

TWO LIVES DEDICATED TO CONSERVATION



From left to right, the photographs above are courtesy of the U.S. National Park Service and U.S. Fish and Wildlife Service.

In her 1962 book *Two in the Far North*, Margaret “Mardy” Murie writes about the great gift Alaska can give to our increasingly mechanical world: unspoiled wilderness. That gift depends on preserving Alaska in its natural state. Mardy hopes its “great wild places will remain great, and wild, and free, where wolf and caribou, wolverine and grizzly bear, and all the arctic blossoms may live on in the delicate balance which supported them” without disruptive human interference.

Mardy’s powerful connection to Alaska began in 1911. Her family moved to Fairbanks when she was nine years old. The closest town to Fairbanks was eight days away by horse-drawn sleigh or ten days away by river steamer. Growing up in a log cabin in the remote frontier, she developed a deep affection for the landscape and the wildlife living in it.

In 1924, Mardy became the first woman to graduate from the University of Alaska Fairbanks. Two months after graduation, she married Olaus Murie, a blonde, blue-eyed wildlife biologist she had met a few years before. The day after they were married, the newlyweds left for an unusual honeymoon: a 500-mile dogsled expedition through the wilds of Alaska to study caribou. Thus began a lifelong partnership—with each other and with nature.

Asking Geo-Inquiry Questions

Together Mardy and Olaus studied the ecology of Alaska and then Wyoming and the Greater Yellowstone Ecosystem, among many other places. Through their experiences, they recognized the importance of preserving land in as pristine a condition as possible. They discovered that many creatures, especially large mammals such as elk and caribou, need large expanses of undisturbed land to survive.

The Muries found that a number of human activities threatened these animals, such as intentional poisoning of predator species, development of land, and hunting, to name a few. If things continued on the same track, the Muries saw a world in which many of the animals and places they studied would no longer exist. They wondered what they could do to protect the places and animals they cared so much about.

Olaus and Mardy spent their lives researching the answers to questions such as: How much land is enough for different species, especially large mammals, to survive? What will we lose if these places are destroyed by development and other human activities? How can we convince others that these places and creatures are worth protecting?

Acquiring Geographic Information

Collecting the data that could help answer these conservation questions happened gradually, over many years and many different research expeditions. Research projects often involved spending months in the wilderness. Geese, brown bears, caribou—Olaus researched all of these, typically with Mardy (and later their children) at his side.

Mardy was not scientifically trained, but she learned from Olaus. His approach to research was close observation, watching the environment around him, collecting specimens, and taking detailed field notes. “Olaus has a strong belief,” Mardy wrote, “that valuable scientific data are accumulated on the ground, afoot, with eyes and ears alert, notebook and camera ready ...” Olaus was also a very good artist, drawing what he saw in the field. Mardy, an excellent writer, kept detailed journals and captured their experiences in a compelling, personal style.

In 1927, the U.S. Biological Survey (now the U.S. Fish and Wildlife Service) hired Olaus to do a comprehensive study of elk herds in Wyoming and the Greater Yellowstone Ecosystem. The Muries moved their family to Jackson Hole, at the base of the Grand Tetons. For five years Olaus conducted field studies, collecting data. He learned about elks’ physical characteristics, reproduction, natural enemies, food habits, and diseases.

Of particular interest was elk migration. Olaus had studied migration in multiple species, banding geese to track their movement and observing caribou migration patterns in Alaska, for example. This wasn’t easy work. Today, scientists attach GPS tracking collars to elk and other large mammals and then monitor their movement via satellite. But in Olaus’s time, human observation was the only way to discern their movement. Records of elk sightings had to be compiled from many sources and stitched together to understand the patterns of movement. Olaus’s studies led to a clearer picture of where elk migrate, why they need to migrate, and how that benefits the ecosystem.

Meanwhile, concerns were growing about increased human activity and the conservation of wilderness in the Muries’ beloved Alaska. “It began to appear that even the vastness of Alaska’s wilderness would not remain unexploited without some special legal protection,” wrote Mardy. In 1956, the Muries returned to Alaska, traveling the Brooks Range above the Arctic Circle. Several conservation organizations and the University

of Alaska sponsored the trip. The goal was to determine how much habitat needed to be protected to ensure the survival of the ecosystem—and gather the evidence to prove it to decision makers.

