

International Scientists' Call for Action to Protect Endangered Temperate Rainforests of British Columbia, Canada

The world's remaining primary (unlogged) and intact forest landscapes support an exceptional confluence of globally significant environmental values. These include imperilled biodiversity, exceptional forest biomass¹, climate resilience², and diverse ecosystem and cultural services such as carbon sequestration and storage, water provision, Indigenous Peoples' cultures and maintenance of human health.³

Few of the Earth's forest ecosystems are rarer and hold more ecological value than temperate rainforests. They constitute only about 2.5 percent of the earth's forests but are exceptionally important. British Columbia's coastal temperate rainforests represent over one quarter of this total⁴, and its inland rainforests are one of only two such areas world-wide⁵. Maintaining older forests as carbon sinks in British Columbia would contribute to Canada's overall commitments to the Paris Climate Change Agreement while providing additional ecosystem benefits in the form of clean water, recreation, First Nations cultural values, and biodiversity⁶. In fact, temperate rainforests in British Columbia contain substantial stores of carbon at the landscape and regional scales.⁷

As scientists, we therefore urge the British Columbia government to recognize the global significance of the remaining primary and intact coastal and inland temperate rainforests of the province by protecting their unique global attributes from industrial logging and development.

In contrast to the Great Bear Rainforest and Haida Gwaii, where ecological integrity of rainforest ecosystems is being maintained through protected areas and Ecosystem-Based Management, the level of conservation for BC rainforest ecosystems is inadequate across the remainder of the province. Through most of the province, primary and intact forest landscapes have been reduced to a fraction of their original extent and are being logged at a rapid pace particularly on Vancouver Island, the South Coast, and the inland rainforest region⁸.

Ongoing logging of old-growth, currently more than 10,000 hectares per year on Vancouver Island alone⁹, is resulting in even higher ecological risk for flora and fauna, now exacerbated by increasingly

¹Luyssaert, S. et al. 2008. Old-growth forests as global carbon sinks. *Nature* 455:213-215. Lindenmayer et al. 2012. Global decline in large old trees *Science* 338:1305-1306. Lutz, J.A. et al. 2018. Global importance of large-diameter trees. *Global Ecology and Biogeography* <https://doi.org/10.1111/geb.12747>

²Johnstone, J.R., et al. 2016. Changing disturbance regimes, ecological memory, and forest resilience. *Frontiers Ecology & Environ.* 14:369-378.

³Schoennagel, T. et al. 2017. Adapt to more wildfire in western North American forests as climate changes. *PNAS* 114:4582-4590.

⁴Mackey B., et al. 2014. Policy options for the world's primary forests in multilateral environmental agreements. *Conservation Letters* 8:139-147

DOI: 10.1111/conl.12120. Watson, J. E M et al. 2018. The exceptional value of intact forest ecosystems. *Nature Ecology & Evolution*, 2 4: 1-12.

⁵DellaSala, D. A. 2011 (ed.). *Temperate and boreal rainforests of the world: ecology and conservation*. Island Press, Washington, D.C. Mori, A.S. et al.

2017. Biodiversity and ecosystem services in forest ecosystems: a research agenda for applied forest ecology. *J. Applied Ecology* 54:12-17.

⁶DellaSala, D.A., et al. 2011. Temperate and boreal rainforests of inland northwestern North America. Pp. 82-110 in D.A. DellaSala, *Temperate and Boreal Rainforests of the World: Ecology and Conservation*. Island Press: Washington D.C.

⁷Brandt, P., et al. 2014. Multifunctionality and biodiversity: Ecosystem services in temperate rainforests of the Pacific Northwest, USA. *Biological Conservation* 169: 362-371

⁸Fredeen, A.L.2005. Comparison of coniferous forest carbon stocks between old-growth and young second-growth forests on two soil types in central British Columbia, Canada. *Can. J. For. Res.* 35:1411-1421. Trofymow, J.A. et al. 2008. Derivation of a spatially explicit 86-year retrospective carbon budget for a landscape undergoing conversion from old-growth to managed forests on Vancouver Island, BC. *For. Ecol. Manage.* 256:1677-1691.

