Scientist Letter to President Barack Obama: Protect U.S. Arctic Important Marine Areas

June 16, 2016

The President The White House 1600 Pennsylvania Avenue Washington, DC 20500

Dear Mr. President:

The Arctic is home to vibrant communities of indigenous peoples, provides vital marine habitats for iconic wildlife such as beluga whales, walruses, and ice seals found nowhere else in the United States, and plays a critical role in global climate systems. As you witnessed during your trip to Alaska this past summer, the region is profoundly affected by climate change—including loss of sea ice, acidification of the ocean, and increased access for industries that pose significant risks to the ocean environment. Careful planning and management can help protect and sustain this valuable ecosystem in the face of these and other threats.

We applaud the leadership you showed in 2015 by withdrawing 9.8 million acres of the Beaufort and Chukchi seas from future oil and gas leasing. This important action to conserve parts of the U.S. Arctic Ocean was a significant step toward protecting Arctic marine ecosystems. We are encouraged by your comprehensive joint vision for the Arctic with Prime Minister Trudeau, which includes taking steps to conserve Arctic biodiversity through science-based decision-making.

As scientists and natural resource managers, we support additional steps to protect vital habitats in the Arctic Ocean. More action is needed to ensure the resilience of the Arctic marine ecosystem and sustain the people who use its living resources to thrive. No new oil and gas leasing or exploration should be allowed in the Chukchi and Beaufort seas in the foreseeable future, including in the next five-year leasing plan. Additional ecologically important and sensitive marine habitats should be placed off-limits to oil and gas activity, while honoring subsistence hunting, fishing, and other uses and access for indigenous peoples, to protect the long-term health and function of these waters.

We know your administration is committed to ensuring sound, science-based decision-making. It is clear that certain offshore areas—often those with durable physical or oceanographic attributes—make critically important contributions to ecosystem functioning and subsistence. Most or all of these areas can be expected to remain productive and essential to ecosystem well-being even as climate change continues to reduce sea ice, alter the food web, and otherwise affect Arctic waters. As you yourself have said, "some areas are too special to drill."

Beyond those areas you already have withdrawn from oil and gas leasing, there are additional places that warrant consideration because they encompass especially diverse habitats, support high species richness, provide habitat for wildlife during critical life stages, host extraordinary productivity, or otherwise sustain the resilience of the Arctic marine ecosystem. Examples are long-established migration routes for seabirds and bowhead whales, foraging hotspots, subsistence use areas, rich seafloor habitats, lingering ice habitat, and areas where algae and phytoplankton thrive.

We, the undersigned, ask you to remove the two Arctic planning areas, which together comprise nearly the entire U.S. Chukchi and Beaufort seas, from the 2017–2022 Outer Continental Shelf Leasing Program. We further ask that you consult with indigenous communities and tribes, who have extensive traditional knowledge relevant to decision-making, and with Arctic scientists to identify and permanently withdraw additional important marine areas to promote a sustainable, resilient future for this extraordinary ecosystem.

Sincerely,

The Honorable Jane Lubchenco, Ph.D. Marine Ecology Oregon State University Former Administrator of NOAA

C. Scott Baker, Ph.D. Associate Director Marine Mammal Institute Oregon State University

Enric Sala, Ph.D. Explorer-in-Residence National Geographic Society

Professor James Hansen Climate Science Awareness and Solutions, The Earth Institute Columbia University

Carl Safina, Ph.D.
Endowed Professor for Nature and
Humanity, School of Marine and
Atmospheric Sciences
Co-chair, Alan Alda Center for
Communicating Science steering
committee, School of Journalism
Stony Brook University

F. Stuart Chapin III, Ph.D. Distinguished Professor Emeritus University of Alaska Fairbanks

Paul K. Dayton, Ph.D. Distinguished Professor Emeritus Scripps Institution of Oceanography

George L. Hunt Jr., Ph.D. Research Professor Aquatic & Fishery Sciences University of Washington

Daniel Pauly, Ph.D. Professor of Fisheries University of British Columbia

Stanley Senner, M.S. Vice President for Bird Conservation Pacific Flyway Nation Audubon Society John Teal, Ph.D. Scientist Emeritus Woods Hole Oceanographic Institute

Kathleen Stafford, Ph.D. Principal Oceanographer Applied Physics Laboratory University of Washington

Anne K. Salomon, Ph.D. Associate Professor Simon Fraser University

Henry P. Huntington, Ph.D. International Arctic, Science Director The Pew Charitable Trusts

