Craighead Institute 2011 Winter e-news



Dear

In Montana we are fortunate to live in a place with spectacular scenery, rich heritage, and incredible wildlife. In fact, a large portion of Montana's economy is generated by wildlife viewing, hunting or fishing. One species that is close to my heart is the American pika (*Ochotona princeps*). They are incredibly cute and a species well worth studying. This dynamo of energy and denizen of alpine ecosystems typically lives at high elevations where it gathers "hay" for the long winters. Unlike other mammals that save energy by hibernating in the winter, pikas remain active all winter utilizing a series of tunnels under the snow to access their haypiles and potential mates.

Pikas are becoming very important to researchers and the general public because pikas are also considered to be the "canary in the coal mine" as indicators for environmental change. Pikas can't stand the heat, literally, and will die if exposed to temperatures over 80°F for more than about six hours. To cool off they utilize the crevices within their rocky homes to stay cool. Unfortunately these alpine environments are beginning to see some of the fastest average temperature increases worldwide due to climate change. Pikas are already beginning to suffer with population declines reported in the Great Basin of the United States and in China.

In Montana, we too are witnessing the effects of climate change with researchers recording average temperatures increases of 2.3°F over the past century (two times the global average). What does a warmer and potentially more unstable climate in Montana mean for pikas and for people? Only time will tell what the future holds but understanding how species like the pika adapt or perish in the face of environmental

Adopt a Pika



Help Support the Craighead Institute's *Plight of the Pika* Campaign.

Your donation dollars go towards our pika research in the Greater Yellowstone Ecosystem.

The Craighead Institute is using habitat suitability modeling to identify current pika habitat and to predict habitat under future climate scenarios.

Give a gift that makes a difference!

Adopt Today!

change may give us a better understanding of our own strengths and weaknesses and suggest strategies to pursue.

At the Craighead Institute we are working on a variety of pika projects in areas of Montana and Wyoming. Our programs include basic research and public outreach. We conduct research to identify pika habitat, determine the existence and longevity of historic pika locations, and engage the public in a citizen science program to record new pika locations in Montana. Our projects are revealing some interesting facts about pikas in Montana and our volunteers are finding pikas in some very remote areas. While we are only working on small pieces of the very complex pika puzzle, I hope that our research findings along with other researchers may help the pika survive into the next century.

With your help, our research at the Craighead Institute will continue, benefitting our new pika campaign entitled *The Plight of the Pika*.

In the end, the plight of the pika and climate change is closely entwined with the fate of humans. It is important to remember that many of these high elevation environments are also important sources of snowpack that provide water to humans and other wildlife downstream in late summer. As temperatures rise and snowpack levels change we humans will be feeling the heat as well. Understanding how pikas will adapt to climate change will directly relate to understanding how humans will adapt as well.

I recently gained some insight about what losing the pika might mean to the wild places in Montana that we so cherish. I was working at a site that at one time had been very active with pikas; I could see the remains of their haypiles and detect much pika sign. However on this day, I only saw one pika and heard only one other; and I couldn't stop asking myself why that was. Are we beginning to see changes in pika populations in Montana due to climate change? What will the future hold for pikas? What will the future hold for wild places? Losing the pika would mean that our children and grandchildren will grow up in a very different world than the one we know and love.

A place that had once been vibrant with pika activity and life was suddenly very lonely and far too quiet. As I made the long hike out, I hoped that this was not the fate for many of our wildlife species in the last best places. To continue our efforts for pika research and our other programs we need your financial support.





JOIN US!!!!

Visit REI in Bozeman on December 10th and get your holiday package gift wrapped by the Craighead Institute!

Craighead Institute will be wrapping up your holiday gifts at REI next Saturday, the 10th! Feel free to stop in and say hi and encourage your friends to do the same.

Learn about our *Adopt a Pika Program* and *Plight of the Pika Campaign*.

***We will charge a small fee to cover our costs.

Please consider a gift to the Craighead Institute this year; your generous donation will make an impact to both our organization and to wildlife conservation in the Greater Yellowstone Ecosystem.

Thank you for your support and best wishes to you in the New Year!

Sincerely,

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Lance Craighead
Executive Director

Seasons

an excerpt from "For Everything There is a Season"

by Frank Lance Craighead

"Snow covers the ground...Tracks in the snow replace direct observation as a means of determining the presence and activities of wildlife.

"The tiny tracks of the deer mouse in fresh snow are joined by those of the weasel that soon disappear down a tunnel in the snow to emerge ahead. The imprint of large wings, tail, and claws suggest that a great horned owl struck but missed his prey... In the coniferous timber of pine, spruce, and fir, foraging martens create breaks in their trail as they vacillate between traveling through the trees or the snow...

"Predators are constantly in search of prey in a wintry environment... Some of the prey species available to the collective predator population include deer mice, meadow voles, pocket gophers, bushy-tailed wood rats, snowshoe hares, jack rabbits, red squirrels, flying squirrels, pikas, beavers, shrews, and even some of the hibernators, such as ground squirrels (vulnerable to the badger). Bighorn sheep, elk, deer, and porcupines may occasionally be taken by a mountain lion. Other predators active in winter, whose tracks and scats you may see, include weasels, martens, minks, otters, skunks, badgers, coyotes, lynx, bobcats, and possibly... the wolverine or the gray wolf."



Holiday Cheer!

Join Us for a pint, pizza, and Hillbilly Chrome at Bozeman Brewing Company.

Sunday, December 11th 4-8 pm.

For every pint sold, 50¢ comes back to support the work of the Craighead Institute.

Raise a glass and be a part of some Holiday Cheer!



Craighead Institute

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Donate Today!



Our Mission: to maintain healthy populations of native plants, wildlife, and people as part of sustainable, functioning ecosystems.



Visit Us!

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Happy Holidays and Happy New Year!

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