

Curriculum Vitae

Andrew P. DeVogelaere, Ph.D.

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Description of Current Job Responsibilities

I currently serve as Research Coordinator for the Monterey Bay National Marine Sanctuary (MBNMS). In this position I oversee all aspects of the Monterey Bay Sanctuary Research Program, including: facilitating collaboration among research groups in the Central California region; providing technical information to regional and national decision makers; assessing Sanctuary health by developing and maintaining monitoring programs; encouraging and participating in research on resource management issues; supervising a geographic information system and web-based monitoring data display program; developing NOAA ship, submersible, and aircraft operations; and related budget and administrative duties. With four other people, the Research Coordinator is part of the MBMS Management Team. I am also the Director of the Sanctuary Integrated Monitoring Network (SIMoN) Program for Cordell, Greater Farallones, Monterey and Channel Islands National Marine Sanctuaries where I lead strategic program planning and oversee administrative functions.

Education

1991. Ph.D. in Biology. University of California, Santa Cruz
1988. M.S. in Marine Science. Moss Landing Marine Labs, San Francisco State University
1983. B.A. in Biology. University of California, Berkeley

Positions Held

2017 - present Adjunct Research Faculty, Cal. State University at Monterey Bay
2002 – present Director, Sanctuary Integrated Monitoring Network
1995 - present Research Coordinator, Monterey Bay National Marine Sanctuary
2003 President, Western Society of Naturalists
1991 - 1995 Research Coordinator, Elkhorn Slough National Estuarine Research Reserve
1993 - 1994 Director, Moss Landing Harbor District (publicly elected position)
1992 - 1994 Lecturer in Marine Sciences, San Jose State University/MLML
1987 - 1999 Principal, DeVogelaere's Biological Consulting

Example Committee Work and Appointments

Central and Northern California Ocean Observing System

Governing Council, 2014 - present

Office of National Marine Sanctuaries

Science Representative for the West Coast Region, 2013 - 2016

Marine Operations Committee, 2011 - 2013

California State University, Monterey Bay

Center for Coastal and Marine Ecosystems Stakeholder Advisory Board, 2017 - present

Board Member for the Coastal & Watershed Science and Policy Program, 2012 - 2014

Advisory Committee to the Institute for Applied Marine Ecology, 2009 - 2018

Oceana

Science Advisor on Remotely Operated Vehicle expeditions, 2010 - 2012

Monterey County Board of Supervisors

Moss Landing County Sanitation Advisory Committee, 2000 - 2006

National Marine Fisheries Service, NOAA

Status Review Team for black abalone under the Endangered Species Act, 2007

International Programs Branch, NOAA

Delegation Member on Marine Resource Management to South Korea, 2002

Pacific Grove City Council

Subcommittee on Research of the Point Pinos Tidepool Task Force, 2000 - 2003

California Coastal Commission

Steering Committee for the Central Coast Comprehensive Wetland GIS Database, 2002

Sustainable Seas Expeditions (National Geographic/NOAA)

Mission Coordinator, 2000

California Biodiversity Council

Science Coordinating Committee, 1996 - 1999

California Department of Fish and Game

Reserve Advisory Committee for the Ecological Reserves Grant Program, 1996 - 1999

National Undersea Research Program

Steering Committee for the Monterey Bay Initiative, 1996

Elkhorn Slough National Estuarine Research Reserve

Tidal Wetland Plan Strategic Planning Team, 2000 - present

Reserve Advisory Committee, 1993 - 1994, 1998 - 2014

Friends of Moss Landing Marine Laboratories

Advisory Board, 1999 - 2008

Board of Directors, 1994 - 1999

Moss Landing Harbor District

Treasurer, 1993

Environmental Committee, 1993 - 1994

Property Committee, 1993 - 1994

Current Collaborations

Every day within the Office of National Marine Sanctuaries, I address science information related to management decisions, policy, and education. Below are some collaborations, external to our office, that I am currently participating in and that I have played a significant role in developing.

