

Everglades Publications by Carlos Coronado

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Education:

PhD. Marine Sciences. Specialization in Tropical Coastal Ecology. Grade obtained at Louisiana State University, Baton Rouge, La. December 2000.

Dissertation Title: Litterfall Dynamics and Nutrient Cycling in Mangrove Forests of Southern Everglades, Florida and Terminos Lagoon, Mexico.

MSc. Marine Sciences. Specialization in Coastal Ecology. Grade Obtained at Louisiana State University, Baton Rouge, La. December 1993.

Thesis Title: Long Term Patterns of Primary Production in a Mangrove Forest Bordering Terminos Lagoon, Mexico.

B.S. Biology. Grade obtained at the National Autonomous University of Mexico (UNAM). Mexico, D.F.. 1985.

Thesis Title: Distribution and abundance of demersal fishes in the coastal area of Guerrero State in the Mexican Pacific Region.

Expertise:

- Species Composition and Forests Structure on tree islands located in WCA-3A and 3B.
- Effect of Hydroperiod on Aboveground Processes: Tree Growth and Litterfall Production.
- Effect of Hydroperiod on Belowground Processes: Nutrient Cycling, Root Production, Root Decomposition, Root Turnover, and Soil Accretion.
- Soil Accretion and Subsidence: Effect of Sea Rise on Coastal Ecosystems.

Projects:

- Tree Island Research Program
 - Nutrient Fluxes on Tree Islands
 - Natural Seedling Recruitment on Tree Islands
- Mangrove Community: Responses to Sea Level Rise
 - Soil Accretion and Elevation Change on Mangrove Ecosystems

Publications:

Victor H. Rivera-Monroy, John.W. Day, Robert R. Twilley, Francisco Vera-Herrera and **Carlos Coronado-Molina**. 1995. Flux of Nitrogen and Sediment in a Fringe Mangrove Forest in Terminos Lagoon, Mexico. *Estuarine Coastal and Shelf Science* **40**: 139-160.

J.W Day, Jr., **Carlos Coronado-Molina**, F.R. Vera-Herrera, R. Twilley, V.H. Rivera-Monroy, H. Alvarez-Guillen, R. Day and W. Conner. 1996. A Seven Year Record of aboveground Net Primary Production in a Southeastern Mexican Mangrove Forest. *Aquatic Botany* **55**: 39-60.

Davis, S.E., **Coronado-Molina, C.**, Childers, D., and Day Jr., J.W. 2003. Temporally dependent dynamics of C, N, and P associated with the decay of *Rhizophora mangle* L. leaf litter, *Aquatic Botany* **75**:199-215.

Coronado-Molina, C., J.W. Day Jr., E. Reyes, and B.C. Perez. 2004. Standing crop and aboveground biomass partitioning of a dwarf mangrove forest in Taylor River Slough, Florida. *Wetland Ecology and Management* **12**:157-164.

Davis III, S.E. J. E. Cable, D. L. Childers, **C. Coronado-Molina**, C. D. Hittle, C. J. Madden, E. Reyes, D. Rudnick, and F. Sklar. 2004. Importance of Storm Events in Controlling Ecosystem Structure and Function in a Florida Gulf Coast Estuary. *Journal of Coastal Research* **20** (4):1198-1208

Rivera-Monroy, V. H., R. Twilley, Bone, D., Childers, D. L., **Coronado Molina, C.**, Feller, I. C., Herrera-Silveira, J., Jaffe, R., Mancera, E., Rejmankova, E., Salisbury, J. E., Weil, E. 2004. A Conceptual Framework to Develop Long Term Ecological Research and Management Objectives in the Wider Caribbean Region. *BioScience* **54** (9): 843-856.

Paul R. Wetzel, Arnold G. van der Valk, Susan Newman, Dale E. Gawlik, Tiffany Troxler Gann, **Carlos A. Coronado-Molina**, Daniel L. Childers, and Fred H. Sklar. 2005. Maintaining tree islands in the Florida Everglades: nutrient redistribution is the key. *Frontiers in Ecology and the Environment* **3**(7): 370-376.

Fred H. Sklar, Michael J. Chimney, Susan Newman, Paul McCormick, Dale Gawlik, ShiLi Miao, Christopher McVoy, Winifred Said, Jana Newman, **Carlos Coronado**, Gaea Crozier, Michael Korvela and Ken Rutchey. 2005. Coupled Ecological-Societal Underpinnings of Everglades Restoration. *Frontiers in Ecology and the Environment*

Poret, N., R.R. Twilley, V. H. Rivera-Monroy, and **C. Coronado-Molina**. 2007. Belowground Decomposition of Mangrove Roots in Florida Coastal Everglades. *Estuaries and Coasts* **30** (3); 1-6.

Wetzel, P.R., van der Valk, A.G., Newman, S., **Coronado, C.A.**, Troxler-Gann, T.G., Childers, D.L., Orem, W.H., and Sklar, F.H. 2009. Heterogeneity of phosphorus distribution in a patterned landscape, the Florida Everglades. *Plant Ecology* **200**:83-90.