

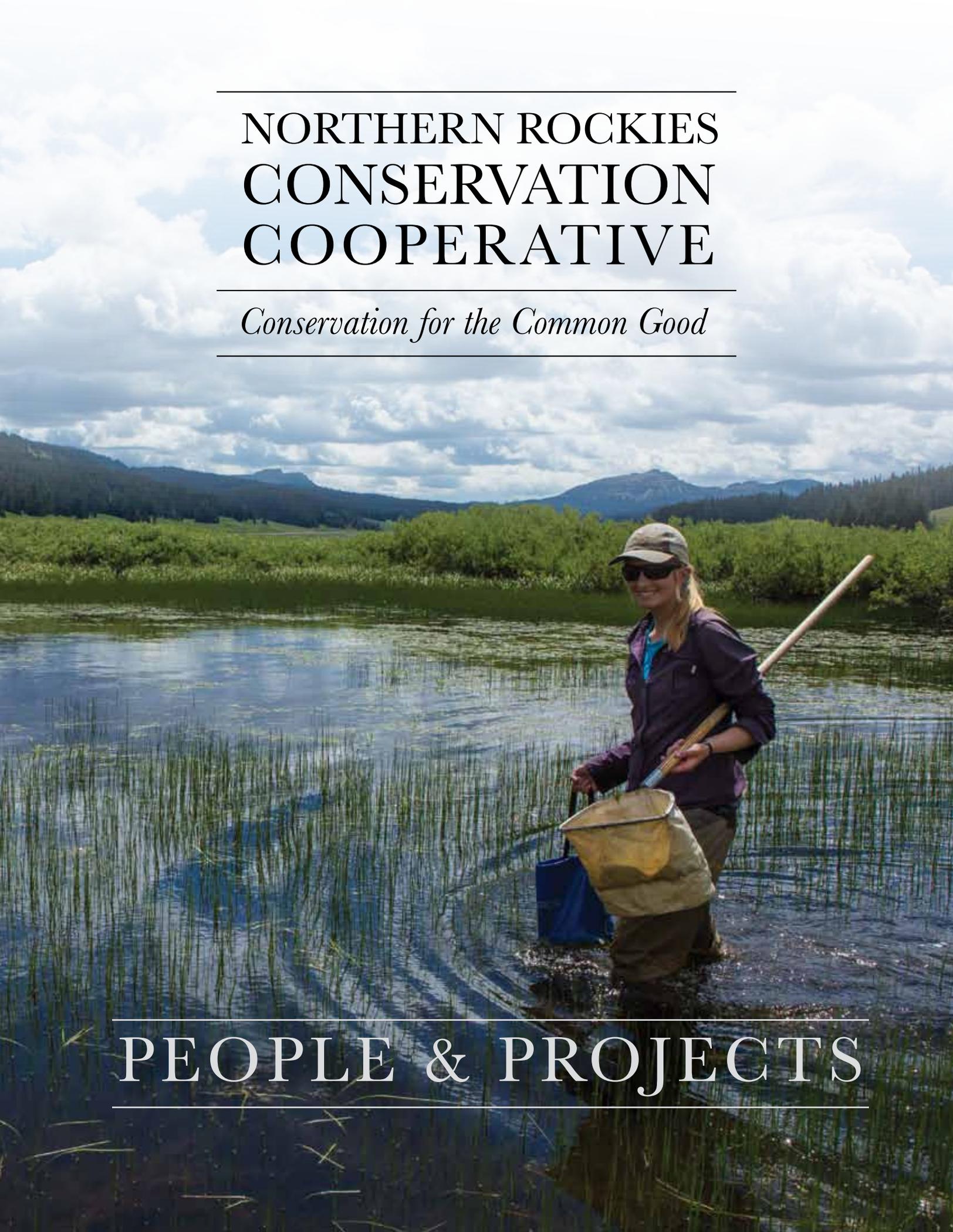
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# NORTHERN ROCKIES CONSERVATION COOPERATIVE

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*Conservation for the Common Good*

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PEOPLE & PROJECTS

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**N**orthern Rockies Conservation Cooperative's (NRCC) Research Associate Program provides a unique opportunity for world-class researchers to complete innovative conservation projects outside the traditional avenues of agency and academia. It is a place where researchers come together with their peers to share ideas and to build new methods.

Each Research Associate is carefully selected by NRCC's Board of Directors based on their record of accomplishment and their demonstrated commitment to NRCC's vision. Our common goal is to ensure that humans and wildlife coexist in healthy ecosystems.

From amphibians, bears and birds right here in the Greater Yellowstone Ecosystem (GYE), to Tibetan snow leopards and Mongolian wolverines, our Research Associates provide vital data on dozens of species around the world. They make invaluable contributions to the communities in which they work. And they provide global opportunities for essential education and outreach. Together, we create a flow of information and ideas that enables best practices to be employed wherever a need arises.

We are so pleased to count these amazing scientists and policy leaders as part of the NRCC team. We hope you enjoy reading more about these outstanding individuals in the pages that follow.



Jennifer Jellen  
*Executive Director*



Maggie Schilling  
*Administrative Director*



"I have come to understand that successful conservation depends upon successful engagement and the development of genuine ties between people and their environments. I strive to instill those relationships in the students with whom I work. In addition to becoming budding young scientists, they lose fear of the nature surrounding them and instead become advocates for its conservation. In so doing, no longer are they passive responders to onslaughts against nature, but have the understanding, appreciation, and passion necessary to truly become citizens of the West."

*- Eric Atkinson, NRCC Research Associate*

## AVANA ANDRADE

Avana Andrade is a social scientist who works to achieve socially and culturally viable conservation solutions. She received a Master's degree from the Yale School of Forestry and Environmental Studies and has conducted extensive natural and cultural resource management research throughout the Intermountain West, including a large-scale study of ranching practices in Southeastern Utah and Northern Arizona. In addition to her research, Avana serves as the co-producer of SAGE Magazine's Habitation podcast.