Three young scientists joined the Muries. The team focused on a relatively small, remote area in the Sheenjek River valley. Their approach was to observe and report on what they saw, disturbing it as little as possible. Two of the younger scientists studied the soil, the plants, and the birds and mammals. They took pictures, made notes, and gathered specimens everywhere they went. Another scientist made a film of the area and also collected insects and fossils to take back to scientific colleagues. Olaus traveled everywhere with a backpack carrying his notebook, colored pencils for sketching, extra film for his camera, and containers for collecting scat (droppings) of animals. Everywhere he went, he observed the birds, mammals, and plants, looked for animal tracks to cast in plaster, and made careful notes. Mardy supported whomever needed help but was mostly with Olaus.

Organizing and Analyzing Geographic Information

Following their research trips, Olaus and Mardy went through their plentiful notes, organizing information about different aspects of the ecosystem they observed. With help from other scientists, they studied and interpreted animal tracks, scat, sightings, and specimens. Without computers, the work involved gathering and reading printed publications as well as exchanging letters and phone calls with other researchers. It was a much slower process than it is today. Piece by piece, they put together the complete picture of the wildlife and their habitats. They added the new information to previous studies until the details of the ecosystem and the life within it came into clearer focus.

Developing a Geo-Inquiry Story

With a greater understanding of these ecosystems, Olaus began to think about conservation differently than many others did at the time. For example, while some people advocated poisoning wolves to protect elk, Olaus believed the wolves served a valuable purpose. They eliminated the weak elk, leaving the strong to reproduce. Murie was also one of the first to point out how tourism benefited local economies, using the argument of economics to push for the preservation of national parks.

He also believed that housing developments, drilling and mining operations, and other human activities were the greatest threat to large mammal populations. His elk research, for example, pointed to human development as the cause of overcrowding of elk populations in their winter range. He determined that Wyoming's 4,500-acre elk refuge was accidentally contributing to the problem. Elk were feeding on rougher vegetation than they normally would. That was causing bacterial wounds in their throats and mouths. Because the herds were living closer together in the refuge, bacteria were transmitted more easily and more elk were getting sick.

Olaus and Mardy were certain that the stories of these ecosystems and the interdependence of the life within them should be told. They were also certain that these ecosystems were worthy of protection.

Taking Action

The Muries believed strongly in the importance of acting to protect the expanses of wilderness they cherished. "It was really better to be in the thick of the fight than to be standing in the corner with your face to the wall," Mardy once said. "So I'd hate to think that all I could do was moan and cry and make a fuss. You have to somehow do more than that. You have to try to influence people."

Throughout their lives, Mardy and Olaus influenced many people, including key decision makers. After the trip to Sheenjek Valley, Olaus met with leadership organizations in Alaska and groups in Washington, D.C. He shared his findings and showed them slides of the area so they could see the abundant wildlife flourishing there. Eventually he and his colleagues helped convince President Dwight Eisenhower to preserve 8 million acres, part of what would later become the Arctic National Wildlife Refuge.

The Muries also had helped to convince President Franklin D. Roosevelt to enlarge Olympic National Park in Washington state. Roosevelt added acres to the park, including neighboring rain forests. In 1943, they also inspired Roosevelt, through their research and stories, to create Jackson Hole National Monument in Wyoming. Most of that area is now part of Grand Teton National Park.

They worked tirelessly to get Congress to pass the Wilderness Act. The act included a legal definition of the term "wilderness" and protected 9.1 million acres of federal land across the nation. The act passed in 1964, but sadly Olaus didn't live to see it. He had died from cancer just a few months before, in 1963.

Though heartbroken, Mardy continued their mission of protecting the wilderness. As she put it, her role shifted from secretary, listener, and notetaker to writer and deliverer of speeches, testifier at wilderness hearings, and writer of brochures. She spoke all across the nation about the importance of conservation. She even continued to make research trips, traveling to Alaska, Tanzania, and New Zealand.

When Mardy spoke on behalf of protecting the wilderness, she spoke with expansive firsthand knowledge and with genuine conviction that these places were worthy of protection. Humble and respectful of other people's opinions, she was nevertheless convincing about her own perspectives. Her impressive storytelling talents helped.

In 1977, Mardy testified before the congressional committee that was reviewing the fate of 100 million acres of Alaskan wilderness. "Beauty is a resource in and of itself," she said. "Alaska must be allowed to be Alaska. That is her greatest economy. I hope the United States of America is not so rich that she can afford to let these wildernesses pass us by. Or so poor, she cannot afford to keep them."

Mardy lived to age 101 and inspired many others who are taking action today to protect wild places. "We need wilderness for what it gives a man's spirit," she said. "For the tolerance, understanding, and peace it can give us."