⁹https://sierraclub.bc.ca/wp-content/uploads/2015/08/South-Coast-Backgrounder_March-2016.pdf

⁹<https://sierraclub.bc.ca/vancouver-island-old-growth-logging-increased-more-than-10-per-cent-in-2016/>

severe climate change impacts such as extended drought conditions, extreme rainfall and stronger storms. Only a small portion of productive old-growth forest remains on Vancouver Island and the majority is still unprotected.¹⁰ The conversion of old-growth temperate rainforests to plantations results in release of a substantial amount of the stored carbon¹¹, as well as a reduction in the overall carbon stored over the long term because managed forests are only grown to rotation age¹².

The rapid pace of logging and the threat of climate change means that our generation has a historic responsibility to make a difference for the fate of the remaining primary rainforests of BC and their irreplaceable values. Furthermore, old-growth forests, late seral climate refugia, and undeveloped landscapes have critical roles to play in developing strategies for enhancing ecosystem resilience in a changing climate.

Importantly, in 2016, the BC government and First Nations inspired the world by implementing the Great Bear Rainforest Agreements.¹³ However, given the global importance of British Columbia's rainforest biodiversity and the imminent threats posed to the highly endangered remaining primary and intact forest landscapes, we urge the BC government to follow through with its promise to modernize land-use plans in partnership with First Nations and communities, and protect BC's primary forests, taking an evidence-based scientific approach including protection for critical areas imminently threatened from logging¹⁴. We hope the province will once again show leadership and seek conservation solutions for all of BC's globally rare and endangered primary and intact forest landscapes, combined with support for First Nations land use planning, compatible economic activities and long-term forestry jobs in improved second-growth forest management.

¹⁰ <https://sierraclub.bc.ca/white-rhino-map-shows-vancouver-islands-most-endangered-old-growth-rainforests/>

¹¹ Matsuzaki E. et al. 2013. Carbon stocks in managed and unmanaged old-growth western redcedar and western hemlock stands of Canada's inland temperate rainforests. *Forest Ecology & Management* 297:108-119.

¹² James, J., & R. Harrison. 2016. The effect of harvest on forest soil carbon: A meta-analysis. *Forests*, 7(12), p.308. Mackey, B. 2014. Counting trees, carbon and climate change. *The Royal Statistical Society* Feb. 2014:19-23.

¹³ A vision realized, Rainforest Solutions Project, 2016 http://www.savethegreatbear.org/images/uploads/RSP_GBRBackgrounderFebruary2016.pdf

¹⁴ 2017 NDP Platform, page 61: "In partnership with First Nations and communities, we will modernize land-use planning to effectively and sustainably manage BC's ecosystems, rivers, lakes, watersheds, forests and old growth, while accounting for cumulative effects. We will take an evidence-based scientific approach and use the ecosystem-based management of the Great Bear Rainforest as a model." <https://www.bcdnp.ca/sites/default/files/platform-book-v2-updated.pdf>

Signed,
(Affiliations listed for identification purposes only)

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

Nancy J. Turner, Ph. D., Professor
Univ. of Victoria, Canada

Jay Malcolm, Ph. D., Professor Forestry
University of Toronto, Canada

Darwyn Coxson, Ph. D., Professor
University Northern BC, Prince George, Canada

Brendan Mackey, Ph. D., Director
Gold Coast Campus, Australia

Michelle Connolly, M.S., Director
Conservation North, Prince George, Canada

Ken Lertzman, Ph. D., Professor
Simon Fraser University, BC, Canada

Faisal Moola, Ph. D., Assoc. Professor Dept. Geology
University of Guelph, Ontario, Canada

Art L. Fredeen, Ph. D., Professor Ecosystem Science & Mgmt
Univ. Northern BC, Prince George, Canada

Sandy M. Smith, Ph. D., Professor Forest Health
University of Toronto, Canada

Barbara Zimmerman, Ph. D., Director
Intern. Conservation Fund Canada, Enviro Defense Fund, Canada

Cyril Kormos, M.S., Director
IntAct: International Action for Primary Forests, San Francisco, California

Yngvar Gauslaa, Ph. D., Professor Natural Resources
Norwegian University of Life Sciences, Norway

Thomas Lovejoy, Ph. D., Senior Fellow
George Mason University, UN Foundation, Washington DC

Andy MacKinnon, Ph.D., Adjunct Professor
Simon Fraser University, Burnaby, BC, Canada

Additional Signers

Paul Alaback, Ph. D.
Professor Emeritus
University of Montana
Missoula, MT

Kayce Anderson, Ph. D.
Director
For the Good
Glenwood Springs, CO

Steven Anderson, Ph. D.
Prof. Emeritus of Biology
University of the Pacific
Stockton, CA