*Photo courtesy of Avana Andrade*

## NRCC CREATES POLICY POCKET GUIDES

NRCC is currently creating a series of Pocket Guides, designed to provide insights into issues, processes and policies that affect conservation. Each booklet covers a different topic ranging from elk management to climate change to the processes involved in collective decision making.

NRCC Research Associate Avana Andrade is currently working to develop Pocket Guides that share the importance

of social science in conservation. "My goal in writing these," Avana says, "is to translate material from the policy sciences into a format that is easily usable by citizens, government administrators and scientists. Each Guide will delve into an aspect of the policy sciences in a way that is easy to understand and quick to apply in everyday situations."

**NRCC'S POCKET GUIDES WILL BE AVAILABLE BEGINNING IN SPRING 2016**

## RESEARCH ASSOCIATES

### ERIC ATKINSON

Eric Atkinson has nearly thirty years of experience in field-based conservation and ecology. He earned a Master's Degree from Boise State University for his work with raptors and shrikes, and has recently returned to complete his doctorate through the University of Wyoming. In addition to his own studies, Eric teaches at Northwest College and continues to conduct field work with diverse taxa. His current projects include efforts to assess the impact of energy development on Wyoming's wildlife and vital surveillance of avian diseases such as malaria, coccidiosis and West Nile Virus in Wyoming's Bighorn Basin.



*Photo courtesy of Eric Atkinson*



*Photo courtesy of NRCC*

### CHRISTINA CROMLEY BRUNER

Christina Cromley Bruner is the Director of the Strategy Management Office at the Office of Inspector General for the U.S. Department of the Interior. Her work has focused on reducing conflict in natural resource management by identifying common interests. Christina has published numerous books and papers on wildlife management, including the Harold D. Lasswell Prize winning book, *Finding Common Ground: Governance and Natural Resources in the American West* (Yale University Press, 2002), which she co-edited. She received her doctorate from the Yale School of Forestry and Environmental Studies.

## NRCC INTERN HIGHLIGHTS A NOVEL WAY TO SEE THE GYE



*Photo courtesy of Katie Holsinger*

This summer NRCC welcomed Katie Holsinger, a graduate student at the Yale School of Forestry and Environmental Studies and a Wyss Scholar, as our newest intern. Katie's project, which extends well beyond her stay at NRCC, is the creation of a novel guide to the GYE. *An Artist's Field Guide to the Greater Yellowstone* is a natural history guide to the region as told by 50 local artists, writers and poets. Through diverse media, Yellowstone's most distinguished storytellers reveal new ways of seeing and experiencing this dynamic place and its wildlife. Katie's book embodies NRCC's vision by modeling collaboration, integration and creativity, while taking a holistic view of the ecosystem.

In addition to her work with NRCC and her studies, Katie also serves as the Education Programming Director for the Yale Sustainable Food Program, the Senior Art Director of the environmental news publication *Sage Magazine*, and is a Teaching Fellow for the Yale College course Yellowstone and Global Change and the School of Forestry course American West.

## KIMBERLY BYRD

Kimberly Byrd is widely known for her use of Q methodology in understanding how individual viewpoints contribute to complex conservation issues. She earned her doctorate from the University of Minnesota for her work with wolves and continues to serve as a lecturer in the University's Sustainability Education program, through the Institute for the Environment.

## BENJAMIN CHEMEL

When Ben Chemel is not in the field conducting research in partnership with the National Ecological Observatory Network (NEON), he serves as a Visiting Assistant Professor for Eckerd College in St. Petersburg, Florida. Ben's work focuses on long-term monitoring of terrestrial ecosystems, especially the impact of agriculture and natural resource development. He received his doctorate from Purdue University and specializes in the botany and ecology of the Intermountain West sagebrush steppe.



*Photo courtesy of Benjamin Chemel*

## DOUG CLARK



*Photo courtesy of NRCC*

Doug Clark is the Centennial Chair and Assistant Professor for the School of Environment and Sustainability at the University of Saskatchewan. His research examines the effect of environmental change on governance and policy in North America. He also develops non-invasive methods for monitoring human-wildlife interactions and is currently assessing the distribution of bear species in Northern Manitoba. As he notes in the *Thompson Citizen*, "It's pretty extraordinary. There are only two places in North America where you have potential for overlap and that's the Yukon Alaska North Slope, and Northern Manitoba. This is the first time, as far as I know, that someone has documented the three species [polar bear, grizzly bear and black bear] in the same place." Doug received his doctorate from Wilfrid Laurier University. In addition to being the Centennial Chair, he also serves as an Associate Member of the Johnson-Shoyama Graduate School of Public Policy and as a Board Member with the Society for Conservation Biology's Social Science Working Group.

## ELIZABETH DELISO

Elizabeth Deliso has worked on a variety of policy issues, from implementing sustainability programs to improving educational outcomes. Her extensive field work in the Central American cloud forests helped set larger biodiversity and conservation goals for the region. She earned a Master's degree from the Yale School of Forestry and Environmental Studies and most recently taught at the Riley School in Glen Cove, ME.



*Photo courtesy of NRCC*



*Photo courtesy of NRCC*

### GLORIA FLORA

For more than twenty-two years, Gloria Flora worked with the U.S. Forest Service, serving in numerous posts, including Forest Supervisor for both the Lewis and Clark National Forest in Montana and the Humboldt-Toiyabe National Forest in Nevada. Her current research involves increasing forest sustainability through the use of biochar. By holding Biochar Community Conversations, she works to educate the public and to create new markets for the millions of tons of woody waste that are generated by agriculture and logging operations. She also continues to promote the sustainability of public lands and water through Sustainable Obtainable Solutions, a non-profit organization she founded, and serves as the Interim Director of the NEWA Forestry Coalition where she works closely with the Colville National Forest to promote effective, ecologically sound forest restoration and resilience practices.

