

Pilot Rock in the Cascade-Siskiyou National Monument. Credit: Ashland Daily Photo

## RE: Recommended Expansion of the Cascade-Siskiyou National Monument

To Whom It May Concern,

May 28, 2015

As scientists with extensive professional experience related to terrestrial and aquatic ecosystems in the Pacific Northwest, we write to express our full support for expansion of the Cascade-Siskiyou National Monument (hereafter "Monument"). The existing Monument is located in southwest Oregon on the California border.

Established by presidential proclamation in June 2000, the Monument is unique among the BLM's National Conservation Lands in that it was established specifically to preserve an area of "remarkable biological diversity." Sitting at the crossroads of four distinct ecoregions and encompassing a wide range of topography, climate and geology, the greater Cascade-Siskiyou landscape is widely recognized as one of the most biologically diverse places in North America. The Monument proclamation describes it as an "ecological wonder" that is "home to a spectacular variety of rare and beautiful species of plants and animals, whose survival in this region depends upon its continued ecological integrity". <sup>1</sup>

While we applaud the initial creation of the Monument as a means to conserve this area's treasure trove of biological resources, scenic beauty and recreational values, we are concerned that existing Monument boundaries are insufficient to assure persistence of the many biological "Objects of Interest" that the Monument was established to protect. As summarized in a 2011 scientific report on this topic <sup>2</sup>, there are several important reasons why existing boundaries are unlikely to sustain the ecological integrity of this area:

<sup>&</sup>lt;sup>1</sup> US Dept. of Interior. 2000. Presidential proclamation 7318 establishing the Cascade-Siskiyou National Monument, Oregon. June 9, 2000. Washington, D.C.

<sup>&</sup>lt;sup>2</sup> Frost, E., D. Odion, P. Trail, J. Williams, J. Alexander, B. Barr, R. Brock, D. DellaSala, P. Hosten, S. Jessup, F. Lang, M. Parker, J. Rossa, D. Sarr and D. Southworth. 2011. Cascade-Siskiyou National Monument Boundary Study: Identification of Priority Areas for Monument Expansion. 14 pp.

- Many special-status plant and animal populations referenced in the Monument's
  proclamation, as well as high quality examples of the area's unique plant communities,
  remain outside existing boundaries, where they are vulnerable to incompatible
  management;
- Some existing boundaries have no ecological basis (e.g., the Oregon-California state line, incomplete watersheds), which over time, may compromise the integrity of the Monument;
- Climate change in the region is altering the ranges of plants and animals that are the focal points for conservation, in some cases pushing them outside of currently protected areas<sup>3</sup>;
- The human population of southwest Oregon is growing rapidly. As a result, more areas immediately adjacent to the Monument are facing increased development or intensive land use pressures (e.g., logging, residential expansion, water diversions) that are likely to undermine long-term persistence of the Monument's biological resources.

Without additional conservation investment, available scientific evidence suggests that some of the most valuable biological resources both within and immediately adjacent to the Monument are at high risk of irreversible degradation and loss.

Given these significant and overarching concerns, it is our professional opinion that expansion of the Monument is necessary for the area's extraordinary values to be sustained over the long term. Specifically, we endorse including five carefully selected areas of adjoining BLM and other public lands within the Monument, as recommended by the scientists' 2011 boundary report and detailed in an updated summary of these areas.<sup>4</sup> Proposed additions described in this report:

- were identified using an interdisciplinary, science-based process;
- contain many biological "Objects of Interest" that were highlighted in the Monument proclamation;
- play a vital role in maintaining ecological integrity of the landscape the Monument was established to protect, and;
- improve habitat connectivity with nearby federal lands, a factor that is critical for sustaining populations of wide-ranging species.

Perhaps most importantly, expansion of the Monument to include these proposed additions will significantly increase the ability of native plants and animals to adapt to a changing climate, an issue that was not considered when initial Monument boundaries were created, but that will become critical to biodiversity conservation in the coming decades.

<sup>&</sup>lt;sup>3</sup> Olson, D.M., D.A. DellaSala, R.F. Noss, J. R. Strittholt, J. Kaas, M. E. Koopman, and T.F. Allnutt. 2012. Climate change refugia for biodiversity in the Klamath-Siskiyou ecoregion. *Natural Areas Journal* 32:65-74.

<sup>&</sup>lt;sup>4</sup> Frost, E.J. and P. Trail. 2015. A Summary of Ecological Values in Proposed Additions to the Cascade-Siskiyou National Monument. Unpublished report available from Soda Mountain Wilderness Council, Ashland, OR.

