemblage composition and productivity in Galveston Bay, TX. *Marine Ecology Progress Series*. 477:561-76.
29. Troxler, T.G., E. Gaiser, R. Jaffe, J. Barr, J. Fuentes, W. Anderson, R. Chambers, D. Childers, E. Castañeda, L. Collado-Vides, C. Coronado-Molina, S. Davis, V. Engel, C. Fitz, J. Fourqurean, J. Kominoski, S. Oberbauer, J. Richards, V. Rivera-Monroy, C. Saunders, F. Sklar, J. Smoak, R. Twilley, K. Whelan, C. Madden, and T. Smith. **2013**. Integrated carbon budget models for the Everglades terrestrial-coastal-oceanic gradient: current status and needs for inter-site comparisons. *Oceanography*. 26(3):98-107.
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33. Roach, K.A., K.O. Winemiller, and S.E. Davis. **2014**. Autochthonous production in shallow littoral zones of five floodplain rivers: effects of flow, turbidity, and nutrients *Freshwater Biology*. 59(6):1278-1293.
34. Sullivan, P.L., E.E. Gaiser, D. Surratt, D. Rudnick, S.E. Davis, and F. Sklar. **2014**. Wetland ecosystem response to hydrologic restoration and management: The Everglades and its urban boundary (FL, USA) *Wetlands*. 34(1):1-8.
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39. Chambers, L.G., J. Boyer, R. Guevara, S.E. Davis, and T.G. Troxler. **2016**. Effects of salinity and inundation on microbial community structure and function in a mangrove peat soil. *Wetlands*. 36(2):361-371
40. Roelke, D.L., H.P. Li, C.J. Miller-DeBoer, G.M. Gable, and S.E. Davis. **2016**. Regional shifts in phytoplankton succession and primary productivity in the San Antonio Bay system (USA) in response to diminished freshwater inflows. *Marine and Freshwater Research*. DOI: 10.1071/MF15223
41. Osborne, T., C. Fitz, and S.E. Davis. **2017**. Restoring the foundation of the Everglades ecosystem: assessment of edaphic responses to hydrologic restoration scenarios. *Restoration Ecology*. 25(S1): S59-S70. DOI: 10.1111/rec.12496.
42. Wetzel PR, SE Davis, T Van Lent, SM Davis, H Henriquez. **2017**. Science synthesis for management as a way to advance ecosystem restoration: Evaluation of restoration scenarios for the Florida Everglades. *Restoration Ecology*. 25(S1): S4-S17. DOI: 10.1111/rec.12566.
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44. Davis SE, R Boucek, E Castañeda-Moya, S Dessu, E Gaiser, J Kominoski, JP Sah, D Surratt, T Troxler. **2018**. Episodic disturbances drive nutrient dynamics along freshwater-to-estuary gradients in a subtropical wetland. *Ecosphere*. DOI: 10.1002/ecs2.2296.
45. Mazzei, V., EE Gaiser, JS Kominoski, BJ Wilson, S Servais, L Bauman, S Davis, S Kelly, F Sklar, D Rudnick, J Stachelek, T Troxler. **2018**. Functional and compositional responses of periphyton mats to simulated saltwater intrusion in the southern Everglades. *Estuaries and Coasts*. <https://doi.org/10.1007/s12237-018-0415-6>
46. Wilson BJ, S Servais, SP Charles, SE Davis, E Gaiser, JS Kominoski, J Richards, TG Troxler. **2018**. Declines in plant productivity drive carbon loss from brackish coastal wetland mesocosms exposed to saltwater intrusion. *Estuaries and Coasts*. <https://doi.org/10.1007/s12237-018-0438-z>
47. Wilson BJ, S Servais, V Mazzei, L Bauman, SE Davis, E Gaiser, S Kelly, JS Kominoski, C Madden, J Richards, D Rudnick, F Sklar, J Stachelek, TG Troxler. **2018**. Long-term experimental salinity pulses in brackish and freshwater marshes interact with seasonal dry-down to increase ecosystem carbon loss in the Florida Coastal Everglades. *Ecological Applications*. <https://doi.org/10.1002/eap.1798>
48. Servais S, JS Kominoski, SE Davis, EE Gaiser, J Pachon, TG Troxler. **2018**. Effects of disturbance on ecosystem carbon storage in coastal mangroves: quantifying plant- and soil-mediated pathways of resilience. *Wetlands*. <https://doi.org/10.1007/s13157-018-1100-z>
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51. Swannack, TM, JR Wozniak, WE Grant, SE Davis. **2019**. A tool for rapid assessment of hydrological connectivity patterns in Texas coastal wetlands: linkages between tidal creeks and coastal ponds. *Texas Water Journal*. 10(1):46-59.
52. Charles SP, JS Kominoski, TG Troxler, EE Gaiser, S Servais, BJ Wilson, SE Davis. **2019**. Saltwater intrusion