### WHAT IS BIOCHAR?

Biochar is a fine-grained charcoal, made by heating materials such as wood or manure in a specially designed furnace with little or no oxygen. The furnace captures all emissions for reuse as energy and the resulting material – biochar – can be used as a soil additive to help improve agricultural yields. The energy generated during this process can also be used to provide heat for buildings and communities.



*© R.J. Walter*

### MICHAEL GIBEAU

Mike Gibeau works with the Nature Conservancy of Canada where he oversees all new acquisitions of land in the Province of Alberta. That includes evaluating potential properties for their biodiversity value, negotiating the terms of a conservation easement, and/or buying property. He also maintains landowner relations and stewardship activities on the two largest ranches under conservation easement in Alberta. Those stewardship activities include new efforts to coexist with grizzly bears. A recent video captures this new relationship; visit <http://www.sharingtherange.com/> to learn more.



ANN HARVEY

Ann Harvey is one of Jackson Hole’s best-known conservationists, with decades of experience in field research, teaching, policy analysis and writing. Her current focus is on the use of logging or forest thinning to modify wildfire behavior on public lands. While the goal of these procedures is often portrayed as forest restoration, Ann says, “Unfortunately, the treatments do not mimic natural processes, and the ecological effects can be severe. In many cases, treatments have been shown to be ineffective, or even to increase wildfire intensity and rate of spread. Regardless of the scientific uncertainty surrounding these treatments, millions of dollars are being spent to treat forests across the West.” Ann is currently working to investigate the effectiveness of similar treatments proposed on the congressionally protected Palisades Wilderness Study Area.



Photo courtesy of Ann Harvey

HANNAH JAICKS

Hannah Jaicks is an interdisciplinary scientist working to develop stronger avenues of communication and inclusion among conservation stakeholders. She is particularly interested in issues relating to human-wildlife coexistence in the Greater Yellowstone Ecosystem, where her research examines the barriers that undermine successful policy. Hannah’s work identifies and differentiates the range of human values that underlie conflict and create challenges for effective wildlife management. She holds a master’s degree from the City University of New York and is currently completing her doctorate.

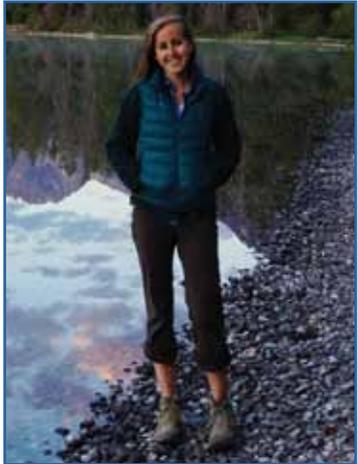


Photo courtesy of Hannah Jaicks



Photo courtesy of Timm Kaminski

TIMMOTHY KAMINSKI

Timmothy Kaminski is the founder and principal investigator for the Mountain Livestock Cooperative, a non-profit conservation initiative that combines a knowledge of traditional ranching with a scientific understanding of carnivore-livestock interactions to reduce conflict. In the American and Canadian west, Timmothy’s work focuses on helping ranchers to employ grazing and husbandry practices that increase profit, while decreasing interactions between livestock and predators. On a larger scale, his work centers around The Campaign for Carnivores, an international effort to increase support for carnivores and wildlife conservation across North America.

“TIME, HARD WORK AND PERSISTENCE ARE OFTEN UNDERAPPRECIATED ASPECTS OF CONSERVATION, BUT IT ALSO TAKES RESOURCES. AFTER ALL, SCIENCE DOESN’T DO CONSERVATION—PEOPLE DO.”

TIMMOTHY KAMINSKI, NRCC RESEARCH ASSOCIATE

## RESEARCH ASSOCIATES



Photo courtesy of NRCC

### JOHN LAUNDRÉ

John Laundré has spent more than 20 years studying mountain lions in the U.S. and Mexico in order to create a system of protected areas that will ensure sustainable big cat populations. He recently published *Prairie Phantoms: The Return of Cougars to the Midwest*. He teaches at the State University of New York – Oswego in the Biology Department and serves on the board of the Cougar Rewilding Foundation

### LYDIA (DIXON) LAWHON

Lydia Lawhon received a Master's Degree from the Yale School of Forestry and Environmental Studies and is now completing her doctorate in the Environmental Studies program at the University of Colorado Boulder. Using the case study of wolves in Wyoming, she works to understand why decisions based on the Endangered Species Act are persistently litigated, and what impact this conflict has on the region's people and wildlife. She also investigates the role of local knowledge and perspectives in Wyoming's wolf management policy.



© Adam P.H. Amir



Photo courtesy of NRCC

### CARLOS LÓPEZ GONZÁLEZ

Carlos López González has been working with large carnivores – including jaguars, cougars, bears and wolves – for two decades. He serves as the co-leader of the U.S. Fish and Wildlife Service's Jaguar Recovery Team and is a member of the Ocelot and Mexican Wolf recovery teams as well. He is currently expanding his work to examine bobcat populations and continues to teach at the Universidad Autonoma de Queretaro in Mexico.



Photo courtesy of Susan Marsh

### SUSAN MARSH

For more than twenty years, Susan Marsh worked as the Recreation and Wilderness Staff Officer for Bridger-Teton National Forest. She is the author of several books exploring the relationship between people and wilderness. Her latest is *A Hunger for High Country: Too Special to Drill*, co-authored with Florence Shepard, will be published in 2016. It tells the story of the Hoback Basin and citizens' successful efforts to prevent gas wells from intruding on its wild environs. Susan also serves on Nature Mapping Jackson Hole's Advisory Board, on the Board of the Meg and Bert Raynes Wildlife Fund, and on the Technical Committee of Safe Wildlife Crossings for Jackson Hole.

