ERIC WILLIAM VETTER

Curriculum Vitae

Address:
Department of Natural Sciences
Hawaii Pacific University
45-045 Kamehameha Highway
Kaneohe, HI 96744 Telephone: 808-236-5832

Birthplace: Ann Arbor, MI
Date: 12 Feb 1961

EDUCATION:

Ph.D., 1995, Oceanography, University of California at San Diego, Scripps Institution of Oceanography
B.Sc., 1988, Marine Biology, San Francisco State University

PROFESSIONAL EXPERIENCE:

9/1/09 – present	Professor of Marine Science, Hawaii Pacific University
9/1/97 – 9/1/2009	Associate Professor of Marine Science, Hawaii Pacific University
5/15/95-8/30/97	Postgraduate Researcher, Marine Life Research Group, SIO/UCSD
1988-1995	Research Assistant, Scripps Institution of Oceanography, University of California, San Diego, La Jolla

AWARDS:

Best Paper Award, Ecology and Evolution, AAAS, Pacific Division, 1994
PADI Foundation research grant
Sierra Club foundation research grant
NOAA-WCNURC; three years of funding to study biological processes deep within Southern California submarine canyons using submarines
NOAA-HURL; Support funds plus ship and submersible time for 24 days of dives to study megafaunal, macrofaunal and scavenging communities deep in submarine canyons in the Northwest Hawaiian Islands.
HURL: Support funds plus ship and submersible time for 15 days of dives to study megafaunal, macrofaunal and scavenging communities deep in submarine canyons off the Island of Moloka'i.
HPU Trustees Scholarly Endeavors Program: Community Ecology of Submarine Canyons, Coral Reef Monitoring (Molokini, Maui)
International Carbon Dioxide Sequestration Experiment – funding for Cruises off Oahu, Hawaii, and Norway.
Naval Research Laboratory – Ship, submersible and equipment funds for studies of hydrothermal venting on Loihi.

Lockheed Martin –Research support for investigating near-bottom zooplankton communities over the Clarion-Clipperton fracture zone abyssal plain. Yearly RFP and budgeting based on continued success.

PROFESSIONAL SOCIETIES:

Ecological Society of America
American Society of Limnology and Oceanography
American Association for the Advancement of Science
Sigma Xi
Phi Beta Kappa

RESEARCH ACTIVITIES:

1987	Population biology of intertidal gastropods
1988-1989	Antarctic benthic community ecology and water column productivity
1989-1991	Zooplankton vertical migration, population biology of leptostracan crustaceans, community response to pulsed enrichments (benthic)
1991-1995	Secondary production of macrofaunal crustaceans in detrital habitats, community ecology in shallow submarine canyons
1995-1997	Effects of macrophyte detritus on communities in deep submarine canyons, carbon sources for infauna in submarine canyons, impact of submarine canyons on nearshore fisheries
1999-2002	Effects of CO_2 sequestration on benthic communities Scavenger communities on the Hawaiian Slope Influences of hydrothermal venting on benthic animals on Loihi Seamount
2003-2007	Effects of macrophyte detritus on communities in deep submarine canyons, carbon sources for infauna in submarine canyons, impact of submarine canyons on nearshore fisheries
2008-2010	Habitat usage and ecological services provided by green sea turtles in the main Hawaiian Islands
2013-	Near-bottom zooplankton communities over the abyssal plain in the tropical North Pacific
2015	FjordEco, Andvord Bay, Antarctic Peninsula, Benthic community dynamics, PI: Craig Smith
2017-	Larval supply to deep seamounts and the abyssal plain in the Northeast Tropical Pacific

TEACHING EXPERIENCE

Lecturer: General Biology I, HPU
General Biology I Lab., HPU

Marine Biology Lab., HPU
Ecology, HPU
Ecology Lab., HPU
Marine Ecology, HPU
Marine Ecology Lab, HPU
Introduction to Oceanography, UCSD
Introduction to Oceanography Lab., UCSD
Biological Oceanography, HPU, SIO
Biological Oceanography Lab., HPU
Biometry, HPU
Honors Seminar, HPU
Honors Research, HPU
Masters Research, HPU
Marine Biology and the Global Ocean, HPU

OCEANOGRAPHIC EXPERIENCE

Research Vessels:

R/V *R. Revelle*, R/V *Atlantis II,* R/V *Hakon Mosby*, R/V *R.G. Sproul,* R/V *Vantuna,* R/V *Laney Chouest*, R/V *Ka'imikai-o-Kanaloa,* R/V *Cavalier, R/V Hakurei Maru,* R/V *Melville,* R/V *Laurence M. Gould*

