

Barbara Albrecht
Watershed Coordinator
Center for Environmental Diagnostics and Bioremediation
University of West Florida
11000 University Parkway
Pensacola, FL 32514
Phone: 850-474-2060
Fax: 850-474-3130
balbrecht@uwf.edu

EDUCATION

Course work towards a M.S. in toxicology at UWF, but a 1993 fire in the wet lab at USEPA destroyed my thesis project, and I never finished my degree requirements.
B.S., Marine Biology, 1987, University of West Florida
A.S., Biology, 1981, Santa Fe Community College

Certification

Open Water PAD! Diver, Certification Number 313850143, AOWI #1785

Training

40-Hour HAZWOPER
8-Hour Refresher
CPR

EMPLOYMENT HISTORY

2009 – Current	UWF- CEDB Watershed Center - Volunteer Watershed Coordinator
2008 – 2009	The Nature Conservancy - Aquatic Ecologist for the Gulf Coastal Plain Ecosystem Partnership (GCPEP)
2006 – 2008	The Nature Conservancy - Program Manager for the Gulf Coastal Plain Ecosystem Partnership (GCPEP)
1998 – 2006	EnSafe, Inc. Aquatic Toxicologist/Marine Ecologist
1995 – 1998	SETAC Whole Effluent Toxicity Program Coordinator
1991 – 1995	TRAC Laboratories Laboratory Sediment Director
1987 – 1991	Biomonitoring Services Laboratory (BSL) – Laboratory Technician
1985 – 1987	USEPA - Gulf Breeze Student Co-op, Pathobiology Dept Assistant

EXPERIENCE AND BACKGROUND

University of West Florida - Watershed Coordinator - Volunteer Position

- Assisting the Program Director for the UWF Center for Environmental Diagnostics and Bioremediation (CEDB) develop a Watershed Center to serve the NW FL Community and Stakeholders preserve the health and maintain aquatic productivity and resources in local watersheds and off-shore.
- Will assist in identifying funding opportunities to develop a funding base to grow the Watershed Center Opportunity.
- Will identify restoration type projects on large landscapes for students to gain project experience.

The Nature Conservancy - Aquatic Ecologist

- Supports the GCPEP Partners with aquatic issues. Serves as a liaison at public meetings, and assists in the identification of threats and issues the partnership may be facing.
- Conducting an inventory of the Yellow and Shoal Watershed to identify impaired sites. Collecting data from unpaved roads and the potential sedimentation load being contributed to small tributaries feeding into the watershed.
- Fostering a new Partnership between the UWF-CEDB, TNC, USEPA R4, and FDEP to utilize the GCPEP Landscape for research and coordinating a coop relationship between the UWF and the GCPEP Partners.
- Fostering a new Partnership between UWF CEDB, USEPA ERL, USGS, and GCPEP to utilize the GCPEP landscape for research associated with sea level rise threats along coastal and interior lands.
- Growing the GCPEP Aquatic Subcommittee to include academia, business, government, and NGOs, to further water quality issues and address watershed threats.

The Nature Conservancy - Program Manager

- Supports day-to-day functions within the Panhandle Longleaf Pine (PLLP) Conservation Area which includes supporting the Perdido River Nature Preserve, the PLLP Director, GCPEP Partners and Committee Members, and Ecosystem Support Team (EST).
- Assists in identifying and preparing grants and proposals, preparation of quarterly and monthly reports as required by various grants and projects.
- Assisted in bringing a partnership website to fruition and am now solely responsible for maintenance and oversight. www.GCPEPpartners.com
- Coordinate, assist, and responsible for logistical support for the GCPEP Steering Committee Meetings, GCPEP Fire Subcommittee Meetings, GCPEP Invasive Subcommittee Meetings, and am resurrecting the Aquatic Subcommittee - after a two-year hiatus.
- Fosters cross-site learning and public out-reach by presenting at local meetings for conservation communities and other various affiliations.
- Maintain a seat at the table with the Bay Area Resource Council (BARC) Technical Advisory Committee (TAC) for TNC.
- Successfully moved a 9-person office from one county to another. Office had to retro-fitted from a residential dwelling to an office capable of supporting PLLP functions.

EnSafe, Inc.

- Conducted ecological risk assessments on 52 isolated wetlands and near shore portions of estuaries located at Pensacola Naval Air Station, Pensacola, FL. Responsibilities included the development of sediment, surface water, tissue sampling design and collection for toxicity studies and chemical analysis so gradients could be identified while applying the DQO approach for interpretation of data for application to base-wide studies, including human health risk assessments.