Daniel Anstett, Ph. D.
Postdoctoral Fellow
University of British Columbia
Vancouver, British Columbia

Marie Auger-Methe, Ph. D.
Assistant Professor
University of British Columbia
Vancouver, British Columbia

Richard Baker, Ph. D.
Professor Emeritus
University of Iowa
Iowa City, IA

William Baker, Ph. D.
Professor Emeritus
Program in Ecology, Univ. of Wyoming
Laramie, WY

Bruce Baldwin, Ph. D.
Professor
University of California, Berkeley
Berkeley, CA

Michael Baranski, Ph. D.
Emeritus Professor of Biology
Catawba College
Salisbury, NC

Frank Barnwell, Ph. D.
Professor Emeritus
University of Minnesota
St. Paul, MN

Paul Bartelt, Ph. D.
Professor & Research Ecologist
Waldorf University
Forest City, IA

Constance Dustin Becker, Ph. D.
Co-Director
Life Net Nature
Willcox, AZ

Craig Benkman, Ph. D.
Professor
University of Wyoming
Laramie, WY

Michael V L Bennett, Ph. D.
Professor of Neuroscience
Albert Einstein College of Medicine
Bronx, NY

David J. Berg, Ph. D.
Professor of Biology
Miami University
Oxford, OH

Leslie Bishop, Ph. D.
Professor Emeritus
Earlham College
Nashville, IN

Scott Black, M.S.
Executive Director
Xerces Society
Portland, OR

James Blauth, Ph. D.
Professor of Biology
University of Redlands
Redlands, CA

David Blockstein, Ph. D.
Chief Scientist
National Council for Sci. & the Environment
Takoma Park, MD

Brian Bodenbender, Ph. D.
Prof. of Geology and Environmental Science
Hope College
Holland, MI

Bazartseren Boldgiv, Ph. D.
Professor
National University of Mongolia
Ulaanbaatar, Mongolia

Brian Boom, Ph. D.
Vice President for Conservation Strategy
The New York Botanical Garden
Bronx, NY

Jim Boone, Ph. D.
Senior Scientist
Desert Wildlife Consultants, LLC
Las Vegas, NV

Brooke Boswell, M.S.
Research Program Manager
University of Northern British Columbia
Edmonds, WA

Irwin Brodo, Ph. D.
Research Lichenologist Emeritus
Canadian Museum of Nature
Ottawa, Ontario

Norah Brown, Ph. D.
Postdoctoral Fellow
University of Victoria
Victoria, British Columbia

Brian Buma, Ph. D.
Assistant Professor
University of Alaska Southeast
Juneau, AK

Jenn Burt, M.S.
Ph.D. Candidate
Simon Fraser University
Burnaby, British Columbia

Ken Carloni, Ph. D.
Assoc. Professor/Science Dept. Chair
Umpqua Community College
Roseburg, OR

Bobb Carson, Ph. D.
Professor and Dean Emeritus
Lehigh University
Bethlehem, PA

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

Donald Charles, Ph. D.
Senior Scientist
The Acad. of Natural Sci. of Drexel Univ.
Philadelphia, PA

Raymond Clarke, Ph. D.
Professor Emeritus
Sarah Lawrence College
New York, NY

Malcolm Cleaveland, Ph. D.
Emeritus Professor of Geosciences
University of Arkansas, Fayetteville
Fayetteville, AR

Alexander Clifford, Ph. D.
Postdoctoral Fellow
University of British Columbia
Vancouver, British Columbia

Kristina Cockle, Ph. D.
Research Scientist
National Sci. and Technical Research Council
Salta, Argentina

Shari Cohen, DVM
Casual Academic Staff
University of Melbourne
Melbourne, Victoria

Frank Lance Craighead, Ph. D.
Director, Craighead Institute.
Affiliate Prof. of Ecology, MT State Univ.
Bozeman, MT

Erin Crockett, M.S.
Ph.D. Candidate
McGill University
Montreal, Quebec

Sam Davis, Ph. D.
Research Manager
Dogwood Alliance
Asheville, NC

Amy Denton, Ph. D.
Professor Biology
California State Univ., Channel Islands
Camarillo, CA

David DeSante, Ph. D.
President
The Institute for Bird Populations
Point Reyes Station, CA

