

# KELLY J. BENOIT-BIRD

College of Earth, Ocean, and Atmospheric Sciences, Oregon State University

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## RESEARCH INTERESTS

My work focuses on the mechanisms creating spatial and temporal dynamics in pelagic marine ecosystems, the effects these dynamics have on interactions between organisms, and the mechanisms animals use to cope with these patterns. I use a variety of field and laboratory acoustic techniques, optical methods, and behavioral modeling to investigate the effects of heterogeneity on predation and competition in the ocean. I often work to develop new instruments and make fundamental acoustical measurements of a species in order to be able to address ecological processes in the ocean.

## CURRENT POSITION

ASSOCIATE PROFESSOR, Oregon State University

07/04-present

College of Earth, Ocean, and Atmospheric Sciences (Assistant Professor prior to 07/09)

## EDUCATION

UNIVERSITY OF HAWAII AT MANOA, Honolulu, Hawaii

2003

Ph.D., Department of Zoology

“Dynamics of the Hawaiian mesopelagic boundary community and their effects on predator foraging”

BROWN UNIVERSITY, Providence, Rhode Island

1998

B.S. with Honors, Aquatic Biology

DUKE UNIVERSITY MARINE LABORATORY, Beaufort, North Carolina

1/97-5/97

## HONORS AND AWARDS

- **MacArthur Fellowship** for "exceptional creativity and promise for important future advances based on a track record of significant accomplishment" 2010
- **Best Presentation Award**, Pacific Marine Science Organization (PICES) Committee on Monitoring 2009
- **R. Bruce Lindsay Award**, Acoustical Society of America 2009  
Presented to a member who is under 35 years of age, has been active in the affairs of the Society, and has “contributed substantially to the advancement of theoretical or applied acoustics”.  
The citation reads “For contributions to marine ecological acoustics”.
- **Ocean Sciences Early Career Award**, American Geophysical Union 2008  
Awarded biennially to a member within 8 years of their Ph.D. “in recognition of significant contributions to and promise in the ocean sciences”. The citation reads “for innovative application of acoustical techniques”.
- **Kavli Frontiers Fellow**, National Academy of Sciences 2007  
One of 40 young scientists from a wide range of disciplines invited to the 2007 symposium. From the Kavli website: “Attendees are selected from a pool of young researchers (under age 45) who have made significant contributions to science. The National Academy of Sciences has conducted seventeen symposia on the Frontiers of Science, with some of the best and brightest of young American scientists attending to hear, discuss, and debate talks across a wide range of the natural sciences.”
- **Presidential Early Career Award for Scientists and Engineers FY 2005 (PECASE)** 2006  
The highest honor bestowed by the United States government on “outstanding scientists and engineers beginning their independent careers”. The citation reads: “For contributions to the study of the foraging behavior of wild spinner dolphins in Hawaii through acoustic remote sensing, for the application of techniques towards understanding the complex, multi-scale dynamics of distributed marine organisms, and for innovative use of state-of-the-art visual techniques in communicating complex marine behavior to students and public audiences”.
- **Feature Article**, Marine Ecology Progress Series 2006
- **Women in Acoustics Young Investigator Award**, Acoustical Society of America 2006

- **Office of Naval Research Young Investigator Award** 2005  
The Office of Naval Research uses these awards to “recognize exceptional young scientists and engineers.”  
One of 28 awarded in FY05 out of 212 proposals.
- **Best Young Presenter Award**, European Congress on Underwater Acoustics, Delft, Netherlands 2004
- **The Future of Animal Bioacoustics and Acoustical Oceanography**, Acoustical Society of America 2004  
Selected as one of nine young presenters to speak at the Society’s 75<sup>th</sup> Anniversary Celebration Plenary
- **Excellence in Science Communication Award** 2003  
15<sup>th</sup> Biennial Conference on the Biology of Marine Mammals, Best Presentation by a Non-Student
- **DIALOG V Symposium Invited Participant**, American Society of Limnology and Oceanography 2003
- **Best Student Paper in Acoustical Oceanography**
  - 145<sup>th</sup> Meeting of the Acoustical Society of America, Nashville, Tennessee 2003
  - First Pan-American/Iberian Meeting on Acoustics, Cancun, Mexico (2<sup>nd</sup> Prize) 2002
  - 142<sup>nd</sup> Meeting of the Acoustical Society of America, Ft. Lauderdale, Florida 2001
  - 140<sup>th</sup> Meeting of the Acoustical Society of America, Newport Beach, California 2000
- **Best Student Paper in Animal Bioacoustics**
  - 145<sup>th</sup> Meeting of the Acoustical Society of America, Nashville, Tennessee 2003
  - 140<sup>th</sup> Meeting of the Acoustical Society of America, Newport Beach, California 2000
- **Excellence in Doctoral Student Research Award** University of Hawaii Regents 2002
- **National Science Foundation Doctoral Dissertation Improvement Grant**, IBN 2002
- **Pauley Marine Biology Scholar** Achievement Rewards for College Scientists Foundation 2001
- **Sigma Xi** Inducted as a Member of the scientific honor society 2001
- **Albert Tester Memorial Award** for Best Graduate Student Paper, University of Hawaii 2000
- **Leonida Scholarship Endowment** for Fisheries Research, Oceanography Dept, Univ. of Hawaii 1999
- **Aspect Technology Fund** Award Recipient for the Development of Novel Technology 1999

### **PREVIOUS EXPERIENCE**

- POST-DOCTORAL FELLOW, Hawaii Institute of Marine Biology** 05/03-07/04  
Research advisor: *Whitlow Au*
- RESEARCH ASSISTANT, Bottomfish Project, Hawaii Institute of Marine Biology** 08/00-05/03  
Research advisors: *Christopher D. Kelley and Whitlow Au*
- RESEARCH ASSISTANT, Hawaii Institute of Marine Biology** 08/99-07/00
- TEACHING ASSISTANT, Biology Program, University of Hawaii** 08/98-08/99  
First and second semester of ‘Introductory Biology’ for science majors.  
(Overall rating 4.51/5.0 and 4.62/5.0, both above the course and department average)
- TEACHING INTERN COORDINATOR, Biology Program, University of Hawaii** 01/99-08/99  
I oversaw the undergraduate teaching interns for ‘Introductory Biology’.
- SCIENTIFIC ILLUSTRATOR, Department of Ecology and Evolution, Brown University** 09/95-06/98  
Completed more than 300 scientific illustrations for *The Ecology of Atlantic Seashores*, Mark Bertness, Sinauer Associates, 1998, illustrated a poster for the Ecology Department more than a dozen journal articles.
- TEACHING ASSISTANT, Department of Ecology and Evolution, Brown University** 01/98-05/98  
Teaching assistant for seminar style sections of sophomore level ‘Foundations of Ecology’.
- RESEARCH ASSISTANT, Duke University Marine Laboratory** 01/97-05/97  
Research advisors: *Andrew Read and Heather Koopman*
- RESEARCH ASSISTANT, Psychology Department, Brown University** 12/94-12/96  
Research advisors: *Andrea Simmons and James Simmons*

