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## CURRICULUM VITAE

**NAME:** Kevin Lee Stierhoff, PhD

**ORGANIZATION:** Department of Commerce  
National Oceanic & Atmospheric Administration  
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**PRESENT POSITION:** Research Fisheries Biologist

**EDUCATION:**

U. of Delaware (UD)	Doctor of Philosophy – Marine Studies	2005
Salisbury State U.	Bachelor of Science – Biology	1998
U. of MD-Eastern Shore	Bachelor of Science – Environmental Science	1998

**EXPERIENCE:**

2008-present	Research Fisheries Biologist NOAA Fisheries – Southwest Fisheries Science Center (SWFSC) La Jolla, CA
2007-2008	Assistant Research Scientist University of Hawai`i at Mānoa – Department of Oceanography Honolulu, HI
2005-2007	Postdoctoral Research Scientist – Joint Appointment NOAA Fisheries – SWFSC/U. of CA Santa Cruz Santa Cruz, CA
1999-2005	Graduate Research Assistant University of Delaware College of Studies Lewes, DE

**RESEARCH INTERESTS:**

Population ecology of marine fishes; Fishery-independent surveys of marine benthic habitats and demersal biological communities; Physiological ecology and early life history biology of fishes; Habitat use and essential fish habitat of estuarine and marine fishes; Impacts of hypoxia on physiology and habitat ecology of juvenile estuary-dependent fishes

## HONORS AND AWARDS:

- E. Sam Fitz Award for the graduate student displaying the greatest aptitude for Professional development in marine studies – UD College of Marine Studies (CMS) 2006
- Delaware Sea Grant Student Award in recognition of research excellence in the Delaware Sea Grant College Program 2006
- Center for the Inland Bays Award for demonstrating excellence in research that Advances the resource management and educational mission of the center 2006
- Outstanding First Author Student Publication Award – UD CMS 2004
- Student Travel Award – American Fisheries Society Physiology Section 2004
- Outstanding Student Presentation Award – American Fisheries Society Mid-Atlantic Chapter 2001
- Research Scholarship – Delaware Mobile Surf-Fishermen, Inc. 2000
- Marian R. Okie Fellowship for academic and research excellence and demonstrated leadership abilities – UD CMS 2000

## PUBLICATIONS:

- Catton, C. A., **Stierhoff, K. L.**, and Rogers-Bennett, L. *In press*. Population status assessment and restoration modeling of white abalone (*Haliotis sorenseni*) in California. *J. Shellfish Res.*
- Stierhoff, K. L.**, Murfin, D. W., Demer, D. A., Mau, S. A., and Pinkard-Meier, D. *In press*. Improving the estimation of transect length and width for underwater visual surveys of targets on or near the seabed. *ICES J. Mar. Sci.*
- Cutter, G. R., Jr., **Stierhoff, K. L.**, and Demer, D. A. 2016. Remote sensing of habitat characteristics using echo metrics and image-based seabed classes. *ICES J. Mar. Sci.* doi: [10.1093/icesjms/fsw024](https://doi.org/10.1093/icesjms/fsw024)
- Demer, D. A., Cutter, G. R., Jr., **Stierhoff, K. L.**, and Renfree, J. S. 2015. Two-million-liter tank expands the boundaries of marine technology innovation: National resource available for advancing marine science. *Mar. Tech. Soc. J.*, 49: 87-98.
- Cutter, G., **Stierhoff, K.**, and Zeng, J. 2015. Automated detection of rockfish in unconstrained underwater videos using Haar cascades and a new image dataset: labeled fishes in the wild. In *IEEE Winter Conference on Applications of Computer Vision Workshops*, pp. 57-62.
- Zwolinski J.P., D.A. Demer, G.R. Cutter, Jr., **Stierhoff, K.L.**, and B.J. Macewicz, 2015. Building on fisheries acoustics for marine ecosystem surveys. *Oceanography* (2015).
- Stierhoff, K.L.**, Neuman, M., and Butler, J.L., 2012. On the road to extinction: Population declines of the endangered white abalone, *Haliotis sorenseni*. *Biol. Cons.* 152:46-52.
- Zeidberg, L.D., Butler, J.L., Ramon, D., Cossio, A., **Stierhoff, K.L.**, and Henry, A. (2011) Estimation of spawning habitats of market squid (*Doryteuthis opalescens*) from field surveys of eggs off Central and Southern California. *Mar. Ecol.: An Evol. Persp.* 1-11.
- Stierhoff, K.L.**, Tyler R.M., and Targett T.E. (2009) Impacts of hypoxia on juvenile weakfish (*Cynoscion regalis*): insensitivity of growth rate to low dissolved oxygen across a range of temperatures. *J. Exp. Mar. Biol. Ecol.* 325:255-266