# NRCC RESEARCH ASSOCIATE HELPS RESTORE THE MEXICAN GREY WOLF TO ITS NATIVE HABITAT

**N**RCC Research Associate Dr. Carlos López González visited Jackson Hole in August to share his experiences working with one of North America’s most endangered carnivores, the Mexican Grey Wolf. Originally found throughout Texas, Arizona, New Mexico and northern Mexico, the Mexican Wolf had been almost completely extirpated by the 1970s. Efforts by the U.S. Fish and Wildlife Service led to a small population being reestablished in the American Southwest, but the wolves remained absent from most of their historic range.

In 2012, Dr. López González set about designing a program that would reintroduce wolves to northern Mexico. With the cooperation of local landowners, wolves were released onto a mosaic of private and public lands. For the first time in more than 40 years, a litter of wild pups arrived.

Dr. López González and his colleagues continue to monitor the population and work with local communities to ensure the long-term survival of these beautiful animals. They are grateful for the logistic and economic support of the National Commission of Protected Areas (CONANP) in Mexico, and the USFWS.



*Photo courtesy of Carlos López González*



*Photo courtesy of NRCC*

## DAVID MATTSON

**D**avid Mattson has spent more than thirty years studying large carnivores, with a focus on the social, political, and organizational dynamics that shape the policies and practices of conservation programs. After a long career with the U.S. Geological Survey as a Research Biologist, leader of the Colorado Plateau Research Station, and Western Field Director of the MIT-USGS Science Impact Collaborative, he now serves as a Lecturer and Visiting Senior Scientist at the Yale School of Forestry and Environmental Studies, and as Affiliate Faculty at Northern Arizona University.

## NICOLE MAZUR

**N**icole Mazur works in the Social Sciences Programme at the Bureau of Rural Sciences in Canberra, Australia. Her research focuses on sustainability and productivity in rural Australian industries including marine and coastal aquaculture and inland agriculture. Her work has a variety of applications, from establishing environmental indicators to developing better animal welfare strategies and promoting environmental philanthropy.

## ARTHUR MIDDLETON

Arthur Middleton works with both ungulate and predator populations throughout the Americas. The main goal of his research is to investigate ungulate migration, predator interactions and reproduction. In 2015, he began a collaborative project to gather field data for a comprehensive report on elk migration in the Greater Yellowstone Ecosystem, which will culminate in a documentary film and museum exhibit. He also works on a joint project with Argentina's National Research Council (CONICET), the University of Wisconsin Madison, and Pennsylvania State University that examines the interactions of pumas, vicunas, and condors in the Andes.



*Photo courtesy of Arthur Middleton*



*Photo courtesy of Clay Neilson*

## CLAY NEILSON

Clay Nielsen conducts research in several areas of wildlife ecology and conservation. His work includes jaguar occupancy in Panama and Brazil, the expansion of large carnivores in the Midwestern U.S., the ecology of river otters and striped skunks in southern Illinois, the use of habitat by restored bison herds in northern Illinois, the relationships between white-tailed deer and predators in Illinois, and the impact of habitat management on grassland birds.

## CHRISTINE PAIGE

Christine Paige is the founder and principal of Ravenworks Ecology, a conservation consulting firm that produces practical solutions and public outreach for projects in the Greater Yellowstone region as well as internationally. She recently collaborated with the Sage Grouse Initiative to produce several "Science to Solutions" publications that put the latest conservation science into the hands of ranchers and land managers. She also works with a variety of organizations to create fence solutions that keep livestock secure, but allow easier passage for wildlife in areas with mixed public and private lands. In 2015, she will travel to the Amazon to teach science communications to Peruvian students at a remote research station in Manu National Park.



*Photo courtesy of Christine Paige*

## DEBRA PATLA

Debra Patla is the Field Coordinator for the Cooperative Amphibian Monitoring Project in the Greater Yellowstone Ecosystem, a project sponsored by the National Park Service and the USGS. The project was developed in response to a global decline in amphibians that was first noticed in the 1990s. Deb's work continues to elucidate long-term trends and patterns. In 2015, her team witnessed a bumper year for some amphibian reproduction in Grand Teton National Park, but amphibians in Yellowstone suffered from low snowpack and dry wetlands. Deb points to data from NRCC colleague Blake Hossack's recent paper when she says, "Of the Parks' widespread species only chorus frogs show a positive trend; others, including Columbia spotted frogs, boreal toads, and tiger salamanders all declined." One piece of good news, however; beavers, where present, had a large positive effect on amphibians.



*Photo courtesy of Yellowstone NP*

## SUSAN PATLA

Susan Patla currently serves as the Non-Game Biologist in the Jackson office of the Wyoming Game and Fish Department. Her work involves habitat restoration and monitoring for a wide range of avian species including Trumpeter Swans, Bald Eagles, loons, curlews, and Peregrine Falcons. In 2012, she was part of the team that received the first standard North American Wetlands Conservation Act (NAWCA) grant in Wyoming, an effort that continues through Susan's work with easement and wetland restoration projects in the Upper Green River Valley.