- Developed the design of sediment sampling at an offshore site in the vicinity of a former metal plating facility at Pensacola Naval Air Station, Pensacola, FL. Utilized the Sediment Quality Triad(SQT) Approach to assess sediment health. Routinely performed field chemistry along the shore to determine if natural attenuation was plausible for site remediation.
- Studied impacts of a Metal Smelting Facility on an estuarine bayou system in Charleston, sc. Assisted in the design and collection of groundwater, surface water, sediments, and invertebrate tissue for use in the delineation of contaminants into this wetland system. This study was conducted in concert with state and federal agencies which are stakeholders in this project.
- Field scientist at a facility-wide assessment for the Navy's base realignment and closure program. Investigation involved groundwater field chemistry testing in support of facility natural attenuation studies. Designed, installed, and monitored a 5 acre phytoremediation pilot project to intersect the groundwater contaminant perchlorate, at Naval Weapons Center, McGregor, Texas.
- Field scientist at a former refrigeration manufacturing facility in which quarterly groundwater sampling events helped us to track chlorinated solvent movements and determine if natural attenuation were possible in this geographic region. Performed groundwater monitoring and field chemistry in support of this 2-year study.
- Assisted several small bioassay laboratories (non-API sponsored members) with the development and incorporation of Synthetic Based Mud Testing (SBMT) techniques to broaden their services to the off-shore oil and gas market. These facilities were mostly located in USEPA Region's VI and IV. Conducted laboratory audits for small bioassay laboratories and designed culture facilities for freshwater and estuarine organisms for use in effluent and sediment exposures.
- Conducted laboratory audits for small bioassay laboratories and designed culture facilities for freshwater and estuarine organisms for use in effluent and sediment exposures.

Society of Environmental Toxicology and Chemistry (SETAC)

- Initiated and coordinated the Whole Effluent Toxicity (WET) Program for SETAC under a Cooperative Agreement with USEPA - Headquarters.
- Developed four Expert Advisory Panels (EPAs) under the WET Program (WET EAP Steering Committee, the WET EAP Data Evaluation Panel, the WET EAP Training Panel, and the WET Toxicity Identification Evaluation/Toxicity Reduction Evaluation (TIE/TRE) Panel).
- WET EAP Steering Committee and Panels met monthly for conference calls; yearly for face-to-face meetings; developed course materials which were offered at SETAC Chapter & SETAC Annual Meetings; and held workshops addressing National WET Issues whose proceedings were then peer reviewed and published (some areas were even adopted as National USEPA Guidance).
- SETAC WET Courses targeted general, intermediate, and advanced audiences and were taught at 27 locations, in 3 countries (including Cuba), and educated over 1050 individuals.
- As SETAC's WET Test Coordinator, I acted as a liaison for 30+ WET EAP Members (all volunteers), oversaw all the above activities, and helped to address national

and international issues on WET including the Total Maximum Daily Load (TMDL) Program and issues.

TRAC Laboratories

- Developed and oversaw the Environmental Monitoring and Assessment Program (EMAP) Sediment Toxicity Testing Program for the USEPA Louisianian, West Indies, and South Carolinian Provinces from 1991-1995.
- Developed and oversaw the National Status and Trends (NS&T) Sediment Toxicity Testing Program for NOAA's Biscayne Bay and Northwest Florida Sediment Studies.
- Cultured bioassay organisms for researchers at the USEPA, including those used in the EMAP & NST Program.
- Experienced field biologist knowledgeable in the sampling techniques used in wetland and estuarine settings, as well as extensive experience evaluating and interpreting data.

Biomonitoring Services Laboratory

- Assisted in the development of USEPA Sediment Testing Protocols and Guidance, which eventually became promulgated methods.
- Isolated and cultured bioassay organisms, thereby designing new culturing techniques based on organism needs.
- Conducted NPDES Toxicity Testing, generated compliance reports, and marketed facility to local industrial clientele.

USEPA Student Co-operative Position, Pathobiology Branch

- Assisted researchers in the culture and isolation of various vertebrate and invertebrate cell lines using sterile technique.
- Collected native species representing vertebrate, invertebrate, and plant species from freshwater, estuarine, and marine conditions and was responsible for the maintenance, exposure, and eventual sacrifice of these organisms for tissue analysis in the histopathology department.
- Cultivated and exposed oysters to several chemicals for long-term studies before sacrificing the organism for tissue analysis.

PUBLICATIONS

Assessing the Conservation Value of Pine plantations in the Western Panhandle of Florida. 2009. Jodi Slapinski, **B. Albrecht**, and Adlai Platt. Poster presented at the 29th Annual Florida Native Plant Society Conference, West Palm Beach, FL.

