

**CURRICULUM VITAE**  
**AMANDA W.J. DEMOPOULOS**

**U.S. Geological Survey**  
**Southeast Ecological Science Center**  
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**EDUCATION**

Ph.D., Biological Oceanography, August 2004, Department of Oceanography, UH Manoa  
Thesis Title: "Aliens in Paradise: a comparative assessment of introduced and native mangrove benthic community composition, food-web structure, and litter-fall production", Advisor: Craig R. Smith

M.S., Biological Oceanography, December 2000, Department of Oceanography, UH Manoa  
Thesis Title: "Evaluation of excess <sup>234</sup>Th activity in sediments as an indicator of food quality for deep-sea deposit feeders", Advisor: Craig R. Smith

B.S., Oceanography-Biological emphasis (Minor: Chemistry), June 1996, College of Oceanography, University of Washington

**RESEARCH INTERESTS**

- Biodiversity, community ecology, and food-web structure of benthic communities
- Coastal wetlands ecology and restoration
- Consequences of species invasion to ecosystem health
- Impacts of climate change (e.g., increased storm severity, sea-level rise) on coastal ecosystem function
- Animal-plant-sediment-geochemical interactions
- Life histories and dispersal of marine invertebrates
- Patterns of recruitment and succession of benthic invertebrates
- Fate of terrestrial and marine organic matter inputs through nearshore food webs and ecosystems

**PROFESSIONAL EXPERIENCE**

2007-Present	Research Ecologist (Benthic), US Geological Survey, Florida Integrated Science Center, Gainesville, FL.
2004-2006	Postdoctoral Scholar, Scripps Institution of Oceanography, University of California, San Diego
2004-2005	Co-Investigator, Typhoon impact assessment on mangrove ecosystems, UCSD, UH Manoa.
2003-2004	Sea Grant Research Trainee, UH Manoa.
2002	Co-Investigator, Micronesian Mangrove Habitat Assessment, USDA Institute of Pacific Islands Forestry and UH Manoa.
1999-2004	Graduate Research Assistant-Lead Scientist, Hawaiian mangrove research program, Sea Grant, UH Manoa.
1999-2003	Graduate Research Fellow-Lead Scientist, NOAA/National Estuarine Research Reserve (NERR), Puerto Rico.
1997-1999	Graduate Research Assistant, Age Dependent Mixing in Deep-Sea Sediments Program, NSF, UH Manoa.
1996	Research Student, NSF Research Experience for Undergraduates (REU), SIO, UCSD.

## TEACHING AND ADVISING EXPERIENCE

2007-present	Courtesy Assistant Professor, Fisheries and Aquatic Sciences, University of Florida
2006	Lecturer, Life in the Ocean (ENVI 121), Department of Marine Science and Environmental Studies, University of San Diego.
2005	Advisor, Erin Mullen, UC LEADS Program, UCSD.
1999-2006	Invited Lecturer, Benthic Ecology (OCE 628-2-3 lectures/labs per annum), UH Manoa. Designed and presented course lectures and labs on mangrove ecology and invasion biology.
2004	Invited Lecturer, Communication of Research Results (OCN 490), Dept. of Oceanography, UH Manoa
2003	Co-instructor, Benthic Ecology (OCE 628-taught 50 % of the course) Lectured and discussed topics on benthic feeding and dispersal modes, community patterns, data manipulation, environmental sampling, pollution gradients, zonation and biogeography, mangrove ecology and invasion biology. Students participated in discussion sessions relating to above topics.
2003-2006	Co-Supervisor, Bryan Nakahara, M.S. Student, Dept. of Oceanography, UH Manoa
2002-2003	Co-Advisor, Kauaoa Fraiola, University of Hawaii-Hawaiian Internship Program (UH-HIP), UH Manoa.
2001	Co-Advisor, Lauren Crawford, NSF Research Experience for Undergraduates, UH Manoa
1999-2004	Supervisor, undergraduate laboratory and field technicians, UH Manoa
1999	Co-Advisor, Mikhail Blikhshteyn, NSF Research Experience for Undergraduates, UH Manoa

## RESEARCH FUNDING

### Obtained

“Deepwater Program: Lophelia II: Continuing Ecological Research on Deep-Sea Corals-Benthic Ecology and Trophodynamics,” Environmental Studies Program, USGS, P.I. A. Demopoulos. 4 year program, 2008-2011.