**Stierhoff, K.L.**, Targett T.E., and Power J.H. (2009) Hypoxia-induced growth limitation of juvenile fishes in an estuarine nursery: assessment of small-scale temporal dynamics using RNA:DNA. *Can. J. Fish. Aquat. Sci.* 66:1033-1047

Sansone, F.J., Pawlak, G., Stanton, T.K., Glazer, B.T., McManus, M.A., DeCarlo, E.H., Bandet, M., Sevadjan, J., **Stierhoff, K.**, Colgrove, C., Hebert, A.B., and Chen, I. (2008) Kilo Nalu: Physical/biogeochemical dynamics above and within permeable sediments. *Oceanography* 21(4): 173-178

**Stierhoff, K.L.**, Targett T.E., and Miller, K. (2006) Ecophysiological impacts of hypoxia on juvenile summer and winter flounder: experimental and modeling assessment of estuarine nursery quality. *Mar. Ecol. Prog. Ser.* 325: 255-266

Glazer, B.T., Marsh, A.G., **Stierhoff, K.L.**, and Luther, G.W. (2004) The dynamic response of optical oxygen sensors and voltammetric electrodes to temporal changes in dissolved oxygen concentrations. *Anal. Chim. Acta* 518:93-100

**Stierhoff, K.L.**, Targett, T.E., and Gre cay, P.A. (2003) Hypoxia tolerance of the mummichog: the role of access to the water surface. *J. Fish Biol.* 63: 580-592

Gre cay, P.A and **Stierhoff, K.L.** (2002) A device for precisely controlling dissolved oxygen levels in laboratory experiments. *J. Exp. Mar. Biol. Ecol.* 280: 53-62

#### **REPORTS:**

Zwolinski, J.P., Demer, D.A. Macewicz, B.J., Cutter, G.R., Elliot, B.E., Mau, S.A., Murfin, D., Renfree, J.S., Sessions, T.S., **Stierhoff, K.L.** 2016. Acoustic-trawl estimates of northern-stock Pacific sardine biomass during 2015. *NOAA Technical Memorandum NMFS-SWFSC-559*, 15 pp.

**Stierhoff K.L.**, Neuman M., Mau S.A., and Murfin D.W. (2014) White abalone at San Clemente Island: Population estimates and management recommendations. *NOAA Technical Memorandum NMFS-SWFSC-527*, 25 pp.

**Stierhoff K.L.**, Mau S.A., and Murfin D.W. (2013) A fishery-independent survey of cowcod (*Sebastes levis*) in the Southern CA Bight using a remotely operated vehicle (ROV). *NOAA Technical Memorandum NMFS-SWFSC-520*, 92 pp.

**Stierhoff K.L.**, Butler J.L., Mau S.A., and Murfin D.W. (2013) Abundance and biomass estimates of demersal fishes at The Footprint and Piggy Bank from optical surveys using a remotely operated vehicle (ROV). *NOAA Technical Memorandum NMFS-SWFSC -521*, 51 pp.

National Marine Fisheries Service (2012) Regional habitat assessment prioritization for California stocks. Report of the Southwest Regional Habitat Assessment Prioritization Working Group. Internal report, NMFS White Paper. Office of Science and Technology, NMFS, NOAA., Silver Spring, MD (one of 11 authors)

**Stierhoff, K.L.**, Cutter, G., Murfin, D.W., and Demer, D.A. (2012) An overview of visual survey research and imaging technology development at the Southwest Fisheries Science Center. In: Williams, K., Rooper, C., Harms, J. (eds) Report of the National Marine Fisheries Service Automated Image Processing Workshop. *NOAA Technical Memorandum NMFS-SPO-000*.

**Stierhoff, K.L.**, Etnoyer, P.J., Murfin, D.W., and Butler, J.L. (2011) A survey of habitat-forming deep-water corals and sponges along the West Coast of the US using a remotely operated vehicle. NOAA Technical Memorandum NOS-NCCOS-138, 37 pp.

**OTHERS:**

**Stierhoff, K.L.,** Mau, S.A., and Murfin, D.W. (2012) A fishery-independent survey of cowcod (*Sebastes levis*) in the Southern CA Bight using a remotely operated vehicle (ROV)

**Stierhoff, K.L.,** Neuman, M.A., Mau, S.A., and Murfin, D.W. (2012) White abalone at San Clemente Island: Population estimates and management recommendations

**Stierhoff, K.L.,** Butler, J.L., Mau, S.A., and Murfin, D.W. (2012) 2011 Comparative Rockfish Survey at The Footprint and Piggy Bank: Results from the SWFSC's optical survey conducted using a remotely operated vehicle (ROV)

**Stierhoff, K.L.,** Murfin, D.W., and Demer, D.A. (2010) FSV *Bell M. Shimada* COAST Shakedown Cruise Report-Leg 6, SWFSC Cruise Report