- causes rapid soil elevation loss and long-term reductions in net organic carbon accumulation in experimental coastal wetlands. *Estuaries and Coasts*. <https://doi.org/10.1007/s12237-019-00620-3>
53. Wiederholt, R, R Paudel, Y Khare, S Davis, M Naja, S Romañach, L Pearlstine, T Van Lent. **2019**. A multi-indicator spatial similarity approach for evaluating ecological restoration options. *Landscape Ecology*. <https://doi.org/10.1007/s10980-019-00904-w>
  54. Dessu, S, R Price, J Kominoski, S Davis, A Wymore, W. McDowell, E Gaiser. **2019**. Percentile-Range Indexed Mapping and Evaluation (PRIME): a new tool for long-term data discovery and application. *Environmental Modeling and Software*. <https://doi.org/10.1016/j.envsoft.2019.104580>
  55. Servais, S, J Kominoski, C Coronado-Molina, L Bauman, SE Davis, EE Gaiser, S Kelly, C Madden, V Mazzei, D Rudnick, F Santamaria, FH Sklar, J Stachelek, TG Troxler, BJ Wilson. **2020**. Effects of saltwater pulses on microbe-mediated organic matter breakdown in freshwater and brackish coastal wetlands. *Estuaries and Coasts*. 43:814-830. <https://doi.org/10.1007/s12237-020-00708-1>
  56. Kominoski, JS, E Gaiser, E Castañeda-Moya, SE Davis, S Dessu, P Julian, DY Lee, L Marazzi, VH Rivera-Monroy, A Sola, U Stingl, S Stumpf, D Surratt, R Travieso, TG Troxler. **2020**. Disturbance legacies increase and synchronize nutrient concentrations and bacterial productivity in coastal ecosystems. *Ecology*. <https://doi.org/10.1002/ecy.2988>
  57. Wiederholt, R, GA Stainback, R Paudel, Y Khare, M Naja, S Davis, T Van Lent. **2020**. Economic and Ecological Benefits of Everglades Restoration. *Ecological Indicators*. <https://doi.org/10.1016/j.ecolind.2020.106678>
  58. Paudel, R, T Van Lent, GM Naja, Y Khare, R Wiederholt, S Davis. **2020**. Assessing the Hydrologic Response of Key Restoration Components to the Everglades Ecosystem. *Journal of Water Resources Planning and Management*. [https://doi.org/10.1061/\(ASCE\)WR.1943-5452.0001283](https://doi.org/10.1061/(ASCE)WR.1943-5452.0001283)