Peter H. Raven, Ph.D. President Emeritus Missouri Botanical Garden, St. Louis

Sylvia A. Earle, Ph.D. National Geographic Explorer in Residence

Gordon H. Orians Professor Emeritus of Biology University of Washington

Brendan P. Kelly, Ph.D. Executive Director Study of Environmental Arctic Change University of Alaska Fairbanks

Trevor A. Branch, Ph.D. School of Aquatic and Fishery Sciences University of Washington

The Honorable Sherburne B. Abbott University Professor Syracuse University Associate Director OSTP/EOP 2009-2011

P. Dee Boersma, Ph.D. Wadsworth Endowed Chair in Conservation Biology University of Washington Dr. Thomas C. Shirley Professor Emeritus Texas A&M Univ.-Corpus Christi Professor Emeritus University of Alaska Fairbanks

Stuart Pimm, Ph.D. Doris Duke Chair of Conservation Duke University

Kate Moran, Ph.D. Ocean Networks Canada Victoria, BC, Canada

Thomas E. Lovejoy Environmental Science and Policy George Mason University

Paul R. Ehrlich, Ph.D. Ecology Stanford University

Mark Hixon, Ph.D. Professor and Hsiao Endowed Chair in Marine Biology University of Hawaii

Peter Abrams Professor University of Toronto, Canada

Robert M. May, O.M., A.C., F.R.S. President, Royal Society 2000-2005 Distinguished Professor Emeritus Oxford University, UK

Robert Elsner, Ph.D. Professor Emeritus School of Fisheries and Ocean Sciences University of Alaska Fairbanks

Kai Chan, Ph.D. Associate Professor Environmental Science and Sustainability University of British Columbia

Philip Alatalo, M.S.

John Alcock, Ph.D. Emeritus Professor of the School of Life Sciences Arizona State University

James Allen, Ph.D. Biobehavioral Health & Population Sciences University of Minnesota Medical School

David J. Anderson, Ph.D. Department of Biology Wake Forest University

Jacob Anderson, M.S. Geosciences Boise State

Todd Anderson, Ph.D. Professor of Biology San Diego State University

William D. Anderson, Jr., Ph.D. Systematic Ichthyology Grice Marine Biological Laboratory College of Charleston

Ricardo Antunes, Ph.D. Ocean Giants Program Wildlife Conservation Society

Caroline Armon Marine Ecology Educator Salish Sea Association of Marine Naturalists

Janet Armstrong Aquatic and Fishery Sciences University of Washington

Lauri Arvola, Ph.D. Environmental Research University of Helsinki, Finland

Marta Azzolin, Ph.D. Life Sciences and Systems Biology Department University of Turin, Italy

Christopher R. Barnes, Ph.D. Professor Emeritus, Earth and Ocean Sciences University of Victoria, BC

Professor Rob Barrett Tromsø University Museum, Norway

Spencer C.H. Barrett Ecology & Evolutionary Biology University of Toronto, Canada Simona Bartl, Ph.D.

Nathan Basiliko, Ph.D. Associate Professor and Canada Research Chair in Environmental Microbiology Laurentian University, Canada

Trina Bayard, Ph.D. Audubon Washington

Giovanni Bearzi, Ph.D. Dolphin Biology and Conservation

David L. Bechler, Ph.D. Professor Emeritus Valdosta State University Valdosta, GA

Jessie Beck Wildlife Biologist Oikonos Ecosystem Knowledge

Paul Beier, Ph.D. Regents' Professor of Conservation Biology Northern Arizona University

Craig Benkman, Ph.D. Professor of Zoology & Physiology University of Wyoming

John A. Berges Professor, Biological Sciences and Freshwater Sciences University of Wisconsin-Milwaukee

David M. Bird, Ph.D. Emeritus Professor of Wildlife Biology McGill University

Jeff Black, Ph.D., D.Sc. Department of Wildlife Humboldt State University

Sandra Black, D.V.M. University of Calgary Faculty of Veterinary Medicine, Department of Ecosystem and Public Health

Harvey D. Blankespoor, Ph.D. Professor Emeritus of Biology 1991 U.S. CASE U.S. Professor of the Year

Tasia Blough Research & Education New England Aquarium Whale Watch

Sarah Bobbe, M.Sc.

