Science and Learning in the Alaska Wilderness

BY INGRID NIXON

An enlightened public is essential in order that there will not exist unfair pressures born of ignorance.

—Adolph Murie et. al. 1948

In the 1930s the Dall sheep population of what is now Denali National Park and Preserve crashed. As was the mood of the time, public officials and public sentiment assumed wolf predation was the cause, and both cried for the immediate implementation of a wolf eradication program. The National Park Service, however, hired a lone biologist to study the situation and ascertain the cause of the sheep's demise. After thousands of hours in the field, biologist Adolph Murie (see figure 1) concluded that a series of harsh winters was to blame for the population crash. Using Murie's scientific conclusion, park officials managed to hold wolf eradication proponents at bay.

As a direct result of Adolph Murie's scientific work, the biological integrity of what is now Denali National Park and Preserve remains intact. The new Science and Learning Center in Denali (see figure 2) bears the Murie name as an acknowledgment of Adolph's work and other members of the Murie family, who served as passionate advocates for the biological integrity of our national parklands.

Although located in Denali National Park and Preserve, the Murie Science and Learning Center is a collaborative effort between Denali National Park and Preserve, seven other Alaska national parks, and several park partners. Its mission is twofold: to promote scientific research in our national parks and to provide science-based education programs and information to students, educational institutions, and the visiting public. The center offers a classroom area, exhibits, and workspace for visiting and resident researchers. It also serves as the winter visitor center for Denali. Other center facilities include a dining facility and a remote field camp.

Figure 1—Adolph Murie. Photo courtesy of the National Park Service.

Working with partners, the Denali Park staff has taken an innovative approach to education and research that employs wireless technology and videoconferencing. For example, a wireless network extends over 40 miles of the park road corridor. Using a specially equipped school bus created by the Denali Borough School District to boost the signal, it is possible to communicate from the field through the Science and Learning Center to anywhere in the world via the Internet. This makes it possible for researchers in the field in Denali to conduct classes for students anywhere on the planet. The park is also working with the Office of Naval Research to develop radio-tracking collars that will be compatible with this wireless system. Such collars would make it possible to track wildlife 24 hours per day, 7 days a week, which would provide park researchers with movement data never before collected.

The wireless network will be put to the test during the 2005 weeklong Denali Science and Storytelling camp offered for the second year in a row in partnership with the Denali Borough School District. Equipped with digital cameras, GPS units, data recorders, and curious minds, the middle- and high-school stu-

Figure 2—Murie Science and Learning Center, Denali National Park and Preserve, Alaska. Photo courtesy of Fred Bayler and the National Park Service.

dents will explore the wilds of the park and record their impressions on DVD.

Through partner Denali Institute, the center offers a series of short daily programs and multiday educational seminars and teacher trainings throughout the summer months. These popular programs based out of the center's remote field camp explore a variety of topics from bear research to wildflowers.

To get kids up to their elbows in wilderness, the park has teamed with the Denali Foundation to offer a new Denali Backcountry Adventures program aimed at high-school students. Piloted in 2005, participants will spend a week in Denali's backcountry collecting impact-monitoring data for park managers.

The Murie Science and Learning Center is one of a growing network of research learning centers in development as one facet of the National Park Service's Natural Resource Challenge initiative. The goal of the Challenge is to promote more and better science in our national parks, to use scientific findings to make sound management decisions, and to share what is learned about these natural areas more effectively with the public. **IJW**

REFERENCES

Murie, Adolph 1948. As quoted in Timothy Lawson, 2001, Changing tracks: Predators and politicians in Mt. McKinley Natural Park (230). Anchorage: University of Alaska Press.

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From ALDO LEOPOLD on page 30

with the wilderness resource in order to identify the agency's role in resolving conflict between sport anglers and local village residents in the Togiak National Wildlife Refuge in southwest Alaska.

Mike Tranel of Denali National Park and Preserve described the relationship air-taxi operators have with the park and the visitors they shuttle in to climb Mt. McKinley or visit glaciers within the park. As a group, these commercial service providers have a long-standing relationship with portions of the Denali area that predates their addition to the park in 1980. This relationship is key to understanding how current air-taxi operators view their own role as well as that of the Park Service.

Alan Watson and Neal Christensen of the Leopold Institute closed the session by describing research on the Tongass National Forest in southeast Alaska. An initial study there concentrated on understanding conditions encountered by sport anglers and how their visits may be changed due to potential changes in management to protect on-site conditions along the Situk River. Local interest by Yakutat village residents, however, led to a second study to understand how they describe their relationships with this river that runs from the Russel Fiord Wilderness to the Gulf of Alaska, and how some of the proposed changes in management of on-site conditions may change those relationships.

These presentations on recent research in Alaska suggest the following:

- Visitor experiences enable individual and societal relationships with an area, and human relationships developed through these experiences can greatly influence the area.
- Federal agencies need to understand local meanings attached to wild places and how management actions interact with those meanings.
- Conflicts between recreation and subsistence users of public lands in Alaska are complex and deeply related to differences in relationships people have with those places.
- Commercial service providers have relationships with federal lands and are intermediate influences on relationships developed by the public with these places.
- We need holistic research and management approaches that consider how on-site management actions affect relationships between various publics and public lands. **IJW**