#### CHAPTERS IN EDITED VOLUMES:

59. Childers, D.L., S.E. Davis, R. Twilley, and V. Rivera-Monroy. **1999**. Wetland-water column interactions and the biogeochemistry of estuary-watershed coupling around the Gulf of Mexico. pp. 211-235. In: T. Bianchi, J. Pennock, and R. Twilley (Eds.), *Biogeochemistry of Gulf of Mexico Estuaries*. John Wiley & Sons, New York.
60. Davis, S.E., D. Lirman, and J. Wozniak. **2009**. Nitrogen and phosphorus exchange between tropical coastal ecosystems. pp. 9-43. In: I. Nagelkerken (Ed.), *Ecological Connectivity Among Tropical Coastal Ecosystems*. Springer, Dordrecht, The Netherlands.
61. Day, J.W., F. Sklar, J.E. Cable, D.L. Childers, C. Coronado-Molina, S.E. Davis, S. Kelly, C.J. Madden, B. Perez, E. Reyes, D.T. Rudnick, and M.A. Sutula. **2013**. The salinity transition zone between the southern Everglades and Florida Bay: System functioning and implications for coastal zone management. Pp. 1-24. In: J.W. Day and A. Yañez-Arancibia (Eds.), *Ecosystem-Based Management of the Gulf of Mexico*. Texas A&M University Press, College Station, TX.
62. Chambers, L.G., S.E. Davis, and T.G. Troxler. **2015**. Sea Level Rise in the Everglades: Plant-Soil-Microbial Feedbacks in Response to Changing Physical Conditions. Pp. 89-114. In: J.A. Entry, K. Jayachandran, A.D. Gottlieb, and A. Ogram (Eds.), *Microbiology of the Everglades Ecosystem*. CRC Press, Boca Raton, FL.
63. Twilley, RR, VH Rivera-Monroy, AS Rovai, E Castañeda-Moya, S Davis. **2019**. Mangrove Biogeochemistry at Local to Global Scales Using Ecogeomorphic Approaches. (Chapter 21) In: G. Perillo, E. Wolanski, D. Cahoon, C. Hopkinson (Eds.), *Coastal Wetlands: An Integrated Ecosystem Approach*. 2<sup>nd</sup> Edition. Elsevier. Amsterdam, The Netherlands. <https://doi.org/10.1016/B978-0-444-63893-9.00021-6>
64. Sklar, F, J Meeder, T Troxler, T Dreschel, P Ruiz, S Davis. **2019**. The Everglades: At the Forefront of Transition. Chapter 17 in: E Wolanski, J Day, M Elliott, R Ramesh (Eds.) *Coasts and Estuaries: The Future*. Elsevier. Amsterdam, The Netherlands.
65. Rivera-Monroy, V.H., J. Cattelino, J.R. Wozniak, K. Schwartz, G.B. Noe, E. Castañeda-Moya, G.R. Koch, J.N. Boyer, and S.E. Davis. **2019**. The life of P: A biogeochemical and sociopolitical challenge in the Everglades. Pages 99-128 (Chapter 5). In: D.L. Childers, E. Gaiser, and L. Ogden (Eds.), *The Dynamics of Social-Ecological Transformation in the South Florida Landscape*. Oxford University Press.

66. Troxler, T.G., G. Starr, J.N. Boyer, J.D. Fuentes, R. Jaffe, S. Malone, J. Barr, S. Davis et al. **2019**. Carbon cycles in the Florida Coastal Everglades social-ecological system across scales. Pages 129-161 (Chapter 6). In: D.L. Childers, E. Gaiser, and L. Ogden (Eds.), *The Dynamics of Social-Ecological Transformation in the South Florida Landscape*. Oxford University Press.
67. Davis, S.E., E. Castañeda, R. Boucek, et al. **2019**. Exogenous drivers: What has disturbance taught us? Pages 162-201 (Chapter 7). In: D.L. Childers, E. Gaiser, and L. Ogden (Eds.), *The Dynamics of Social-Ecological Transformation in the South Florida Landscape*. Oxford University Press.
68. Sklar, F., J. Beerens, L. Brandt, C. Coronado, S. Davis, T. Frankovich, C. Madden, A. McLean, J. Trexler, W. Wilcox. **2019**. Back to the Future – Rebuilding the Everglades. Pages 202-231 (Chapter 8). In: D.L. Childers, E. Gaiser, and L. Ogden (Eds.), *The Dynamics of Social-Ecological Transformation in the South Florida Landscape*. Oxford University Press.

**PAPERS IN REVIEW, IN REVISION, or IN PREP:**

1. Julian, P, E Gaiser, J Kominoski, E Castañeda, T Troxler, S Davis, C Osburn. **In Prep**. A tale of two storms: effects of sea level rise and pre-existing conditions on biogeochemical response to tropical storms. To be submitted to: *Frontiers in Ecology and Environment*.
2. Dessu, S, R Paudel, R Price, S Davis. **In Review**. Using Empirical Data and Modeled Scenarios of Restoration to Understand Changes in Coastal Vulnerability to Sea Level Rise. Submitted to: *Frontiers in Ecology and Environment*.