Ocean Conservancy

Allesandro Bocconcelli Research Specialist Woods Hole Oceanographic Institution

Walter J. Bock, Ph.D. Evolutionary Biology Columbia University

Bazartseren Boldgiv, Ph.D. Department of Ecology National University of Mongolia

Finn Borchsenius, Ph.D. Aarhus University, Denmark

William D. Bowman, Ph.D. Ecology and Evolutionary Biology University of Colorado, Boulder

Bert Boyer, Ph.D. Director, Center for Alaska Native Health Research University of Alaska Fairbanks

Richard Bradley, Ph.D. The Ohio State University

M. Syndonia Bret-Harte, Ph.D. Associate Professor University of Alaska Fairbanks

Carol A. Brewer, Ph.D. Professor Emerita University of Montana, Missoula

Kenneth T. Briggs, Ph.D., D.V.M Mercy Pet Hospital Citrus Heights, CA

Paul Broady, Ph.D. University of Bristol, U.K.

Annette Broderick, Ph.D. Associate Professor of Marine Conservation University of Exeter, UK

Franziska Broell, Ph.D. Department of Oceanography Dalhousie University

Jamie L. Brusa, M.S.

Curtis Burkhalter, Ph.D. The National Audubon Society

Gregor M. Cailliet, Ph.D. Professor Emeritus Moss Landing Marine Laboratories California State University

Michael L. Cain, Ph.D. Bowdoin College

Prassede Calabi, Ph.D. University of MA, Boston

Ken Caldeira Dept. of Global Ecology Carnegie Institution for Science

Prof. Antonio Camacho, Ph.D. University of Valencia

Robin K. Cameron, Ph.D. Plant Biology McMaster University, Canada

Professor Miquel Canals Marine Geosciences University of Barcelona, Spain

F. Lynn Carpenter Professor Emerita University of California, Irvine

Mark H. Carr Professor, Department of Ecology and Evolutionary Biology University of California, Santa Cruz

Walter Carson, Ph.D. Biological Sciences University of Pittsburgh

Ralph Cartar, Ph.D. Ecology & Evolution University of Calgary, Canada

Nanette E. Chadwick Associate Professor of Biological Sciences Auburn University

Hazel Chapman, Ph.D. School of Biological Sciences University of Canterbury, NZ

David M. Checkley, Jr. Professor Scripps Institution of Oceanography

Constance Chen Sanchez, M.S. Director, Important Bird Areas Program National Audubon Society

John A. Cigliano, Ph.D. Environmental Conservation Program Cedar Crest College Dr. John Clague Simon Fraser University

Gershon Cohen, Ph.D. CSAW Project Director Earth Island Institute

David C. Coleman Professor Emeritus Odum School of Ecology University of Georgia

Mark A. Colwell, Ph.D. Wildlife Department Humboldt State University

David O. Conover Professor, School of Marine and Atmospheric Sciences Stony Brook University

Joseph Cook, Ph.D. Biology University of New Mexico

Colleen Corrigan University of Queensland

Nicola Crockford Royal Society for the Protection of Birds

David A. Culver, Ph.D. Aquatic Ecology Ohio State University

Stephen Cumbaa, Ph.D. Researcher Emeritus Canadian Museum of Nature

Herbert Curl, Jr., Ph.D. NOAA (retired)

David Curson, Ph.D. Director of Bird Conservation Audubon Maryland-DC

Dominick A. DellaSala, Ph.D. Chief Scientist Geos Institute, Ashland, OR

Amy Denton, Ph.D.
Professor and Chair of Biology &
Geology

California State University Channel Islands

Emma Despland, D.Phil. (Oxon.) Biology Concordia University, Canada

Rodolphe Devillers, Ph.D. Geography

Memorial University Canada

Antony Diamond, Ph.D. University of New Brunswick

Lawrence Dill, PhD, FRSC Professor Emeritus, Simon Fraser University

Andy Dobson, D.Phil (Oxon) Ecology & Evolutionary Biology Princeton University

Ellen Druffel Fred Kavli Professor of Earth System Science U.C. Irvine

Lawrence K. Duffy, Ph.D. University of Alaska Fairbanks

Peter Dunwiddie, Ph.D. Biology Department University of Washington

Matthew Dzieciuch, Ph.D. Project Scientist Scripps Institution of Oceanography

Peter Eklöv Professor in Limnology Uppsala University, Sweden

Josef Elster, Ph.D. Centre for Polar Ecology University of South Bohemia Ceske Budejovice, Czech Republic

Dr. John England Professor Emeritus Arctic Environmental Change, Earth & Atmospheric Sciences University of Alberta, Edmonton, AB

Gidon Eshel, Ph.D.