*Photo courtesy of NRCC*



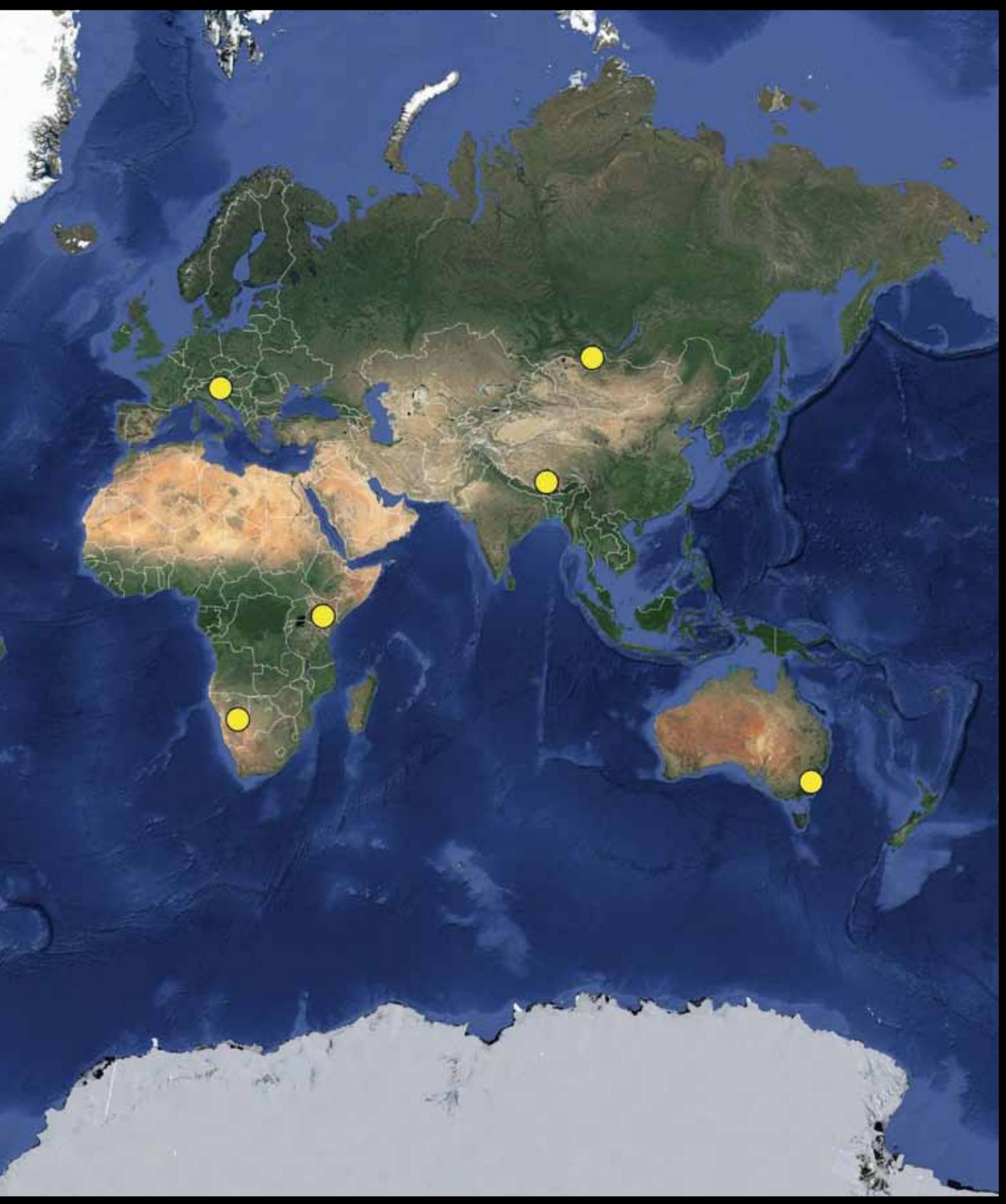
*Spotted frog. Photo courtesy of Debra Patla*

**“NRCC’S VITAL COLLABORATIVE ROLE, SUPPORTING THE NPS GREATER YELLOWSTONE NETWORK AND THE USGS, HAS SUSTAINED THE MONITORING PROJECT FOR YEARS. I LOOK FORWARD TO CONTINUING.”**  
- DEBRA PATLA, NRCC RESEARCH ASSOCIATE

NRCC'S RESEARCH  
ASSOCIATES  
WORK AROUND  
THE WORLD  
GENERATING  
ESSENTIAL DATA  
ON DOZENS OF  
SPECIES AND  
ECOSYSTEMS.



FOR MORE INFORMATION,  
PLEASE VISIT  
[WWW.NRCCOOPERATIVE.ORG](http://WWW.NRCCOOPERATIVE.ORG).



## CONSERVATION AWARDS HONOR JACKSON HOLE'S BEST AND BRIGHTEST

Jackson Hole has a long history of excellence and engagement in conservation; two major awards, given at the December 2014 Jackson Hole Wildlife Symposium, honored those who carry on this tradition.

The Craighead Wildlife Conservation Award is given to individuals who follow in the footsteps of the famous Craighead brothers, John and Frank, demonstrating a long-standing commitment to wildlife research, management, community involvement and policy. This year's award was shared by two NRCC Research Associates who also happen to be sisters: Debra and Susan Patla. Debra's work with amphibians has helped establish a clearer understanding of population trends in the GYE, while Susan works with a broad variety of species, improving habitat and ensuring that sustainable populations continue to thrive.

The inaugural Raynes Citizen Conservation Award, named for local legends Meg and Bert Raynes, was also presented at the Symposium. The award was given to Chuck and Carol Schneebeck, whose commitment to conservation is evident in their long history of tireless volunteerism.

***Congratulations to all the winners!***



*Top: Brothers Charlie (L) and Lance (R) Craighead present the 2014 Craighead Conservation Award to sisters Susan (L) and Deb (R) Patla. Bottom: Doug Wachob presents the inaugural Raynes Citizen Conservation Award to Carol and Chuck Schneebeck. Both awards were given on behalf of NRCC and the Teton Research Institute. Photos courtesy of NRCC.*

## CHARLES PETERSON

Charles Peterson teaches at Idaho State University, where he specializes in herpetology and the application of GIS in ecological monitoring. His research focuses on the ecology and conservation of reptiles and amphibians, as well as developing new methods for surveying sensitive populations.



© R.J. Walter



Photo courtesy of NRCC

## STEVE PRIMM

Steve Primm is Conservation Director at People and Carnivores, an organization that connects people, ideas, and resources to advance rangeland stewardship and carnivore conservation in the American West. From a Missouri farming family, Steve grew up with twin passions for wild nature and sustainable agriculture. Working with people to prevent conflicts with grizzlies and wolves gives him the opportunity to turn those passions into a job. Steve's conflict prevention projects span western Montana and northwest Wyoming, from the deepest backcountry to rural subdivisions and ranches.