Dana Dolsen, M.S.
Founder/Owner
Natural Resources PRISM
Moscow, ID

Craig Downer, Ph.D. Cand.
Wildlife Ecologist
Andean Tapir Fund
Minden, NV

Mark Egger, B.S.
Science Educator & Research Associate
WTU Herbarium, Burke Museum
Seattle, WA

Paul Ehrlich, Ph. D.
President, Center for Conservation Biology
Stanford University
Stanford, CA

Norman Ellstrand, Ph. D.
Distinguished Professor of Genetics
University of California, Riverside
Riverside, CA

Steve Erickson,
Restoration Ecologist
Frosty Hollow Ecological Restoration
Langley, WA

Suzanne Estes, Ph. D.
Associate Professor of Biology
Portland State University
Portland, OR

Jonathan Evans, Ph. D.
Professor of Biology
University of the South
Sewanee, TN

Daniel Fisher, Ph. D.
Professor, Director
University of Michigan
Ann Arbor, MI

Johannes Foufopoulos, Ph. D.
Associate Professor
University of Michigan
Ann Arbor, MI

Douglas Frederick, Ph. D.
Professor of Forestry
North Carolina State University
Raleigh, NC

Lee Frelich, Ph. D.
Director, Center for Forest Ecology
University of Minnesota
Minneapolis, MN

Evan Frost, M.S.
Conservation Biologist
Wildwood Consulting
Ashland, OR

Stephen W Fuller, Ph. D.
Professor Emeritus
University of Mary Washington
Fredericksburg, VA

Christine Perala Gardiner, Ph. D.
Senior Scientist, Sustainable Ag. Systems
University of Mary Washington
Cave Junction, OR

Marrtin Gardner, DHE
Chair IUCN Conifer Specialist Group
Royal Botanic Garden Edinburgh
Edinburgh, Scotland

Barb Gass, M.S.
Vancouver, British Columbia

Lee Gass, Ph. D.
Professor Emeritus
University of British Columbia
Vancouver, British Columbia

Jennifer Gervais, Ph. D.
Wildlife Ecologist
Oregon Wildlife Institute
Corvallis, OR

Scott Goetz, Ph. D.
Professor
Northern Arizona University
Flagstaff, AZ

Antonio Gonzalez-Rodriguez, Ph. D.
Full Researcher
National Autonomous University of Mexico
Morelia, Mexico

Alys Granados, Ph. D.
Gunung palung orangutan project
Ketapang, Indonesia

David Gray, Ph. D.
Professor of Biology
California State University Northridge
Northridge, CA

Edward Gregr, Ph. D.
Adjunct Professor
University of British Columbia
Vancouver, British Columbia

Jon Grinnell, Ph. D.
Uhler Chair in Biology
Gustavus Adolphus College
Saint Peter, MN

Ed Grumbine, Ph. D.
Land and Conservation Director
Grand Canyon Trust
Flagstaff, AZ

Jared Grummer, Ph. D.
Postdoctoral Research Fellow
University of British Columbia
Vancouver, British Columbia

Vincent Gutschick, Ph. D.
Prof. of Biology, Emeritus
Las Cruces Academy and Global Change
Consulting Consortium
Las Cruces, NM

Cheryl Harding, Ph. D.
Professor Emeritus
CUNY Hunter College
Stanton, NJ

Betsy Herbert, Ph. D.
Freelance writer
Sempervirends Fund
Corvallis, OR

Ingrid Hogle, M.S.
Ecologist and GIS Consultant
Private consultant
Berkeley, CA

Richard Holmes, Ph. D.
Professor Emeritus
Dartmouth College
Hanover, NH, NH

Paula Hood, M.S.
Co-Director
Blue Mountains Biodiversity Project
Portland, OR

Edward Huang, Ph. D.
Distinguished Professor
CA Institute of Env. Design & Management
Arcadia, CA

Malcolm Hunter, Ph. D.
Professor
University of Maine
Amherst, ME

Marc and Alice Imlay, Ph. D.
Conservation biologist
Sierra Club Natural Places Chair
Bryans Road, MD

Aerin Jacob, Ph. D.
Conservation Scientist
Yellowstone to Yukon Cons. Initiative
Canmore, Alberta

David Janos, Ph. D.
Professor Emeritus
University of Miami
Corvallis, OR

Gail Johnston, Ph. D.
Professor of Biology
Lindenwood University
St. Charles, MS

Jay Jones, Ph. D.
Pro. Biology and Biochemistry
University of La Verne
La Verne, CA