- Impact assessment and solutions to shipping containers lost at sea. With Monterey Bay Aquarium Research Institute (MBARI) and Save The Earth.
- Marine mammal vocalizations and anthropogenic sounds in Monterey Bay and at Davidson Seamount. With Stanford University and the University of California at Santa Cruz.
- Surveying beach cast organisms to detect natural and human caused events: a citizen science program. With Moss Landing Marine Labs and the Oiled Wildlife and Veterinary Care Center.
- Characterizing midwater fishes in Sanctuary Ecologically Significant Areas. With California Academy of Sciences and Moss Landing Marine Labs.
- Ecological impacts of side casting associated with highway maintenance along the Big Sur coastline. With the Partnership for Interdisciplinary Studies at the University of California at Santa Cruz.
- Developing restoration techniques for deep-sea coral communities. With MBARI.
- Developing a soundscape monitoring system for Monterey Bay. With Hopkins Marine Station, MBARI, Moss Landing Marine Labs, Naval Postgraduate School.
- Assessing tidal erosion rates to marshes in Elkhorn Slough, and associated restoration projects. With the Elkhorn Slough National Estuarine Research Reserve.
- Quantification of trawl impacts from multiple gear types. With California State University Monterey Bay and Environmental Defense Fund.
- Building demonstration marine biodiversity observation networks (MBONs) in the Florida Keys and Monterey Bay National Marine Sanctuaries. With MBARI, University of South Florida, Central and Northern California Observing System, Florida Keys National Marine Sanctuary, National Marine Fisheries Service, and others.

Example Video Presentations

Interviews

Earth is Blue: Exploring Davidson Seamount
https://www.youtube.com/watch?v=2B3Gz0rOg_A

“Person on the street” interview at Blue Ocean Film Festival
<https://www.youtube.com/watch?v=yazrOuI6D3E>

Formal productions

KQED *QUEST* program on Exploring Corals of the Deep
<http://ww2.kqed.org/quest/2012/05/08/exploring-corals-of-the-deep/>

Stories from the Blue production on lost shipping containers
<https://www.youtube.com/watch?v=PRU2PxMOh18>