“Synthesis of available information for Florida East and West Coasts relevant to evaluating potential environmental impacts associated with offshore sand dredging for beach and coastal restoration,” Ecosystems Program, USGS, P.I. A. Demopoulos. 2007-2009

“Benthic community ecology and trophic structure in chemosynthetic ecosystems of the Gulf of Mexico.” Environmental Studies Program, USGS, P.I. A. Demopoulos. 2008-2009.

“Trophic Coupling and Habitat Connectivity in Reef Fishes of the Virgin Islands National Park (VIIS) and Coral Reef National Monument (VICR) and Seagrass and Mangrove Habitats using Multiple Tracers”, State Partnership Program, USGS, P.I. A. Demopoulos, Co-P.I. D. Murie and D. Parkyn, 3 yrs.

“Examination of the potential effects of feral hogs (*Sus scrofa*) on the federally threatened Flatwoods Salamander, *Ambystoma cingulatum*” ARMI proposal, P.I. S. Walls, Co-investigator, A. Demopoulos.

“Recolonization and Succession of Wetland Communities Following Mangrove Removal” Sea Grant, 3/01/03-2/28/06.\*

“Continuing Assessment of the Impact of Invading Mangroves on Hawaiian Coastal Communities” Sea Grant, 3/15/01-2/28/03.\*

“Impact of Invading Mangroves on Hawaiian Soft-Sediment Communities” Sea Grant, 3/15/99-2/28/01.\*

“Recolonization and Succession of Mangrove Fauna Following Natural and Anthropogenic Disturbance” NOAA/NERR Graduate Fellowship Program, 6/1/99-5/31/03.\*

\*Although the University of Hawaii does not permit graduate students or postdoctoral scholars to serve as principal investigators on federal grants, I was the primary author (95-100%) on each of these proposals and responsible for securing these funds to conduct proposed research.

## **AWARDS AND DISTINCTIONS**

2006 Invited speaker, US Geological Survey, Florida Integrated Science Center, Gainesville, FL.  
2006 Invited speaker, Department of Marine Science, University of Southern Mississippi, Stennis Space Center, Mississippi.  
2006 Invited speaker, Marine Biology Department, Texas A&M, Galveston, Texas.  
2005 Invited participant, Dissertations Initiative for the Advancement of Limnology and Oceanography (DIALOG VII), Dauphin Island, Alabama.  
2005 Invited speaker, Marine Biology Department, Texas A&M, Galveston.  
2003 Invited speaker, American Society of Limnology and Oceanography Meeting, Salt Lake City, Utah.  
2003 Invited speaker, Conference on the Investigation and Restoration of Estuaries, San Juan, Puerto Rico.  
2003 Student Poster Award, Estuarine Research Federation Meeting, Seattle, Washington. (\$300)  
2003 School of Ocean and Earth Science and Technology (SOEST) Leonida Scholarship Endowment. (\$1500)  
2001-2002 Pacific Fleet Submarine Memorial Association Scholarship. (\$750)  
1999-2003 NOAA/National Estuarine Research Reserve Graduate Research Fellowship. (\$49,000)  
1996 University of California, San Diego, Scripps Undergraduate Research Fellowship. (\$2500)  
1996 Student Oral Presentation Award, Pacific Estuarine Research Society Annual Meeting, Olympia, Washington.

## **STUDENTS SUPERVISED**

I. Altamira (B.F.A. 2001), M. Blikshteyn (B.S. 2000), J. Busch (undergraduate), L. Crawford (B.S. 2002), K. Fraiola (B.S. 2004), H. Ingram (undergraduate), S. Iott (undergraduate), J. Hargrove (M.S. Current), E. Mullen (undergraduate), B. Nakahara (B.S. 2001, M.S. 2007), D. Ngo (B.S. 2000), K. Quinn (B.S. 2000), A. Siegenthaler (B.A. 2001), R. Smith (B.S. 2003), A. Thurber (B.S. 2001).

## **RESEARCH CRUISE EXPERIENCE**

Accumulated 173 days of ship time, including 10 submersible dives.