Eugenie Euskirchen, Ph.D. Associate Research Professor Ecology, Institute of Arctic Biology University of Alaska Fairbanks

William E. Faber, Ph.D. Natural Resources Central Lakes College, Brainerd, MN

Andrew Farnsworth, Ph.D. Information Science Cornell Lab of Ornithology

Neus Figueras, M.S.

Daniel C. Fisher, Ph.D. Dept. Earth & Environmental Science University of Michigan

Thomas L. Fleischner, Ph.D. Natural History Institute Prescott College

Lisa Floyd-Hanna, Ph.D. Prescott College Prescott, AZ

Andrew Foggo, MA DPhil University of Plymouth, UK

Douglas J. Forsell

David Foster Director, Harvard Forest Harvard University

Shannon Leone Fowler, Ph.D.

Michael Fox, Ph.D. School of the Environment Trent University

Dr. William R. Fraser

Gail Fraser, Ph.D. Faculty of Environmental Studies York University, Canada

Art Fredeen Professor, Ecosystem Science and Management University of Northern British Columbia, Canada

Douglas J. Frederick Professor of Forestry and Environmental Resources North Carolina State University

Silvia Frey, Ph.D. Director Science and Education OceanCare

Alan Fryar, Ph.D. Earth and Environmental Sciences University of Kentucky

Jed A Fuhrman, Ph.D. McCulloch-Crosby Chair of Marine Biology University of Southern California

Stuart H. Gage, Ph.D. Professor Emeritus Michigan State University Anthony Gaston Senior Research Scientist Environment and Climate Change Canada

Thomas A. Gavin Professor Emeritus Dept. of Natural Resources Cornell University

Harold J. Geiger, Ph.D. Chief Scientist St. Hubert Research Group Juneau, Alaska

Leah Gerber, Ph.D. Life Sciences Arizona State University

Martin Gibling, Ph.D.

Celine Godard, Ph.D. Associate Professor of Environmental Toxicology Texas Tech University

Ilan Golani Professor Emeritus of Zoology Tel Aviv University

Max Goldman Arctic Marine Ecologist Audubon Alaska

Michael N. Gooseff Institute of Arctic & Alpine Research University of Colorado

Elise Granek, Ph.D. Environmental Science and Management Portland State University

Stewart Grant, Ph.D. Alaska Department of Fish and Game

Cornelis Grimmelikhuijzen Professor of Biology University of Copenhagen, Denmark

Gary D. Grossman, Ph.D. Forestry & Natural Resources University of Georgia

Emeritus Professor Colin Groves School of Archaeology & Anthropology Australian National University Canberra, Australia

Pamela Groves, Ph.D. University of Alaska Fairbanks Melania Guerra, Ph.D. University of Washington

Karlene Gunter, Ph.D. Biophysics University of Rochester

Sarah Gutowsky, Ph.D. Dalhousie University, Canada

Sigmund Hågvar Norwegian University of Life Sciences

Benjamin Halpern, Ph.D.
Professor of Marine Conservation
Bren School of Environmental
Science & Management
Director, National Center for
Ecological Analysis & Synthesis
University of California, Santa
Barbara

James Hanken, Ph.D., Director, Museum of Comparative Zoology, Harvard University

Gordon F. Hartman, Ph.D. Fisheries Science Nanaimo, B.C., Canada

Bradford A. Hawkins, Ph.D. Dept. of Ecology & Evolutionary Biology University of California, Irvine

Ken R. Helms, Ph.D. Department of Biology University of Vermont

Kringen Henein, Ph.D. Instructor in Environmental Science Carleton University

Sharon M. Hermann, Ph.D. Dept. of Biological Sciences Auburn University

Luise Hermanutz, Ph.D. Ecologist Memorial University Canada

Gerhard J. Herndl, Ph.D. Professor of Marine Biology University of Vienna, Austria

Ellen Hines, Ph.D Professor San Francisco State University

Michael F. Hirshfield, Ph.D. Chief Scientist and Strategy Officer Oceana John Hocevar, M.Sc. Greenpeace USA

Peter Hodum, Ph.D. Associate Professor, Biology University of Puget Sound

Mimi Hogan, M.S. Wildlife Biology U.S. Fish &Wildlife Service

Douglas A. Holdway, Ph.D. Tier 1 Canada Research Chair in Aquatic Toxicology University of Ontario Institute of Technology, Ontario, Canada