**PUBLICATIONS****PEER-REVIEWED JOURNALS**

- Benoit-Bird, K.J. Au, W.W.L., Brainard, R.E., & Lammers, M.O. 2001 "Diel horizontal migration of the Hawaiian mesopelagic boundary community observed acoustically" *Marine Ecology Progress Series*, 217:1-14
- Benoit-Bird, K.J. & Au, W.W.L. 2001 "Target strength measurements of animals from the Hawaiian mesopelagic boundary community" *Journal of the Acoustical Society of America*, 110:812-819.
- Benoit-Bird, K.J. & Au, W.W.L. 2002 "Energy: Converting from acoustic to biological resource units" *Journal of the Acoustical Society of America*, 111: 2070-2075.
- Benoit-Bird, K.J., Au, W.W.L., Kelley, C.D., Taylor, C.D. 2003 "Acoustic backscattering by deepwater fish measured in situ from a manned submersible." *Deep-Sea Research I*, 50: 221-229.
- Benoit-Bird, K.J. & Au, W.W.L. 2003 "Prey dynamics affect foraging by a pelagic predator (*Stenella longirostris*) over a range of spatial and temporal scales." *Behavioral Ecology and Sociobiology*, 53:364-373.
- Au, W. & Benoit-Bird, K.J. 2003 "Dynamic gain control in the echolocation system of dolphins." *Nature*, 423:861-863.
- Benoit-Bird, K.J. & Au, W.W.L. 2003 "Spatial dynamics of a nearshore micronekton sound-scattering layer." *ICES Journal of Marine Science*, 60:899-913.
- Benoit-Bird, K.J. & Au, W.W.L. 2003 "Echo strength and density structure of Hawaiian mesopelagic boundary community patches." *Journal of the Acoustical Society of America*, 114: 1888-1897.
- Benoit-Bird, K.J., Au, W.W.L., & Kelley, C.D. 2003 "Acoustic backscattering by Hawaiian lutjanid snappers I: Target strength and swimbladder characteristics." *Journal of the Acoustical Society of America*, 114: 2757-2766.
- Au, W.W.L. & Benoit-Bird, K.J. 2003 "Acoustic backscattering by Hawaiian lutjanid snappers II: Broadband temporal and spectral structure." *Journal of the Acoustical Society of America*, 114: 2767-2774.
- Benoit-Bird, K.J., Würsig, B., & McFadden, C.J. 2004 Dusky dolphin (*Lagenorhynchus obscurus*) foraging in two different habitats: Active acoustic detection of dolphins and their prey." *Marine Mammal Science*, 20: 215-231.
- Benoit-Bird, K.J. & Au, W.W.L. 2004 "Fine-scale diel migration dynamics of an island-associated sound-scattering layer." *Deep-Sea Research I*, 51: 707-719.
- Benoit-Bird, K.J. 2004 "Prey value and energy needs: Foraging predictions for wild spinner dolphins." *Marine Biology*, 145:435-444.
- Benoit-Bird, K.J., Au, W.W.L. & Kastelein, R.A. 2006 "Testing the acoustic prey debilitation hypothesis: No stunning results." *Journal of the Acoustical Society of America*, 120: 1118-1123.
- Au, W.W.L., Kastelein, R.A., Benoit-Bird, K.J., Cranford, T. & McKenna, M. 2006 "Acoustic radiation from the head of echolocating harbor porpoises (*Phocoena phocoena*)." *Journal of Experimental Biology*, 209:2726-2733.
- Benoit-Bird, K.J. & Au, W.W.L. 2006 "Extreme diel horizontal migrations by a tropical nearshore resident micronekton community." *Marine Ecology Progress Series*, 319: 1-14.
- Au, W.W.L, Benoit-Bird, K.J, & Kastelein, R.A. 2007 "Modeling the detection range of fish by echolocating bottlenose dolphins and harbor porpoises." *Journal of the Acoustical Society of America*, 121:3954-3962.
- Benoit-Bird, K.J., Gilly, W.F, Au, W.W.L, & Mate, B. 2008 "Controlled and *in situ* target strengths of the jumbo squid *Docidicus gigas* and identification of potential acoustic scattering sources." *Journal of the Acoustical Society of America*, 123:1318-1328.
- Au, W.W.L. & Benoit-Bird, K.J. 2008 "Broadband backscatter from individual Hawaiian mesopelagic boundary community animals with implications for spinner dolphin foraging" *Journal of the Acoustical Society of America*, 123:2884-2894.
- McManus, M.A., Benoit-Bird K.J., & Woodson, C.B. 2008 "Behavior exceeds physical forcing in the diel horizontal migration of a midwater sound-scattering layer in Hawaiian waters." *Marine Ecology Progress Series*: 365:91-101.
- Benoit-Bird, K.J., Zirbel, M.J., & McManus, M.A. 2008 "Zooplankton spatio-temporal distributions in Hawaiian waters favor diel horizontal migration by midwater micronekton." *Marine Ecology Progress Series*, 367:109-123.
- Benoit-Bird, K.J. & Au, W.W.L. 2009 "Phonation behavior of cooperatively foraging spinner dolphins." *Journal of the Acoustical Society of America*, 125:539-546.
- Benoit-Bird, K.J. & Au, W.W.L. 2009 "Cooperative prey herding by a pelagic dolphin, *Stenella longirostris*." *Journal of the Acoustical Society of America*, 125:125-137.
- Benoit-Bird, K.J. 2009 "Effects of scattering layer composition, animal size, and numerical density on the frequency response of volume backscatter." *ICES Journal of Marine Science*, 66: 582-593

- Benoit-Bird, K.J., Cowles, T.J., Wingard, C.E. 2009 "Edge gradients provide evidence of ecological interactions in planktonic thin layers." *Limnology and Oceanography* 54:1382-1392.
- Au, W.W.L., Branstetter, B.K., Benoit-Bird, K.J., Kastelein, R.A. 2009 "Acoustic basis for fish prey discrimination by echolocating dolphins and porpoise." *Journal of the Acoustical Society of America* 126: 460-467
- Benoit-Bird, K.J., Au, W.W.L., Wisdom, D.W.\* 2009 "Nocturnal light and lunar cycle effects on diel migration of micronekton." *Limnology and Oceanography* 54: 1789-1800
- Kaltenberg, A.M.\* & Benoit-Bird, K.J. 2009 "Diel behavior of sardine and anchovy schools in the California Current System." *Marine Ecology Progress Series* 394:247-262.
- Benoit-Bird, K.J., Dahood, AD, & Wursig, B. 2009 "Using active acoustics to compare predator-prey behavior of two marine mammal species". Invited Contribution to Special Issue "Applications of Acoustics in Exploring Marine Ecosystems and the Impacts of Anthropogenic Sound" *Marine Ecology Progress Series* 395: 119-135.
- Benoit-Bird, K.J. 2009 "Dynamic three-dimensional structure of zooplankton thin layers is affected by foraging fish." *Marine Ecology Progress Series* 396: 61-76.
- Benoit-Bird, K.J., Moline, M.A., Waluk, C.M, Robbins, I.C. 2010 "Integrated measurements of acoustical and optical thin layers I: Vertical scales of association." *Continental Shelf Research*, 30: 17-28.
- Moline, M.A., Benoit-Bird, K.J., Robbins, I.C, Schroth-Miller, M, Waluk, C.M, Zelenke, B. 2010 "Integrated measurements of acoustical and optical thin layers II: Critical horizontal length scales." *Continental Shelf Research*, 30: 29-38.
- Sullivan, J.M., McManus, M.A., Cheriton, O.M., Benoit-Bird, K.J., Goodman, L., Wang, Z., Ryan, J.P., Stacey, M., Holliday, D.V., Greenlaw, C., Moline, M.A., & McFarland, M. 2010 "Layered organization in the coastal ocean: An introduction to planktonic thin layers and the LOCO project." *Continental Shelf Research*, 30: 1-6.
- Benoit-Bird, K.J., Moline, M.A., Schofield, O.M., Robbins, I.C, & Waluk, C.M. 2010. "Zooplankton avoidance of a profiled open-path fluorometer." *Journal of Plankton Research*, published online May 6.
- Kaltenberg, A.M.\*, Emmett, R., Benoit-Bird, K.J. 2010 "Timing of forage fish seasonal appearance in the Columbia River plume and linkage to ocean conditions" *Marine Ecology Progress Series*, Vol. 419: 171-184.
- Benoit-Bird, K.J. & Kuletz, K., Heppell, S, Jones, N., Hoover, B. 2011 "Active acoustic examination of the diving behavior of murre foraging on patchy prey" *Marine Ecology Progress Series*, 443: 217-235.
- Benoit-Bird, K.J. "Validation of scattering models for elastic shelled animals using multi-frequency in situ measurements of backscatter from pteropods." In review.
- Benoit-Bird, K.J. & McManus, M.A. "Bottom-up regulation of a pelagic community through aggregations - not biomass" In review.
- McManus, M.A., Sevadjian, J.C., Benoit-Bird, K.J., Cheriton, O.M., Timmerman, A.V., & Waluk, C.M. "Observations of Thin Layers in Coastal Hawaiian Waters" In review.
- Sevadjian, J.C., McManus, M.A., Benoit-Bird, K.J., & Selph, K.E. "Shoreward pulses of cold, phytoplankton-rich waters off leeward Oahu, Hawaii" In review.
- Benoit-Bird, K.J. & Gilly, W.F. "Coordinated nocturnal behavior of foraging jumbo squid, *Dosidicus gigas*" In review.

