

**David W. Ceilley, M.S., P.W.S.
& Certified Senior Ecologist**
1366 Oaklawn Court
Fort Myers, Florida 33919
(239) 936-7494 or 590-7190
dceilley@fgcu.edu

EXPERIENCE AND EXPERTISE:

David W. Ceilley is currently working in the fields of aquatic and wetlands ecology, Everglades restoration monitoring, and fish and wildlife surveys. He has over 27-years of professional experience in limnology, aquatic and wetland ecology, fish and macroinvertebrate studies, and the assessment of ecosystem disturbances for developing restoration strategies. He has worked in a professional scientific supervisory role since 1987 and produced numerous technical and scientific reports related to aquatic and terrestrial ecosystems.

Mr. Ceilley is employed as a full-time *Research Associate* and Graduate Faculty member in the College of Arts and Sciences at Florida Gulf Coast University. From 2002 to 2007 he led a multi-agency team in a research project for the US Fish and Wildlife Service related to the recovery of threatened and endangered species in the western Everglades that resulted in two technical reports and oral and poster presentations at the Greater Everglades Ecosystem Restoration Conferences in 2008. From 2006-2008 he was the lead investigator for the assessment of aquatic faunal response to hydrologic restoration of the Picayune Strand State Forest (PSRP) a Comprehensive Everglades Restoration Project (CERP) that involves restoring pre-development conditions and hydrology to more than 55,000-acres of State land in Collier County, FL. Currently he is the lead investigator for the biological monitoring and post-restoration assessment program for Lake Trafford restoration, also a CERP project, and the lead investigator at FGCU for the baseline assessment of invertebrates, fish and wildlife communities at Babcock Ranch Community. Since 1989, Mr. Ceilley has been actively involved in evaluating water quality and effects on biotic communities in Southwest Florida including grant-funded research in Estero Bay and its watershed for the U.S. Environmental Protection Agency and the South Florida Water Management District.

Previous Positions

Director of Environmental Science, Conservancy of Southwest Florida: August 2002 – September 2005.

Responsible for all aspects of managing budgets and directing science programs and projects at the Conservancy including the supervision of 7-9 full-time professional biologists, research associates and environmental specialists. I was directly responsible for managing all staff, grants and contracts, special programs, and the entire Division budget. I was directly responsible for obtaining more than \$1.3 million in research grants and environmental monitoring contracts from State and Federal Agencies, including the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, South Florida Water Management District, U.S. EPA-Gulf of Mexico Program and Charlotte Harbor National

Estuary Program. Responsible for writing technical reports, reviewing and editing journal articles, preparing and delivering professional and public presentations at conferences and seminars and functioning as media contact for the Conservancy on science related issues. During my tenure as Director, the Science Division was recognized as a critical core program of the Conservancy and was awarded the NGO of the Year Award from the Estero Bay Agency on Bay Management in 2005.

Senior Ecologist, Conservancy of Southwest Florida: October 2001-July 2002. Functioned as field supervisor and project manager for the assessment of an experimental beach re-nourishment of Naples Beach using water quality, fishes and marine invertebrates as indicators of biological health. Assumed supervisory responsibility for a research grant project titled “Enhancing the Recovery of Threatened and Endangered Species in South Florida through Aquatic Refugia” that will be completed in December 2005.

Restoration Ecologist & Land Manager, the Sanibel-Captiva Conservation Foundation: August 1996-September 2001.

This position was created in 1996 from a start-up grant from a private foundation to begin a land stewardship program. Within two years, I developed a viable habitat management program with limited resources through research, successful grant writing, networking, and partnership development. The primary goal was to restore natural functions of 1,800-acres of private conservation lands including restoration through invasive plant removal, hydrologic restoration/enhancement and prescribed fire. More than 40 separate parcels were actively managed during this period, including uplands and wetlands on Sanibel, Captiva, Albright Island, York Island, Patterson Island and Buck Key. I supervised 3 staff members as well as contractors and I supervised more than ten prescribed burns in high-hazard, urban interface areas on Sanibel. As a direct result, my program was recognized by the U.S. Fish and Wildlife Service as the “Region IV winner of the National Wetlands Conservation Award” in 2000.