Photo courtesy of NRCC

## PAMELA READING

Pamela Reading has dedicated her career to promoting conservation ideals across public and private lands. She currently works at LSA Associates, an environmental consulting firm, where she is involved in the planning stages of project development in order to avoid or minimize environmental impacts through conscious project design. She is also beginning to work with local communities to achieve groundwater sustainability. Pam previously spent ten years at the Jackson Hole Conservation Alliance, where she worked to protect wildlife and wildlife habitat in the Greater Yellowstone Ecosystem as well as to improve working relationships among conservation stakeholders in the GYE. Pam received a master's degree from the Yale School of Forestry and Environmental Studies.

## RICHARD READING

Rich Reading was the Director of Conservation Biology at the Denver Zoological Foundation for 19 years and now works as a consultant, using interdisciplinary approaches to solve complex conservation problems. Through his relationship with the Denver Zoo, he maintains projects in Mongolia, Botswana and Peru and is currently working in partnership with the Southern Plains Land Trust on a new initiative to restore an historic bison herd to southeastern Colorado. Richard received his doctorate from Yale University and teaches at the University of Denver.

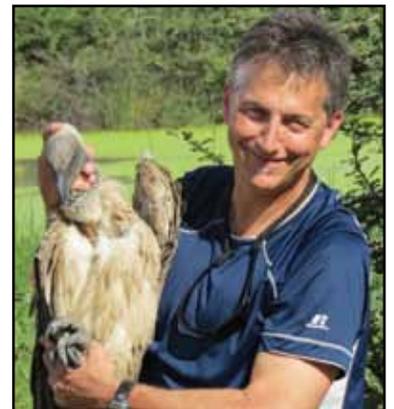


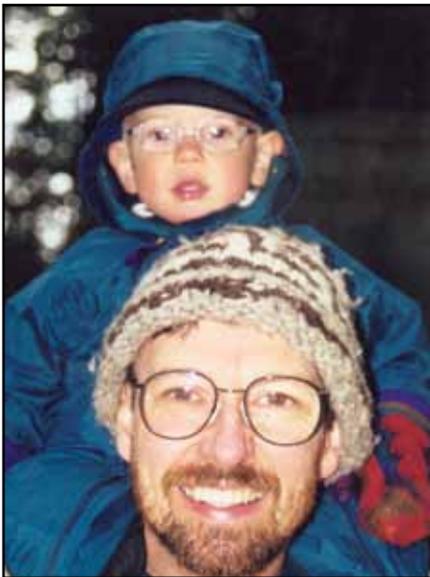
Photo courtesy of Rich Reading

### CORINNA RIGINOS

Corinna Riginos works on a variety of topics relating to the conservation of wildlife and habitat including migration, rangeland management, and the impacts of change on natural systems. Most recently, she has taken on the practical issue of wildlife-vehicle collisions. She is partnering with The Nature Conservancy, the Wyoming Migration Initiative, and the Wyoming Department of Transportation to identify roadways that are particularly dangerous for wildlife and is working to develop new technologies that prevent collisions and improve landscape connectivity for wildlife. She is also involved in several studies that examine the effects of climate change. Corinna received her doctorate from the University of California-Davis, and was recently named an Early Career Fellow by the Ecological Society of America.



*Photo courtesy of Corinna Riginos*



*Photo courtesy of NRCC*

### MURRAY RUTHERFORD

Murray Rutherford serves as an Associate Professor of Environmental Policy and Planning at the School of Resource & Environmental Management at Simon Fraser University in British Columbia, Canada. His research focuses on natural resource policy and he is particularly interested in how human values shape our relationships with the environment. He and NRCC co-founder Susan Clark recently co-edited the book *Large Carnivore Conservation: Integrating Science and Policy in the North American West* (University of Chicago Press, 2014).

### TAZA SCHAMING

Taza Schaming studies the impact of the decline of whitebark pine on Clark's Nutcrackers in the Greater Yellowstone Ecosystem. She is especially interested in how these dynamic birds use the larger landscape, and how they will modify their behavior and habitat selection as whitebark pines disappear. The goal of her work is to create an effective management strategy for the iconic whitebark pine and the many animals that depend upon it. Taza is currently completing her doctorate at Cornell University.



*Photo courtesy of Taza Schaming*



Photo courtesy of Ruth Shea

### RUTH SHEA

After 40 years of work in Trumpeter Swan restoration, research and management, Ruth Shea is working to create a new initiative that will ensure the comprehensive long-term management of these beautiful birds. She and fellow wildlife biologist Drew Reed have created the Northern Rockies Trumpeter Swan Stewards (NRTSS), a network of land and wildlife stewards whose activities improve the future quality of swan nesting habitat. By providing stewards with greater knowledge of swan ecology and the tools to conserve or improve swan habitat, NRTSS aims to keep regional nesting populations secure.

### NRCC AND PARTNERS HELP MAKE CRITICAL HABITAT SAFER FOR SWANS

Each year, thousands of birds and other wildlife are killed by power lines, but the simple solution—relocating the lines below ground—is often cost prohibitive. After witnessing dozens of swans colliding with and being electrocuted by a power line near Texas Slough, a critical wintering habitat for Trumpeter Swans in eastern Idaho, local landowner Tim Brockish decided he'd had enough.

Tim and his wife, Wendy, rallied friends and neighbors to work with their local electric company, Fall River Electric Cooperative, to find a solution. Together, they created a unique partnership that relocated the line through community involvement and cooperation. NRCC, along with our partner program the Northern Rockies Trumpeter Swan Stewards, proudly joined the effort and we are happy to report that more than one mile of critical habitat is now Swan Safe.



Trumpeter Swan. ©Tim Brockish

### TIMOTHY TERWAY

Timothy Terway is a policy scientist whose research examines the ways in which people create meaning and how human viewpoints shape environmental issues. He is particularly interested in the role of epistemology in change. Tim also has a strong background in city planning and landscape architecture; he recently worked with the town of Guilford, Connecticut, its residents, and The Nature Conservancy to create a comprehensive Community Coastal Resilience Plan. He is completing his doctorate at the Yale School of Forestry and Environmental Studies.