\*indicates student advisee author

#### OTHER PUBLICATIONS

- Bertness, M.D., Benoit-Bird, K.J., Illustrator *The Ecology of Atlantic Shorelines*, Sinauer Associates, 1998.
- Benoit, K.J., "Auditory triggers of the alarm response in *Rana catesbeiana* larvae", Undergraduate Honors Thesis, Brown University, 55 pages, 1996.
- Benoit-Bird, K.J., "Dynamics of the Hawai'ian Mesopelagic Boundary Community and their effects on Predator Foraging", Ph.D. Dissertation. Department of Zoology, University of Hawaii, 272 pages, 2003.
- Benoit-Bird, K.J. 2005 (Invited) "Review of Echolocation in Bats and Dolphins. J. A. Thomas, C. F. Moss, and M. Vater, eds.", *Marine Mammal Science*, 21: 173-174
- Jochens, A., D. Biggs, K. Benoit-Bird, D. Engelhaupt, J. Gordon, C. Hu, N. Jaquet, M. Johnson, R. Leben, B. Mate, P. Miller, J. Ortega-Ortiz, A. Thode, P. Tyack, and B. Würsig. 2008."Sperm whale seismic study in the Gulf of Mexico: Synthesis report". U.S. Dept. of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study MMS 2008-006. 341 pp
- Churnside, J., Brodeur, R., Horne, J.K., Adam, P., Benoit-Bird, K.J., Reese, D.C., Kaltenberg, A.M., Brown, E. 2009. "Combining techniques for remotely assessing pelagic nekton: Getting the whole picture" Edited Conference Proceedings of The American Institute of Fishery Research Biologists.
- Dahood, A.\* & Benoit-Bird, K.J. "Nocturnal foraging of dusky dolphins" Peer-reviewed book chapter in "Dusky Dolphins: Master Acrobats of the Ocean", 2009.

**PRESENTATIONS**  
**INVITED PRESENTATIONS**

- Benoit-Bird, K.J. "Causes and Consequences of Heterogeneity of Organisms in the Ocean: From Phytoplankton to Dolphins" Plenary Lecture, Ocean Sciences 2012 (AGU, ASLO, TOS joint meeting). February 20-24, 2012.
- Benoit-Bird, K.J. "Using acoustics to reveal patchiness in the coastal ocean and its ecological consequences for plankton, fish, birds, and marine mammals" Session on Active Acoustic Applications to Bioacoustics Research, 161st Meeting of the Acoustical Society of America. May 23-27, 2011.
- Benoit-Bird, K.J. "Finding my voice: Experiences communicating research with the media" Session on Effective Communication between Scientists and the Media 161st Meeting of the Acoustical Society of America. May 23-27, 2011.
- Benoit-Bird, K.J. "Trophic cascades in Hawaii's nearshore ecosystem: Using observing technology to understand ecological interactions" PICES Annual Meeting, Jeju, Korea. October 23-November 1, 2009.
- Benoit-Bird, K.J. "Three-dimensional structure of thin zooplankton layers is impacted by foraging fish" Acoustics '08. Paris, France. June 30-July 4, 2008.
- Benoit-Bird, K.J. "Effects of scattering layer composition, animal size, and numerical density on the frequency response of volume backscatter" 4<sup>th</sup> Meeting of the Acoustical Societies of America and Japan. Honolulu, HI. Nov 28-Dec 2, 2006.
- Benoit-Bird, K.J. & McManus, M.A. "Advancing from pattern to process in Hawaii's nearshore pelagic ecosystem" 150<sup>th</sup> Meeting of the Acoustical Society of America. Minneapolis, MN. October 17-21, 2005.
- Benoit-Bird, K.J. & Au, W.W.L. "Echolocation click rates and behavior of foraging Hawaiian spinner dolphins (*Stenella longirostris*)." 7<sup>th</sup> European Conference on Underwater Acoustics. Delft, Netherlands. July 5-8, 2004.
- Benoit-Bird, K.J. "Acoustics will play an important role in revealing the biological secrets of the ocean." Celebratory Plenary Session "The Future of ASA", 75<sup>th</sup> Anniversary Meeting of the Acoustical Society of America, New York, NY. May 24-28, 2004.
- Benoit-Bird, K.J. & Au, W.W.L. "Light and lunar cycle as cues to diel migration of a sound-scattering layer." 75<sup>th</sup> Anniversary Meeting of the Acoustical Society of America, New York, NY. May 24-28, 2004.
- Benoit-Bird, K.J. & Au, W.W.L. "Using acoustics to study the ecology of Hawaii's mesopelagic zone." 2004 Ocean Sciences Meeting, American Geophysical Union; Applications of Acoustics to Oceanography. Portland, OR. January 26-30, 2004.
- Benoit-Bird, K.J. "Using active acoustics to study marine mammal behavior." Pauley Foundation Workshop on the acoustics of whales and dolphins; Hawaii Institute of Marine Biology. Kaneohe, HI. August 10, 2001.
- Benoit-Bird, K.J. & Au, W.W.L. "Foraging behavior of the Hawaiian spinner dolphin observed with active acoustics." 140<sup>th</sup> Meeting of the Acoustical Society of America; William Cummings session on the acoustics of whales and dolphins. Newport Beach, CA. December 3-8, 2000.