As professional scientists who value and understand the many benefits of biological diversity and ecological health, we appreciate the opportunity to offer our recommendations for the future of the Cascade-Siskiyou National Monument and urge decision-makers to expand the boundaries of the Monument so that it can successfully achieve the proclamation's stated goal of protecting the area's outstanding biological resources for present and future generations.

Sincerely,

## <u>Scientists that Contributed to the 2011 Cascade-Siskiyou Monument Boundary Study</u> \*affiliations for identification purposes only

Pepper Trail, Ph.D., Ornithologist Ashland, OR

Dennis Odion, Ph.D., Vegetation Ecologist Southern Oregon University, Ashland, OR

Jack Williams, Ph.D., Chief Scientist Trout Unlimited, Medford, OR

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

Steve Jessup, Ph.D., Botanist Southern Oregon University, Ashland, OR

Darlene Southworth, Ph.D., Professor (Emeritus), Department of Biology Southern Oregon University, Ashland, OR

Frank Lang, Ph.D., Professor (Emeritus), Department of Biology Southern Oregon University, Ashland, OR

Richard Brock, M.Sc., Senior Botanist Siskiyou BioSurvey LLC, Ashland, OR

Paul Hosten, Ph.D., Terrestrial Ecologist Kualapu'u, HI

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

Michael Parker, Ph.D., Aquatic Ecologist, Department of Biology Southern Oregon University, Ashland, OR

Daniel Sarr, Ph.D., Ecologist Flagstaff, AZ

Scott Hoffman Black, M.Sc., Ecologist and Executive Director Xerces Society, Portland, OR

Jeannine Rossa, M.Sc., Aquatic Ecologist Ecolink Consulting, Kualapu'u, HI

Brian Barr, M.Sc., Fisheries Biologist Gold Hill, OR

## Additional Scientists in Support of Cascade-Siskiyou Monument Expansion\*

\*affiliations for identification purposes only

David A. Perry, Ph.D., Professor (Emeritus) Department of Forest Science Oregon State University, Corvallis, OR

Gary Tabor, Ph.D., Conservation Scientist Center for Large Landscape Conservation Bozeman, MT

Arthur J. Boucot, Ph.D. Distinguished Professor of Geology Oregon State University, Corvallis, OR

Jack W. Sites, Jr., Ph.D.
Professor of Biology/Curator of Herpetology
Brigham Young University, Provo, Utah

Calvin Maginel, M.Sc. (candidate) Department of Natural Resources University of Missouri, Columbia, MO

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

Gary Roemer, Ph.D., Professor Dept. of Fish, Wildlife & Conservation Ecology NM State University, Las Cruces, NM

William D. Anderson, Jr., Ph.D. Professor (Emeritus), Marine Biology College of Charleston, Charleston, SC Ke Chung Kim, Ph. D., Professor (Emeritus) and Former Director, Center for Biodiversity Research, Pennsylvania State University University Park, PA

Jay Lininger, M.Sc., Senior Scientist Center for Biological Diversity Ashland, OR

Vicky Meretsky, Ph.D. Professor of Conservation Biology Indiana University, Bloomington, IN

Michael J. Vandeman, Ph.D. Conservation Biologist San Francisco Bay Area, CA

George Wuerthner, M.Sc., Senior Scientist Foundation for Deep Ecology San Francisco, CA

Mitchell M. Johns, Ph.D. Professor of Soil Science California State University-Chico Chico, CA

Melissa Savage, Ph.D., Associate Professor (Emeritus), Department of Geography University of California, Los Angeles, CA

James H. Marden, Ph.D.
Professor, Department of Biology
Penn State University, University Park, PA

Sandra Mardonovich, M.Sc.(candidate) Department of Botany Miami University, Oxford, OH

D. Scott Samuels Ph.D. Professor of Biological Sciences University of Montana, Missoula, MT

Peter Bahls M.Sc., Fisheries Biologist Northwest Watershed Institute Port Townsend, WA

Peter B. Moyle, Ph.D., Distinguished Professor, Dept. of Wildlife, Fish, & Conservation Biology University of California, Davis, CA

Wayne D. Spencer, Ph.D., Director of Conservation Assessment, Conservation Biology Institute, San Diego, CA

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

F. Stuart Chapin III, Ph.D., Professor (Emeritus), Department of Biology University of Alaska, Fairbanks, AK

Stephen G. Weller, Ph.D., Professor Dept. of Ecology and Evolutionary Biology University of California-Irvine, Irvine, CA