Alan Journet, Ph. D.
Co-Facilitator
Southeast Missouri State University
Cape Girardeau, MS

Jacquelyn Kallunki, Ph. D.
Curator Emerita
The New York Botanical Garden
Bronx, NY

Jacob Kann, Ph. D.
Aquatic Ecologist
Aquatic Ecosystem Sciences
Ashland, OR

David Karowe, Ph. D.
Professor of Biological Sciences
Western Michigan University
Kalamazoo, MI

James R. Karr, Ph. D.
Professor Emeritus
University of Washington, Seattle
Sequim, WA

Sterling Keeley, Ph. D.
Professor of Botany
University of Hawaii
Honolulu, HI

Maya R. Khosla, M.S.
Wildlife Biologist
Ecological Studies
Rohnert Park, CA

Robin Wall Kimmerer, Ph. D.
Distinguished Teaching Professor of Env.
SUNY College of Env. Science and Forestry
Syracuse, NY

Matthew Kirchhoff, M.S.
Communications Director
Alaska Fish and Game (retired)
Anchorage, AK

Marni Koopman, Ph. D.
Climate Change Scientist
Geos Institute
Ashland, OR

Fayette Krause, Ph. D.
Retired
The Nature Conservancy
Pt. Townsend, WA

Alex Krevitz, M.A.
Independent Biologist
Independent Researcher
Coarsegold, CA

Russell Lande, Ph. D.
Emeritus Professor
University of California, San Diego
London, CA

Rick Landenberger, Ph. D.
Science and Management Specialist
West Virginia Land Trust
Morgantown, WV

Jeri Langham, Ph. D.
Professor Emeritus
California State University
Sacramento, CA

Marc Lapin, Ph. D.
Laboratory Prof. and College Lands Cons.
Middlebury College
Middlebury, VT

Beverly Law, Ph. D.
Prof. Global Change Biol. & Terrestrial
Systems Science
Oregon State University
Corvallis, OR

Derek Lee, Ph. D.
Professor
Penn State University
State College, PA

James Lendemer, Ph. D.
Assistant Curator
The New York Botanical Garden
Bronx, NY

William Lidicker, Ph. D.
Professor of Integrative Biology Emeritus
University of California, Berkeley
Berkeley, CA

Jason A. Lillegraven, Ph. D.
Arts & Sciences Dist. Emeritus Professor
University of Wyoming
Laramie, WY

Darryl Lloyd, M.S.
Retired
Friends of Mount Adams
Hood River, OR

Michael Loik, Ph. D.
Professor
University of California
Santa Cruz, CA

Loys Maingon, Ph. D.
Senior Researcher
Strathcona Wilderness Institute
Courtenay, British Columbia

Steven Manchester, Ph. D.
Professor
University of Florida
Gainesville, FL

Sandra Mardonovich, M.S.
Graduate Student
Miami University
Oxford, OH

Janet Marsden, M.S.
Ph.D. Candidate
Syracuse University
Syracuse, NY

Carl McDaniel, Ph. D.
Prof. of Biology Emeritus; Visiting Professor
RPI; Oberlin College
Oberlin, OH

Athena McKown, Ph. D.
University of British Columbia
Vancouver, British Columbia

Gavin McNicol, Ph. D.
Postdoctoral Researcher
Alaska Coastal Rainforest Center
Juneau, AK

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

Douglas Meikle, Ph. D.
Professor of Biology
Miami University
Oxford, OH

E. Charles Meslow, Ph. D.
Wildlife Research Supervisor
U S Fish & Wildlife Service (retired)
Corvallis, OR

Julie Messier, Ph. D.
Postdoctoral Researcher
University of Sherbrooke
Sherbrooke, Qc

Christina Mills, J.D.
Administrative Associate
Geos Institute
Ashland, OR

Matthew Mitchell, Ph. D.
Postdoctoral Research Fellow
University of British Columbia
Vancouver, British Columbia

Rob Mrowka, M.S.
Senior Scientist
Center for Biological Diversity
Franklinville, NY

John Mull, Ph. D.
Professor of Zoology
Weber State University
Ogden, UT

Peter Murphy, Ph. D.
Professor Emeritus
Michigan State University
East Lansing, MI