**INVITED SEMINARS**

<b>Duke University Marine Laboratory</b> , Beaufort, North Carolina	September, 2011
<b>Booz/Allen/Hamilton Distinguished Colloquium</b> , Department of Electrical & Computer Engineering University of Maryland	September, 2010
<b>Northwest Fisheries Science Center</b> , Seattle Washington	January, 2010
<b>Oregon Institute of Marine Biology</b> , University of Oregon, Charleston.	August, 2007
<b>Office of Naval Research</b> , Young Investigator Seminar Series, Washington, D.C.	February, 2007
<b>Louisiana State University</b> , Department of Oceanography and Coastal Sciences	March, 2006
<b>University of Washington</b> , School of Aquatic and Fishery Sciences	March, 2005
<b>Office of Naval Research</b> , Washington, D.C.	June, 2004
<b>Rutgers University</b> , Institute of Marine and Coastal Sciences	May, 2004
<b>Scripps Institute of Oceanography</b> , University of California at San Diego, Ecology Program	May, 2004
<b>Woods Hole Oceanographic Institution</b> , Applied Ocean Physics and Engineering	March, 2004
<b>University of Washington</b> , Applied Physics Laboratory	February, 2004
<b>Oregon State University</b> , College of Oceanic and Atmospheric Sciences	January, 2004
<b>University of Connecticut</b> , Avery Point	March, 2003

**SUBMITTED PRESENTATIONS**

- Benoit-Bird, K.J. "Active acoustic examination of the diving behavior of murrets foraging on patchy prey" 162nd Meeting of the Acoustical Society of America, San Diego, October 31- 4 November, 2011.
- McIntosh, N.E.\*, Benoit-Bird, K.J., Heppell, S. "Spatial variation in the small-scale distribution of juvenile walleye pollock (*Theragra chalcogramma*) in the southeastern Bering Sea" 162nd Meeting of the Acoustical Society of America, San Diego, October 31- 4 November, 2011.
- Cowles, T.J. & Benoit-Bird, K.J. (presenting author) "Planktonic layers: New insights stimulated by Van Holliday" 162nd Meeting of the Acoustical Society of America, San Diego, October 31- 4 November, 2011.
- Piatt, J.F., Hunt, G.L., Benoit-Bird, K.J. "Advances in the methods for quantifying the distribution and abundance of seabird prey". 1st World Seabird Conference, Victoria, BC, Canada, September 7-11, 2010.
- Benoit-Bird, K.J., Kuletz, K., Heppell, S., Jones, N., Hoover, B., & Whitman, L. "Active acoustic examination of the diving behavior of murrets on patchy prey during the breeding season" 2010 Ocean Sciences Meeting, Portland, OR Feb 22-18, 2010.
- Kaltenberg, A.M.\*, Benoit-Bird, K.J., Emmett, R. "Seasonal timing of zooplankton and forage fish in the Columbia River plume and effects on marine juvenile salmon survival" 2010 Ocean Sciences Meeting, Portland, OR Feb 22-18, 2010.
- Matteson, R.S.\*, Benoit-Bird, K.J., Mate, B.R., Calambodikas, J. "Aggregation characteristics of prey determine blue whale distribution at the Costa Rica Dome" 2010 Ocean Sciences Meeting, Portland, OR Feb 22-18, 2010.
- Cowles, T.J., Benoit-Bird, K.J., Benfield, M. "Assessing the Ecological Role of Planktonic Thin Layers" 2010 Ocean Sciences Meeting, Portland, OR Feb 22-18, 2010.
- McIntosh, N.E.\*, Whitman, L.D.\*, Benoit-Bird, K.J., Heppell, S.A. "Spatial variation in the distribution and energy density of juvenile walleye pollock in the southeastern Bering Sea" 2010 Ocean Sciences Meeting, Portland, OR Feb 22-18, 2010.
- Benoit-Bird, K.J., Cowles, T.J. "Acoustical and optical measurements provide evidence of ecological interactions in planktonic thin layers" 157<sup>th</sup> Meeting of the Acoustical Society of America. Portland, OR. May 18-22, 2009.
- Kaltenberg, A.M.\*, Benoit-Bird, K.J., Emmet, R. "Temporal patterns of fish and mesozooplankton near the Columbia River plume" 157<sup>th</sup> Meeting of the Acoustical Society of America. Portland, OR. May 18-22, 2009.
- Matteson, R.S.\*, Benoit-Bird, K.J., Gilly, W.F. "Humboldt squid distribution in three-dimensional space as measured by acoustics in the Gulf of California" 157<sup>th</sup> Meeting of the Acoustical Society of America. Portland, OR. May 18-22, 2009.
- Benoit-Bird, K.J. "Three-dimensional structure of thin zooplankton layers is impacted by foraging fish" 2008 Ocean Sciences Meeting, Orlando, FL. March 3-7, 2008.
- Kaltenberg, A.M.\*, Benoit-Bird, K.J. "The influence of zooplankton prey abundance and daylight on pelagic schooling fish behavior" 2008 Ocean Sciences Meeting, Orlando, FL. March 3-7, 2008.
- Benoit-Bird, K.J., McManus, M.A., McLaughlin, B. "Thin phytoplankton and zooplankton layers and not so thin micronekton layers off the west coast of Oahu, Hawaii" 2006 Ocean Sciences Meeting, Honolulu, HI. Feb. 20-24, 2006.
- Au, W.W.L., & Benoit-Bird, K.J. "Acoustic properties of the Hawaiian mesopelagic boundary sound scattering layer" 2006 Ocean Sciences Meeting, Honolulu, HI. February 20-24, 2006.
- Cowles, T.J., Briggs Whitmire, A., Wingard, C., Desidario, R., Benoit-Bird, K.J., Concannon, B., & Prentice, J. "Spatial and temporal patterns in planktonic thin layers: the interplay between vertical shear, mixing, and plankton behavior" 2006 Ocean Sciences Meeting, Honolulu, HI. February 20-24, 2006.
- Concannon, B.M., Prentice, J.E. Benoit-Bird, K.J., & Cowles, T.J. "Lidar signatures in regions with thin layers in the coastal ocean" 2006 Ocean Sciences Meeting, Honolulu, HI. February 20-24, 2006.
- Kaltenberg, A.M.\*, Chursnide, J.H, Benoit-Bird, K.J., Brodeaur, R.D., Brown, E.D., & Horne, J.K. "A study of sardines in the NE Pacific using multiple platforms and technologies" 2006 Ocean Sciences Meeting, Honolulu, HI. February 20-24, 2006.
- Smith, J.N.\*, Benoit-Bird, K.J., & McManus, M.A. "Effects of lunar phase on biomass at four trophic levels along Oahu, Hawaii's leeward coast" 2006 Ocean Sciences Meeting, Honolulu, HI. February 20-24, 2006.
- Benoit-Bird, K.J, Au, W.W.L., Kastelein, R.A., & Van de Huel, S. "Testing the prey debilitation hypothesis: No stunning results" 16<sup>th</sup> Biennial Conference on the Biology of Marine Mammals. San Diego, CA. December 15-18, 2005.
- Benoit-Bird, K.J, Au, W.W.L., Kastelein, R.A., & Van de Huel, S. "Testing the prey debilitation hypothesis: No stunning results" 148<sup>th</sup> Meeting of the Acoustical Society of America. San Diego, CA. November 15-18, 2004.