Photo courtesy of Timothy Terway

## RESEARCH ASSOCIATES

### REBECCA WATTERS

Rebecca Watters is a wildlife biologist and social scientist who works at the intersection of culture, human rights and conservation. Her work has taken her to numerous countries, most recently Mongolia, where she studies wolverines in the Ulaan Taiga Protected Areas in northern Huvsgul province. The goal of Rebecca's work is to create effective conservation strategies that also preserve human communities and cultures.



*Photo courtesy of NRCC*



*Photo courtesy of NRCC*

### JASON WILMOT

Jason Wilmot is a wildlife biologist with the U.S. Forest Service's Bridger Teton National Forest where he specializes in human-wildlife coexistence and carnivore conservation, especially the elusive wolverine. Jason has lived and worked in many of America's most remote wilderness areas, helping to create stewardship and management plans that ensure the continued existence of these special places. He received a Masters from the Yale School of Forestry and Environmental Studies and served as NRCC Executive Director from 2003-2013.

### MICHAEL WHITFIELD

Michael Whitfield has been conducting field research in the Greater Yellowstone Ecosystem for more than 30 years. His long-term monitoring of bald eagle populations has contributed significantly to a larger understanding of how at-risk populations recover. Michael also serves as the coordinator for the Heart of the Rockies Initiative, an innovative coalition of land trusts that work together to conserve clean water, iconic Western landscapes and the communities that depend upon them.



*© R.J. Walter*

### REVISITING AN OLD FRIEND

“We had known for five years that one of the bald eagle adults at the St. Anthony breeding area was banded, but the historic nesting location, in a dense cottonwood canopy, prevented views of the birds. Finally after numerous early morning observations at a new, more accessible nest site in 2015, we documented that the adult male was an eagle we banded far downstream as a nestling ten years earlier. Such is the nature of our research on the GYE/Idaho nesting bald eagle population, now with 90 breeding pairs, some of which are known adults up to 28 years old. Monitoring of nesting productivity, juvenile dispersal, adult survival, and interactions with myriad factors such as human disturbance, habitat change, stream flows and weather require many hours of careful observation. More than 30 years of work has led to a treasure trove of population data that we are now mining to identify how best to conserve this dramatically successful population of America's iconic symbol, the bald eagle, in a rapidly changing environment.”—**Michael Whitfield, NRCC Research Associate**

*Bald eagle © R.J. Walter*

## SETH WILSON

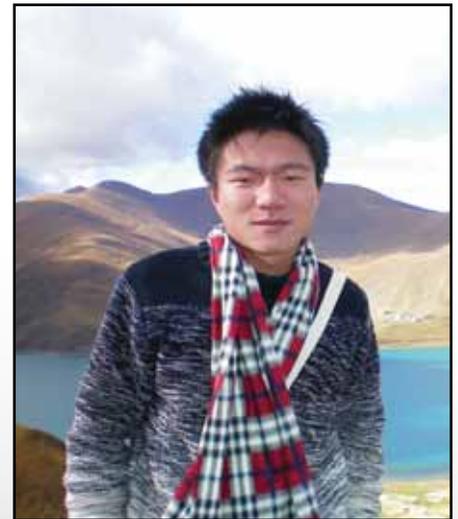
Seth Wilson works on landscape connectivity, ensuring that wildlife has adequate space to safely live and move. An expert in the landscapes of the American West, he is now employing lessons learned in the GYE to the forests of Slovenia, where he serves as a technical advisor for one year on the LIFE DINALP BEAR project. One of the world's most comprehensive and ambitious international bear conservation efforts, this five-year project focuses on bear population monitoring, habitat connectivity, ecotourism, and human-bear conflict reduction in Croatia, Slovenia, Italy, and Austria.



*Photo courtesy of Seth Wilson*

## GAO YUFANG

Gao Yufang is the Executive Director of the Everest Snow Leopard Conservation Center, based in Tibet, where he works to promote human-wildlife coexistence through research, conservation, public engagement and developing future conservation leaders. Yufang also works to prevent the illegal harvest and trade of wildlife, including African ivory. He holds a master's degree from the Yale School of Forestry and Environmental Studies and is a member of Yale's Large Carnivore Group.



*Photo courtesy of Gao Yufang*



## PROJECT AFFILIATES

### TANI HUBBARD

Tani Hubbard works as a science communicator for the National Park Service and the U.S. Fish and Wildlife Service inventory and monitoring programs. She is involved in a wide variety of science and conservation projects, including the development of protocols for the long-term monitoring of mammals using wildlife cameras in the American Southwest. She brings more than 15 years experience in science writing, editing, publishing, ecological research, and teaching to her work with NRCC.

### ALLYSON MATHIS

Allyson Mathis joined NRCC in summer 2015 as a science writer collaborating on Natural Resource Condition Assessments (NRCAs) for the National Park Service in the Intermountain Region. Her work involves a number of disciplines, including geology, hydrology, exotic and non-native plants, biological soil crust, and the night sky. Allyson has worked with the National Park Service in education and interpretation for more than 20 years.



*Photo courtesy of Allyson Mathis*



*Photo courtesy of Erin Muths*

### ERIN MUTHS

Erin Muths is a zoologist with the U.S. Geological Survey whose work focuses on demographics, disease, and changes in amphibian populations. Her research generates detailed data on amphibian populations to better understand amphibian decline and the effects of mitigation on amphibian survival. She received her doctorate from the University of Queensland in Brisbane, Australia, and is now affiliate faculty at Colorado State University.

## DREW REED

**W**ildlife biologist Drew Reed has an extensive background that includes work with large carnivores, raptors, bats, amphibians and plants. He is involved in a number of projects that conserve wetlands and their diverse inhabitants. He leads efforts to relocate beavers to forest drainages where they can improve stream function and increase habitat quality. Drew also recently partnered with NRCC Research Associate Ruth Shea to form the Northern Rockies Trumpeter Swan Stewards (NRTSS). NRTSS helps secure regional nesting populations by improving habitat, eliminating hazards and resolving management issues (see page 15 of this newsletter for an example of their work).



