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WSAS COMMITTEE FOR UNDERWATER ACOUSTICS AND DISTURBANCE

Peter Dahl – Senior Principal Engineer, Acoustics Department, Applied Physics Laboratory; Professor, Mechanical Engineering, University of Washington – dahl@apl.washington.edu

Dr. Peter H. Dahl is a Senior Principal Engineer with the University of Washington Applied Physics Laboratory, and a Professor of Mechanical Engineering at the University of Washington. His research focuses on underwater sound. He has published extensively on the physics of acoustic propagation as influenced by the sea surface and seabed, vector acoustic properties of underwater and airborne sound, and studies on underwater noise from explosives and marine pile driving. Dr. Dahl has conducted several ocean-going experiments in underwater acoustics, sponsored by the U.S. Office of Naval Research involving international collaborative teams, and is currently a Principal Investigator for two projects under the purview of the Navy's Living Marine Resource program concerning the effects of sound on marine life. Dr. Dahl received his Ph.D. from the Massachusetts Institute of Technology and Woods Hole Oceanographic Institution Joint Program in Ocean Engineering. He is a Fellow of the Acoustical Society of America (ASA), has served as the chair of the ASA technical committee on Underwater Acoustics (2002-2005), on its Executive Council (2008-2011), and was the ASA Vice President (2013-2014). (link)

Marla Holt – Research Wildlife Biologist, NOAA Fisheries – marla.holt@noaa.gov

Dr. Marla Holt is a Research Wildlife Biologist for the Marine Mammal Ecology Team; she joined the Northwest Fisheries Science Center as a National Research Council (NRC) Postdoctoral Associate for the Marine Mammal Program. Dr. Holt's postdoctoral research was an investigation on the effects of vessel noise on the acoustic signals of Southern Resident killer whales. She also wrote a review paper which focused on sound exposure in Southern Resident killer whales. Dr. Holt received her Ph.D. from the University of California, Santa Cruz in Ocean Sciences. Her dissertation focused on pinniped spatial acoustics including sound localization and auditory masking in captive seals and sea lions and call directionality in free-ranging northern elephant seals. Dr. Holt also has an M.S. in Marine Sciences and a B.A. in Marine Biology from the University of California, Santa Cruz. Her current research focuses on marine mammal acoustics including the effects of noise on the acoustic signals and behavior of Southern Resident killer whales, their use of sound during different activity states, and the cost of sound production in odontocetes. Dr. Holt's research interests include marine mammal sound production and acoustic communication, sensory ecology (including hearing capabilities and auditory scene analysis), sound exposure and acoustic risk factors, and passive acoustic monitoring. (link)

David Lusseau – Professor, School of Biological Sciences, University of Aberdeen – d.lusseau@abdn.ac.uk

Dr. David Lusseau works at the intersection of life, formal, and social sciences to understand how individuals make decisions when uncertain and what the consequences of those decisions are for their health, social life, and demographic contributions. He has been at the University of Aberdeen since 2007. He obtained his BSc in marine biology at the Florida Institute of Technology and his PhD in

Zoology at the University of Otago (New Zealand). He then received a Killam fellowship for postdoctoral work at Dalhousie University. He was elected member of the Young Academy of Scotland in 2007, Fellow of the Royal Statistical Society in 2009, and Fellow of the Royal Society of Biology in 2016. Dr. Lusseau has worked on sustainable wildlife management since his PhD at Otago, particularly focussing on developing quantitative methods to detect and avoid wicked problems when managing these socioecological systems. He is a member of IUCN's Cetacean Specialist Group and Sustainable Use and Livelihoods Specialist Group and recently convened the marine mammal assessment chapter of the 2nd UN World Ocean Assessment. (link)

Dawn Noren – Research Fish Biologist, Conservation Biology Division, National Oceanic and Atmospheric Administration – dawn.noren@noaa.gov