- Au, W.W.L, Benoit-Bird, K.J., Kastelein, R.A. & Van De Heul, S. "Acoustic basis for fish prey selection by echolocating odontocetes" 148<sup>th</sup> Meeting of the Acoustical Society of America. San Diego, CA. November 15-18, 2004.
- Benoit-Bird, K.J. "Predator avoidance by midwater micronekton: Differences between visual and non-visual predators." Ecological Society of America, Portland, Oregon. August 1-7, 2004.
- Benoit-Bird, K.J. & Au, W.W.L. "Echolocation click rates and behavior of foraging Hawaiian spinner dolphins (*Stenella longirostris*)." Acoustical Society of America, New York, NY. May 24-28, 2004.
- Au, W.W.L, Benoit-Bird, K.J., Kastelein, R.A. & Cranford, T. "Array measurement of echolocation signals on the melon of harbor porpoises (*Phocoena phocoena*)" 147<sup>th</sup> Meeting of the Acoustical Society of America. New York, NY. May 24-28, 2004
- Benoit-Bird, K.J. & Au, W.W.L. "Observing the diel migration dynamics of an island-associated sound-scattering layer." ASLO/TOS Ocean Research Conference. Honolulu, HI. February 15-20, 2004.
- Benoit-Bird, K.J. & Au, W.W.L. "Echolocation click rates and behavior of foraging Hawaiian spinner dolphins (*Stenella longirostris*)." 15<sup>th</sup> Biennial Conference on the Biology of Marine Mammals. Greensboro, NC. December 14-19, 2003.
- Benoit-Bird, K.J. & Au, W.W.L. "Hawaiian spinner dolphins aggregate midwater food resources through cooperative foraging" 146<sup>th</sup> Meeting of the Acoustical Society of America. Austin, TX. November 10-14, 2003.
- Benoit-Bird, K.J. "Sound-scattering layers and the foraging ecology of pelagic marine mammals." 88<sup>th</sup> Annual Meeting of the Ecological Society of America. Savannah, GA. August 3-8, 2003.
- Benoit-Bird, K.J., Würsig, B., McFadden, C.J. "Behavior of dusky dolphins foraging on the deep-scattering layer in Kaikoura Canyon, New Zealand." 145<sup>th</sup> Meeting of the Acoustical Society of America. Nashville, TN. April 22-May 2, 2003.
- Benoit-Bird, K.J. & Au, W.W.L. "Target strength and density structure of Hawaiian mesopelagic boundary community patches" 145<sup>th</sup> Meeting of the Acoustical Society of America. Nashville, TN. April 22-May 2, 2003.
- Au, W.W.L, & Benoit-Bird, K.J. "Broadband temporal and spectral structure of acoustic backscatter from Hawaiian Lutjanid snappers " 145<sup>th</sup> Meeting of the Acoustical Society of America. Nashville, TN. April 22-May 2, 2003.
- Benoit-Bird, K.J. & Au, W.W.L. "Fine-scale diel migration dynamics of an island-associated sound-scattering layer." First Pan-American/Iberian Meeting on Acoustics. Cancun, Mexico. December 2-6, 2002.
- Benoit-Bird, K.J., Au, W.W.L., Kelley, C.D., & Taylor, C. "Acoustic backscattering by deepwater fish measured *in situ* from a manned submersible." First Pan-American/Iberian Meeting on Acoustics. Cancun, Mexico. December 2-6, 2002.
- Benoit-Bird, K.J. & Au, W.W.L. "Dynamics of the Hawaiian mesopelagic boundary community studied with active acoustic moorings." ICES Symposium on Acoustics in Fisheries and Aquatic Ecology. Montpellier, France. June 10-14, 2002.
- Kelley, C.D, <sup>1</sup>Benoit-Bird, K.J., Taylor, C., Richman, N., Au, W., & Crook, K. "Two New Submersible Techniques for Deepwater Fisheries Research in Hawaii." 2002 Ocean Sciences Meeting. Honolulu, HI. February 11-15, 2002. <sup>1</sup>presenting author
- Benoit-Bird, K.J. & Au, W.W.L. "Energy: Converting from acoustic to biological resource units." 142<sup>nd</sup> Meeting of the Acoustical Society of America. Ft. Lauderdale, FL. December 3-7, 2001.
- Benoit-Bird, K.J. & Au, W.W.L. "Foraging behavior of the Hawaiian spinner dolphin, *Stenella longirostris*." 14<sup>th</sup> Biennial Conference on the Biology of Marine Mammals. Vancouver, BC. November 28-December 3, 2001.
- Benoit-Bird, K.J. "Foraging behavior of the Hawaiian spinner dolphin observed with active acoustics." Animal Behavior Society; W. C. Allee Session. Corvallis, OR. July 15-18, 2001.
- Benoit-Bird, K.J. & Au, W.W.L. "Acoustic investigation of the Hawaiian mesopelagic boundary community" 140<sup>th</sup> Meeting of the Acoustical Society of America. Newport Beach, CA. December 3-8, 2000.
- Benoit-Bird, K.J. & Au, W.W.L. "Spatial and temporal patterns in the Hawaiian mesopelagic boundary community observed acoustically" Oceanography Seminar. School of Ocean and Earth Science and Technology, University of Hawaii at Manoa. November 16, 2000.
- Benoit-Bird, K.J. "Spinner dolphin foraging and the mesopelagic boundary community" 25<sup>th</sup> Annual Albert Tester Symposium, University of Hawaii. April 13-14, 2000. Published in: Pacific Science, 55:99.

**CONTINUING PROFESSIONAL EDUCATION**

<b>Communicating Ocean Science Workshop</b> , COSEE Pacific Partnerships	02/09
<b>Science Writing Workshop</b> , Author Julia Whitty hosted by OSU's Spring Creek Project	10/08
<b>Media Training</b> , OSU News and Communications	12/07
<b>Donor Training</b> , OSU Foundation	08/07
<b>Survival Strategies for Faculty New to Teaching</b> , OSU Center for Teaching and Learning	10/06

**SEAGOING EXPEDITIONS (Since 2005)**

Cruise Date	Vessel	Project	Location	Role
15-Feb - 1-Mar 2005	<i>F/V Alyce C.</i>	Micronekton Migration Patterns	Waianae, Hawaii	Chief Scientist
20-Apr - 27-Apr 2005	<i>F/V Alyce C.</i>	Nearshore Sound-Scattering Layer	Waianae, Hawaii	Chief Scientist
7-May - 10-May 2005	<i>F/V Alyce C.</i>	Nearshore Sound-Scattering Layer	Waianae, Hawaii	Chief Scientist
22-May - 27-May 2005	<i>F/V Alyce C.</i>	Nearshore Sound-Scattering Layer	Waianae, Hawaii	Chief Scientist
3-Jun - 30-Jun 2005	<i>R/V Gyre</i>	Sperm Whale Seismic Studies	Gulf of Mexico	Investigator*
1-Aug - 2-Aug 2005	<i>R/V Shana Rae</i>	Layered Organization in the Coastal Ocean	Monterey Bay, CA	Investigator
17-Aug - 10-Sep 2005	<i>R/V New Horizon</i>	Layered Organization in the Coastal Ocean	Monterey Bay, CA	Investigator
14-Sep - 15-Sep 2005	<i>R/V Shana Rae</i>	Layered Organization in the Coastal Ocean	Monterey Bay, CA	Investigator
8-Aug - 9-Aug 2005	<i>F/V Pacific Journey</i>	Epipelagic Fish Habitat	Astoria, Oregon	Chief Scientist
9-Aug - 15-Aug 2005	<i>F/V Frosti</i>	Epipelagic Fish Habitat	Oregon	Investigator*
1-Feb - 16-Feb 2006	<i>F/V Bundi</i>	Dusky Dolphin Foraging	Kaikoura, New Zealand	Chief Scientist
9-Apr - 15-Apr 2006	<i>F/V Alyce C.</i>	Nearshore Sound-Scattering Layer	Waianae, Hawaii	Chief Scientist
26-Apr - 29-Apr 2006	<i>F/V Alyce C.</i>	Nearshore Sound-Scattering Layer	Waianae, Hawaii	Investigator
12-May - 17-May 2006	<i>F/V Alyce C.</i>	Nearshore Sound-Scattering Layer	Waianae, Hawaii	Chief Scientist
1-Jun - 12-Jun 2006	<i>F/V Frosti</i>	Epipelagic Fish Habitat	Oregon	Investigator*
8-Jul - 30-Jul 2006	<i>R/V Thompson</i>	Layered Organization in the Coastal Ocean	Monterey Bay, CA	Investigator*
11-Jul - 30-Jul 2006	<i>R/V Shana Rae</i>	Layered Organization in the Coastal Ocean	Monterey Bay, CA	Investigator
6-Aug - 9-Aug 2006	<i>R/V Shana Rae</i>	Layered Organization in the Coastal Ocean	Monterey Bay, CA	Chief Scientist
9-Sep - 15-Sep 2006	<i>R/V Sharp</i>	Fish Schooling in Ocean Observatory	Mid Atlantic Bight	Chief Scientist
14-Mar - 30-Mar 2007	<i>R/V Pacific Storm</i>	Jumbo Squid Acoustics	Gulf of California, Mexico	Chief Scientist
23-Jun - 10-Jul 2007	<i>R/V Sharp</i>	Fish Schooling in Ocean Observatory	Mid Atlantic Bight	Chief Scientist
17-May - 30-May 2008	<i>R/V Shana Rae</i>	Fish Schooling in Ocean Observatory	Monterey Bay, CA	Chief Scientist
12-Jul - 8-Aug 2008	<i>F/V Frosti</i>	Forage Fish Patch Dynamics	Bering Sea	Chief Scientist
22-Aug - 30-Aug 2008	<i>R/V Wecoma</i>	Thin Layers ROV Sampling	Oregon	Investigator
9-Nov - 19-Nov 2008	<i>R/V BIP XII</i>	Jumbo Squid Acoustics	Gulf of California, Mexico	Investigator
15-Apr - 15-May 2009	<i>F/V Alyce C.</i>	Thin Layers in Ecosystem Processes	Waianae, Hawaii	Chief Scientist
17-Jun - 26-Jun 2009	<i>R/V Wecoma</i>	Thin Layers ROV Sampling	Oregon	Co-Chief Scientist
16-Jul - 13-Aug 2009	<i>F/V Frosti</i>	Forage Fish Patch Dynamics	Bering Sea	Chief Scientist
16-Jul - 13-Aug 2009	<i>F/V Gold Rush</i>	Forage Fish Patch Dynamics	Bering Sea	Investigator*
10-Apr - 30-Apr 2010	<i>F/V Alyce C.</i>	Thin Layers in Ecosystem Processes	Waianae, Hawaii	Co-Chief Scientist
3-Jun - 17-Jun 2010	<i>R/V New Horizon</i>	Jumbo Squid in the Oxygen Minimum Zone	Gulf of California, Mexico	Investigator
18-Jul - 21-Aug 2010	<i>R/V Kalipi, R/V Elakha</i>	Grey Whale Foraging on Mysids	Depoe Bay, Oregon	Chief Scientist