[SETAC] Society of Environmental Toxicology and Chemistry. 2004. Technical issue paper. Whole effluent toxicity testing: ion imbalance. Pensacola FL, USA: SETAC. 4p <http://www.setac.org/htdocs/files/TIP-Ion.pdf> **B. Albrecht** contributing author.

[SETAC] Society of Environmental Toxicology and Chemistry. 2004. Technical issue paper. Whole *effluent* toxicity testing. Pensacola FL, USA: SETAC. 4p
<http://www.setac.org/htdocs/files/TIP-WET.pdf> **B. Albrecht** contributing author.

Porewater Toxicity Testing: Biological, Chemical, and Ecological Considerations, editors R.S. Carr and Nipper, M. 2003. SETAC Press. 346 pgs. **B. Albrecht** contributing author.

Lewis, M., D. Weber, R. Stanley, **B. Albrecht**. 2000. Treated Wastewater as a Source of Sediment Contamination in Gulf or Mexico Near-Coastal Areas: A Survey. *Environmental Toxicology and Chemistry*. Vol 19 No.1. Jan 2000.

Schlekat, C.E., K.J. Scott, R.C. Swartz, **B. Albrecht**, et al. 1995. Interlaboratory Comparison of a 10-day Sediment Toxicity Test Method Using *Ampelisca abdita*, *Eohaustorius estuarius* and *Leptocheirus plumulosus*. *Environmental Toxicology and Chemistry*. Vol 14 No. 12. Dec 1995.

Brecken-Folse, J., F. Mayer, M. Ellersieck, **B. Albrecht**, et al. 1995. Sheepshead Minnows (*Cyprinodon variegatus*) as a Surrogate Species in Assessing Contaminant Risk to Two Endangered Cyprinodontids. Submitted to *Environmental Toxicology and Chemistry*.

Clark, J. and **B. Albrecht**. 1992. Effects of Sediment from Three Locations in Gulfport Harbor, Mississippi, on Two Marine Organisms. *EPA/600/X-92/032*. Submitted to the Army Corps of Engineers.

Moore, J., E.M. Lores, J. Forester, R. Stanley, **B. Albrecht**, P. Harris. 1992. Biological and Chemical Assessments of Sediments Collected from Eleven Locations in Albemarle-Pamlico Sound, North Carolina. *EPA/600/X-92/076*.

Walsh, G.E., D. Weber, L. Esry, M. Nguyen, J. Noles, **B. Albrecht**. 1992. Synthetic Substrata for Propagation and Testing of Soil and Sediment Organisms. *Pedobiologia* 36: 1-10.

Clark, J. and **B. Albrecht**. 1991. The Results of Toxicity Tests Conducted on Sediment Samples from the Wamchem Superfund Site, South Carolina. 34 pp. *EPA/600/X-91/094*.

Albrecht, B., et al. 1989. Freshwater Shrimp: Hatchery and Growout. In *Aquaculture Profiles and Opportunities in Mississippi*. 31pp. Eds., Cake, Jr., E., L. Folger Wicker, and C.M. Ladner.

PRESENTATIONS

Antrim, L., P. Crocker, S. Foss, T. Hollister, J. Biedenbach, A. Keller, **B. Albrecht**, et al., 1997. Round Robin Toxicity Tests with *Mulinia lateralis*: A New 10-day Whole Sediment Test Method.

Lewis, M.A., **B. Albrecht**. 1994. Toxicities of Gulf of Mexico Sediments to Marine Invertebrates. North American Benthological Society, Orlando, FL.

Lewis, M.A., **B. Albrecht**, J. Macauley. 1994. Toxicities of Sediments in the Gulf of Mexico to Animals and Plants: Lessons Learned. American Chemical Society (ACS) Spring Symposium, San Diego, CA.

Albrecht, B., et al. 1993. Acute Toxicity of Dieldrin Spiked Sediments to Six US EPA Recommended Marine Species. Society of Environmental Toxicology and Chemistry (SETAC) 14th Annual Meeting, Houston, TX.

VOLUNTEER PROJECTS AND PROFESSIONAL ORGANIZATIONS

- Member of the Bay Area Resource Council (BARC) Technical Advisory Committee (TAC) since 2007.
- President of the NW Chapter of the Florida Association of Environmental Professionals (FAEP) since 2006
- Secretary of the Longleaf Pine Chapter of the Native Plant Society (NPS) since 2009.
- Member of the Advisory Board and Steering Committee for the Blackwater River Foundation since 2009.
- Piney Woods Spring, Holmes County, FL. Spring restoration project 2002.
- Project GreenShores (PGS), Pensacola, FL. Assisting several schools with aquaculture projects for students to grow native species for eventual release at PGS. 2004-2005

PROFESSIONAL REFERENCES

References available upon request.