Jul./Aug. 2010 Chief Scientist, Nancy Foster/Global Explorer ROV; Deep-Coral Communities, GOM-18 days  
Dec. 2009 Cape Hatteras, Deep-sea Coral Communities, SEUS, Cape Lookout – 9 days  
Sept. 2009 Seward Johnson/Johnson Sea Link; Deep-Coral Communities, Gulf of Mexico-12 days  
Aug./Sept. 2009 Ron Brown/Jason II ROV; Deep-Coral Communities, Gulf of Mexico – 25 days  
Aug. 2009 Seward Johnson/Johnson Sea Link, Deep-Coral Communities, SEUS, Cape Canaveral – 12 days  
Oct. 2008 Nancy Foster/SeaEYE Falcon DR ROV; Deep-Coral Communities, Gulf of Mexico – 18 days, collected sediment push cores located in proximity to deep-coral community.

- Aug. 2007 Cape Hatteras; Chemosynthetic Communities, Gulf of Mexico – 21 days, collected organisms, sediments and hard substrates associated with seep communities.
- Nov. 1999 Lawrence Gould; Drake Passage, Antarctic Peninsula – 22 days, sampled Antarctic shelf for benthic fauna and sediments for chemical analysis.
- Oct. 1999 Atlantis/DSV Alvin; Southern California Borderland Basins – 7 days, collected organisms and sediments associated with organic food falls (e.g., dead whales), using sediment corers and submersible.
- July 1998 Atlantis/DSV Alvin; Juan de Fuca Hydrothermal Vents – 19 days, sampled bacteria, other microorganisms associated with hydrothermal vents and ODP bore holes.
- June 1998 Atlantis/DSV Alvin; Southern California Borderland Basins – 7 days, collected organisms and sediments associated with organic food falls.
- April 1998 New Horizon; Southern California Borderland Basins – 8 days, collected sediments for macro- and meiobenthos, Th-234 analysis, and various sediment parameters for food quality assessment using multiple corer, box corer, and sediment collections.
- Aug. 1997 Atlantis/DSV Alvin; Santa Catalina Basin – 5 days, sampled deep-sea sediment for benthos, Th-234 analysis, various sediment parameters for food quality assessment.
- June 1997 New Horizon; Southern California Borderland Basins – 8 days, sampled deep-sea sediment benthic organisms and various sediment parameters for food quality assessment.

### MEMBERSHIP IN ORGANIZATIONS

- 2004-2010 American Association for the Advancement of Science
- 2003-2010 Ecological Society of America
- 2002-2010 American Society of Limnology & Oceanography
- 2002-2010 Estuarine Research Federation
- 2002-2003 UH Commission on the Status of Women  
Substitute Graduate Student Representative
- 1997-2004 Oceanography Department Graduate Student Organization, UH Manoa  
1998-1999 President
- 1995-1996 Women in Oceanography, University of Washington

### PUBLICATIONS

- Demopoulos, A.W.J., C.R. Smith, D.J. DeMaster and W. Fornes. 2003. Evaluation of excess <sup>234</sup>Th activity in sediments as an indicator of food quality for deep-sea deposit feeders. *J. Mar. Res.* 61:267-284.
- Demopoulos, A.W.J., C.R. Smith, and P.A. Tyler. 2003. Ecology of the deep Indian Ocean floor. In: *Ecosystems of the World Volume 28: Ecosystems of the Deep Ocean*, P.A. Tyler, ed., Elsevier, Amsterdam. 569 pp.
- Smith, C.R. and A.W.J. Demopoulos. 2003. Ecology of the deep Pacific Ocean floor. In: *Ecosystems of the World Volume 28: Ecosystems of the Deep Ocean*, P.A. Tyler, ed., Elsevier, Amsterdam, 569 pp.
- Demopoulos, A.W.J., B. Fry., C.R. Smith. 2007. Food-web structure in exotic and native mangroves: a Hawaii-Puerto Rico comparison, *Oecologia*. 153:675-686.
- Demopoulos, A.W.J., N. Cormier, K. Ewel, B. Fry. 2008. Use of multiple chemical tracers to define habitat use of Indo-Pacific mangrove crab, *Scylla serrata* (Decapoda: Portunidae). *Estuaries and Coasts*. 31:371-381.
- Fry, B., N. Cormier, and A.W.J. Demopoulos 2009. Adventures in an isotopically ordered world-the

chemical ecology of Micronesian mangroves and crabs, Pages 50-56 in N. Yoshida, ed., Proceedings of the 4<sup>th</sup> International Conference on Isotopomers, ISI2008-18, 292 pp.

