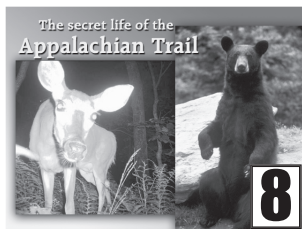


The secret life along the Appalachian Trail



Motion-triggered cameras captured candid images of wildlife.

BASIC

How can you take a close-up photo of a wild deer? One way is to go into the woods and wait very quietly for a very long time. But a better way is to set up a camera to work on its own. That's what scientists did along the Appalachian Trail, in the eastern U.S. The cameras were motion-triggered, meaning they took pictures whenever something in front of them moved. Most of the pictures were of one of the types of animals shown here. **Can you guess which?** (*The white-tailed deer.*)

What do you think this deer thinks

of the strange camera? But the cameras also captured less common animals, like black bears, bobcats, and flying squirrels. Scientists now have almost 2,000 photos showing the wildlife along hundreds of miles of the trail. **What do you think they can learn by looking at these photos? What do you think a motion-triggered camera would photograph in your back yard?** NEXT

GENERAL

If you want close-up photos of wild animals, you could go into the woods with a camera and sit very quietly and wait. Or you could do what a group of scientists from the Smithsonian Institution did. They set up 50 motion-triggered cameras in the woods along the Appalachian Trail, in the eastern United States. To attract animals to the cameras, they used a stick dipped in a smelly mixture of animal urine they called "the stink." From April through October, volunteers went to the trail to collect the photos and move the cameras to new locations. **Why do you think they moved the cameras?** When the experiment ended, they had almost 2,000 photos of wild animals along the trail. It's no surprise that the most photographed animal was the white-tailed

deer, a very common animal in that part of the country. **Do you have white-tailed deer where you live?** But the camera also captured many black bears, sometimes playfully attacking the camera. Some photos showed nothing but dark fur — the bear's backside as it used the camera as a scratching post. Several bobcats, which are rarely ever seen by humans, were photographed. One camera caught a horse, part of a herd of wild ponies in the area. Scientists had hoped they might get a picture of the Eastern cougar, but they didn't. The animal is now thought to be extinct. But the camera did catch a picture of a very common animal — a human hiker, photographing the camera as it photographed him. **What do you think scientists can learn by looking at the wildlife in these photos?** NEXT

ADVANCED

Last spring, scientists for the Smithsonian Institution undertook a project to capture candid images of wildlife along the Appalachian Trail in the eastern United States. They installed 50 motion-triggered cameras along a 600-mile stretch of the trail in Virginia, West Virginia, and Maryland. The cameras were set back from the path so that hikers wouldn't set them off. To attract animals to the area, scientists used sticks dipped in a malodorous mixture of animal secretions they called "the stink." Each month, volunteers went into the woods to get the digital photos and move the cameras to new locations. By the end of the project in October, they had nearly 2,000 photos, documenting wildlife along the trail. **What do you think were the most commonly photographed animals?** (*white-tailed deer*)

But scientists were surprised at the large number of black bears that showed up. The cameras managed to capture the essence of the bears' personalities on film — one series shows an attacking bear coming at the camera, followed by a photo of the ground. Another picture shows nothing but a dark, hairy mass — the backside of a bear using the camera as a scratching post.

Other animals captured by the cameras include coyotes, flying squirrels, raccoons, and the common but rarely seen bobcat. One shot caught a horse, part of a colony of feral ponies. Scientists had hoped they might see an Eastern cougar, once native to the area, but now thought to be extinct. But none were seen. **What do you think can be learned from a project like this one?** NEXT

The secret life along the Appalachian Trail (cont'd)



The Appalachian Trail is the nation's longest marked footpath.

BASIC

The Appalachian Trail is the longest footpath in the United States. It is more than 2,000 miles long, and runs through 14 different states. **Can you tell what some of these states are from the map here? Does the Appalachian Trail run through your state?** One end of the trail is in Maine, shown in the picture on the left. The other end of the trail is in Georgia. Hikers enjoy the trail because they can see beautiful scenery and wildlife, like moose, deer, fox, and other animals. But some sections

of the trail are very difficult, with rocky slopes or poison ivy. Hikers also have to watch out for bears and poisonous snakes. A few hikers have walked from one end of the trail to the other, camping overnight along the way. Walking the entire trail takes about five to seven months. **Would you like to hike on this trail? Why or why not?** END OF STORY

GENERAL

The Appalachian Trail is 2,175 miles long, and is the longest footpath in the United States. It began in 1921 as the idea of Benton MacKaye, a forester who wanted a trail that would allow city-dwellers to get out and see nature and wildlife. Thanks to the work of many volunteers, the trail was finished in 1937. Today, the trail runs through 14 states. **From the map here, how many of these states can you list? Does the trail run through or touch your state?** The northern end of the trail is in Maine, and you can see part of that trail here on the left. Here the trail is the most difficult, with many rivers or streams that hikers have to cross. From Maine, the trail runs south through the mountains and forests in New England. Further south, the

trail goes into the Blue Ridge Mountains, part of the Appalachian Mountains. It ends at Springer Mountain in Georgia. Some sections of the trail are easy, but in some areas, hikers must beware of poison ivy, rattlesnakes, or black bears. All along the trail, there are long sections that are many miles from any towns or homes. Fortunately, there are some shelters along the way for hikers to camp. Many people enjoy hiking on short sections of the trail, but some people actually hike the whole length. If you want to hike the whole trail, start counting down from 5 million — that's about how many steps it will take. The trip usually takes people about five to seven months. **Would you like to hike this entire trail, or part of it?** END OF STORY

ADVANCED

At 2,175 miles long, the Appalachian Trail is the longest marked footpath in the country. It began in 1921 as the brainstorm of Benton MacKaye, a forester who envisioned a long trail connecting farms and camps. The trail would allow urban people to enjoy great stretches of wilderness. Thanks to the work of many volunteers, the trail was finished in 1937. Today, the trail runs through or touches 14 states, six national parks, and eight national forests. In 1968, it was designated as the first national scenic trail. More than 2,000 rare, threatened, or endangered plant and animal species live along it. More than 30 trail clubs and other organizations work to maintain the trail, which is continually threatened by

expansive housing developments, highway construction, declining air quality, and invasive species. **Do you think it's important for federal and local authorities to protect this trail from degradation? Why or why not?**

The northernmost stretch of the trail in Maine, shown here on the left, is considered the most difficult, with steep, rocky terrain, and extreme weather. Ambitious hikers who want to hike the length of the trail often start there in the spring, because the journey can take five to seven months. So-called "thru-hikers" consider completing the trail a badge of honor. But most hikers limit themselves to hiking sections of the trail. **Would you ever attempt to hike the entire length of the trail? Why or why not?** END OF STORY