

A hiker in a brown jacket and dark pants stands on a large, light-colored rock in a forest of tall evergreen trees. The hiker is looking down. In the bottom right corner, there is a circular inset showing a close-up of a small, fluffy, brown and white pika sitting on a rock.

PCT hikers become citizen scientists

By Liam Dillaway

For hikers looking to expand their PCT experience by aiding conservation efforts and learning more about the landscape, ongoing research being conducted on the Pacific Crest Trail may be the answer.

Last summer, more than 40 volunteers participated in a study arranged by **Adventurers and Scientists for Conservation (ASC)**. The nonprofit organization is using volunteers as amateur scientists to observe and record evidence of the American pika, the smallest member of the rabbit family and an important indicator of climate change.

Pikas are sensitive animals that prefer cooler temperatures. Their presence, or lack thereof, gives researchers an understanding of climate change through observations of populations over several years. High-alpine areas along the trail are known to contain populations of these small, fuzzy mammals.

With little more than a camera, a GPS and some quick training, PCT hikers are becoming an integral part in researching and protecting the trail and its surrounding areas.

While thru-hiking the PCT is an immense feat in itself, ASC has stepped in to organize a project that can give hikers even more satisfaction by recording any signs of pikas along the way. ASC's mission

is to connect adventurers and outdoor enthusiasts with researchers in need of data from remote places; they are calling on interested hikers to add to their journeys and become directly involved in protecting the PCT as they travel it.

"Scouting for pikas provided an extra goal to accomplish each day, while contributing to something more than my own self-improvement and enjoyment," said **Peter Gil-Montllor**, a recent thru-hiker.

Over the past two years, ASC has armed more than 80 hikers like Peter with the knowledge and ability to locate and document this important species. By familiarizing PCT hikers with the signs and sounds of pikas, ASC is equipping them to be amateur field scientists.

Hikers record GPS coordinates, document information about the places where observations occur and take pictures whenever possible. This fairly simple system allows them to contribute to ongoing research without the need for much extra equipment or effort.

The data is extremely helpful to researchers. Information is uploaded to an online database (iNaturalist.org) and is analyzed by a number of organizations and individual researchers. Scientists on tight budgets reap the rewards of this effort through large quantities of data submitted by volunteers.



Left: ASC Executive Director Gregg Treinish looks for pika. (seen in inset) Above, left: ASC has people record the GPS coordinates of any sign of pika, including their droppings. Above, right: Data collection and more evidence of pika activity.

“Funds for wildlife surveys are limited,” said **Joseph Stewart**, a PhD student and pika researcher at the University of Nevada, Reno. “Citizen science exponentially increases the data we can collect while reducing the costs.”

While PCT hikers are certainly a unique breed, the desire to take part in a larger project – one that can benefit conservation, environmental research or any number of other causes – is not unusual for adventure athletes.

Gregg Treinish, founder and executive director of ASC, had a similar feeling after completing the Appalachian Trail in 2004. This experience was part of the reason he created the nonprofit after several more journeys, including the first-ever trek of the Andes Mountains from 2006 to 2008. Treinish knew that more could be done to preserve the beautiful places in which people explore, and he believed that the solution was to connect athletes with researchers.

Since its inception in early 2011, ASC has facilitated these partnerships with great success. Adventurers have volunteered to gather data from remote areas all over the world. This has resulted in major discoveries like plant samples – the highest ever found – from the slopes of Everest, and key plankton collections and whale observations made by rowers attempting to cross the Arctic Ocean.

However, ASC has also involved everyday citizen scientists, not just athletes seeking record-setting feats, in the collection of valuable information. They have mobilized and trained recreational bikers, mountain climbers, skiers and many others. The nonprofit has even developed outings to train and engage specific groups ranging from elementary school students to military veterans. Anyone interested in being outside and making a difference is invited to be involved with ASC’s mission.

In fact, many of the project’s participants on the PCT have little to no previous knowledge of pikas but find the opportunity to assist researchers appealing. After a brief group training, they’re ready to take on their adventures with a new meaning and purpose.

“The experience of looking for pikas made me far more aware of their living conditions, some of their habits . . . and [inspired my] concern for their welfare,” said **Noel Ortiz**, one of this year’s hikers. “If I could help their survival with any information, then why not?”

As more hikers on the PCT take the step to collect pika data, a better picture of how this creature behaves and adapts is forming. Over time this project will provide further insight into the condition of this species and in turn will play a role in the discussions on climate change and conservation in the region.

“The pika research on the PCT is a prime example of what hikers can do to make a difference while they explore the outdoors,” Treinish said. “The work they do in searching for this indicator species for climate change will help researchers a great deal. It provides otherwise unattainable information about their habits and locations.”

Granting researchers access to this beautiful and rugged area ensures hikers a positive and lasting legacy for their adventures. By taking the time to record data along the way, you too can share your PCT journey with the scientific and conservation communities. 🐾

To learn more about the project and how you can get involved, please visit www.adventureandscience.org/pika.html.