Submersible Experience:

R/V *Alvin,* R/V *Sea Cliff*, R/V *Pisces V*, R/V *Delta, Advanced Tethered Vehicle* (ROV), *Benthos Sea ROVER* (ROV), *Aglanta* (ROV), R/V *Pisces IV, Remora* (ROV)

60 + submarine dives

30 + ROV dives

SCUBA experience:

SIO (formerly) certified to 200 ft., 2,000+ research dives

SERVICE

1981-1984	United States Army
1984-1988	California Marine Mammal Center, associate fund raising director, animal care volunteer
1993	Uncompensated Consultant, City of San Diego
1991-1994	SIO, Student representative, biological oceanography curricular group
1992-1997	SIO, Staff Research Development Shop Committee
1990-1996	SIO, Diving Control Board
1997-1999	Chairman, Curriculum Review, HPU Marine Biology Degree
1998	Chairman, Faculty Search Committee, HPU Marine Science Program
1998-1999	Chairman, Program Review, Marine Science, HPU
1998-2000	Scientific Advisor, Island Marine Internship Program, Lahaina, Maui
1999-2001	Chairman, HPU Faculty Assembly Learning Resources Committee

2000-2003	Member International Technical Committee of the Ocean CO_2 Sequestration Experiment
2001- 2010	Member HPU Educational Effectiveness Planning Committee
2001-2003	Member HPU College of Natural Sciences Curriculum Committee
2001	Member Chemistry Search Committee
2004	Member Biology Search Committee
2005-2006	Member College of Natural Sciences Dean Search Committee
2005-2006	Member of HPU VP for Research Search Committee
2007	Member of CNS Oceanography Search Committee
2007-2009	Chair MSMS Admissions Committee
2007-2009	Program Chair, CNS Marine Science Program
2008	Member OLC Annex design committee (OI/HPU)
2007-2008	Member HPU Faculty Assembly FPRC
2012-2013	Member HPU General Education Working Group
2013	Member HPU CNCS FPRC
2014-2016	Member HPU CNCS Curriculum Committee
2014-	Faculty Advisor, HPU MSMS Club
2014-	Member HPU University Student Success Committee
2015-	Member HPU Student Retention Subcommittee
2015-	Faculty Advisor, HPU Marine Science Club
2014-2016	Chair, HPU CNCS Marine Science Program
2014-2015	Chair, Faculty Assembly University Life and Sustainability Committee
2016	Member, Department of Natural Sciences Faculty Promotion and Review Committee
2017	Member Shared Governance Planning Committee, Department of Natural Sciences Faculty Promotion and Review Committee, Marine Science Program Cohort Faculty Advisor

Reviewer for journals:

(1) *Limnology and Oceanography*
(2) *Journal of Experimental Marine Biology and Ecology*
(3) *Lethia*
(4) *Deep-Sea Research*
(5) *Continental Shelf Research*
(6) *Ecological Applications*
(7) *Journal of the Marine Biological Association of the United Kingdom*
(8) *Marine and Freshwater Research*
(9) *Global Change Biology*
(10) *Proceedings of the Biological Society of Washington*
(11) *Estuaries*
(12) *Ecological Monographs*
(13) *Marine Ecology Progress Series*
(14) *Proceeding of the Royal Society (B)*
(15) *Marine Ecology*
(16) *Fisheries Bulletin*
(17) *Ecological Applications*
(18) *Progress in Oceanography*

Reviewed grant proposals for:

(1) National Science Foundation
(2) National Undersea Research Program
(3) Sea Grant
(4) Sigma Xi
(5) National Fish and Wildlife Foundation

DISSERTATION

Vetter, E. W. 1995. Southern California *Nebalia,* Ecology, Production, Natural History and Systematics of three Subtidal Species. Ph.D. thesis, University of California, San Diego.

PUBLICATIONS

Vetter, E. W. 1994. Hotspots of benthic production. Nature 372: 47.

Vetter, E. W. 1995. Detritus-Based Patches of High Secondary Production in the Nearshore Benthos. Marine Ecology Progress Series 120: 251-262.

Vetter, E. W. 1996. *Nebalia daytoni*, n. sp. A leptostracan from Southern California (Crustacea: Phyllocarida). Crustaceana 69: 379-386.

Vetter, E. W. 1996. Enrichment experiments and infaunal population cycles on a Southern California sand plain: response of the leptostracan *Nebalia daytoni* and other infauna. Marine Ecology Progress Series 137: 95-101.