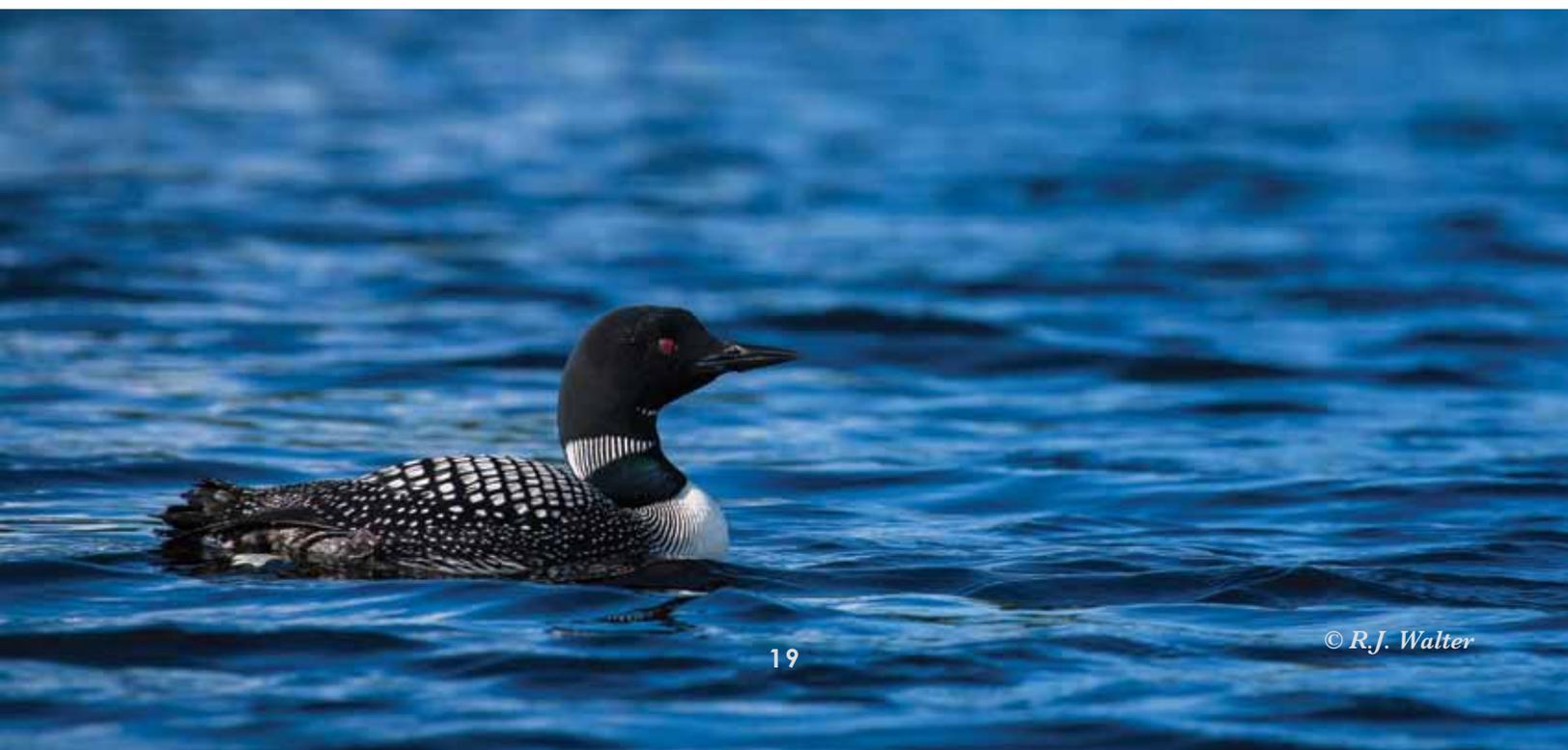
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## BLAKE HOSSACK

**B**lake Hossack is a U.S. Geological Survey Research Zoologist. His work examines how biological communities respond to environmental change and involves long-term monitoring of amphibian populations in the Rocky Mountains and areas of the desert Southwest. He earned his doctorate at the University of Montana.



Photo courtesy of USGS



# JACKSON HOLE WILDLIFE SYMPOSIUM: TOWARDS A RESILIENT FUTURE

In December 2014, NRCC and its partner, the Teton Research Institute of Teton Science Schools, hosted more than 150 researchers, conservationists and citizen scientists from across the region for the 5th Jackson Hole Wildlife Symposium.

Three keynote speakers presented unique viewpoints of the challenges facing the Greater Yellowstone Ecosystem (GYE) and those who steward it. Ann Rodman, a researcher in Yellowstone National Park, presented compelling data on climate change and its effect on the plants and animals of the GYE. David Mattson, a NRCC Research Associate, spoke about the need for greater equity in the decision-making processes that shape the GYE's policies. Grand Teton National Park Superintendent, David Vela, spoke about the need to honor the region's deep cultural roots in addition to its natural resources.



*Dr. Doug Wachob welcomes the crowd at the 2014 Jackson Hole Wildlife Symposium, held at the Jackson Campus of Teton Science Schools.*

*Photo courtesy Teton Science Schools*

Regional conservation leader and NRCC Board Member, Lance Craighead, said, "It's obvious from these discussions that science isn't enough. We have to figure out a way to keep the habitat we have in the face of an ever-increasing human population. We need to work together in the common interest."

**NRCC will be hosting the 6th Jackson Hole Wildlife Symposium in spring 2017.  
Please stay tuned for more information.**

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*Cover: NRCC field team member Leah Swartz monitors amphibians in the Greater Yellowstone Ecosystem. Inside Front Cover: Bison in Grand Teton National Park.  
Photos © R.J. Walter.*

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*Designed by Lydia A. Lavhon*

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