Everglades Publications by Colin Saunders

SENIOR ENVIRONMENTAL SCIENTIST

Watershed Management/Everglades Division csaunder@sfwmd.gov

EDUCATION:

- Ph.D. in Biology (Ecosystem Modeling), 2003 Duke University, Durham, NC, 2003.
- B.S. in Ecology, Evolution, and Systematics, 1994 Humboldt State University, Arcata, CA, 1994.

PROJECTS:

- Tree Island Nutrient Enrichment and Controlling Mechanisms
- Modeling Soil Dynamics
- Tree Island Elevation Responses to Hydrology

PUBLICATIONS:

Saunders C. J., M.J. Blum, J. McLachlan, C. Craft, and J. Herrick. Genetic variation in salinity tolerance within a coastal marsh sedge population resurrected from a seed bank spanning 110 years (1885 to 1995). [submitted to Global Change Biology]

Saunders C.J., J.P. Megonigal, and J.F. Reynolds. 2006. Comparison of belowground biomass in C3- and C4-dominated mixed communities in a Chesapeake Bay brackish marsh. Plant and Soil. 280 (1-2): 305-322.

<u>Saunders C.J.</u>, Min Gao, Jason Lynch, Rudolf Jaffe, and Daniel L. Childers. 2006. Using soil profiles of seeds and molecular markers as proxies for sawgrass and wet prairie slough vegetation in Shark Slough, Everglades National Park. Hydrobiologia. 569: 475-492.

<u>Saunders C.J.</u>, D.L. Childers, W. Anderson, J.A. Lynch, R. Jaffe. 2005-2007. Understanding Cladium jamaicense dynamics over the last century in ENP using simulation modeling and paleoecological data. 6-, 12-, 18-, and 24-month reports submitted to National Park Service, Everglades National Park.

Blum, M.J., J.S. McLachlan, <u>C.J. Saunders</u>, Rebecca Hamilton, and J.D. Herrick. Genetic variation within Schoenoplectus americanus (Cyperaceae) across multiple spatial scales. Molecular Ecology [in press]

Blum, M.J., M.J. Bagley, J.S. McLachlan, <u>C.J. Saunders</u>, J.D. Herrick. 2006. The influence of genetic adaptation on global change forecasting with special reference to global change scenarios for marsh plan communities. United States Environmental Protection Agency. USEPA / 600 / R

Iwaniec D.M., D.L. Childers, D. Rondeau, C.J. Madden, and <u>C.J. Saunders</u>. 2006. Effects of hydrologic and water quality drivers on periphyton dynamics in the Southern Everglades. Hydrobiologia. 569: 223-235.

POSTER PRESENTATIONS

<u>Saunders, C.J.</u> and D.L. Childers. Linked at the ridge. Phosphorus exchanges between Cladium and wet prairie communities make for a fitter, happier, more productive model of Shark River Slough. Long-term Ecological Research All Scientists Meeting, September, 2006.

Ewe S, L. Sternberg, <u>C. J. Saunders</u>, V. Engel, G. Koch, D. L. Childers. Seasonal plant water uptake patterns in the saline southeast Everglades ecotone. Greater Everglades Ecosystem Restoration Conference (GEER), June, 2006.

Gao, M., <u>C.J. Saunders</u>, D.L. Childers, and R. Jaffé. Reconstruction of historical vegetation patterns in freshwater wetlands of the Florida Everglades: A molecular marker approach. Greater Everglades Ecosystem Restoration Conference (GEER), June, 2006.

PROFESSIONAL MEETINGS AND WORKSHOPS ATTENDED

Workshop on Computational Science for Natural Resource Managers. University of Tennessee, Knoxville, TN. April, 2007.

Greater Everglades Ecosystem Restoration Conference (GEER). Orlando, FL, June, 2006.

Long-Term Ecological Research All Scientists Meeting. 2003, 2006.

Florida Coastal Everglades Long-Term Ecological Research All Scientists Meeting. Miami, FL, 2004, 2005, and 2006.

Cape Sable Seaside Sparrow Fire Management Strategy Symposium. Homestead, FL. December, 2005 and 2006.

International Symposium on the Biogeochemistry of Wetlands. Baton Rouge, LA. March, 2005.