Karen Holl Professor of Environmental Studies University of California, Santa Cruz

Richard T. Holmes, Ph.D. Biological Sciences Dartmouth College

Osmund Holm-Hansen, Ph.D. Research Oceanographer Scripps Institution of Oceanography University of California at San Diego

Geoff Holroyd, Ph.D. Retired Research Scientist Canadian Wildlife Service

Roger LeB. Hooke Geomorphology University of Maine

Haakon Hop, Ph.D. Norwegian Polar Institute Tromsø, Norway

Lara Horstmann, Ph.D. Marine Biology University of Alaska Fairbanks

Mads F. Hovmand Senior Scientist Terrestrial Ecology Department of Biology University of Copenhagen, Denmark

Prof. Dr. Hans-W. Hubberten Alfred Wegener Institute, Germany

Karen W. Hughes, Ph.D. University of Tennessee

David Hyrenbach, Ph.D. Associate Professor of Oceanography Hawaii Pacific University David Innes Department of Biology Memorial University

David W. Inouye, Ph.D. Department of Biology University of Maryland

Dr. Carlos Alberto Iudica Department of Biology and Ecology Susquehanna University

Erik I. Johnson, Ph.D. Director of Bird Conservation Audubon Louisiana

Mark Johnson, Ph.D. Scottish Oceans Institute University of St. Andrews

Mitchell M. Johns, Ph.D. Professor Emeritus of Soil and Crop Science California State University, Chico

James R. Karr, Professor Emeritus School of Aquatic and Fishery Sciences University of Washington, Seattle

Monika Kędra, Ph.D. Oceanography IOPAN, Poland

Jeremy T. Kerr, Ph.D. University Research Chair in Macroecology and Conservation University of Ottawa

Knut Kielland, Ph.D. Ecology University of Alaska

William M. Kier, Professor Department of Biology UNC-Chapel Hill

Alexander S. Kitaysky, Ph.D. Professor University of Alaska Fairbanks

Daniel Klem, Jr., Ph.D., D.Sc. Biology Muhlenberg College, USA

Dr. Holger Klinck Bioacoustics Research Program Cornell University

Terrie Klinger, Ph.D. Professor and Director School of Marine and Environmental Affairs University of Washington

Walter D. Koenig, Ph.D. Cornell University

Marianne G. Korosy, Ph.D. Important Bird Areas Program Audubon Florida

Dipl. Biol. Sven Koschinski Meereszoologie, Nehmten, Germany

Gail Krantzberg, Ph.D. Aquatic Scientist McMaster Masters in Engineering and Public Policy Program

Marcel Lambrechts, Ph.D.

William F. Laurance, Ph.D., FAA, FAAAS, FRSQ Distinguished Research Professor & Prince Bernhard Chair in International Nature Conservation James Cook University Australia & Singapore

Isabelle Laurion Professor, Limnology INRS-ETE, Canada

Dennis Lavrov, Ph.D. Ecology, Evolution and Organismal Biology Iowa State University

Beverly Law, Ph.D. Global Change Biology Oregon State University

Geoffrey S. LeBaron, M.S. Christmas Bird Count Director National Audubon Science

Ruth Leeney, Ph.D. Simon Fraser University, Vancouver

Pauline Snoeijs Leijonmalm Professor of Marine Ecology Stockholm University, Sweden

Luc Lens Full Professor of Terrestrial Ecology Ghent University, Belgium

Marty L. Leonard, Ph.D. Dalhousie University Halifax, Nova Scotia, Canada

Ken Lertzman, Ph.D. Professor, School of Resource and Environmental Management Simon Fraser University British Columbia, Canada

Simon Levin, Ph.D. Princeton University

William Z. Lidicker, Jr. Professor of Integrative Biology Emeritus University of California Berkeley

Gene E. Likens, Ph.D.
Founding Director and President
Emeritus and Distinguished Senior
Scientist Emeritus
Cary Institute of Ecosystem Studies

Richard L. Lindroth, Ph.D.

Karin Lochte, Ph.D. Alfred Wegener Institut Helmholtz Center for Polar and Marine Research

Heike K. Lotze, Ph.D. Canada Research Chair in Marine Renewable Resources Dalhousie University, Canada

Prof. Gary Luck, Ph.D. Institute for Land, Water and Society Charles Sturt University, Australia

Devin Lyons Department of Biological Sciences University of Alberta

Michael C. MacCracken, Ph.D. Climate Institute, Washington, DC

Sheila Macfie, Ph.D. Dept. of Biology University of Western Ontario Canada

Stephen F. MacLean Professor Emeritus Institute of Arctic Biology and Department of Biology and Wildlife University of Alaska Fairbanks

Julie A.K. Maier, Ph.D. Research Scientist Institute of Arctic Biology University of Alaska Fairbanks

Marvin W. Makinen, M.D., D.Phil.