**KEY PROJECT REPORTS:**

1. Cable, J., J.W. Day, E. Reyes, C. Coronado-Molina, M. Sutula, C. Agraz-Hernandez, D. Childers, and S. Davis. 2003. Nutrient Exchange Between Florida Bay and the Everglades' Salinity Transition Zone. Final Report submitted to the South Florida Water Management District.
2. Winemiller, K., A. Chin, S.E. Davis, D.L. Roelke, L.M. Romero, and B.P. Wilcox. 2004. Summary Report Supporting the Development of Flow Recommendations for the Stretch of Big Cypress Creek below Lake O' the Pines Dam. <https://agrificdn.tamu.edu/aquaticecology/files/2012/07/TAMU-Caddo-summary-rpt.pdf>
3. Winemiller, K., A. Chin, S.E. Davis, D.L. Roelke, L.M. Romero, and B.P. Wilcox. 2005. CADDO LAKE ANNOTATED BIBLIOGRAPHY <http://agriflife.org/aquaticecology/files/2012/07/Caddo-annotated-bibliography.pdf>
4. Winemiller, K.O., T. Bonner, B. Brandes, S. Davis, R. King, D. Maidment, and G. Ward. 2008. Review of Desktop Methods for Establishing Environmental Flows in Texas Rivers and Streams. Final Report to the Texas Commission on Environmental Quality <http://aquaticecology.tamu.edu/files/2012/07/txfscdesktop.pdf>
5. Slack, R.D., W.E. Grant, S.E. Davis III, T.M. Swannack, J. Wozniak, D.M. Greer, and A.G. Snelgrove. 2009. Linking Freshwater Inflows and Marsh Community Dynamics in San Antonio Bay to Whooping Cranes. Final Report. <http://www.gbpa.org/documents/studies/sages/FullReport.pdf>
6. Davis, S.E. (project manager), K.N. Hines, W.H. Conner, J.J. Cox, D.E. Gawlik, J.A. Jackson, J.O. Jones, F. Miralles-Wilhelm, and J.H. Richards. 2010. Oil and Gas Impacts in the Big Cypress Ecosystem: An analysis of impacts associated with proposed activities in the Nobles Grade area. Final Report. <https://www.evergladesfoundation.org/wp-content/uploads/sites/2/2017/12/Report-Oil-Gas-Impacts-Reduced.pdf>
7. Davis, S.E. (project manager) and multiple co-authors. The Synthesis of Everglades Research and Ecosystem Services (SERES) Project. Reports. <http://everglades-seres.org/SERES-Everglades-Foundation/Products.html>
8. Davis, S.E. (project manager) and multiple co-authors. Management-Driven Synthesis: An Evaluation of Everglades Restoration Trajectories. The Synthesis of Everglades Research and Ecosystem Services (SERES) Project. Final Report. <https://drive.google.com/file/d/1YgTovV5cvmyGthEDmHT9W086NVZvpqeE/view>
9. Jaeger, T and SE Davis. 2017. Report of the Joint WHC/IUCN Reactive Monitoring Mission to Wood Buffalo National Park, Canada. <https://whc.unesco.org/en/documents/156893>

**F. Invited Presentations (past 5 years)**

1. Effects of increased salinity and inundation on wetland soil carbon dynamics at the Everglades freshwater-saltwater ecotone. April 21, **2015** at the Greater Everglades Ecosystem Research Conference, Coral Springs, FL.