Selected Publications

- Simonis, A., K.A. Forney, S. Rankin, J. Ryan, Y. Zhang, A. DeVogelaere, J. Joseph, A. Krumpel, S. Baumann-Pickering. (in review) Seal bomb noise as a potential threat to Monterey Bay harbor porpoise. *Frontiers in Marine Science*.
- Boch, C.A., A. DeVogelaere, E. Burton, C. King, J. Lord, C. Lovera, S.Y. Litvin, L. Kuhnz, and J.P. Barry. 2019. Coral translocation as a method to restore impacted deep-sea coral communities. *Frontiers in Marine Science* 6:540. doi: 10.3389/fmars.2019.00540.
- Brown, J., G.D. Williams, C.J. Harvey, A.P. DeVogelaere, and C. Caldow. 2019. Developing science-based indicator portfolios for national marine sanctuary condition reports. *Marine Sanctuaries Conservation Series ONMS-19-07*.
- Ryan, J., D.E. Cline, J.E. Joseph, T. Margolina, J.A. Santora, R.M. Kudela, F.P. Chavez, J.T. Pennington, C. Wahl, R. Michisaki, K. Benoit-Bird, K.A. Forney, A.K. Stimpert, A. DeVogelaere, N. Black, and M. Fischer. 2019. *PLoS ONE* 14(9):e0222456.
- Alvarado, N., C. Boyle, B. Brown, A. Cline, C. de Rond, S. Ferrin, C. Friedlander, C. Gonzalez, C. Hermann, G. Leavitt, L. Lemon, A. Nally, E. Senyk, A. Wasserman, J. Lindholm, A. DeVogelaere. 2017. The spatio-temporal mosaic of scientific research: a case study from Monterey Bay National Marine Sanctuary. *Marine Sanctuaries Conservation Series ONMS-17-08*. U.S. Department of Commerce. National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. 115pp.
- Burton, E.J., L.A. Kuhnz, A.P. DeVogelaere, and J.P. Barry. *Sur Ridge field guide: Monterey Bay National Marine Sanctuary*. 2017. *Marine Sanctuaries Conservation Series ONMS-17-10*.
- Barry, J.P., J.R. Taylor, L.A. Kuhnz, and A.P. DeVogelaere. 2016. Symbiosis between the holothurian *Scotoplanes* sp. A and the lithodid crab *Neolithodes diomedea* on a featureless bathyal sediment plain. *Marine Ecology*: 1-10 (DOI: 10.1111/maec.12396).
- Ryan, J., D. Cline, C. Dawe, P. McGill, Y. Zhang, J. Joseph, T. Margolina, M. Caillat, M. Fischer, A. DeVogelaere, A. Stimpert, and B. Southall. 2016. New passive acoustic monitoring in Monterey Bay National Marine Sanctuary. *Oceans 2016 MTS/IEEE Monterey*; 19-23 Sept 2016; 8pp. (DOI:10.1109/OCEANS.2016.7761363).
- Basta, D., L. LaFeir, S. Gittings, K. Broughton, T. Casserley, P. Chetirkin, J. Delgado, A. DeVogelaere, R. Green, E. Hickerson, J. Hoyt, M. Lawrence, T. Lillestolen, M. Pickett, T. Reyer, S. Rohmann, G. Schmahl, K. Thompson, D. Wiley, and D. Wilkes. 2015. Technology use in NOAA's National Marine Sanctuary System. *Marine Technology Society Journal* 49:178-192.
- Brown, J.A., E. Burton, A. DeVogelaere, B. Hoover, and S.I. Lonhart. 2015. *Monterey Bay National Marine Sanctuary condition report partial update: a new assessment of the state of sanctuary resources*. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. 133pp.
- Knight, A., J. Lindholm, A. DeVogelaere, and F. Watson. 2014. An approach to the collection, processing, and analysis of towed camera video imagery for marine resource management. *Marine Technology Society Journal* 48:86-95.
- Taylor, J.R., A.P. DeVogelaere, E.J. Burton, O. Frey, L. Lundsten, L.A. Kuhnz, P.J. Whaling, C. Lovera, K.R. Buck, and J.P. Barry. 2014. Deep-sea faunal communities associated with a lost intermodal shipping container in the Monterey Bay National Marine Sanctuary, CA. *Marine Pollution Bulletin* 83:92-106.