Daniela Maldini, Ph.D Chief Scientist Okeanis Marc Mangel Distinguished Research Professor University of California Santa Cruz

Daniel H. Mann Associate Professor Department of Geosciences and Institute of Arctic Biology University of Alaska

James H. Marden, Ph.D. Professor of Biology Pennsylvania State University

Jennifer L. Maresh, Ph.D. University of California Santa Cruz

Timothy J. Maret, Ph.D. Professor Shippensburg University

Tiago A. Marques, Ph.D. Senior Research Fellow University of St. Andrews

Patrick Martin, Ph.D.

Cristiane C. A. Martins, Ph.D. Tryphon Océans

Jerome Marty, Ph.D. University of Waterloo

Dr. Nicole Misarti Water and Environmental Research Center University of Alaska Fairbanks

Dr. Juan F. Masello

Katie Matthews, Ph.D. Deputy Chief Scientist Oceana

Kevin S. McCann, Ph.D. Canadian Research Chair in Biodiversity

Daniel P. McCarthy, Ph.D. Dept. of Earth Sciences Brock University, Canada

Dr. Marla S. McIntosh Professor Emerita University of Maryland

Ian McLaren, Ph.D Biology Dalhousie University, Halifax, NS

Gary K. Meffe, Ph.D. Adjunct Professor, Retired University of Florida

De Forest Mellon, Jr., Ph.D.

Arthur J. Miller, Ph.D. Scripps Institution of Oceanography

Brian T. Miller, Ph.D. Department of Biology Middle Tennessee State University

Dr. Myron J. Mitchell Distinguished Professor SUNY College of Environmental Science and Forestry, Syracuse, NY

Twila Moon, Ph.D. NSF Postdoctoral Fellow University of Oregon

Helmut C. Mueller Ph.D. Emeritus Professor of Biology, University of North Carolina, Chapel

Alison Munson, PhD Forest Ecology Université Laval, CANADA

David F. Murray Professor of Botany and Curator Emeritus University of Alaska Fairbanks

Steven N. Murray Professor Emeritus California State University, Fullerton

Knute J. Nadelhoffer, Ph.D. Professor, Department of Ecology and Evolutionary Biology Director, University of Michigan Biological Station University of Michigan

Robert J. Naiman Professor Emeritus Aquatic & Fishery Sciences University of Washington

Donna Newman, Ph.D. Biochemistry North Caroline State University

Barry R. Noon, Ph.D. Professor of Wildlife Ecology Colorado State University

Richard D. Norris Professor Scripps Institution of Oceanography University of California, San Diego Gretchen B. North Professor of Biology Occidental College

Steffen Oppel, Ph.D. Wildlife Biology University of Alaska Fairbanks

Sarah Otto, Ph.D. Department of Zoology University of British Columbia

Dianna K. Padilla, Ph.D.
Department of Ecology and Evolution
Stony Brook University

Margaret A. Palmer Distinguished University Professor and Director National Socio-Environmental Synthesis Center University of Maryland

Snæbjörn Pálsson, Ph.D. Professor University of Iceland

Michael A. Patten Oklahoma Biological Survey University of Oklahoma

Judith Patterson, Ph.D. Science College Concordia University Montreal Quebec

James L. Patton, Ph.D. Professor and Curator Emeritus Museum of Vertebrate Zoology and Department of Integrative Biology University of California, Berkeley

Gustav Paulay, Ph.D. Florida Museum of Natural History University of Florida

Dan Pendleton, Ph.D. Research Scientist John H. Prescott Marine Laboratory New England Aquarium

Charles H. Peterson, Ph.D. Distinguished Professor Marine Sciences University of North Carolina

Esther C. Peters, Ph.D. Biological Oceanography George Mason University

Professor W. Tad Pfeffer University of Colorado at Boulder Guido Pietroluongo Veterinarian, Cetologist

Dr. Jay Pitocchelli Biology Saint Anselm College

Stephen Porder, Ph.D. Institute at Brown for Environment and Society Brown University