Philip Myers, Ph. D.
Professor Emeritus
University of Michigan
Ann Arbor, MI

Knute Nadellhoffer, Ph. D.
Professor of Ecology & Evolutionary Biology
University of Michigan
Ann Arbor, MI

Wolf Naegeli, Ph. D.
Senior Research Scientist Emeritus
The University of Tennessee
Knoxville, TN

Charles R. Neal, B.S.
Ecologist, retired
US Dept. Interior, retired
Cody, WY

Jocelyn Nelson, M.S.
Nanaimo, British Columbia

William Newmark, Ph. D.
Research Curator
Natural History Museum of Utah
Salt Lake City, UT

Elliott Norse, Ph. D.
Author
Ancient Forests of the Pacific Northwest
Bellvue, WA

Reed Noss, Ph. D.
President and Chief Scientist
Florida Institute for Conservation Science
Chuluota, FL

Philip Nyhus, Ph. D.
Assoc. Prof and Director
Env Studies Program, Colby College
Waterville, ME

David Olson, Ph. D.
Conservation Biologist
Conservation Earth
Washington DC, DC

Johannsson Ora, Ph. D.
Adjunct Professor, Zoology
University of British Columbia
Vancouver, British Columbia

Sarah Otto, Ph. D.
Professor
University of British Columbia
Vancouver, British Columbia

Paul Paquet, Ph. D.
Senior Scientist
Raincoast Conservation Foundation
Sydney, British Columbia

Michael Parker, Ph. D.
Professor of Biology
Southern Oregon University
Ashland, OR

Gustav Paulay, Ph. D.
Professor
University of Florida
Gainesville, FL

Dennis Paulson, Ph. D.
Director Emeritus
Slater Museum of Natural History
Tacoma, WA

James Pease, Ph. D.
Emeritus Assoc. Professor
Iowa State University
Ames, IA

Michael Pelizzari, Ph. D.
Physicist, retired
Lockheed Martin
Milpitas, CA

Dave Perry, Ph. D.
Professor Emeritus
Oregon State University
Taos, NM

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

Gerald Post, DVM, MEM
Founder and Medical Director
The Veterinary Cancer Center
Norwalk, CT

Roger Powell, Ph. D.
Professor Emeritus
Dept. of Applied Ecology, NC State
Raleigh, NC

Thomas Power, Ph. D.
Professor Emeritus
The University of Montana
Missoula, NH

Jessica Pratt, Ph. D.
Assistant Professor
University of California, Irvine
Irvine, CA

Robert Pyle, Ph. D.
Independent Biologist
Xerces Society
Gray's River, WA

James Quinn, Ph. D.
Professor Emeritus
Rutgers University
New Brunswick, NJ

John Ratti, Ph. D.
Research Scientist, retired
University of Idaho
Moscow, ID

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

Barbara Reynolds, Ph. D.
Professor, Emerita
University of North Carolina, Asheville
Asheville, NC

Fred Rhoades, Ph. D.
Mycologist, retired & Research Associate
Western Washington University
Bellingham, WA

Thomas Rooney, Ph. D.
Professor of Biological Sciences
Wright State University
Dayton, OH

Terry L. Root, Ph. D.
Senior Fellow, Emerita
Stanford University
Stanford, CA

Dan Rosenberg, Ph. D.
Co-Executive Director and Assoc. Professor
Oregon Wildlife Inst. & Oregon State Univ.
Corvallis, OR

Matthew Rubino, M.S.
Research Associate
North Carolina State University
Raleigh, NC

Robin Salter, Ph. D.
Professor Emeritus
Oberlin College
Oberlin, OH

Melissa Savage, Ph. D.
Professor Emeritus
University of California, Los Angeles
Los Angeles, CA

Paul Schaeffer, Ph. D.
Associate Professor
Miami University
Oxford, OH

Charles Schelz, M.S.
Ecologist
Ecos Consulting
Ashland, OR

Paula Schiffman, Ph. D.
Professor
California State University
Northridge, CA

David Schindler, Ph. D.
Killam Memorial Prof. of Ecology Emeritus
University of Alberta
Edmonton, Alberta

Dolph Schluter, Ph. D.
Professor
University of British Columbia
Vancouver, British Columbia