Aquatic Lab Director, K.L. Erwin, Consulting Ecologists, Inc. Ft. Myers, Florida: 1994-1996. Responsible for conducting wetland faunal surveys at natural and disturbed sites and wetland mitigation areas in South Florida and writing technical reports for State and Federal agencies to comply with monitoring conditions. I specialized in wetland fish surveys and aquatic macroinvertebrate identifications. I was also responsible for developing specific functional assessment tools and restoration success criteria for the Little Pine Island Mitigation Bank owned by the state of Florida and operated by a private company. Major clients included the J.D. and C.T. MacArthur Foundation, Duda & Sons and the Florida State Board of Regents for assessing the pre-construction wetland conditions at Florida Gulf Coast University.

Senior Environmental Planner, Lee County Environmental Sciences Division: 1991-1994. I supervised one staff Environmental Planner and was responsible for the environmental compliance and enforcement program for all of un-incorporated Lee County. I also developed a simple but effective tracking program for all active

compliance and enforcement cases related to Lee County Development Standards and Ordinances for the protection of wetlands, mangroves, sea turtles, native habitats and conservation easements. This Compliance and Enforcement program won a National Association of Counties Award (NACO) in 1991. I conducted wetland jurisdictional determinations working with property owners, developers, consulting firms, and the Lee County Property Appraiser's office. I also conducted wetland mitigation monitoring on Lee County DOT projects and wrote detailed assessment reports to comply with State and Federal Agency permit requirements and success criteria.

Aquatic Biologist, Lee County Environmental Laboratory: 1989-1991. Primarily responsible for the collection and analyses of water quality and biological data from Lee County waterways as part of an ambient monitoring program for the Lee County Water Resources Division. I completed an analysis of ten years worth of water quality data from Estero Bay along with an assessment of heavy metals in sediment and wrote a comprehensive report summarizing these data to the Board of County Commissioners. I also obtained a grant from the Florida Department of Natural Resources-Coastal Zone Management Program to ground-truth the sea grasses in Estero Bay before being promoted to Senior Env. Planner.

Limnologist I and II, University of Iowa: 1985-1989. The University of Iowa Hygienic Laboratory is known as the State of Iowa's "Environmental and Public Health Laboratory" and was certified as a Contract Laboratory for the U.S. Environmental Protection Agency (U.S. EPA) Region VII. I initially started as an entry-level chemist and was promoted to a "Limnologist I" position in 1985. After voluntarily relocating twice between Des Moines and Iowa City Laboratory locations I gained experience and a great deal more responsibility. By 1987, I supervised two staff limnologists and operated my own Limnology section at the University's Oakdale Campus in Iowa City. My primary responsibilities including implementing the Iowa Department of Natural Resources (DNR) monthly ambient water quality monitoring program for lakes, streams, and rivers. I also implemented specific studies for evaluating stream condition with respect to water quality standards and effects of point-source pollutant discharges. I conducted more than 100 compliance sampling inspections at municipal and industrial facilities with National Pollutant Discharge Elimination System (NPDES) permits from the U.S. EPA Region VII and Iowa DNR, many of which included field bioassessments and toxicity testing or chronic bioassays of effluent discharges.

I was responsible for supervising staff in the field while conducting a watershed survey of the fishes and aquatic macroinvertebrates of the Big Spring Basin of Northeast Iowa for the Iowa Geological Survey. I also implemented the continuous monitoring of thermal discharge of Duane Arnold Nuclear Power Plant for its effects on aquatic in the Cedar River.

COMMITTEES

Picayune Strand Restoration Adaptive Assessment Team
Big Cypress Watershed Restoration Coordination Team
Estero Bay Agency on Bay Management
Southwest Florida Feasibility Study Project Delivery Team (PDT)
CERP Quality Assurance Oversight Team
Charlotte Harbor National Estuary Program Technical Advisory Committee
USFWS Multi-species Ecosystem Restoration Implementation Team (MERIT)
Editorial Review Committee for the 27th and 28th Annual Conferences on Ecosystem Restoration and Creation at Hillsborough Community College.