Roger A. Powell Department of Applied Ecology North Carolina State University

David W. Pratt, Ph.D. Chemistry UC Berkeley

Lynda Prior, Ph.D. University of Tasmania

Laura Prugh, Ph.D. School of Environmental and Forest Sciences University of Washington

David Punter, Ph.D. Department of Biological Sciences University of Manitoba

Robert Michael Pyle, Ph.D. Founder, The Xerces Society for Invertebrate Conservation Portland, Oregon

Mirwais Qaderi, Ph.D. Department of Biology Mount Saint Vincent University

Professor James S. Quinn, Ph.D. Biology Department McMaster University, Canada

Volker Radeloff, Ph.D. Conservation Biology University of Wisconsin-Madison

José Luis Rangel, Ph.D. Department of Conservation Biology The College of the Southern Frontier Chiapas, México

G. Carleton Ray, Ph.D. Research Professor University of Virginia

Ginger Rebstock, Ph.D. Department of Biology University of Washington William E. Rees, PhD, FRSC Professor Emeritus University of British Columbia

Mary Reid, Ph.D. Biological Sciences University of Calgary, Canada

Marcel Rejmanek Professor, Department of Evolution and Ecology University of California, Davis

Martin Renner, Ph.D. Tern Again Consulting Homer, AK

John D. Reynolds, Ph.D. Department of Biological Sciences Simon Fraser University, BC, Canada

Fred M. Rhoades, Ph.D. Research Associate and retired instructor, Biology, Western Washington University, Bellingham WA USA

Denise Risch, Ph.D.
PostDoctoral Resarcher in
Underwater Noise
Scottish Association for Marine
Science (SAMS)

Julie Rivers

Inna Rivkin, Ph.D. Associate Professor Dept. of Psychology and Center for Alaska Native Health Research University of Alaska Fairbanks

Martin Robards, Ph.D. Director, Arctic Beringia Program Wildlife Conservation Society

Lee H. Robinson, M.S. Wildlife Biologist

Prof. George Robinson State University of New York at Albany

Dr. Michael S. Rodway R.P.Bio (ret.)

Andy Rogan Science Manager Ocean Alliance

Thomas Rooney Associate Professor of Biological Sciences Wright State University Terry L. Root, Ph.D.

Emerita

Woods Institute for the Environment Stanford University

Howard Rosenbaum, Ph.D. Director-Ocean Giants Program Wildlife Conservation Society

Toby Ross, M.Sc. Science Manager Seattle Audubon Society

John T. Rotenberry, Ph.D. Emeritus Professor of Biology University of California-Riverside

Jeffrey N. Rothal

Julia A. Rowe, M.Phil., Ph.D. Candidate University of Hawaii at Manoa

Dustin Rubenstein, Ph.D. Associate Professor Columbia University

Eric W. Sanderson, Ph.D. Senior Conservation Ecologist Wildlife Conservation Society

Sarah Sargent, Ph.D. Program Manager for Bird Conservation Audubon Pennsylvania

Paul J Schaeffer, Ph.D. Physiology Miami University

Joseph R. Schiller, Ph.D. Zoology Austin Peay State University

David W. Schindler, D.Phil. Killam Memorial Professor of Ecology Emeritus University of Alberta

William H. Schlesinger, Ph.D. Duke University

Dr. Ingo Schlupp Biologist Norman, Oklahoma

G. Carl Schoch, Ph.D. Marine Ecology Coastal and Ocean Resources

John W. Schoen, Ph.D. Wildlife Ecologist, retired

Anchorage, AK

Andreas Schramm Professor of Microbial Ecology Aarhus University, Denmark

David L. Secord, Ph.D. Barnacle Strategies University of Washington Simon Fraser University

Maria Servedio, Ph.D. Department of Biology, University of North Carolina

Thomas W. Sherry, Ph.D. Ecology Tulane University

Jeffrey W. Short, Ph.D. JWS Consulting LLC

David H. Shull, Ph.D. Professor of Environmental Science Western Washington University

Dave Shutler, Ph.D. Department of Biology Acadia University Nova Scotia, Canada

Derek Sikes, Ph.D. University of Alaska Museum University of Alaska Fairbanks

Claudio Sillero, D.Phil. Wild Conservation Research Unit University of Oxford, UK

Thomas D. Sisk, Ph.D. Olajos-Goslow Chair of Environmental Science and Policy Northern Arizona University

Scott Slocombe, Ph.D.
Professor of Geography &
Environmental Studies
Wilfrid Laurier University, Canada

Melanie Smith Director of Conservation Science Audubon Alaska

Richard C. J. Somerville Distinguished Professor Emeritus Scripps Institution of Oceanography University of California, San Diego

Heidi M. Sosik Woods Hole Oceanographic Institution

Wayne P. Sousa, Ph.D.