Vetter, E. W. 1996. Secondary production of a Southern California *Nebalia* (Crustacea: Leptostraca). Marine Ecology Progress Series 137: 83-93.

Martin, J., E. W. **Vetter** and C. Cash-Clark. 1996. Description and external morphology of a new species of *Nebalia* Leach, 1814 (Crustacea, Phyllocarida, Leptostraca) from Southern California, with a key to extant Families and Genera of the Leptostraca. Journal of Crustacean Research 16: 347-372.

Vetter, E. W. 1996. Life history patterns of two Southern California Nebalia (Crustacean; Leptostraca): the failure of form to predict function. Marine Biology 127: 131-141.

Vetter, E. W. 1998. Population dynamics of a dense assemblage of marine detritivores. Journal of Experimental Marine Biology and Ecology 226: 131-161.

Vetter, E. W., P. K. Dayton. 1998 Macrofaunal Communities within and adjacent to a Detritus-Rich Submarine Canyon System. Deep-Sea Research II 45: 25-54.

Gibbons, M. J. et al. 1999. The taxonomic richness of South Africa's marine fauna: a crisis at hand. South African Journal of Science 95: 8-12. (too many authors to list all)

Vetter, E. W., P. K. Dayton. 1999 Organic enrichment by macrophyte detritus, and abundance patterns of megafaunal populations in submarine canyons. Marine Ecology Progress Series 186:137-148.

Adams E. Akai M. Alendal G. Golmen L. Haugan P. Herzog H. Masutani S. Murai S. Nihous G. Ohsumi T. Shirayama Y. Smith C. **Vetter** E. Wong CS. 2002. International field experiment on ocean carbon sequestration. [Letter] Environmental Science & Technology. 36(21):399A.

Summers, J., E. **Vetter**, C. Smith, P. Bergman E. Adams, M. Akai 2004. Results of international field experiment on a natural CO_2 analogue, Greenhouse Gas Control Technologies 7, Volume I.

Vetter, E. W. and C. R. Smith, 2005, Ecological effects of deep-ocean CO_2 enrichment: Insights from natural high-CO_2 habitats, Journal of Geophysical Research, Oceans. 110: C09S13, 10 pp.

Haney T.A., J.W. Martin, and E.W. **Vetter**, 2007. Leptostraca, The Light and Smith Manual Intertidal Invertebrates from Central California to Oregon, Fourth Edition, University of California Press, Berkeley

Vetter, E. W., C. R. Smith, F. C. and De Leo, 2010, Hawaiian Hotspots: enhanced megafaunal abundance and diversity in submarine canyons on the oceanic islands of Hawaii, Marine Ecology. 31: 183-199

De Leo, F., J.C. Drazen, E.W. **Vetter**, A. A. Rowden, and C.R. Smith, 2012. The effects of submarine canyons and the oxygen minimum zone on deep-sea fish assemblages off Hawai'i. Deep-Sea Research Part 1 64: 54-70.

Francke, D.L. S.A. Hargrove, E.W. **Vetter**, C.D. Winn, G.H. Balazs, K.D. Hyrenbach, 2013, Behavior of juvenile green turtles in a coastal neritic habitat: Validating time–depth–temperature records using visual observations, Journal of Experimental Marine Biology and Ecology, 444: 55-65.

De Leo, F., ,E.W. **Vetter**, C.R. Smith, A.A. Rowden, M. McGranaghan, 2014, Spatial scale-dependent habitat heterogeneity influences submarine canyon macrofaunal abundance and diversity off the Main and Northwest Hawaiian Islands, Deep-Sea Research Part II, 104: 267-290.

Kersten, O, C.R. Smith, E.W. **Vetter,** 2017, Abyssal near-bottom dispersal stages of benthic invertebrates in the Clarion-Clipperton polymetallic nodule province, Deep-Sea Research Part 1, 127:31-40.

MANUSCRIPTS IN PREPARATION

Dayton, P. K., J. P. Barry, J. Hanson, M. Riddle, S. Thrush and E. W. Vetter. Benthic ecology and production of McMurdo Sound (Antarctica).

Vetter, E. W., P. K. Dayton. Southern California submarine canyons as nursery grounds for juvenile Pacific hake *(Merluccius productus)*.

Vetter, E. W., P. K. Dayton. Enhanced benthic production attributable to macrophyte detrital aggregates, stable isotope evidence.