EDUCATION

Master of Science 1989. University of Florida, Gainesville, Florida (School of Forest Resources and Conservation: Department Fisheries and Aquatic Ecology). Coursework completed in December 1984. I returned in 1989 to complete and defend my thesis while employed full-time at the University of Iowa as Limnologist II. Thesis topic: The Intensive Culture of Hybrid Striped Bass (*Morone chrysops x M. saxatilis*) in Circular Tanks.

Graduate School Marine Biology 1982. Florida Institute of Technology, Melbourne, Florida. Includes research assistant work on the RV *Tursiops* at the FIT field station on Grand Bahama Island. Transferred to the Univ. of Florida in 1983 to continue graduate studies.

B.A. 1981. University of Northern Iowa, Cedar Falls, Iowa (Biology-Interpretive Naturalist). This was an interdisciplinary program that included major coursework in geology, earth history, soil conservation, meteorology, and anthropology as well as biological sciences, including 10 semester credits (4.0/4.0) of graduate coursework in "Aquatic Ecology" and "Fish Ecology" at Iowa Lakeside Laboratory under Dr. Richard Bovbjerg and Dr. Ken Carlander respectively.

CERTIFICATIONS

Senior Ecologist, 1995, 2003, and 2008. Ecological Society of America, Washington DC
Professional Wetland Scientist, 1996. Society of Wetland Scientists, Lawrence, KS
SCUBA Lifetime Certification, 1979 & Advanced Open Water Cert. 2011. Professional Association of Diving Instructors
Rapid Bioassessment Protocols for Rivers and Streams, 1989. U.S. Environmental Protection Agency
Basic Firefighter Training S-130/190, 1997. U.S. Fish and Wildlife Service
Heavy Equipment Operator, 1999. U.S. Fish and Wildlife Service
Interagency Prescribed Fire Training, 1999. Florida Division of Forestry/Hillsborough Community College
Gopher Tortoise Conservation "Boot Camp" Certification of Completion, 2001. Ashton Biodiversity Research & Preservation Institute, Inc. Newberry, Florida.

PROFESSIONAL SOCIETIES/ORGANIZATIONS

Ecological Society of America
Florida Association of Benthologists
Estero Bay Agency on Bay Management
Charlotte Harbor National Estuary Program, Technical Advisory Committee

PROFESSIONAL EXPERIENCE

2002 – September 2005, Director of Environmental Science
2001- 2002, Senior Biologist, The Conservancy of Southwest Florida
1996-2001, Restoration Ecologist & Land Manager, Sanibel-Captiva Conservation Foundation
1994-1996, Aquatic Lab Director, K.L. Erwin Consulting Ecologists, Inc. Ft. Myers, FL.
1991-1994, Senior Environmental Planner, Lee County Government
1989-1991, Aquatic Biologist, Lee County Government
1985-1989, Limnologist I and II, University of Iowa

PROFESSIONAL GRANTS SUMMARY

Principal Investigator on Research Projects	
Kitson/Babcock Property Holdings – <i>Wildlife and Corridor Assessment 2011</i>	\$40,000
USFWS/DOI <i>Effects of Land Use Conversion Projects on the Eastern Indigo Snake in South Florida.</i>	\$29,250
USFWS South Florida Coastal Program – <i>Lake Trafford SAV Restoration & Mapping</i>	\$90,000
Kitson Partners – <i>Aquatic Faunal Assessments 2009-2011</i>	\$83,141
SFWMD - <i>Lake Trafford Monitoring and Management</i>	\$50,000
SFWMD - <i>Biological Monitoring Program for Lake Trafford Restoration Project 2007-10</i>	\$125,000
Florida Dept. of Env. Protection – <i>Water Quality Technical Support</i>	\$25,000
Kitson Partners- <i>Baseline Biological Assessment of Babcock Ranch Fish, Macroinvertebrates, Herpetofauna and Mammals</i>	\$85,625
SFWMD-Acceler8 Project: <i>Picayune Strand Restoration Project Baseline Inland Fauna Monitoring and Analyses 2005-07</i>	\$65,000
EPA Gulf of Mexico Program <i>Ecological Calibration of Water Quality in Estero Bay</i>	\$110,000
EPA Gulf of Mexico Program <i>Ecological Calibration of Estero Bay Basins: 2003-2005</i>	\$72,000
U.S. Fish & Wildlife Service <i>Enhancing the Recovery of Threatened & Endangered Species in South Florida Through Refugia 2001-2005</i>	\$478,193
U.S. Fish & Wildlife Service <i>Seagrass and Mangrove Restoration Study: 2004-2009</i>	\$16,400
Charlotte Harbor National Estuary Program <i>A Survey of the Effects of Invasive Exotic Vegetation on Wetland Function; Aquatic Fauna, Wildlife and Native Plant Community Structure, 2002-2004</i>	\$24,641
Charlotte Harbor National Estuary Program <i>Benthic Invertebrate Calibration of Estero Bay Watershed, 2002-2004</i>	\$20,000
Florida Coastal Zone Management Program	