2. Caught Between a Rock and a Soft Spot: Peat Vulnerability in the Coastal Everglades. October 26, **2015** at Everglades Wetland Research Park, Florida Gulf Coast University, Naples, FL.
3. A Synthesis of Everglades Research and Ecosystem Services, The SERES Project. November 17, **2015** to the National Academies CISRERP Committee, Miami, FL.
4. A Synthesis of Everglades Research and Ecosystem Services, The SERES Project. January 17, **2016** at the South Florida Water Sustainability and Science Project All-Scientists Meeting, Naples, FL.
5. Everglades Restoration: The link to South Florida's Ecology and Economy. January 29, **2016** to the Land Use and Property Rights Committee of the Florida Realtors Association, Orlando, FL.
6. Caught Between a Rock and a Soft Spot: Sea level rise and peat collapse in the coastal Everglades. Feb. 15, **2016** to the Department of Wildlife Ecology at University of Florida, Gainesville, FL.
7. Everglades Restoration Panel Discussion. April 9, **2016** at the Miami Water Summit, Palmetto Bay, FL.
8. The Status of Everglades Restoration and Health of Florida Bay. May 5, **2016** to the International Game Fish Association, Dania, FL.
9. The Status of Everglades Restoration and Health of Florida Bay. June 15, **2016** at the NOAA Atlantic Oceanographic and Meteorological Lab, Miami, FL.
10. Sea Level Rise and Everglades Restoration. June 16, **2016** to the Greater Miami Chamber of Commerce, Miami, FL.
11. Episodic disturbance effects on Florida Coastal Everglades water quality. April 19, **2017** at the Greater Everglades Ecosystem Research meeting, Coral Springs, FL.
12. Recent Advancements in Everglades Restoration. June 6, **2017** at the Society of Wetland Scientists Annual Meeting, San Juan, Puerto Rico.
13. Synthesis of Everglades Research and Ecosystem Services. September 22, **2017** to the Department of Earth and Environment at Florida International University, Miami, FL.
14. The Everglades and Florida Bay 2015-2017: It's been a rough few years. November 11, **2017** at the Bonefish and Tarpon Trust Science Symposium, Weston, FL.
15. Restoration of America's Everglades: It's all about the water. April 26, **2018** to the U.S. House of Representatives Sustainable Energy and Environment Coalition. Washington, D.C.
16. Restoration of America's Everglades: It's all about the water. June 2, **2018** at the Outdoor Writers Association of America Annual Meeting. Ft. Wayne, IN.
17. Everglades Restoration and the Role of Ecosystem Science. October 4, **2018** at the American Association of Ecosystem Research Centers Annual Congressional Briefing. Washington, D.C.
18. Building Confidence in Communities: Stemming the nutrient tide (Panel). April 9, **2019** at the Environmental Council of the States Spring Meeting. Washington, D.C.
19. Communicating Science to Policy-Makers. April 23, **2019** at the Greater Everglades Ecosystem Research Conference, Coral Springs, FL.

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Jeff Shimonski

Elizabeth Smith

Alan Steinberg

Dr. Tiffany Troxler

**Advisory Board**

Rafael Galvez

George Gann

Mark Howell

Cindy Lerner

Dennis Olle, Esq.

Sonia Succar  
Rodriguez

Dear Ms. Gil:

Please accept this letter as a recommendation for nomination of Dr. Stephen Davis to the Land Acquisition Selection Committee of the Environmentally Endangered Lands Program.

I have known Dr. Davis over five years. I have interacted with him by way of environmental activities with the Everglades Foundation where Dr. Davis is a wetland Ecologist. I have followed his expertise in wetland conservation attending lectures and presentations involving Everglades Restoration. He spoke at our Tropical Audubon Society Annual meeting speaking on sea level rise. I have known him socially as well enjoying stimulating conversation each time.

I can, with the greatest confidence, recommend Dr. Davis to the LASC.