- Frey, O. and A.P. DeVogelaere. 2014. The containerized shipping industry and the phenomenon of containers lost at sea. Marine Sanctuaries Conservation Series ONMS-14 - 07. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. 51pp.
- Frey, O. and A.P. DeVogelaere. 2014. A review of resource management strategies for protection of seamounts. Marine Sanctuaries Conservation Series ONMS-14-08. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. 52pp.
- Frey, O., G. Shester, and A.P. DeVogelaere. 2014. A profile of the hook and line fishery for California Halibut in Monterey Bay, California: learning from fishermen through collaborative research. Marine Sanctuaries Conservation Series ONMS-14-06. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. 46 pp.
- Lundsten, L., S.B. Johnson, G.M. Cailliet, A.P. DeVogelaere, and D.A. Clague. 2012. Morphological, molecular, and in situ behavioral observations of the rare deep-sea anglerfish *Chaunacops coloratus* (Garman, 1899), order Lophiiformes, in the eastern North Pacific. *Deep-Sea Research I* 68:46-53.
- Nevins, H., S.R. Benson, E.M. Phillips, J. de Marignac, A.P. DeVogelaere, J.A. Ames and J.T. Harvey. 2011. Coastal ocean mammal and bird education and research surveys (Beach COMBERS), 1997 – 2007: ten years of monitoring beached marine birds and mammals in the Monterey Bay National Marine Sanctuary. Marine Sanctuaries Conservation Series ONMS11-02. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. 63 pp.
- McClain, C. R., L. Lundsten, J. Barry, and A.P. DeVogelaere. 2010. Assemblage structure, but not diversity or density, change with depth on a northeast Pacific seamount. *Marine Ecology* 31:1-12.
- Brown, J.A., R. Pavia, C. King, and A.P. DeVogelaere. 2010. The application of observing system data in California current ecosystem assessments. Marine Sanctuaries Conservation Series NMSP-ONMS-10-01. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. 112 pp.
- McClain, C.R., L. Lundsten, M. Ream, J. Barry, and A.P. DeVogelaere. 2009. Endemicity, biogeography, composition, and community structure on a northeast Pacific seamount. *PLoS ONE* 4:e4141.
- de Marignac, J., J Hyland, J. Lindholm, A.P. DeVogelaere, W.L. Balthis, and D. Kline. 2009. A comparison of seafloor habitats and associated benthic fauna in areas open and closed to bottom trawling along the central California continental shelf. Marine Sanctuaries Conservation Series ONMS-09-02. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. 44p.
- Clague, D.A., J.B. Paduan, R.A. Duncan, J.J. Huard, A.S. Davis, P.R. Castillo, P. Lonsdale, and A.P. DeVogelaere. 2009. Five million years of compositionally diverse, episodic volcanism: construction of Davidson Seamount atop an abandoned spreading center. *Geochemistry Geophysics Geosystems* 10:1-17.

- Andrews, A.H., R.P. Stone, C.C. Lundstrom, and A.P. DeVogelaere. 2009. Growth rate and age determination of bamboo corals from the northeastern Pacific Ocean using refined ²¹⁰Pb dating. *Marine Ecology Progress Series* 397:173-185.
- VanBlaricom, G., M. Neuman, J. Butler, A.P. DeVogelaere, R. Gustafson, C. Mobley, D. Richards, S. Rumsey, and B. Taylor. 2009. Status review report for black abalone (*Haliotis cracherodii* Leach, 1814). National Marine Fisheries Service Technical Report.
- Lundsten, L., J.P. Barry, G.M. Cailliet, D.A. Clague, A.P. DeVogelaere, and J.B. Geller. 2009. Benthic invertebrate communities on three seamounts off southern and central California, U.S.A. *Marine Ecology Progress Series* 374:23-32.
- Lundsten, L., C.R. McClain, J.P. Barry, G.M. Cailliet, D.A. Clague, and A.P. DeVogelaere. 2009. Ichthyofauna on three seamounts off southern and central California, U.S.A. *Marine Ecology Progress Series* 389:223-232.
- Douros, W.J. and A.P. DeVogelaere. 2007. Marine Sanctuaries and Parks. Pages 38 - 352 in: M.W. Denny and S.D. Gaines (eds.), *Encyclopedia of tidepools and rocky shores*, University of California Press, Berkeley, California.
- DeVogelaere, A.P., E.J. Burton, T. Trejo, C.E. King, D.A. Clague, M.N. Tamburri, G.M. Cailliet, R.E. Kochevar, and W.J. Douros. 2005. Deep-sea corals and resource protection at the Davidson Seamount, California, U.S.A. Freiwald, A., Roberts, J.M. (eds). *Cold-water corals and ecosystems*. Springer-Verlag Berlin Heidelberg. Pp. 1189 – 1198.
- Andrews, A. H., G. M. Cailliet, L. A. Kerr, K. H. Coale, C. Lundstrom, and A.P. DeVogelaere. 2005. Investigations of age and growth for three deep-sea corals from the Davidson Seamount off central California. Freiwald, A., Roberts, J.M. (eds). *Cold-water corals and ecosystems*. Springer-Verlag Berlin Heidelberg. Pp. 1021 – 1038.
- DeVogelaere, A., R. Kochevar, M. Tamburri, G. Cailliet, E. Burton, S. Benson, and W. Douros. 2002. Exploring the Davidson Seamount: combining science, public outreach, and resource management. *Proceedings of California and the World Ocean '02*, October 27-30, 2002. Santa Barbara, CA.
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- Scholin, C. A., F. Gulland, G. Doucette, S. Benson, M. Busman, F. Chavez, J. Cordaro, R. DeLong, A. De Vogelaere, J. Harvey, M. Haulena, K. Lefebvre, T. Lipscomb, S. Loscutoff, L. Lowenstine, R. Marin III, P. Miller, W. McLellan, P. Moeller, C. Powell, T. Rowles, P. Silvagni, M. Silver, T. Spraker, V. Trainer, and F. Van Dolah. 2000. Mortality of sea lions along the central California coast linked to a toxic diatom bloom. *Nature* 403:80-84.
- King, A. and A. P. De Vogelaere. 2000. MBNMS Kelp report - management recommendations for 2000 - 2005. *Monterey Bay Sanctuary Technical Report*. 54pp.
- De Vogelaere, A. P. and R .C. Green. 1998. A review of research programs in central California coastal managed areas with a suggestion for improved collaboration. Pages 99 - 104 in O. T. Magoon, H. Converse, B. Baird, and M. Miller-Henson, editors. *California and the World Ocean '97: Taking a look at California's ocean resources: an agenda for the future*. American Society of Civil Engineers. 1756pp.
- Starr, R., K. Stanbury, Y. Lao, J. Paris, and A. P. De Vogelaere. 1998. Geographic information system technology for the Monterey Bay National Marine Sanctuary. Final Report to the