<i>Seagrass Mapping of Estero Bay Florida</i> (1990)	\$21,000
Restoration Projects	
U.S. Fish & Wildlife Service-Partners Program (1996)	\$10,000
U.S. Fish & Wildlife Service-Partners Program (1997)	\$10,000
U.S. Fish & Wildlife Service-Partners Program (1998)	\$10,000
U.S. Fish & Wildlife Service-Partners Program (1999)	\$10,000
U.S. Fish & Wildlife Service-Partners Program (2000)	\$9,000
Florida Department of Environmental Protection	\$58,000
U.S. Fish & Wildlife Service-Coastal Ecosystem Program	\$30,000
U.S. Fish & Wildlife Service-Coastal Ecosystem Program	\$24,500
U.S. Fish & Wildlife Service-Coastal Ecosystem Program	\$22,000
Bruning Foundation 1998-2001	\$155,000
U.S.D.A. Natural Resources Conservation Service	\$17,000
U.S.D.A. Natural Resources Conservation Service	\$8,363
Charlotte Harbor National Estuary Program 1998	\$20,000
Charlotte Harbor National Estuary Program 1999	\$13,000
Charlotte Harbor National Estuary Program 2000	\$20,000
Charlotte Harbor National Estuary Program 2001	\$20,000

DAVID W. CEILLEY, M.S., CSE

Selected Technical Reports and Publications
2003-2008

Ceilley, D. W. 2008. Picayune Strand Restoration Project: Baseline Assessment of Inland Aquatic Fauna.

Final Report to the South Florida Water Management District's Everglades Acceler8 Program,
West Palm Bch. FL. 97 pp.

Ceilley, D. W. and E.M. Everham, III. 2008. Water Quality Projects Data Analysis. Final Report to the
Florida Department of Environmental Protection Bureau of Watershed Restoration. Tallahassee,
FL. 36 pp.

Cassani, J. R., K. Watts, D.W. Ceilley and E. M. Everham, III. 2006. Ichthyofaunal survey of the
Caloosahatchee River Oxbows. Charlotte Harbor NEP Watershed Summit, Edison College, Punta
Gorda, FL.

Dennison, T. J., M. L. Lohr, D.W. Ceilley, and E. M. Everham, III. 2008. Water quality evaluation of the impacts of aeration on deep and shallow wet detention ponds in southwest Florida. Proceedings from StormCon: The North American Surface Water Quality Conference & Expedition. Orlando, FL. 11 pp.

Mazzotti, F.J., R.G. Harvey, L.G. Pearlstine, A.D. Daugherty, L.A. Brandt, K.G. Rice, J.H. Waddle, D.W. Ceilley, and M.J. Duever. 2008. *Stressor Response Model for Southwest Florida Amphibians*. Joint Ecosystem Modeling Technical Report. Final report to the South Florida Water Management District and the U.S..Geological Survey. University of Florida, Fort Lauderdale Research and Education Center, Fort Lauderdale, Florida, 41 pages.