\* Participated in cruise planning, preparation, and ship set up but not aboard vessel

**GRANT AND CONTRACT SUPPORT**

Since arriving at Oregon State University in 2004, my research program has attracted funding from diverse sources including the National Science Foundation, Office of Naval Research, National Oceanic and Atmospheric Administration, National Oceanographic Partnership Program, Minerals Management Service, North Pacific Research Board, and Packard Foundation. I have served as the lead investigator on eight of these. Many of these grants are collaborative as is typical for inter-disciplinary studies in oceanography. I served as the lead investigator and project director of four such large, interdisciplinary programs. My research program's component of grants received while at OSU currently totals **\$7,079,458**.

**CURRENT GRANTS (\$ COAS component)****Strategic Environmental Research and Development Program, Department of Defense 2012-2017**

Principal Investigator (\$1,566,000)  
 'Deep mapping of teuthivorous whales and their prey fields'  
 Collaborators: Mark Moline, CalPoly; Brandon Southall, Southall Environmental Associates

**Office of Naval Research, Ocean Acoustics 2011-2015**

Principal Investigator, Chief Scientist for the Fish Acoustics Basic Research Challenge (\$1,395,628)  
 'Acoustical scattering, propagation, and attenuation caused by two abundant Pacific schooling species:  
 Humboldt squid and hake'  
 Collaborators: Joseph Warren, Stony Brook University; Dezhang Chu, Northwest Fisheries Science Center

**National Science Foundation, Biological Oceanography 2009-2012**

Principal Investigator (\$463,873)  
 ‘Collaborative Research: Physiological limits to vertical migrations of the pelagic, jumbo squid, *Dosidicus gigas*, in the Gulf of California’  
 Collaborators: William Gilly, Stanford University; Brad Seibel, University of Rhode Island

**Office of Naval Research, Marine Mammals & Biological Oceanography Program 2009-2011**

Co-Principal Investigator (\$518,856)  
 ‘Factors influencing the acoustic behavior and nearshore residence of the gray whale (*Eschrichtius robustus*) along their migration route’  
 Collaborators: Timothy Cowles and David Mellinger, Oregon State University

**Office of Naval Research, Marine Mammals & Biological Oceanography Program 2008-2012**

Principal Investigator (\$338,881)  
 ‘Importance of thin plankton layers in Hawaiian food web interactions: Research spanning from physical circulation to spinner dolphins’  
 Collaborator: Margaret McManus, University of Hawaii

**North Pacific Research Board, Bering Sea Integrated Ecosystem Research Program 2007-2012, Principal Investigator**

‘Patch Dynamics of Forage Fish’ (\$375,647)  
 ‘Bogoslof Island: Patch Dynamics of Forage Fish’ (\$596,009)  
 Collaborator: Scott Heppell, Oregon State University

**COMPLETED GRANTS**

(\$COAS component after 2004, \$University of Hawaii component prior to 2004)

**National Science Foundation, Major Research Instrumentation 2006-2010, Co-Principal Investigator**

‘ROV-based System for Sampling Planktonic Thin Layers’ (\$584,119)  
 Collaborators: Timothy Cowles, Oregon State University; Mark Benfield, Louisiana State University

**Office of Naval Research, Young Investigator Program 2005-2010, Principal Investigator**

‘Predator effects on dense zooplankton aggregations in the coastal ocean’ (\$596,609)

**Packard Foundation 2008-2009, Co-Principal Investigator**

‘Biomass estimates of jumbo squid in the Gulf of California and incorporation into a squid fishery management plan.’ (\$56,609)  
 Collaborator: William Gilly, Stanford University

**National Oceanographic Partnership Program 2005-2008, Principal Investigator, Project Director**

‘Novel acoustic techniques to measure schooling in pelagic fish in the context of an operational coastal ocean observatory’ (\$423,614)  
 Collaborators: Oscar Schofield, Scott Glenn, John Quinlan, Rutgers University; Christopher Jones, University of Washington; Jeffrey Condiotty, Simrad USA

**National Oceanographic Partnership Program 2005-2008, Co-Principal Investigator**

‘A novel technique to detect epipelagic fish and map their habitat’ (\$230,549)  
 Collaborators: James Churnside, Richard Brodeur, NOAA; John Horne, University of Washington; Evelyn Brown, University of Alaska

**Minerals Management Service, Sperm Whale Seismic Study 2005-2008, Co-Principal Investigator**

(\$36,454)

**Office of Naval Research, Ocean Optics and Biology Program 2004-2007, Principal Investigator**

‘Factors Influencing the Nearshore, Sound-Scattering Layer in Hawaiian Waters’ (\$234,000)

**Oregon State University, Research Council Award 2005, Principal Investigator**

‘The way to a whale’s habitat is through his stomach: Adding prey to sperm whale assessment’ (\$10,000)

**NOAA Fisheries Pacific Islands Fisheries Science Center 2004-2005, Co-Principal Investigator**

‘Fisheries data analysis’ (\$31,000)

**Measurements and Signature Intelligence, Defense Intelligence Agency 2004-2006, Co-Principal Investigator**

‘Acoustic characterization of the mesopelagic boundary community’ (\$120,000)

**University of Hawaii SeaGrant College Biennial 2003-2005, Co-Investigator**

‘The Role of Mesopelagic Boundary Community Dynamics in Hawaiian Fisheries’ (\$123,761)