- California Urban Environmental Research and Education Center. 55pp.
- Caffrey, J., S. Shaw, M. Silberstein, A.P. DeVogelaere, and M. White. 1997. Water quality monitoring in Elkhorn Slough: a summary of results 1988-1996. Elkhorn Slough National Estuarine Research Reserve Technical Report.
- Werner, M., L. Wunderlich, M. Los Huertos, S. Swezey, S. Gliessman, M. Silberstein, R. Tjeerdema, A. De Vogelaere, and L. Marcus. 1995. Agriculture and wetlands: developing a model system for assessing the effects of conversion to sustainable agricultural practices in a sensitive estuarine watershed, Elkhorn Slough, California. Final report to the California State Coastal Conservancy and the U.S. Environmental Protection Agency.
- De Vogelaere, A.P. 1996. Biological communities: Rocky intertidal habitats. In J. Guerrero and R. Kvitek (editors). Monterey Bay National Marine Sanctuary Site Characterization. <http://bonita.mbnms.nos.noaa.gov>.
- De Vogelaere, A.P., S. Shaw, M. Silberstein, and M. White. 1995. Water quality in Elkhorn Slough and adjacent wetlands (1988 - 1995). Elkhorn Slough National Estuarine Research Reserve Technical Report. 110pp.
- De Vogelaere, A.P. and M.S. Foster. 1994. Damage and recovery in intertidal *Fucus* assemblages following the *Exxon Valdez* oil spill. Marine Ecology Progress Series 106:263-271.
- De Vogelaere, A.P. 1993. Using a quadrat variance method to quantify patterns of patchiness in a central California mussel bed. Pages 183-189 in C.N. Battershill, D.R. Schiel, G.P. Jones, R.G. Creese and A.B. MacDiarmid (editors). Proceedings of the Second International Temperate Reef Symposium, 7-10 January 1992, Auckland, New Zealand. NIWA Marine, Wellington. 252pp.
- Werner, M., L. Wunderlich, M. Los Huertos, S. Swezey, S. Gliessman, M. Silberstein, R. Tjeerdema, and A. De Vogelaere. 1993. Agriculture and wetlands: developing a model system for assessing the effects of conversion to sustainable agricultural practices in a sensitive estuarine watershed, Elkhorn Slough, California. Final report to the National Oceanic and Atmospheric Administration; Grant No. NA27OR0213-01.
- Monterey Bay National Marine Sanctuary Research Advisory Committee. 1993. Scientific research plan for the Monterey Bay National Marine Sanctuary. National Ocean Service, Office of Ocean and Coastal Resource Management, Sanctuaries and Reserves Division, National Oceanic and Atmospheric Administration. 55pp.
- De Vogelaere, A.P., J. Holte, and ABA Consultants. 1993. Elkhorn Slough Bibliography, second edition. Prepared for the Elkhorn Slough National Estuarine Research Reserve. 32pp.
- De Vogelaere, A.P. and M.S. Foster. 1993. Damage, recovery, and restoration of intertidal *Fucus* following the *Exxon Valdez* oil spill. Prepared for the Environmental Protection Agency; Contract No. 53-0109-9-00276. 45pp.
- Kiguchi, L.M., E.W. Nigg, and A.P. De Vogelaere. 1993. Study of the recovery from an oil spill on the rocky intertidal coast of Washington, final report. Prepared by Kinnetic Laboratories, Inc. for the Pacific OCS Region, Minerals Management Service, U.S. Department of the Interior. Contract No. 14-12-0001-30057.
- De Vogelaere, A.P. 1992. The effects of the severity and size of disturbances on the recovery of a rocky intertidal mussel assemblage, final report. Appendix A in Kinnetic Laboratories, Inc.; Study of the rocky intertidal communities of central and northern California, final report. Prepared in association with the University of California, Santa Cruz, Moss Landing

