

Dedicated to protecting the diversity of life through the conservation of invertebrates the little things that run the world

Board of Directors

May R. Berenbaum, President
J. Kathy Parker, Vice President
Linda Craig, Treasurer
Sacha Spector, Secretary
Michael J. Bean
Scott E. Miller

Counselors

Paul R. Ehrlich
Claire Kremen
John Losey
Thomas Lovejoy
Jerrold Meinwald
Michael G. Morris
Piotr Nasrecki
Paul A. Opler
Robert Michael Pyle
Charles L. Remington
Michael Samways
Cheryl Schultz

Scientific Advisors
Thomas Eisner

E.O. Wilson

Executive Director
Scott Hoffman Black

THE XERCES SOCIETY

FOR INVERTEBRATE CONSERVATION

4828 Southeast Hawthorne Boulevard Portland, Oregon 97215, USA Telephone 503-232-6639 Fax 503-233-6794 www.xerces.org

April 1, 2009

Ren Lohoefener Regional Director US Fish and Wildlife Service California-Nevada Region 2800 Cottage Way, Suite W2606 Sacramento, California 95825

Dear Ren,

The Laguna Mountains skipper (*Pyrgus ruralis lagunae*, LMS) was designated as a federal Endangered Species in January of 1997. More than a decade later, the subspecies continues to decline. Recent extensive surveys by the Service and LMS cooperators have determined that the LMS is extirpated from the Laguna Mountains, a site that encompassed over half of the subspecies' range at the time of listing. There are now only 5 meadows on neighboring Palomar Mountain that support LMS populations; you might agree that this species is poised on the brink of extinction.

On February 21, 2007 the U.S. Fish and Wildlife Service's Carlsbad office hosted a cooperative meeting with eminent ecologists and entomologists to discuss the biology and conservation of this subspecies and develop a strategy to prevent its extinction. After the meeting, Service staff took many of the ideas and concepts discussed and developed a study plan so that conservation efforts would be based on the best available science.

First, I want to commend your staff for taking a proactive approach to the conservation of this species. Over the last two years, a small team of your staff has developed butterfly and host plant survey methods and captive propagation protocols that provide the underpinning of a successful conservation program. Staff at the Carlsbad office have completed a Five Year Review, a Species Optimal Resurgence Strategy, a poster paper on LMS displayed at your recent climate change conference in San Francisco, a Draft Research Report for two years of monitoring and occupancy analysis, and a Draft LMS Captive Propagation Plan in accordance with Service policy. They have also secured a critical million-dollar easement (i.e., the Mendenhall Easement) to permanently protect what may be the most important remaining LMS population. All of this work has been possible because of the dedication of staff members who have accomplished much on a shoestring budget with limited institutional support.

Despite these achievements, there is much to be done if we are going to prevent the imminent extinction of the Laguna Mountains skipper. In the immediate future, the Service should be working in earnest to captive propagate this butterfly and to swiftly reintroduce it to appropriate sites within its historic range at both Palomar Mountain and within the Laguna Mountains. To accomplish this, your agency needs to fully support its staff and their outstanding efforts. It is our opinion that the Service should 1) start captive propagation immediately, 2) work to prepare sites for reintroduction where feasible on Palomar Mountain and in the Laguna Mountains, and 3) continue to monitor what remains of the population in a scientifically credible manner to determine if what your agency is doing is working. Captive propagation, reintroduction and continued monitoring are critical, as the threat of extinction is greatly exacerbated by the risk of catastrophic wildfire fueled by prolonged drought and climate change, as well as the potential threats of over grazing, water draw-downs, and the recent discovery of a non-native insectivorous ladybird beetle on Palomar Mountain.

In this effort, you have the support of multiple scientists (many of whom have been providing feedback on this project free of charge) and the conservation community. We are currently working on grant opportunities for which we hope to identify matching government funds to continue our private-public sector conservation partnership.

Thank you for your consideration of this request. If possible I would like to meet with you about this issue.

Best regards,

Scott Hoffman Black
Ecologist/Entomologist
Executive Director
The Xerces Society for Invertebrate
Conservation
4828 SE Hawthorne
Portland, OR 97215
Direct line (503) 449-3792
sblack@xerces.org

Rich Van Buskirk Assistant Professor of Environmental Science Pacific University 2043 College Way Forest Grove, OR 97116

Matthew L. Forister
Research Assistant Professor
Dept. of Natural Resources & Environmental
Science
University of Nevada, Reno
Mail Stop 186, 1000 Valley Road
Reno, NV 89512, USA

Jaret C. Daniels, Ph.D Assistant Professor McGuire Center for Lepidoptera and Biodiversity Florida Museum of Natural History S.W. 34th Street and Hull Road P.O. Box 112710 University of Florida Gainesville, FL 32611 Steven P. Courtney Ph.D. Xerces Society Advisor PO Box 80605 Portland, OR 97280

May Berenbaum Department of Entomology 320 Morrill Hall University of Illinois 505 S. Goodwin Urbana, IL 61801-3795

David L. Wagner University of Connecticut Dept of Ecology & Evolutionary Biology U-Box 43, Room 312 75 North Eagleville Rd Storrs, CT 06269-3043

Peter J. Tolson, PhD Director of Conservation and Research The Toledo Zoo P.O. Box 140130 Toledo, OH 43614-0801

Peter F. Brussard, Ph.D. Professor Emeritus Department of Biology, M.S. 314 University of Nevada Reno, NV 89557 USA

Keith S. Summerville Associate Dean, College of Arts and Sciences Associate Professor, Environmental Science Drake University Des Moines, Iowa 50311

Felix A. H. Sperling Associate Professor - Department of Biological Sciences Curator - Strickland Museum of Entomology

University of Alberta

Carol A. Butler, Ph.D. 60 West 13th Street New York, NY 10011 Robert Michael Pyle Grays River, WA Author/Lepidopterist

Dr. Leon G. Higley Professor of Entomology and Forensic Science 706 Hardin Hall University of Nebraska-Lincoln Lincoln, NE 68584-0987

Dr. Kailen Mooney University of California Department of Ecology & Evolutionary Biology 321 Steinhaus Hall Irvine, CA 92697-2525 USA

Doug Taron, Ph.D. Chicago Academy of Sciences / Peggy Notebaert Nature Museum 2430 N. Cannon Drive Chicago, IL 60614

Ernest H. Williams, Christian A. Johnson Professor Dept. Biology Hamilton College Clinton, NY 13323

Leslie Simpson Brennan General Curator Brandywine Zoo 1001 North Park Drive Wilmington, DE 19802

Linda Criss VP Communications Akron Zoo 500 Edgewood Ave. Akron, OH 44307

Steve Spomer University of Nebraska-Lincoln Lincoln, NE 68584-0987 The Conservation Committee of the Lepidopterist's Society:

John Shuey (Chair) Andrew Brower Keith Brown Neil Björklund John Calhoun Jaret Daniels Pat Durkin Eric Metzler Ron Panzer Robert Pyle Jens Roland John Shuey Thomas Simonsen Dale Schweitzer Keith Summerville Doug Taron David L. Wagner Ernest Williams Harry Zirlin Stephanie Sanchez
Program Coordinator
Butterfly Conservation Initiative
McGuire Center for Lepidoptera and
Biodiversity
Florida Museum of Natural History
S.W. 34th Street and Hull Road
P.O. Box 112710
University of Florida
Gainesville, FL 32611