Dr. Dawn Noren is a research fishery biologist, with expertise in physiological ecology, at the NOAA Fisheries Northwest Fisheries Science Center in Seattle, WA. She is currently a member of the International Whaling Commission Scientific Committee and primarily works with the environmental concerns and whale watching sub-committees. Her research includes energetics and metabolism, assessment of body condition, diving physiology, and anthropogenic impacts. Her recent work focuses on killer whale prey requirements, the effects of vessels and sound on cetacean behavior and energetics, factors influencing killer whale body condition indices, the transfer of contaminants from female dolphins and killer whales to their calves, and Southern Resident killer whale habitat use patterns. Her earlier research focused on Steller sea lion, northern elephant seal, and bottlenose dolphin physiology. Previously, Dr. Noren was a National Research Council (NRC) Postdoctoral Research Associate at the National Marine Mammal Laboratory at the NOAA NMFS Alaska Fisheries Science Center in Seattle, WA. Dr. Noren earned a M.S. in Marine Sciences and a Ph.D. in Ecology and Evolutionary Biology, both from the University of California, Santa Cruz. She earned a B.S. in Biological Sciences with an emphasis in Marine Sciences from the University of Maryland, College Park. (link)

Susan Parks – Associate Professor, Biology, Syracuse University – sparks@syr.edu

Dr. Susan Parks' research focuses on the ecology and evolution of acoustic signaling. Diverse research topics in the lab span the fields of behavioral ecology, bioacoustics, biological oceanography, and conservation biology. Current projects in the lab involve studies of marine and terrestrial animals ranging from observational studies characterizing the acoustic behavior of species to experimental studies investigating behavioral functions of sounds and the impacts of noise on communication. Dr. Parks holds a PhD from Massachusetts Institute of Technology/ Woods Hole Oceanographic Institution and a BA from Cornell University (link)

Ron Thom – Staff Scientist Emeritus, Coastal Sciences Division, Pacific Northwest National Laboratory – ron.thom@pnnl.gov

Dr. Ron Thom has conducted applied research in coastal and estuarine ecosystems since 1971. His research includes coastal ecosystem restoration; adaptive management of restored systems; benthic primary production; ecosystem monitoring; climate change and adaptation; carbon storage in restored coastal systems, and ecology of fisheries resources. Dr. Thom has directed approximately 200 multidisciplinary ecological studies and worked on systems in California, Washington, Oregon, Alaska, Massachusetts, New York, Nebraska, and Alabama. He chaired the original Technical Advisory Committee of the EPA's Puget Sound Estuary Program, was appointed by the Governor of Washington to the 2015 Northwest Straits Commission, and served as a member of US EPA Science Advisory Board panel reviewing the Great Lakes Restoration Program in 2011. Dr. Thom served on the National Academy panel that developed recommendations for monitoring the effectiveness

recovery actions in the Gulf of Mexico coastal ecosystem following the 2010 oil spill. He co-chaired the 2015 conference of the Coastal and Estuarine Research Federation (CERF), and co-chaired the 2016 Salish Sea Ecosystem Conference. In 2010, he was elected to the Washington State Academy of Sciences, and in 2016 was elected president-elect of the Academy to serve in 2018-2020. Dr. Thom managed the Coastal Ecosystem technical group at PNNL until 2013. He currently serves as the Senior Science Advisor to the Puget Sound Partnership, which is the EPA National Estuary Program in Puget Sound. (link)

Dom Tollit – Senior Research Scientist, SMRU Consulting – djt@smruconsulting.com

Dr. Dom Tollit is a Principal Scientist with SMRU Consulting. He has over 28 years of experience studying the behavioural ecology, foraging, and population dynamics of marine predators. His primary research interests are to understand the ecological role of pinnipeds in coastal habitats and to define key parameters within multi-species environmental risk assessment frameworks. Following a PhD at the University of Aberdeen in Scotland, Dr. Tollit worked for SMRU in St. Andrews University, the University of Tasmania and the National Trust for Fiji, before leading a Steller sea lion foraging ecology research program at the University of British Columbia. Since 2009, Dr. Tollit has undertaken a variety of North American based consultancy projects, including noise impact assessment, environmental and acoustic-based monitoring programs and pinniped ecological research. His collaborative research has led to more than 35 journal publications in the field of marine mammal science. Recent project experience includes working with industry, NGOs, federal and local regulators (DFO, NOAA, CSLC) and a variety of academic institutions in Canada and the USA. He is currently the technical advisor to Vancouver Fraser Port Authority's ECHO program and actively involved in improving Population Consequences of Disturbance (PCOD) assessments. (link)