Ceilley, D. W. 2007. Supplemental Data Analyses and Discussion for: Enhancing the Recovery of Threatened and Endangered Species in South Florida through Aquatic Refugia. Cooperative Agreement # 1448-40181-01-G-47, US Fish and Wildlife Service, Vero Beach, Florida. 53 pp

Ceilley, D. W., I. Bartoszek, M. Schuman, R.E. Schroeder, K. Worley and J. Schmid. 2007. Enhancing the Recovery of Threatened and Endangered Species in South Florida through Aquatic Refugia. Cooperative Agreement # 1448-40181-01-G-47, US Fish and Wildlife Service, Vero Beach, Florida. 272 pp.

Ceilley, D. W. 2007. Aquatic Faunal Collections and Data Analysis: Babcock Ranch Community. Final Report Contract # 06019 to Johnson Engineering Inc., Ft. Myers, FL. 78 pp.

Main, M. B., D. W. Ceilley, and P. A. Stansly. 2007. Inventory of freshwater fishes in isolated wetlands of South Florida. *Southeastern Naturalist* 6(2): 343-350.

Everham, E. M., B. L. Thomas, D. W. Ceilley, and D Hamilton. 2007. Estero Bay Tributaries Riparian Vegetation Analysis. Final Report Contract # OT061248 to the South Florida Water Management District, West Palm Beach, FL. 104 pp.

Schmid, J.R., G.G. Buckner, E. C. Milbrandt, and D.W. Ceilley. 2006. Ecological Calibration of Estero Bay Basins. Final Report to the US Environmental Protection Agency Gulf of Mexico Program Office for Contract Agreement No. MX-97485103. 103 pp.

Addison, D.S., M.J. Barry, I.A. Bartoszek, D.W. Ceilley, J.R. Schmid, and M.J. Schuman. 2006. Pre-Restoration Wildlife Surveys in the Southern Golden Gate Estates (2001-2004). Final Report for the South Florida Water Management District Contract No. C-13259. Naples, Florida. 97 pp.

Ceilley, D. W., G. G. Buckner, J. R. Schmid and B. W. Smith. 2005. A Survey of the Effects of Invasive Exotic Vegetation on Wetland Functions: Aquatic Fauna and Wildlife. Final Report to the Charlotte Harbor National Estuary Program, Ft Myers, FL. 52pp.

Ceilley, D. W. and S. A. Bortone. 2004. Benthic Invertebrate Calibration of the Estero Bay Watershed Assessment. Final Report to the Charlotte Harbor National Estuary Program, Ft Myers, FL. 68 pp.

Ceilley, D.W., I. Bartoszek, G. G. Buckner, and M.J. Schuman. 2003. Tape grass (*Vallisneria americana*) restoration feasibility study. Final Report to the South Florida Water Management District, 3300 Gun Club Rd. West Palm Bch, FL. 16 pp.

Oral Presentations 2008:

David W. Ceilley, Jason Lauritsen, Brad Cornell, "Wetlands: NO NET LOSS", 2008 Audubon Assembly, Audubon of Florida, Crystal River, October 24-25.

David W. Ceilley, 2008. Fish Community Structure of Aquatic Refugia, Impacted and Reference Wetlands in Southwest Florida. <http://conference.ifas.ufl.edu/GEER2008/presentations>.

Freshwater Fishes as Indicators of Wetland Hydrology and Function in South Florida -<http://conference.ifas.ufl.edu/jc/> David W. Ceilley

Joint Conference on the Science and Restoration of the Greater Everglades and Florida Bay Ecosystem
(p. 71) April 13-18, 2003 Palm Harbor, Florida

Poster Presentations 2008:

David Ceilley, S. Mortellaro, R.P. Rutter, R.B.E. Schuford and D. Strom - A Rapid Wetland Assessment Method using Macroinvertebrates as an Indicator of Wetland Condition and Everglades Restoration Success [Ecology & Ecological Modeling].
<http://conference.ifas.ufl.edu/GEER2008/posters.htm>

David W. Ceilley - Aquatic Macroinvertebrates of Impacted and Reference Wetlands of the Western Everglades: Picayune Strand Restoration Project [Wildlife Ecology and Modeling].
<http://conference.ifas.ufl.edu/GEER2008/posters.htm>