Demopoulos, A.W.J. and C.R. Smith. 2010. Invasive mangroves alter macrofaunal community structure and facilitate opportunistic exotics. *Mar. Ecol. Prog. Ser.* 404:51-67

Sweetman, A.K., J.J. Middelburg, A.M. Berle, A.F. Bernardino, C. Schander, A.W.J. Demopoulos, and C.R. Smith. 2010. Impacts of exotic mangrove forests and mangrove deforestation on carbon remineralization and ecosystem functioning in marine sediments. *Biogeosciences*. 7: 2129-2145.

Demopoulos, A.W.J., D. Gualtieri, and K. Kovacs. Food-web structure of seep sediment macrobenthos from the Gulf of Mexico. *Deep-Sea Res. II.* (2010), doi:10.1016/j.dsr2.2010.05.011.

Nico, L., A. Demopoulos, D. Gualtieri, C. Wieser. 2010 Use of stable isotopes and mercury to assess trophic positions of black carp and other large fishes in the Red-Atchafalaya rivers, Louisiana (USA). *American Fisheries Society Symposium* 74 (in press).

Demopoulos, A.W.J., D.J. Gualtieri, A. Neils, D. Huger. Comprehensive summary of beach renourishment and offshore sand removal impacts for Florida. USGS Open File Report 2010-xxx OCS Study MMS 2010-XXX, 258 pp. (in review).

Demopoulos, A.W.J., A. Foster, M.L. Jones, D.J. Gualtieri, A.M. Neils. Geospatial Characteristics of Florida's coastal and offshore environments. USGS Scientific Investigations Map 2010-xxx (in review).

Demopoulos, A.W.J. Catastrophic disturbance as regulators of wetland community structure and function: typhoon impacts on mangrove benthos. General Technical Report GTR-xxx. USDA Forest Service. (in review).

#### **Other Reports, Meeting Proceedings, Book Reviews**

Demopoulos, A.W.J. 2004. Black Mangrove Benthic Community Structure, Seedling Growth and Survival, and Sediment Characteristics in Anthropogenically Disturbed and Pristine Habitats, NOAA/NERR final report, Jobos Bay National Estuarine Research Reserve, Puerto Rico.

Demopoulos, A.W.J. 2003. Introduced mangroves in the Hawaiian Islands: Their history and impact on Hawaiian coastal ecosystems. In: Global Invasive Species Programme-Invasive Species Report following the conference on the Ecological and Socio-Economic Impacts of Invasive Alien Species on Island Ecosystems.

Demopoulos, A.W.J. 2003. Book Review of Sokolova, M.N. 2000. *Feeding and Trophic Structure of the Deep-Sea Macrobenthos*. Smithsonian Institution Libraries, Washington, D.C. 264 pp. In: Deep-Sea Newsletter 32:24-25.

Demopoulos, A.W.J. 2000. Evaluation of excess <sup>234</sup>Th activity in sediments as an indicator of food quality for deep-sea deposit feeders, M.S. Thesis. Dept. of Oceanography, University of Hawaii.

Levin, L.A., T.S. Talley, A.A. Larson, A. Jones\*. 1997. Faunal composition in the Tijuana River Estuary Intertidal Habitats and the role of life histories in the faunal recovery of Southern California Restored Wetlands. Final Report to the Tijuana River National Estuarine Research Reserve. NOAA Award, No. NA 670R0237. NOAA.

Levin, L., D. Talley, T. Talley, A. Larson, A. Jones\*, G. Thayer, C. Currin, and C. Lund. 1997.  
Restoration of *Spartina* marsh function: An infaunal perspective. Conference Proceedings, Society for Ecological Restoration, 1995 International Conference. Seattle, Washington. Sept. 14-16, 1995.  
\* Please note Demopoulos formerly Jones.

