

Derek Michael Smith

Department of Biology
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EDUCATION

- 2015 PhD Biology, University of Washington, Seattle (anticipated)
Advisor: Dr. Ken Sebens
- 2010 M.S. Zoology, University of Hawai'i at Manoa
Thesis topic: The Ecology of Shipwrecks in the Hawaiian Archipelago: An Assessment of Biodiversity. Advisor: Dr. Ruth Gates
- 1999 B.A. Marine Biology, University of California, Santa Cruz
Thesis topic: Expulsion of Symbiotic Zooxanthellae from *Palythoa* spp. (Anthozoa: Zoanthidia) after shading. Advisor: Dr. Giacomo Bernardi

TECHNICAL REPORTS PUBLISHED

- 2009 **Smith, Derek M.**, Dominique Rissolo and Jeffrey B. Glover n.p. Análisis de Concha. In *La Costa Escondida: Una Investigación Arqueológica del Puerto Maya Vista Alegre*, Quintana Roo, México, edited by Jeffrey B. Glover and Dominique Rissolo. Report prepared for the Consejo de Arqueología del Instituto Nacional de Antropología e Historia, México, D.F.
- 2004 Lombardi, MR and **Derek Smith** Perry Institute for Marine Science Hosts Closed-Circuit Technology; *The Slate*, Volume 2, pp11-13.

PUBLICATIONS

- 2009 **Smith, Derek.** Submerged Cultural Resource Discoveries in Albania; Surveys of Ancient Shipwreck Sites; In: N Pollack (ed). *Diving for Science: Proceedings of the 27th Annual Scientific Diving Symposium*, American Academy of Underwater Sciences. Atlanta, GA.
- 2009 **Smith, Derek**, Jeff Bozanic and John Froeshke. Comparing Potential Differences in the Assessment of Fish Populations and Assemblages Using Open-Circuit versus Closed-Circuit Modes of Diving: A Study in Silence. (in prep)

PAPERS PRESENTED

- 2011 **Smith, Derek.** Submerged Structure Ecology: A New Framework for Understanding and Interpreting Biodiversity. Presented at the 44th Annual Symposium of the Society for Historical Archaeology. Austin, TX.
- 2010 **Smith, Derek.** Submerged Resource Ecology in Papahānaumokuākea. Presented at the 21st Annual Symposium on Maritime Archaeology and History of Hawai'i and the Pacific. Papahānaumokuākea Marine National Monument, Honolulu, HI.
- 2010 Duncan, Kanesa, Judy Lemus, **Derek Smith**, Hollie Putnam, Kaleo Veary, Kenton Wong. Communicating Ocean Sciences: Linking Educators and Research Scientists in a Cultural Context. Presented at the Hawaii Educational Research Associations 32nd Annual Conference. University of Hawaii, Honolulu, HI.

- 2009 **Smith, Derek.** Submerged Cultural Resource Discoveries in Albania; Surveys of Ancient Shipwreck Sites. Presented at the American Academy of Underwater Sciences 27th Annual Symposium. Atlanta, GA.
- 2006 **Smith, Derek** and Jeff Bozanic. Comparing Potential Differences in the Assessment of Fish Populations and Assemblages Using Open-Circuit versus Closed-Circuit Modes of Diving: A Study in Silence. Presented at the American Academy of Underwater Sciences 25th Annual Symposium. University of Miami, Miami, FL.
- 2003 **Smith, Derek** and Kathy Ann Miller. Safe Harbors for our Future: An Overview of Marine Protected Areas in California. Presented at the American Academy of Underwater Sciences 22nd Annual Symposium. East Carolina University, Greenville, NC.

GRANTS/FELLOWSHIPS FOR RESEARCH AND PROFESSIONAL DEVELOPMENT

- 2011-2012 NSF Ocean and Coastal Interdisciplinary Science GK12 Program Fellow - \$30,000
- 2009 NOAA Office of Ocean Exploration and Research Grant; *The Costa Escondida Project: Exploring The Hidden World Of The Maritime Maya* - \$79,738
- 2009 NOAA Office of Ocean Exploration and Research Grant; *Montenegro Coastal and Archaeological Survey* (in review) - \$87,523
- 2008 University of Hawai'i at Manoa Professional Development Grant - \$2000
- 2001 University of California at Santa Cruz New Technologies Grant - \$3500