Professor of Integrative Biology University of California, Berkeley

Robert B. Spies, Ph.D. Applied Marine Sciences Editor Emeritus Marine Environmental Research Little River, CA

Maria Stager, M.S. Division of Biological Sciences University of Montana

Christopher Still, Ph.D. Ecology Oregon State University

. . . .

Craig S. Strong CEO, Crescent Coastal Research

Powell Strong, M.Sc. Senior Lecturer Pembrokeshire College, UK

Bridget Stutchbury Distinguished Research Professor York University, Toronto

Benjamin Sullender, M.S. Audubon Alaska

Dipani Sutaria, Ph.D. (James Cook University, Australia) India

Trent M. Sutton, Ph.D. Fisheries Science University of Alaska Fairbanks

Michael C. Swift, Ph.D. St. Olaf College

John Y. Takekawa, Ph.D. Director of Bird Conservation National Audubon Society Science Division

David Tallmon, Ph.D. Biology and Marine Biology Program University of Alaska Southeast

Sherry Tamone, Ph.D. University of Alaska Southeast

Michael Tedengren, Ph.D. Department of Ecology Stockholm University, Sweden

Joerg Tews, Ph.D. Trailmark Systems (Canada)

Margaret Thayer, Ph.D. Biology

Field Museum of Natural History, US

William H Thomas Ph.D.

Simon R. Thorrold, Ph.D. Senior Scientist Woods Hole Oceanographic Institution

Gene R. Trapp, Ph.D. Professor Emeritus Dept. Biological Sciences California State University Sacramento

Nick Tregenza Chelonia Ltd.

Andrew Tyre, Ph.D. University of Nebraska-Lincoln

Mark C. Urban, Ph.D. Ecology and Evolutionary Biology University of Connecticut

James W. Valentine Professor of Integrative Biology University of California, Berkeley

M. Jake Vander Zanden, Ph.D. University of Wisconsin-Madison

Peter D. Vickery, Ph.D.

Raimo Virkkala, Ph.D. Leading Researcher Finnish Environment Institute

Frank A. von Hippel Professor, Department of Biological Sciences, University of Alaska Anchorage

Donald A. Walker, Ph.D. Professor, Institute of Arctic Biology University of Alaska Fairbanks

Bradley B. Walters, Ph.D. Professor of Geography & Environment Mount Allison University

Mount Allison University New Brunswick, Canada

Jon Warrenchuk, M.Sc. Oceana

Stuart Warter, Ph.D. Biological Science California State University Long Beach G. J. Wasserburg, Ph.D. Crafoord Laureate, John D.MacArthur Prof. (emeritus) California Institute of Technology

David M. Watson, Ph.D., Professor of Ecology, Charles Sturt University

Lawrence J. Weider, Ph.D.

Gunter Weller Professor Emeritus University of Alaska

Jeffrey Wells, Ph.D. Science Director Boreal Songbird Initiative

Jan Marcin Weslawski Professor, Institute of Oceanology Polish Academy of Sciences Sopot, Poland

Dr. Sue Wick University of Minnesota

Sharon Wilcox, Ph.D. Ocean Conservancy

Chad Wilsey, Ph.D. National Audubon Society Science Division

Jon D. Witman, Ph.D. Ecology and Evolutionary Biology Brown University

Larry L. Wolf, Ph.D. Professor of Biology, Emeritus Syracuse University

George M. Woodwell Director Emeritus Woods Hole Research Center

Timothy Wootton Department of Ecology & Evolution University of Chicago

Bettina Wurche Biologist and Journalist Darmstadt, Germany

Camila Azevedo Xavier, M.Sc. Marine Bioacoustics

Oran R. Young, Ph.D. Bren School University of California, Santa Barbara

Rebecca C. Young, Ph.D.

Steven B. Young, Ph.D.

Yanling Yu, Ph.D. Oceanography and Arctic Research University of Washington

Dany Zbinden, M.Sc. Mériscope Marine Research Station Canada

Stephan I. Zeeman, Ph.D. University of New England

Anna M. Zivian, Ph.D. Ocean Conservancy

Roman Zurek, Ph.D.