### **Presentations at Meetings**

- Demopoulos, A.W.J. and P. Sikkel. The role of ectoparasites in trophic dynamics in Caribbean coral reef ecosystems. ISOECOL, Fairbanks, AK, Aug. 2010.
- Demopoulos, A.W.J., S.J. Ross, J.P. McClain, A.M. Quattrini, and D. Gualtieri. Food-web diversity on the Hatteras middle slope: analysis of surface to benthic trophodynamics. ASLO Ocean Sciences Meeting, Portland, OR, Feb.2010.
- Hargrove, J.W., D. Parkyn, J. Austin, D. Murie, and A. Demopoulos. Using polymerase chain reaction to aid visual analysis of French grunt stomach contents. ASIH, 2009.
- Demopoulos, A.W.J. and D. Gualtieri. Food-web structure of seep macrobenthos from the Gulf of Mexico. MMS ITM, New Orleans, LA. Jan. 2009
- Demopoulos, A.W.J. and K. Sulak. Community structure and trophic function of deep-reef fish and invertebrate communities in the Gulf of Mexico. MMS ITM, New Orleans, LA. Jan. 2009.
- Demopoulos, A.W.J. and K. Sulak. Macrofaunal community structure and trophic function in deep-sea coral ecosystems in the Gulf of Mexico. 4<sup>th</sup> International Symposium on Deep-Sea Corals, Wellington, New Zealand. Dec. 2008.
- Demopoulos, A.W.J., R. MacKenzie, and N. Cormier. Catastrophic disturbance as regulators of wetland community structure and function: typhoon impacts on mangrove benthos. 19th Biennial Conference of the Estuarine Research Federation in Providence, RI., Nov. 2007.
- Kay, I., A.W.J. Demopoulos, L. Levin. Halting and invasion surge of non-native mangroves in a Southern California tidal saltmarsh while engaging the local community. Ecological Society of America Annual Meeting in San Jose, CA., Aug. 2007.
- Kay, I., A.W.J. Demopoulos, L. Levin. Resurrection: a case study of introduced mangroves re-infesting the Mission Bay Marsh, San Diego, California. Ecological Society of America Annual Meeting in Memphis, TN., Aug. 2006.
- Demopoulos, A.W.J, J. B. Kauffman, M. Tetteh, N. Cormier, and K. Ewel. Catastrophic disturbance as regulators of wetland community structure and function: typhoon impacts on mangroves. 18th Biennial Conference Conference of the Estuarine Research Federation in Norfolk, VA., Oct. 2005.
- Demopoulos, A.W.J., B. Fry, N. Cormier, K. Ewel. Defining links among coastal ecosystems using a multi-tracer approach and mangrove crabs. ASLO Ocean Sciences Meeting, Santiago de Compostela, Spain, June 2005.
- Demopoulos, A.W.J. and C.R. Smith. Ecological impacts of introduced mangroves on Hawaiian

coastal communities. Invasive Plants in Natural and Managed Systems: Linking Science and Management and 7th International Conference on the Ecology and Management of Alien Plant Invasions, Fort Lauderdale, FL., Nov. 2003.

Demopoulos, A.W.J., B. Fry, N. Cormier, and K. Ewel. Trophic linkages and crab movement within Micronesian mangrove forests. 17th Biennial Conference of the Estuarine Research Federation in Seattle, WA, Sept. 2003.

Demopoulos, A.W.J., C.R. Smith, B. Fry, L. Crawford. (Invited) Benthic community composition and food-web structure in native and introduced mangrove forests: comparisons between Puerto Rico and Hawaii. ASLO Ocean Sciences Meeting, Salt Lake City, UT, Feb. 2003.

Demopoulos, A.W.J., C.R. Smith, B. Fry, L. Crawford. Food-web structure in introduced and native mangrove communities; a Hawaii-Puerto Rico comparison. 31st Annual Marine Benthic Ecology Meeting, Orlando, FL. Mar. 2002.

Demopoulos, A.W.J. and C.R. Smith. The Impact of Invading Mangroves on Hawaiian Coastal Ecosystems. International Symposium on Mangroves, Tokyo, Japan. Jul. 2001.

Demopoulos, A.W.J. and C.R. Smith. The Impact of Invading Mangroves on Hawaiian Soft Sediment Communities. 2nd International Conference on Marine Bioinvasions, New Orleans, LA., Apr. 2001.

Demopoulos, A.W.J., C.R. Smith, D. DeMaster, W. Fornes. Evaluation of excess  $^{234}\text{Th}$  activity in sediments as an indicator of food quality for deep-sea deposit feeders, 9th Deep-Sea Biology Symposium, Galway, Ireland, June 2000.