Vicki Tripoli, Ph.D., Biologist Moorpark, CA

Douglas J. Frederick, Ph.D., Professor Dept. of Forestry & Environment Sciences North Carolina State Univ., Raleigh, NC

Gary K. Meffe, Ph.D., Adjunct Professor Dept. of Wildlife Ecology & Conservation University of Florida, Gainseville, FL Bitty Roy, Ph.D., Professor, Department of Biology / Smithsonian Research Associate University of Oregon, Eugene, OR

Don Waller, Ph.D., John T. Curtis Professor of Botany and Environmental Studies University of Wisconsin, Madison, WI

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

Richard O. Bierregaard, Ph.D., Research Associate, Academy of Natural Sciences Drexel University, Philadelphia, PA

Matthew Rubino, M.Sc., Conservation Biologist, Dept. of Applied Ecology North Carolina State University Raleigh, NC

Robin Salter, Ph.D. Associate Professor of Biology Oberlin College, Oberlin, OH

Dina Roberts, Ph.D., Professor Department of Biology The Evergreen State College, Olympia, WA

Rachel E. Golden, M.Sc., Department of Environmental Science and Public Policy George Mason University, Arlington, VA

Phil Myers, Ph.D., Professor (Emeritus) Dept. of Ecology and Evolutionary Biology University of Michigan, Ann Arbor, MI

Peter F. Brussard, Ph.D., Professor (Emeritus), Department of Biology University of Nevada, Reno, NV

Jesse Ford, Ph.D., Professor Department of Fisheries and Wildlife Oregon State University, Corvallis, OR Craig W. Benkman, Ph.D., Professor Department of Zoology and Physiology University of Wyoming, Laramie, WY

Malcolm K. Cleaveland, Ph.D., Professor (Emeritus), Department of Geosciences University of Arkansas, Fayetteville, AR

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

Glenn R. Stewart, Ph.D., Professor (Emeritus), Biological Sciences Department California State Polytechnic University Pomona, CA

Bruce G. Baldwin, Ph.D., Professor Department of Integrative Biology University of California, Berkeley, CA

David Janos, Ph.D., Professor Department of Biology and Cooper Fellow University of Miami, Coral Gables, FL

Robert Michael Pyle, Ph.D. Lepidopterist and Founder The Xerces Society, Portland, OR

Jon Rhodes, Ph.D. Hydrologist Planeto Azul Hydrology, Portland, OR

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

Erik Jules, Ph.D., Professor Department of Biological Sciences Humboldt State University, Arcata, CA

Daphne Stone, Ph.D., Botanist Biodiversity Research Collective Eugene, OR Trygve Steen, Ph.D., Professor Department of Environmental Studies Portland State University, Portland, OR

Jason Clark, M.S. Senior Botanist Siskiyou BioSurvey LLC, Ashland, OR

David Olson, Ph.D. Conservation Earth Consulting and Biodiversity & Wildlife Solutions, Washington, DC

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

Robert L. Beschta, Ph.D., Professor (Emeritus), Forest Ecosystems and Society Oregon State University, Corvallis, OR

Dennis Murphy, Ph.D. Adjunct Research Professor University of Nevada, Reno

Thomas Michael Power, Ph.D. Professor (Emeritus), Dept. of Economics The University of Montana, Missoula, MT

Reed F. Noss, Ph.D. Provost's Distinguished Research Professor Department of Biology University of Central Florida, Orlando, FL

Rowan J. Baker, MS Independent Environmental Consultant Portland, OR

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

Raymond A. Saumure, Ph.D. Herpetologist and Director WildFauna, Las Vegas, NV

Karen Stone, Ph.D., Professor Department of Biology Southern Oregon University, Ashland, OR

Douglas A. Miller, Ph.D., Professor Department of Geography Penn State University, University Park, PA

William Bridgeland, Ph.D. Wildlife Biologist Bandon, OR

Susan Harrison, Ph.D., Professor Dept. of Environmental Science & Policy University of California, Davis, CA

Gordon H. Orians, Ph.D., Professor (Emeritus), Department of Biology University of Washington, Seattle, WA

Frito Dolisca, Ph.D. Forest Resource Policy and Conservation Orange, NJ

Stephen C. Trombulak, Ph.D., Professor Department of Biology Middlebury College, Middlebury, VT

Sam Rich, M.Sc. Conservation Land Manager Wild Restoration LLC, Seattle, WA

Barry R. Noon, Ph.D., Professor Dept. of Wildlife & Conservation Biology Colorado State University, Fort Collins, CO

Jeff Wells, Ph.D., Senior Scientist Boreal Songbird Initiative Seattle, WA