December 6, 2016

Dear Member of Congress:

As biologists, landscape ecologists, and members of the scientific community, we are writing to express our strong support of the National Wildlife Corridor Conservation Act. We urge all members of the House of Representatives to support this bill that would help conserve the interconnectedness of habitats of thousands of our nation’s native species, boosting their resilience to climate change and maintaining the health of our country’s diverse natural heritage.

Today, many of our most beloved American species – from the Florida Panther to the pronghorn, to Pacific salmon, to the monarch butterfly are under threat from fragmentation of their habitats. The National Wildlife Corridor Conservation Act would provide for the protection and restoration of our native wildlife by identifying connectivity and corridors within public lands across the country. The addition of corridors to our national system of protected areas would increase the effectiveness of our public lands for wildlife, recreation, and ecosystem services and allow species to shift their ranges in response to climate change and other stresses. In addition, the bill will create a National Native Species Habitats and Corridors Database to compile information about wildlife connectivity that will be shared with states, tribes and other members of the public.

It has long been recognized by the scientific community that protected areas in isolation fail to adequately protect a number of species and ecosystem processes. Often, management of our public lands has protected islands of habitat, resulting in isolated wildlife populations. Wildlife corridors provide connectivity between these habitat patches, sustaining vital natural processes, wildlife populations and biodiversity while allowing species to move in response to climate change.

Over 20 years of published scientific research from 180 scientific studies have shown that maintaining habitat connectivity and corridors are key components for the survival for many wildlife species. Specifically, scientific evidence has shown:

- The rate of extinction of species is accelerating with the current rate 1000 times pre-human levels ¹.
- Corridors increase the movement of species between populations by approximately 50% compared to patches that are not connected with corridors². This movement allows species to migrate and to find food and mates, which increases the health of populations and their chances of survival³.

Corridors can increase the population sizes of species\textsuperscript{4,5} and their genetic health\textsuperscript{6}.

Corridors can help maintain important ecosystem services (direct contributions to human well being from healthy ecosystems and wildlife). These include: (1) provisional services such as food and water, (2) regulating services such as climate, disease, disturbance, flood, pests, and soil erosion control, pollination, seed dispersal, and water quality, and (3) cultural services such as recreation and aesthetics\textsuperscript{7}. Data from these papers show that decreasing connectivity has a consistently negative effect on pollination and regulation of pests, indicating the importance of connectivity for agriculture and food security.

Corridors provide opportunities for species to move in response to climate change\textsuperscript{7}.

Corridors are important for maintaining biodiversity\textsuperscript{8}.

Currently, one in five species in the U.S. is at risk of extinction. In order to prevent a drastic loss of biodiversity, we must act quickly to protect key habitats. Threats to the survival of our national’s wildlife include the loss, degradation and fragmentation of natural areas as well as shifting habitats due to climate change. It has been shown that wildlife are shifting their ranges approximately 10 miles further north every decade\textsuperscript{9}. This is equivalent to the world’s animals shifting 20cm every hour. Therefore, we call upon members of Congress to pass this Act so that our nation can protect those crucial areas that allow our native plants and animals to move and adjust to change. Such an effort will help stitch disparate patches of habitat together into an ecological fabric that will help conserve our natural heritage and be a critical step in protecting America’s biodiversity.

Thank you for your consideration of our request.

Sincerely,

Edward O. Wilson
University Professor Emeritus and Honorary Curator in Entomology
Museum of Comparative Zoology
Harvard University

Michael E. Soule
Professor Emeritus,
Environmental Studies Dept.
UCSC

John Terborgh
Professor Emeritus
Duke University

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

Tom Lovejoy
University Professor
Environmental Science and Policy Department
George Mason University

Nick Haddad
William Neal Reynolds Professor
Applied Ecology
North Carolina State University

Stuart Pimm
Doris Duke Professor of Conservation
Nicholas School of the Environment
Duke University

Paul Beier
Regents Professor
School of Forestry
Northern Arizona University

David Theobold
Senior Scientist
Conservation Science Partners

Kathy Zeller
Post-Doctoral Researcher
San Diego State University

Robert Long
Senior Conservation Fellow
Woodland Park Zoo

Fred Koontz
Vice President of Field Conservation
Woodland Park Zoo

Chris Darimont
Associate Professor of Geography
University of Victoria