

AS WILD AS IT GETS

Review of:

Adolph Murie 1961. *A Naturalist in Alaska*. New York: Devin-Adair 302 pp.

[37th in a series on "naturalist-in" books; see
www.ckstarr.net/reviews_of_naturalist.htm]

Adolph Murie (1899-1974) was a pioneer wildlife biologist of the arctic. His older brother, Olaus J. Murie (1889-1963), was also an outstanding biologist and conservationist.

Alaska had long been part of the USA when Murie began work there, yet it was very much a wild place, as it is even today. A key message of this book is the hope that Alaska can remain forever wild.

His main focus was Mt McKinley National Park, almost 8000 km² in extent. Its nucleus is Mt McKinley, or Denali, the highest mountain in North America, rendered even more impressive by a relatively abrupt rise from its base.

In 1939 he began a two-year study of the relationship between wolves and Dall sheep in the park in order to determine whether artificial control of wolf numbers was justified. Murie was the first biologist to study wolves in their natural habitat. His basic research on the behaviour and environmental relations was based on living in their midst. It involved extensive rambling and observation, watching wolves and analyzing their droppings in order to identify their prey and learn what fraction of the sheep that they ate was carrion that had died from other agents. In addition, he examined some hundreds of sheep skulls to infer sex, age and overall physical condition at the time of death. One result was that sheep were often old and near the end of their natural lifespan when killed.

The wolves hunt mostly at night, resting during the day. Their numbers fluctuate widely, in large part due to disease. In the end, Murie argued against predator eradication at a time when this was a very controversial position.

And he studied the wolves' alternative prey (e.g. caribou and moose) and the sheep's alternative predators (e.g. golden eagle and brown bear). Although the core of the book revolves around these two species, then, its subject is Alaska's larger wildlife. About half of the chapters are taken up with the grey wolf and brown (or grizzly) bear, the rest with such creatures as the lynx, red fox, and caribou.

Murie's approach, while always data-rich, was mainly descriptive, seldom interpreting his results as for or against a particular hypothesis. Still, he wondered what causes the Dall sheep's seasonal migrations between summer and winter ranges. In a discussion of possible factors, he advanced the hypothesis that the initial cause is no longer present, and they continue to migrate out of long habit. Or perhaps the migration is necessary only in occasional years when the sheep are very abundant and deplete the forage in their winter range.

Red foxes vary a great deal in their colouration, so that Murie was able to recognize most of the individuals that he watched repeatedly. From this it emerged that they tend to spend their lives within quite a restricted home range. One must envy any naturalist who gets to spend days in the observation of wild foxes that he

knows personally.

The chapter on the lynx has a special charm. This cat -- characterized by David Attenborough as "the very essence of wilderness" -- is rare, and one can live for years in lynx country without even seeing its tracks. Murie was able to see several at fairly close quarters and gives a very pleasing picture of a confident, unperturbed and majestic creature. He spent several half-days watching a mother with her kittens at the den.

Brown bears, in contrast, are fairly common and conspicuous in much of Alaska. Unlike the book's other main focus, wolves, these are rigorously solitary animals, so that outside of mating the only groupings are females with their dependent cubs. Murie found that the cubs, born in the winter, usually remain with the mother until their third summer, when they are about two and a half years old.

Although we think of it as a very powerful predator -- which it is -- the brown bear is omnivorous, and mostly vegetarian out of necessity. They eat a great many roots, and Murie describes their extensive digging.

In treating other animals, even wolves, he largely takes it for granted that they pose no hazard to humans. Obviously, one cannot treat the brown bear in the same offhand manner, and there is a chapter devoted to human encounters with this animal. It is here that the book's chief weakness really stands out. Murie makes the point that bears almost always avoid people, but such non-events tend not to get reported. And when someone does have an encounter, the distance is minimized and the size of the bear is maximized -- no one ever seems to run into a small bear -- to dramatic effect.

Still, close and even hazardous encounters, while rare, do occur, and Murie takes up the better part of a chapter relating a great many of these, many of them second-hand, one after the other. To what purpose? I can understand campers regaling each other with an endless stream of bear stories, but does it belong in a serious naturalist-in book? This is part of a tendency to a great many narrative observations, not necessarily in the service of any larger point. Fortunately, these tend to be clustered in just a few chapters, so that one can read the first one or two and then skip the rest.

In contrast, the most engaging chapter has none of this and instead revolves around a particular biological problem. It began when Murie found small caches of drying hay -- plainly provisions for the coming winter -- with mouse droppings around them. The only hay-making rodent he knew was not found in the area, so what could it be? He set live traps and caught three species of small rodents. Further trapping showed that the Toklat vole (*Microtus miurus*) was the only species caught where hay caches were plentiful and was only caught in association with hay.

That solved the identification and led him to study the placement of hay caches, their composition -- with a list of eight plant species found in abundance -- and the dimensions of storage chambers. The vole also accumulates caches of root pieces, and Murie identified some thousands of such pieces, while using the excavation patterns to infer how they did it. One remarkable feature of this study is that most of it was carried out before he had even seen an untrapped vole.

A key general lesson from Murie's results is the need to observe animals at length and under varied conditions if one is to understand what shapes their lives. The

arctic is of course a very seasonal place, so that a study undertaken in just one part of the year misses a key dimension.

The technical report of this research (Murie 1944) is regarded as a classic in wildlife biology. The core of *A Naturalist in Alaska* is the popular version of this report. It is a book about being a naturalist studying mostly large mammals in the arctic. Its 23 chapters are illustrated with many photos and drawings.

While Murie is occasionally lyrical in setting a scene, his prose is mostly sober and straight-forward, devoid of simile or metaphor, as befits a naturalist-in book. Still, there are times when one must sing. Here is an example:

"The presence of the wolf adds immeasurable richness and a wilderness spirit to the landscape. One need not see a wolf to benefit from its presence; it is enough to know that there is the possibility of discovering one on some distant ridge. It is enough to know that the wolf still makes its home in the beautiful wilderness region to which he contributes vividness, color, and adventure."

Reference

Murie, A. 1944. *The Wolves of Mount McKinley*. Washington: United States Government Printing Office 238 pp. Online at:
http://www.npa.gov/history/history/online_books/fauna5/fauna1.htm.