Sincerely,



Jose Francisco Barros, DDS  
President  
Tropical Audubon Society

Eduardo M. Varona

Resume of 4/2021 – for LASC

- Education
  - BS in Biology, University of Central Florida
  - Post graduate courses in Landscape Architecture
  - course work to include, Ecosystems of S FL
- Presently employed with USDA: 2003 to present
- Extensive knowledge of the major ecosystems found in Miami-Dade and Monroe counties
- Extensive knowledge of both native and non-native plant species commonly present in the S FL landscape both in natural areas and in developed areas
- Extensive knowledge of invasive species issues and common problematic species affecting the S FL environment
- Extensive work and hands on experience with what works and what doesn't on degraded lands in process of restoration to more natural conditions
- Familiar with tree and landscape codes and regulations for MDC
- Familiar with zoning designations of MDC
- Understanding of the underlying aquifers and impacts to them from development/habitation/SLR, and some knowledge of MDC geology and soil types both natural and disturbed
- Extensive knowledge of BBCW and BBSEER projects
- Familiar with Back Bay Study and recommendations
- Familiar with S FL Resiliency initiatives, Topographic maps, sea level rise present and future impacts
- Extensive work in grass roots activism on land development and land preservation issues in South Dade
- Extensive experience motivating a volunteer work force for hands on work
- Good understanding of the complex and changing demographics of MDC
- Developed a good network within the South Dade enviro-community at the grass roots level
- Experience with grass roots fundraising
- Extensive knowledge and experience in membership and leading committees such as:
  - Biological Threat Advisory Group (USDA/CBP)
  - Outreach Committee
  - Civil Rights Committee
- Familiar with virtual meetings such as Zoom and Teams
- Extensive knowledge how to write and edit SOPs (Standard Operating Procedures) and related documents, as well as reviews of Cooperative Agreements
- Extensive experience with public speaking and presentations by PowerPoint on complex biological and/or environmental topics
- Experience in co-authoring and submitting an EEL application.
- Experience in writing a variety of reports, including technical reports.
- 2016 Finalist for Miami Herald, Miami Visionary Award in the Environment category
- Proclamation Awarded by the Town of Cutler Bay on February, 17, 2021 for leadership, passion, and continued commitment to safeguarding the natural heritage of the community.
- Chair of Cutler Bay Environmental Task Force



## OFFICE OF THE MAYOR

Tim Meerbott

Mayor

April 16, 2021

Ms. Janet Gil  
Department of Regulatory and Economic Resources  
Environmentally Endangered Lands Program  
701 NW 1 Court, 5th Floor, Miami, FL 33136

### Re: Candidate Recommendation to the Land Acquisition Selection Committee

Dear Members of the Selection Committee:

I am pleased to offer this letter of recommendation of Mr. Eduardo M. Varona to the Land Acquisition Selection Committee (LASC). We strongly support the objectives of the LASC and have worked with the committee to protect and enhance the Biscayne Bay Coastal Wetlands (BBCW) located within the Town of Cutler Bay (the "Town").

Mr. Varona has been fully engaged in environmental advocacy through grassroots mobilization for over fifteen years, and has applied his vast knowledge helping to bring greater resiliency through environmental preservation and restoration to the Cutler Bay community. While working with a small group of committed residents in South Dade, he advocated to save 130-acres of coastal wetlands in the footprint of the Comprehensive Everglades Restoration Plan from being developed. Due to his dedication and leadership, these lands were purchased for Everglades and BBCW restoration.

As an environmental activist, Mr. Varona has taken on an active role as a member of the Livablecutler where he advocates for the continued acquisition, protection, and restoration of the BBCW and adjacent lands. He has committed himself to educating residents and the community on the importance of preserving our endangered lands and natural habitats, and protecting rare and precious coastal wetlands and native ecosystems of Cutler Bay and Miami-Dade County.

Mr. Varona continues to strongly influence local governments, state and federal partners to bring greater resiliency through environmental preservation and restoration to our natural areas and coastal communities. It is my belief that Mr. Varona's experience and skills will be a great asset to LASC.

Thank you for your consideration.

Sincerely,

Tim Meerbott  
Mayor





# DANIEL A. VALLE

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16004 SW 97<sup>th</sup> Terrace • Miami, FL 33196 • (305) 301-8533 • [davalle17@gmail.com](mailto:davalle17@gmail.com)

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## PROFESSIONAL HIGHLIGHTS

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- Environmental Scientist with over 6 years of expertise in South Florida fauna and flora.
- Research assistant on Gopher Tortoise ecological study in Pine Rockland ecosystems.
- Educator and mentor to students in field work and data analysis on Zoo Miami grounds – including a native butterfly conservation program and garden, invasive species removal, and wildlife camera trapping.

## PROFESSIONAL EXPERIENCE

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### **BIOTECH @ RICHMOND HEIGHTS 9-12 | Miami, FL | January 2020 to Present**

A public magnet high school which aims to deliver an interdisciplinary, rigorous and relevant STEM education focused on conservation biology via Zoology and Botany programs.

#### **Biology Educator, Zoology Program**

### **ZOO MIAMI CONSERVATION & RESEARCH | Miami, FL | October 2015 to December 2019**

Zoo Miami's Conservation and Research Department works to promote conservation of wildlife and natural ecosystems - in South Florida and throughout the world.