ABSTRACTS

Vetter, E. W. 1993. Extraordinarily high secondary productivity fueled by kelp and surfgrass detritus at the head of the La Jolla Submarine canyon. American Zoologist 33(5): 17A.

Vetter, E. W. 1994. Biological and physical regulation of a community of marine scavengers inhabiting accumulations of macrophyte detritus. EOS, Transactions, American Geophysical Union, Supplement. 75(3): 215.

Vetter, E. W. 1994. Annual physical and biological disturbances control populations by mediating fish predation. Proceedings of the Pacific Division, American Association for the Advancement of Science. 13(1): 99.

Vetter, E. W. and P. K. Dayton 1996. Effects of large quantities of macrophyte detritus on benthic and demersal animals within a submarine canyon. Western Society of Naturalists, 76th Annual Meeting, Port Washington.

Vetter, E. W. and P. K. Dayton 1996. Observations of juvenile hake (*Merluccius productus*) in and around the Scripps/La Jolla submarine canyon system. California Cooperative Oceanic Fisheries Investigations, Annual Conference, Asilomar, California.

Vetter, E. W. and P. K. Dayton 1998. Macrofaunal Communities Within and Adjacent to a Detritus-Rich Submarine Canyon System. 1998 Ocean Sciences Meeting, Eos 16 Dec. 1997.

Vetter, E. W. 2002. Southern California Submarine Canyons: unique features of canyons lead to dramatic differences in biomass, species composition, and diversity of benthos and demersal fishes relative to non-canyon reference areas. European Union Submarine Canyons Workshop, Sitges, Spain.

Vetter, E. W., and C. R. Smith (2002) Direct Carbon Dioxide Sequestration in the Deep-Sea.
Biological Consequences, 6th Greenhouse Gas Control Technologies meeting, Kyoto, Japan.

Vetter, E. W. 2002. The Ecological Setting of Submarine Canyons. Seamounts, Canyons and Deep Sediments Workshop, Hatfield Marine Center, Oregon

Vetter, E. W. and C. R. Smith (2004) Impacts of Elevated CO_2 on Deep-Sea Scavengers, *The oceans in a high carbon dioxide world,* UNESCO Scientific Committee on Ocean Research conference, Paris, France

Vetter, E. W. (2004) Submarine Canyons. Deep-Sea Fisheries: Ecology, Economics and Conservation, sponsored by the Ocean Life Institute (OLI) of the Woods Hole Oceanographic Institution and the New England Aquarium, Woods Hole, Mass.

Vetter, E. W. and C. R. Smith (2004) Potential Impacts Deep-Sea CO_2 Sequestration on Deep-Sea Scavengers, *ASLO Ocean Sciences Meeting,* Honolulu, HI

Vetter E.W. & Smith C.R. (2006) Canyon and slope assemblages on the oceanic island of Oahu: detrital enrichment in the deep blue sea. 11th International Deep-Sea Biology Symposium, National Oceanography Centre, Southampton, UK

Yeh, J; Smith, C R ; Vetter, E W (2007) Effects of submarine canyons on megafaunal scavengers of the Hawaiian islands, *ASLO Ocean Sciences Meeting, Santa Fe, NM*

De Leo, F.; Smith, C; Rowden, A.; Vetter, E. (2008) Submarine canyons as sources of habitat heterogeneity and enhanced biodiversity on the Hawaiian and New Zealand margins. Workshop 'Roles of Habitat Heterogeneity in Generating and Maintaining Continental Margin Biodiversity' at Scripps Institution of Oceanography, La Jolla, CA

De Leo, F.; Drazen, J.; Smith, C; Vetter, E. (2010) Quantitative assessment of deep-sea fish communities off Hawaii: the effect of submarine canyons and habitat structure on assemblage abundance and composition. Poster - 12th Deep-sea Biology, Reykjavík, Iceland, June 7-11

De Leo, F.; Smith, C; Vetter, E. (2010) Enhanced macrofaunal abundance and beta diversity in three Hawaiian submarine canyons: deep-sea oases embedded in an oligotrophic ocean. Poster - 12th Deep-sea Biology Symposium, Reykjavík, Iceland

Kersten O., Smith C., Vetter E. (2015) Abyssal benthopelagic zooplankton in the Clarion Clipperton Zone - 14 Deep-sea Biology Symposium, Aveiro, Portugal

Kersten O., Vetter E., Smith C., Goetze E (2016) Assessment of an abyssal near-bottom zooplankton community via metabarcoding. ICES/PICES 6TH Zooplankton Production Symposium, Bergen, Norway.