TEACHING EXPERIENCE

- 2010- Graduate Teaching Assistant, Biology Department, University of Washington
- 2000-2010 Instructor, Scientific Diving Course (as DSO for USC, CMRC, AOP, HIMB)
- 2006 Mentor; Senior Honors Thesis for Scott Hampton (currently BS student at UCSC)
- 2006 Mentor, Senior Honors Thesis for Chris Otto (currently BA student at CSULB)
- 2003 Guest Lecturer, USC Catalina Semester (Invertebrate ID and Island Ecology)
- 2002 Guest Lecturer, CSUN Catalina Semester (Invert, Fish, and Algae ID)
- 1999 Undergraduate Teaching Assistant (Chemistry Department, UCSC)

SELECTED RESEARCH EXPERIENCE

- 2009 *Marine ecologist*; Biodiversity Assessment of Maritime Heritage Sites, NW HI Islands
Ongoing work in collaboration with Dr. Kelly Gleason and the Papahānuamokuākea Marine National Monument Maritime Heritage Program. Collecting ecological and oceanographic data and coral samples for genetic analysis from submerged cultural resource sites.
- 2009 *Cultural Resource Ecologist*; Egadi Islands Survey, Sicily
Worked in collaboration with the Soprintendenza del Mar, Sicily as a consultant and researcher in an ongoing project surveying and verifying anomalies in multibeam data from around Levanzo Island. Initial work includes deployment of long-term settlement and recruitment plates and temperature loggers in the vicinity of the final battle of the First Punic War (241 BCE).
- 2008- 2009 *Head Biologist*; Albanian Coastal Survey, Albania
Working in collaboration with the Albanian Institute of Archaeology and the Waitt Institute for Discovery on an ongoing project to locate, document, identify, and begin analysis of all submerged cultural material as well as assisting in the preservation and protection of the maritime cultural heritage of Albania. This season saw deployment of long-term temperature loggers and ecological transects conducted at a site dated to 3rd century BCE.

- 2008-2009 *Graduate Student, Field Researcher*; Effects of Sedimentation on Coral Recruitment and Histology, Kaneohe Bay
Gates Lab two-year project studying the effects of sedimentation on the recruitment and histology of *Montipora capitata* on the fringing and patch reefs in Kaneohe Bay
- 2007 *Principal Investigator*; Assessment of Fish Populations Using Open and Closed Circuit Modes of Diving, Catalina Island
Conducted fish transects using open and closed circuit modes of diving to compare the assessment of commercially important fish stocks around Catalina Island and inside the WMSC Marine Reserve
- 2005 *Field Researcher*; Submerged Cultural Resource Annual Survey, Channel Islands
Conducted underwater archaeological surveys of shipwrecks in the Channel Islands Marine Sanctuary in collaboration with National Park Service
- 2004 *Diving Safety Officer, Researcher*; PIMS/CMRC
Worked in collaboration with Dr. Michael Lesser and the NOAA Undersea Research Program (NOAA, NURP) project using mixed gas diving techniques in the remote Exuma Cays to study the biological communities found in the mesophotic zone. Settlement plates were deployed near 100m water depth and samples were taken from coral colonies and invertebrate specimens.
- 1999-2003 *Field researcher*; Effects of El Nino on Kelp Forest Communities, WA to Baja CA Sur
Worked as a field researcher and assistant for Dr. Matt Edwards dissertation research conducting transects and surveying kelp forest communities from Washington State to Baja California Sur.

PROFESSIONAL ACTIVITIES

- 2010- Reviewer, National Geographic Society/Waitt Institute Grants Program
- 2010- Research Associate, RPM Nautical Foundation
- 2009-2010 Graduate Student Representative, Zoology Department, University of Hawai'i
- 2006-2008 President, Association of Dive Program Administrators
- 2005-2008 Research Advisory Committee Member, Marine Conservation Research Institute
- 2003-2009 Member, Caribbean Marine Research Center Diving Control Board
- 2002-2008 Standards Committee Member; American Academy of Underwater Sciences
- 2002-2007 Member, University of Southern California Diving Control Board

SELECTED TECHNICAL CERTIFICATIONS

- Instructor Trainer, National Association of Underwater Instructors
- Instructor, American Red Cross, Divers Alert Network
- Instructor, NOAA Advanced Coxswain Training
- Instructor, DOI Motorboat Operator Certification Course
- Instructor, AP Diving/NAUI Inspiration and Evolution Closed-Circuit Mixed Gas Rebreathers
- National Registry Emergency Medical Technician (EMT-B)
- National Board of Diving and Hyperbaric Technology Diving Medical Technician (DMT-B)
- DMT and Care Provider, Kuakini Hyperbaric Treatment Center, John A Burns School of Medicine
- Hyperbaric Chamber Technician and Operator, USC/Catalina Hyperbaric Chamber
- Emergency Diving Accident Management Certification
- Advanced Mixed Gas Blending/O₂ Service Technician, NAUI and Technical Diving International