- Marine Laboratories, and TENERA Corp., for the Pacific OCS Region, Minerals Management Service, U.S. Department of the Interior. Contract No. 14-12-0001-30057. OCS Study, MMS 89-0010. Vol. 1 of 3.
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- De Vogelaere, A.P. and M.S. Foster. 1990. Status report: *Fucus* restoration project. Prepared for the Environmental Protection Agency; University of Alaska, Fairbanks contract No. 53-0109-9-00276 Mod #4. 13pp.
- Foster, M.S., A.P. De Vogelaere, C. Harrold, J.S. Pearse and A.B. Thum. 1988. Causes of spatial and temporal patterns in rocky intertidal communities of central and northern California. *Memoirs of the California Academy of Sciences* 9:1-45.

Grants and Contracts Awarded

Since 1984 I have received over \$10,500,000 in research grants and contracts from the following organizations: National Aeronautics and Space Administration, Bureau of Ocean Energy Management, Mineral Management Service, Duke Energy, National Oceanic and Atmospheric Administration, David and Lucile Packard Foundation, Save The Earth, California Urban Environmental Research and Education Center, Environmental Protection Agency, Kinetic Laboratories Inc., Santa Clara Valley Audubon Society, Myers Oceanographic and Marine Biology Trust.

Personal Interests

- Saint Francis High School, in Watsonville CA
Chair, Board of Directors, 2016 - present
Vice Chair, Board of Directors, 2012 - 2016
Ecology Club Advisor- 2013 - 2016
Western Association of Schools and Colleges accreditation review committee, 2012 & 2017
Basketball team photographer, 2011- 2013
- Santa Cruz County Animal Shelter
Volunteer certified for dog care and fostering, 2013 - 2018
- Moss Landing Marine Laboratories
50th Anniversary Planning Committee, 2014 - 2016
- Seaside's Finest AAU Basketball Team
Team photographer, 2012 - 2013
- San Carlos School, in Monterey CA
Science Fair Judge, 2008 - 2013
Western Association of Schools and Colleges accreditation review committee, 2010
Basketball Coach, 2007 - 2009
- Moss Landing Heights Water Association
Acting President and Treasurer, 1997