<b>Defense University Research Instrumentation Program 2004</b> , Co-Principal Investigator	
‘Mesopelagic processes and underwater noise effects on marine mammals’	(\$399,500)
<b>Office of Naval Research, Marine Mammal Program 2002-2003</b> , Co-Principal Investigator	(\$197,291)
‘Dynamics of the Hawaiian Mesopelagic Boundary Community and their Effects on Spinner Dolphin Foraging’	
<b>National Science Foundation Doctoral Dissertation Improvement Grant 2002</b> , IBN, Co-PI	(\$9,065)
‘Fine-scale pelagic predator-prey interactions: Hawaiian spinner dolphins and the mesopelagic boundary’	
<b>University of Hawaii SeaGrant College Biennial 2001-2003</b> , Co-Investigator	(\$137,600)
‘The Dynamics of the Mesopelagic Boundary Community and their Role in Hawaiian Coastal Fisheries’	
<b>National Undersea Research Laboratory 2001-2003</b> , Co-Principal Investigator (3 weeks of ship and ROV time)	
‘Simultaneous Video and Acoustic Investigation of Mesopelagic Boundary Layer Structure’	
<b>Hawaii State Department of Land and Natural Resources 2000-2003</b> , Co-Investigator	(\$1,067,793)
‘Improvement of Bottomfish Stocks in the Hawaiian Islands: Development of Assessment Techniques’	

### TEACHING

<b>Zooplankton Ecology</b> (OC441/541)	<i>Spring 06; 08, Winter 10</i>
<b>Acoustical Oceanography</b> (OC679)	<i>Spring 07, Winter 11</i>
<b>Honors College Introduction to Oceanography</b> (OC331H) Guest Lecturer	<i>11/05</i>

### MENTORING

<b>Neal McIntosh</b> , Ph.D. Student College of Earth, Ocean, and Atmospheric Sciences, Oregon State University	<i>Committee Chair</i> <i>07/11-present</i>
<b>David Cade</b> , Ph.D. Student College of Earth, Ocean, and Atmospheric Sciences, Oregon State University	<i>Committee Chair</i> <i>09/11-present</i>
<b>Renee Albertson</b> , Ph.D. Department of Fisheries and Wildlife, Oregon State University	<i>Committee Member</i> <i>10/10-present</i>
<b>Martin Hoecker-Martinez</b> , Ph.D. Student College of Oceanic and Atmospheric Science, Oregon State University	<i>Committee Member</i> <i>10/09-present</i>
<b>Andrew Szabo</b> , Ph.D. Student Department of Fisheries and Wildlife, Oregon State University	<i>Committee Member</i> <i>04/05-12/11</i>
<b>Amanda Kaltenberg</b> , Postdoctoral Associate College of Oceanic and Atmospheric Sciences, Oregon State University	<i>Advisor</i> <i>06/10-12/11</i>
<b>Neal McIntosh</b> , M.S. Student College of Oceanic and Atmospheric Sciences, Oregon State University	<i>Committee Chair</i> <i>09/08-05/11</i>
<b>Luke Whitman</b> , M.S. Student Department of Fisheries and Wildlife, Oregon State University	<i>Committee Member</i> <i>07/08-12/10</i>
<b>Gregory Kowalke</b> , M.S. Student College of Oceanic and Atmospheric Sciences, Oregon State University	<i>Committee Member</i> <i>09/08-08/10</i>
<b>Amanda Olson Kaltenberg</b> , Ph.D. Student College of Oceanic and Atmospheric Sciences, Oregon State University	<i>Committee Chair</i> <i>06/05-06/10</i>
<b>Robyn Matteson</b> , M.S. College of Oceanic and Atmospheric Science, Oregon State University	<i>Co-Advisor</i> <i>09/07-10/09</i>
<b>Renee Gibb</b> , M.S. Department of Fisheries and Wildlife, Oregon State University	<i>Committee Member</i> <i>09/07-06/09</i>
<b>Daniel Wisdom</b> , Marine Resource Management M.S. College of Oceanic and Atmospheric Sciences, Oregon State University	<i>Committee Chair</i> <i>09/06-12/08</i>
<b>Ladd Irvine</b> , M.S. College of Oceanic and Atmospheric Sciences, Oregon State University	<i>Committee Member</i> <i>12/05-12/07</i>
<b>Alyson Azzara</b> , M.S. Department of Oceanography, Texas A&M University	<i>Outside Research Advisor</i> <i>06/05-12/06</i>
<b>Joy Smith</b> , B.S. Coastal Carolina University, HMSC REU Program	<i>REU Mentor</i> <i>06/05-08/05</i>
<b>Jennifer Pettis</b> , M.S. Georgetown University	<i>Outside Thesis Reader</i> <i>12/04-06/05</i>
<b>Kristine Hiltunen</b> , B.S. Texas A&M University, University of Hawaii SOEST REU Program	<i>REU Mentor</i> <i>06/01-08/01</i>

## PROFESSIONAL ACTIVITIES

<b>19th Biennial Conference on the Biology of Marine Mammals</b> , Ecology Session Chair	12/11
<b>D.V. Holliday Memorial Session</b> , Session Co-Chair 162nd Meeting of the Acoustical Society of America, San Diego	10/11
<b>Office of Naval Research Fish Acoustics Basic Research Challenge</b> , Chief Scientist for research program involving 19 Principal Investigators under 10 different grants	2010-2015
<b>Acoustic Challenges in Aquatic Ecosystem Assessment</b> , Scientific Committee, A Joint Special Workshop of the Acoustical Society of America and the American Fisheries Society	2010-2011
<b>IEEE Oceanic Engineering Society</b> Technical Committee on Underwater Acoustics	01/06-present
<b>Oceanography in 2025 Workshop</b> , Plenary Speaker & Invited Participant, Sponsored by the National Academy of Sciences' Ocean Studies Board and the U.S. Office of Naval Research	01/09
<b>Fish Acoustics Science Review</b> Invited Speaker, Participant, and ONR DRI Working Group Leader	11/07
<b>Autonomous and Lagrangian Platforms and Sensors Workshop</b> Invited Participant	11/05
<b>Cooperative Institute for Marine Resources Studies</b> Scientific Advisory Council	10/04-04/09
<b>Acoustical Society of America</b> Acoustical Oceanography Technical Committee	05/08-present
Outreach Committee on Posters	04/09-present
Website Committee	04/09-present
Animal Bioacoustics Technical Committee	12/02-12/04, 05/05-05/08
Public Relations Committee	05/04-present
Vision 2010 Retreat Participant, the future of the Society after 75 years	11/04
Student Council	2002-2003
<b>Society for Marine Mammalogy</b> Education Committee	01/00-11/09
Hawaii Student Chapter Organizer	02/00-05/03
<b>Western Pacific Regional Fisheries Management Council</b> Presenter and scientific advisor to the Scientific and Statistical Committee and Full Council	03/04-05/04
<b>Hawaiian Islands Stranding Response Group Volunteer</b>	12/02-07/04

## REFEREE

(Average 8 manuscripts/year, 6-7 proposals/year)

Journal of the Acoustical Society of America, Limnology and Oceanography, Aquatic Mammals, Deep-Sea Research Part-I, Fisheries Research, Journal of Marine Systems, Scientia Marina, Aquatic Living Resources, Marine Mammal Science Book Reviews, Animal Behaviour, Marine Ecology Progress Series, Marine Biology, Canadian Journal of Zoology, Fisheries Oceanography, Sea Grant College Programs, Journal of Physical Oceanography, Joint Industry Programme, Natural Science and Engineering Research Council of Canada, North Pacific Research Board, National Science Foundation (Major Research Instrumentation, Ocean Sciences, and Antarctic Biology Programs), Society for Marine Mammalogy Biennial Conference Abstract Reviewer (Bioacoustics, Ecology, and Behavioral Ecology divisions).

