2018

CONSERVATION AWARD WINNER, DR. CHRIS RAY

Join us in celebrating Dr. Chris Ray, Research Associate with the Institute for Arctic and Alpine Research at the University of Colorado Boulder, as the 2018 Denver Zoological Conservation Award winner.

Dr. Ray has worked tirelessly to better understand and bring recognition to the American pika, a tiny alpine mammal familiar to Colorado hikers and known for their iconic "eep". Pika are also believed to offer key insights into environmental change.

For eight years and since program inception, Dr. Ray has worked closely with the Front Range Pika Project, a research effort run by Denver Zoo and Rocky Mountain Wild, which relies on citizen involvement. The Pika Project enlists hundreds of volunteers in citizen science research on the potential impacts of climate change on pika.

Dr. Ray has spent countless hours providing expertise in the best ways to collect data, helped train volunteers to become citizen scientists, and hiked to remote mountain sites alongside those same volunteers to collect information on the pika and their habitats.

Denver Zoo presents its annual Conservation Award to someone who has made significant contributions to wildlife since 1997. This award is given to a uniquely qualified, but unsung hero of conservation.

Thank you for your generous support of the Front Range Pika Project – the longest running project on the American pika.

DENVER ZOO

2300 Steele St., Denver, CO 80205

"On the one hand, each pika is a wild and scrappy individual – not afraid to bark if you come too close – and capable of surviving some of the harshest winters on the planet. On the other hand, pikas are small and cute and completely vulnerable to changes in their environment that they can't escape."

Dr. Chris Ray
Institute for Arctic and Alpine Research
University of Colorado

DENVER ZOO

FORCES OF NATURE

Field Conservation in our Rocky Mountain Backyard

With warming temperatures and less rain, snow is melting earlier than it should. This is causing harmful changes and a lack of food for the American pika. Increasing summer heat is dangerous as exposure to temperatures above 80 degrees can be lethal.

YOU ARE THE HOPE FOR THREATENED SPECIES, AND WE'RE FOREVER GRATEFUL FOR YOUR SUPPORT

Thank You for Helping the Tiniest Among Us...

Pika are an indicator species (meaning they provide early warnings about environmental changes) and rely upon snow insulation to survive cold winters in their high- elevation homes (as they don't hibernate).

Research has found pika disappearing in parts of Colorado. For instance, these little creatures seem to do better in the Southern Rocky Mountains than in other areas. Conversely, we've learned that pika may become extinct, in this century, in places like Rocky Mountain National Park. Denver Zoo is trying to figure out why.

We engage citizens as volunteer scientists to help collect data as pika offer huge insight into understanding our changing planet. For the last eight years, in partnership with Project Wild, our citizen science program, the Front Range Pika Project has deployed volunteer scientists across Colorado in an effort to increase understanding about the plight of the pika.

Our army of 150 citizen scientists track a variety of information (including pika poop!) and pika sightings – to see where these tiny mammals are located and how they are adapting.

Information collected helps analyze conditions in the face of environmental change. Additionally, with donor support, Denver Zoo was able to expand monitoring – now totaling 100 pika sites – across the entire state.

Denver Zoo's Front Range Pika Project has helped many other zoos and organizations start similar citizen science programs. Thank you for being a force of nature and helping this iconic Colorado creature.

TO GET INVOLVED, CHECK OUT: WWW.PIKAPARTNERS.ORG

BRINGING TOGETHER BISON, STUDENTS AND NATIVE COMMUNITIES

Bison hold a special place in the history of the West and were some of the original animals at Denver Zoo. As one of the first zoos to help bring bison back from the brink of extinction, we maintain this focus today at our conservation refuge, Rio Mora, in New Mexico. Denver Zoo has developed highly successful bison and grassland restoration techniques at Rio Mora—which we are now applying to Genesee Park, Colorado.

Field-based education programs in Genesee help support a grassland monitoring plan that enlists students from Denver Public Schools. Under the guidance of Denver Zoo staff, local middle and high schoolers learn about the vegetation on which the park's bison feed. They also assess the impact of herd grazing habits. The project shapes key knowledge for Denver Mountain Parks while bringing classroom curriculum to life, helping students interact deeply with subjects like math, biology and ecology in a real world setting.

Another component of this project is supporting cultural connections between local Native American communities by honoring strong ties to bison and the land. Similar to our work with the Pueblo of Pojoaque in Rio Mora, Denver Zoo is collaborating with Denver-area tribal groups and working closely with Colorado State University's Native American STEM institute.

SHORTGRASS PRAIRIES ARE ONE OF THE MOST ENDANGERED ECOSYSTEMS IN THE WORLD

How do Bison Help Save Grasslands?

Bison co-evolved with grasslands and help the land to fully flourish. Similar to lawn aeration, when bison graze, their hooves stir up the soil, capturing moisture and helping bury seeds. Bison wallow (roll in the dirt) which improves the land by creating water reservoirs and encouraging diverse plant growth.