#### **Student Intern, FIU**

### **MIAMI CHILDREN'S HOSPITAL | Miami, FL | May 2011 to June 2014**

South Florida's only licensed specialty hospital exclusively for children, with nearly 800 attending physicians and more than 475 pediatric subspecialists, and renowned for excellence in pediatric medicine

#### **Community Physician Liaison, Public Relations & Outreach Services**

## EDUCATION

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### **FLORIDA INTERNATIONAL UNIVERSITY | Miami, FL | 2019**

**Bachelor of Science, Environmental Sciences**

**Minor, Biological Sciences**

**Certificate Program, Biodiversity Conservation and Management**

### **MIAMI DADE COLLEGE | Miami, FL | 2011**

**Associate of Arts, Business Administration**

#### PUBLISHED WORK

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Whitfield, Steven, Ridgley, Frank, **Valle, Daniel** & Atteberry, Nicole. (2018). Seroprevalence of *Mycoplasma agassizii* and *Mycoplasma testudineum* in Wild and Waif Gopher Tortoises (*Gopherus polyphemus*) in Miami-Dade County, Florida, USA. *Herpetological Review*, 49(1), 47-49

Steven M. Whitfield, **Daniel A. Valle**, Adrian Figueroa, Brianna Chin, Hugo Bravo-Gallegos, Frank Leone. (2021). Burrow Characteristics and Habitat Associations of Gopher Tortoises in Urban Pine Rockland Reserves (Miami, Florida, USA). *Ichthyology & Herpetology*, COPEIA-D-20-00168

#### COMMUNICATION

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**Valle, Daniel**. "Gopher Tortoise Burrow Use by Commensal Species in the Pine Rocklands (Miami-Dade County)." 40<sup>th</sup> Annual Gopher Tortoise Council Meeting. Archbold Biological Station. 13 October 2018.

**Valle, Daniel**. "Gopher Tortoise Burrow Use by Commensal Species in the Pine Rocklands (Miami-Dade County)." 2018 Pine Rockland and Tropical Botany Conference 2018. Fairchild Tropical Botanic Garden. 1 November 2018.

**Valle, Daniel**. "Threatened Gopher Tortoises in the Imperiled Pine Rocklands at Zoo Miami." 2017 Tropical Conservation Institute Student Symposium. The Kampong, National Tropical Botanical Garden. 20 April 2017.



Janet Gil  
Department of Regulatory and Economic Resources  
Environmentally Endangered Lands Program  
701 NW 1 Court, 5th Floor  
Miami, FL 33136  
305-372-6687  
[Janet.Gil@miamidade.gov](mailto:Janet.Gil@miamidade.gov)

December 20, 2021

Dear Ms. Gil,

I am writing this letter of recommendation and support for Mr. Daniel Valle to serve on the Land Acquisition Selection Committee (LASC).

I have known Mr. Valle since 2018 when he was selected for a teaching position at BioTECH @ Richmond Heights 9-12, a Conservation Biology Magnet School, from a vast number of highly qualified applicants. In this time, through his dedication not only to the school but to the preservation of the environment, Mr. Valle has led the students in the Zoology Program in a number of conservation efforts such as in depth studies of the pine rock lands, participation in Baynanza (beach clean ups), development of Wings @ BioTECH which focuses on the study of butterflies, collaboration with a myriad of real-world scientists in supporting students in their conservation-themed research projects, coordination of a Zoology Symposium, and so much more. His ability to lead a team of educators is evident in his communications with the staff, as well as, in the ease with which he coordinates and carries out multi-faceted projects from beginning to end.

I have no doubt that Mr. Valle would be a considerate, diligent and attentive member of the committee. He has consistently shown through his roles as teacher and Science Department Chairperson his dedication, professionalism, and work ethic. His accumulated knowledge of many of the species and habitats that directly correlate with the mission of our school and the efforts of your program are to be commended. Finally, Mr. Valle's consistently positive personality and ability to work well with others will undoubtedly be one of his strongest attributes for the committee's success in accomplishing its mission.

I wish the committee much success in its efforts to protect the endangered lands. Should additional information be needed, please contact me at [wcosta@dadeschools.net](mailto:wcosta@dadeschools.net).

Sincerely,



Wendy Costa  
Assistant Principal  
BioTECH @ Richmond Heights 9-12