## PROFESSIONAL ASSOCIATIONS

Acoustical Society of America  
American Geophysical Union  
Society for Marine Mammalogy  
American Society for Limnology and Oceanography  
Ocean Engineering Society

### OUTREACH ACTIVITIES

- Acoustics for Kids**, profiled scientist for the poster and guidebook for middle school students, Acoustical Society of America 2011
- Song for the Blue Ocean: Science, Arts, & Ethics**, Spring Creek Project co-speaker with writer Julia Whitty 02/11
- Columbia Forum** Food for the Mind Dinner Lecture Speaker 03/10
- COSEE NOW** (Centers for Ocean Sciences Education Excellence - Networked Ocean Now) Podcast interview <http://coseenow.net/> 02/09
- Scientists and Fishermen Exchange (SAFE)** 09/04-present  
Participant in this group of fishermen and scientists working together to build trust and a mutual understanding of the industry and ocean sciences. Sponsored by Oregon Sea Grant
- Oregon State University Board of Trustees** Presenter at annual meeting 09/06
- COAS Board of Advisors** Presenter at annual meeting 07/05
- SeaFest** 06/05  
*Featured Speaker*, Hatfield Marine Science Center Open House and Marine Science Festival
- Oregon Ocean Science and Math Collaborative Program** 09/04-5/05  
*Technical Advisor, Keynote Speaker, Teacher at Sea Program Host*  
This is the largest single initiative of the Office of Community College and Workforce Development for the State of Oregon. It aims at integrating the expertise of scientists and educators in a collaborative project designed to incorporate ocean sciences into science, math, critical thinking as part of adult education.
- Hawaii State Science Fair** 04/02, 4/04  
*Judge*, High School Biological Sciences Division
- Community Seminar Series**, Keynote Speaker, Kula Nai'a Foundation & Kohala Center, Waimea, Hawaii 04/04

### MEDIA & WEBSITE COVERAGE

- The Scientist Magazine** Scientist to Watch story 04/11
- SmartPlanet.net** Feature scientist profile 02/11
- Exploring How Jumbo Squid Use Oxygen to Survive** US News and World Reports story on our NSF funded research in collaboration with William Gilly, Stanford and Brad Seibel, URI 10/10
- MacArthur Fellowship** Covered by National Public Radio's "All Things Considered", Oregon Public Broadcasting, The New York Times, USA Today, The Washington Post, The Oregonian, Popular Science and Atlantic Magazines, and others 09/10
- Mother Jones Magazine** Research featured in cover story on the BP oil spill 08/10
- Malamalama** University of Hawaii Alumni Magazine Volume 34:1, Article "Ocean acoustics reveal dolphin diet and feeding behavior" 03/09
- Honolulu Star Bulletin**, Story: "Underwater Dance" by Helen Alton about spinner dolphin foraging 11/10/08
- Discovery Channel Canada, Daily Planet** Interviewed about research on spinner dolphin foraging for this daily science news program *aired* 10/22/08
- Spinner dolphin foraging** research featured on *Bio-Medicine.org*, *Sciencecentric.com*, *Physorg.com*, *Innovations-Report.de*, *ScienceDaily.com*, *ScienceNewsDaily.org*, *FirstScience.com*, *DrTom.tv*, *ScienceCodex.com*, *BiologyNews.net*, *NSF.gov*'s homepage banner, and the American Academy for the Advancement of Science's website *EurekAlert.org* 10/21/08
- National Public Radio Guest** for story on the Bering Sea Integrated Ecosystem Research Program *aired* 08/11/08
- NSF's Live Science** My squid research featured by this public outreach website 06/08
- Discovery of Sound in the Sea** 12/05  
Served as a scientific expert for [www.dosits.org](http://www.dosits.org), an outreach website about the recently controversial topic of the use of sound in the ocean. I did an on camera interview for the "Scientists Gallery" of the website, provided figures and information for the site, and fact checked the final pages.
- Women in Oceanography** featured in the *Oceanography* Special Issue Vol. 18, No. 1 03/05  
One of a series of autobiographical sketches of modern women in oceanography
- Press Conference Panel Member** on the applications of acoustics to oceanography, as part of the 2004 Ocean Sciences Meeting 01/04
- Acoustical Society of America, Press Room** 05/03, 12/01  
Prepared Lay-Language Papers for meeting website, fielded press questions at meeting press conferences

## UNIVERSITY SERVICE COMMITTEES

<b>Associate Dean for Research Search Committee, CEOAS</b>	<i>06/10-present</i>
<b>Ship Operations, College of Oceanic and Atmospheric Sciences</b>	<i>09/10-present</i>
<b>Marine Superintendent Hiring Committee, College of Oceanic and Atmospheric Sciences</b>	<i>09/10-01/11</i>
<b>Strategic Planning Committee, College of Oceanic and Atmospheric Sciences</b>	<i>09/10-1/10</i>
<b>Faculty Hiring Committee, College of Oceanic and Atmospheric Sciences</b>	<i>12/07-01/11</i>
<b>Peer Review of Teaching, College of Oceanic and Atmospheric Sciences</b>	<i>09/09-09/10</i>
<b>Dean's Advisory Committee, College of Oceanic and Atmospheric Sciences</b>	<i>09/06-09/07, 09/08-08/09</i>
<b>Frontiers Seminar Series Committee, College of Oceanic and Atmospheric Sciences</b>	<i>09/07-09/08</i>
<b>Director Search Committee, Oregon Sea Grant</b>	<i>09/07-06/08</i>
<b>Promotion and Tenure Committee, College of Oceanic and Atmospheric Sciences</b>	<i>09/07-02/08</i>
<b>Oregon State University Faculty Senate</b>	<i>12/04-01/08</i>
<b>Ship Operations Committee, College of Oceanic and Atmospheric Sciences</b>	<i>09/06-09/07</i>
<b>Branding Committee, College of Oceanic and Atmospheric Sciences</b>	<i>09/06-09/07</i>
<b>Cetacean Biologist Search Committee, Dept of Fisheries and Wildlife, COMES</b>	<i>11/04-12/05</i>
<b>Instructional Programs Committee, College of Oceanic and Atmospheric Sciences</b>	<i>09/04-09/05</i>
<b>Scientific Facilities Committee, College of Oceanic and Atmospheric Sciences</b>	<i>09/05-09/06</i>

## PUBLIC RELATIONS

<b>Senate, State of Oregon</b> Invocation speaker for University Day	<i>04/11</i>
<b>ARCS Foundation</b> Speaker for the College to this scholarship organization	<i>04/11</i>
<b>Terra Magazine</b> Interviewed for article on my recent research and MacArthur Award	<i>10/10</i>
<b>Media</b> Listed on OSU's " <i>Faculty Experts</i> " website, I am regularly contacted by the press to talk about my research or comment on science in the news	
<b>Terra Magazine</b> Interviewed for article "Sounding the Deep" on my recent squid research	<i>07/08</i>
<b>OSU Foundation</b> Campaign for OSU feature article and banner	<i>2007-2008</i>
Worked with the Development Office on materials representing my work at OSU which included several interviews and a photo-shoot	
<b>OSU University Advancement</b>	<i>05/07</i>
Participated in meetings with the Vice President for University Advancement focusing on the impacts of advancement on the broader implications of research	
<b>Oregon State University Board of Trustees</b> Presenter at annual meeting	<i>09/06</i>
<b>OSU University Advancement</b> Presenter	<i>05/06</i>
<b>OSU University Advancement</b> Faces of OSU banner subject	<i>01/06</i>
<b>COAS Board of Advisors</b> Presenter at annual meeting	<i>07/05</i>