John Schoen, Ph. D.
Wildlife Ecologist, retired
Anchorage, AK

Richard Schuster, Ph. D.
Liber Ero postdoctoral fellow
Terrace, British Columbia

Kathy Schwager, M.S.
Ecologist
Upton, NY

Dave Seaborg, M.S.
Teacher
Walnut Creek, CA

Janet Shellman Sherman, Ph. D.
Research Scientist, Evolutionary Biologist
Cornell University
Gold Beach, OR

Thomas W. Sherry, Ph. D.
Professor, Ecology and Evolutionary Biology
Tulane University
New Orleans, LA

Jack Sobel, M.S.
President
ETI Professionals, Inc.
Bethesda, MD

Timothy Spira, Ph. D.
Professor Emeritus
Clemson University
Clemson, SC

Jerre Stallcup, M.S.
Encinitas, CA

Pamela Stanley, Ph. D.
Professor
Albert Einstein College of Medicine
Bronx, NY

Robert Stanton, Ph. D.
Professor of Biology
Baldwin-Wallace College
Alliance, OH

Trygve Steen, Ph. D.
Professor of Envi. Science and Management
Portland State University
Portland, OR

Alan Stemler, Ph. D.
Professor Emeritus
University of California
Davis, CA

Gwen Stone, Ph. D.
Doctor
Mission Viejo, CA

Daphne Stone, Ph. D.
Biological Consultane
Eugene, OR

Richard Strathmann, Ph. D.
Professor Emeritus
University of Washington
Friday Harbor, WA

James Strittholt, Ph. D.
President and Executive Director
Conservation Biology Institute
Corvallis, OR

Chin Sun, Ph. D.
University of British Columbia
Vancouver, British Columbia

Michael Swift, Ph. D.
Assistant Professor Emeritus of Biology
St. Olaf College
Northfield, MN

Gary Tabor, VMD
Executive Director
Center for Large Landscape Conservation
Bozeman, MT

Stephen Tettelbach, Ph. D.
Professor of Biology
Long Island University
Brookville, NY

William Thomas, Ph. D.
Elizabeth G. Britton Curator of Botany
The New York Botanical Garden
Bronx, NY

Jean Thomson Black, M.S.
Senior Executive Editor
Yale University Press
New Haven, CT

Tamara Ticktin, Ph. D.
Professor of Botany
University of Hawaii at Manoa
Honolulu, HI

Tom Titus, Ph. D.
Eugene, OR

Pepper Trail, Ph. D.
Ornithologist
Ashland, OR

Vicki Tripoli, Ph. D.
Environmental Scientist
Retired
Moorpark, CA

Anna Tyler, Ph. D.
Associate Research Scientist
The Jackson Laboratory
Bar Harbor, MN

Rick Van de Poll, Ph. D.
Principal
Ecosystem Management Consultants
Center Sandwich, NH

Marlene Wagner, M.S.
Ph.D. Candidate
Simon Fraser University
Petersburg, AK

David Wake, Ph. D.
Professor of the Graduate School
University of California
Berkeley, CA

Greg Walker, Ph. D.
Professor emeritus
University of California, Riverside
Riverside, CA

Donald Waller, Ph. D.
Professor of Botany & Env.Studies
Univ. of Wisconsin
Madison, WI

Vicki Watson, Ph. D.
Professor Emeritus
University of Montana, Env. Studies
Missoula, MT

Judith Weis, Ph. D.
Professor Emeritus
Rutgers University
Newark, NJ

Jeffery Werner, Ph. D.
Wildlife Ecologist
Conservation North
Prince George, WA

David Whitacre, Ph. D.
Instructor
Treasure Valley Math and Science Center
Boise, ID

David Whitacre, Ph. D.
Instructor, Biology and Statistics
Treasure Valley Math and Science Center
Boise, ID

Sue Wick, Ph. D.
Professor
University of Minnesota
St. Paul, MN

Gerald Williams, Ph. D.
Chief historian (retired)
U.S. Forest Service
Ridgefield, WA

Neville Winchester, Ph. D.
Adjunct Assistant Professor, SLI
Biology Department, University of Victoria
Victoria, British Columbia

Lindsey Wise, M.S.
Biodiversity Data Manager
Institute for Natural Resources, Portland
State University
Portland, OR

Sylvia Wood, Ph. D.
Postdoctoral Researcher
Université de Québec en Outaouais
Montreal, WY

George M. Woodwell, Ph. D.
Director Emeritus
The Woods Hole Research Center
Falmouth, MA

Steven Yanoff, M.S.
Biologist
White Oaks, NM