



*All About Wolves in Denali National Park and Preserve*

# Keeping Up With the Pack in Denali

**W**ith about 100 wolves covering terrain in 6-million-acre Denali National Park and Preserve, you just might see one — maybe even a whole pack.

Odds are best along the first 50 miles of road past the park's entrance, a section that traverses the territories of two packs, the Mount Margaret and the East Fork (also known as the Toklat).

To spot members of the Mount Margaret wolf pack, keep your eyes peeled along the first 14 miles of the park road. Be on the lookout for members of the East Fork pack between the Teklanika campground

and the Toklat River. Although these packs are used to the presence of humans, park visitors can create problems for them and other wolves through actions that interfere with a wolf's natural wild behavior. Feeding wolves or allowing them to approach closely can reduce their natural wariness of people, which can lead to fearless behavior.

In recent years, wolves have been seen in and around Denali's Teklanika and Igloo campgrounds. This prompted park officials to close Igloo, a small walk-in campground, and to prohibit tent camping at Teklanika in 2002.



WOLF ON DENALI ROAD BY JOEL BENNETT

FOR WOLF WATCHING RULES, SEE PAGE 3.

## WELCOME TO DENALI WOLF TRACKER

*Denali Tracker* is a collaboration of the National Park Service and Defenders of Wildlife, a national nonprofit conservation group long involved in wolf conservation and recovery. Its purpose is to educate visitors about the wolves of Denali National Park and Preserve and to encourage responsible and rewarding wolf viewing in the park. For more information on Defenders of Wildlife, visit [www.defenders.org](http://www.defenders.org).

*Denali Tracker* is funded by the Wendy P. McCaw Foundation and compiled by Joel Bennett and Karen Deatherage.

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## Glimpsing an Elusive Predator

*By Joel Bennett*

**I** am always astonished at how wolves seem to appear out of nowhere in the wilds of Alaska. From an empty horizon or the edge of an endless winding river course, all of a sudden they are there, instantly energizing the landscape.

One day near Primrose Ridge in Denali, I was filming a grizzly bear mother and her cub feeding on berries in heavy brush. The cub began acting nervously. The mother bear charged. In a blur of activity, an adult wolf burst from the brush followed by the massive grizzly in close pursuit. In a split second it was over. The two bears were together again, and the wolf had disappeared.

Another time, farther north, a band of caribou with newborn calves fanned out into a clearing in front of the camera. I noticed one skittish cow in the

lead moving forward, cautiously stopping and starting and looking from side to side. Somehow I had failed to see a lone wolf that had been stalking the animals from a sparse line of willow shrubs paralleling their route. The wolf raced into the open and within seconds careened into the frightened herd, seizing a fleeing calf. It all took less than a minute.

As you pass through Denali, remember that casually looking around for wolves is not enough. Concentrate intensely. Look hard out at the same piece of land for a time. Then look again. There's a wolf out there somewhere. Sooner or later you will see it.

*Joel Bennett is Defenders' Alaskan representative and an accomplished wildlife filmmaker and photographer.*

# Alaska's Wolves: Something to Howl About

**A**laska—it's a land where the caribou population outnumbers the people and where vast stretches of wilderness remain pristine. It's also the only state in the union where wolves still thrive and don't need protection under the Endangered Species Act.

Estimated at some 7,500 to 10,000 animals and covering more than 85 percent of the state, Alaska's wolf population is distributed among several hundred packs. Wolf numbers vary geographically, generally in accor-



dance with the abundance of their ungulate prey. While wolves still face many human pressures, they have a reputation for adaptability and survival—if ample food and suitable wild habitat are available.

## PACKING IT IN

In Denali National Park, the wolf population fluctuates from year to year but averages about 100 wolves in 12 to 23 packs, or family groups. Packs, which are usually named for a river, moun-

tain or some other prominent geographic feature within their territory, vary in size from two to nearly 30 members in Denali.

Each pack defends a territory that can cover from 200 to 800 square miles. Wolf packs are found throughout the park, but most occupy the northern two-thirds where broad glacial river valleys provide plenty of food for moose and other prey. Some packs, such as the ones found on the Herron River or in the northern Kantishna Hills, are rarely encountered by visitors. Others, such as the Mount Margaret and East Fork packs near the park's eastern end, are seen frequently. Some Denali wolves also travel outside park borders.

Wolf packs are well-organized families. Typically there is only one breeding pair called the alpha male and female. Their pups are born in spring and are cared for by all family members until they become independent in the fall.

Packs are forever changing. Juvenile wolves typically leave the group to form new packs or to join other packs, and roughly 30 percent of wolves under the age of three disperse into territories outside the park each year. Entire packs may die out, but their territories are reoccupied by new packs formed by dispersers or neighboring packs.

Wolves communicate closely, using body language, scent marking and howling. In packs, they work as a team to hunt and defend their territories against threats from other wolves.

## IN PURSUIT OF PREY

Almost any animal is fair game, but moose, caribou and Dall sheep are the mainstays of the wolf's diet in interior Alaska. Of the smaller mammals available, beavers, hares, marmots and ground squirrels are often eaten by wolves. Wolves follow the daily and seasonal movements of the large prey animals, sometimes traveling more than 100 miles a day.

Moose are by far the largest prey animals pursued by wolves in Denali. At present, they are moderately plentiful, numbering more than 2,000.

Weighing in at 1,000 pounds or more, an adult moose is difficult to kill and can require several days of pursuit, but it will feed an average size wolf pack for many days. To have such a feast, wolves risk injury and use all the resources of the pack to make the kill.

With an average weight of 275 pounds, caribou are the second most preferred prey species for Denali's wolves. The Denali caribou herd, which has fluctuated from 1,000 to more than 3,000 animals during the past 25 years, currently numbers about 1,750. In summer, caribou are scattered throughout the alpine tundra in the Alaska Range and its foothills. In the winter, they are found in the lower elevation tussock tundra and spruce woodlands across the northern reaches of the park. The herd moves through the central and western sectors of the park seasonally, feeding on lichens and



other vegetation. Wolves pursue newborns on the caribou calving grounds and look for older bulls worn down by fights during the fall mating season. In the winter, if more caribou than needed are killed, wolves return repeatedly to feed on the frozen carcasses.

The wolf's third mainstay, Dall sheep, are mountain animals that are especially vulnerable if caught off their terrain. They are smaller than caribou and moose — usually less than 140 pounds — but with about 2,000 sheep in the park, they are a regular food source for the packs that cover their range.

As wolves and their prey interact, other carnivores come into play. The wolf's foremost adversary is the grizzly bear, which competes for food as both a hunter and scavenger. Conflicts over moose are most frequent, but bears are wide-ranging and encounter wolves near dens and around other kills. The carcasses of animals killed by wolves also provide meat for scavengers such as foxes, coyotes, wolverines, martens and ravens.

## THE BENEFITS OF WOLVES

Wolves are an essential component of healthy ecosystems. Without wolves and other top predators and the complex predator-prey relationships that have evolved over thousands of years, biodiversity would be lost.

Although wolves do take healthy prey, they tend to kill the most vulnerable animals — the young, the old, the injured or the sick.

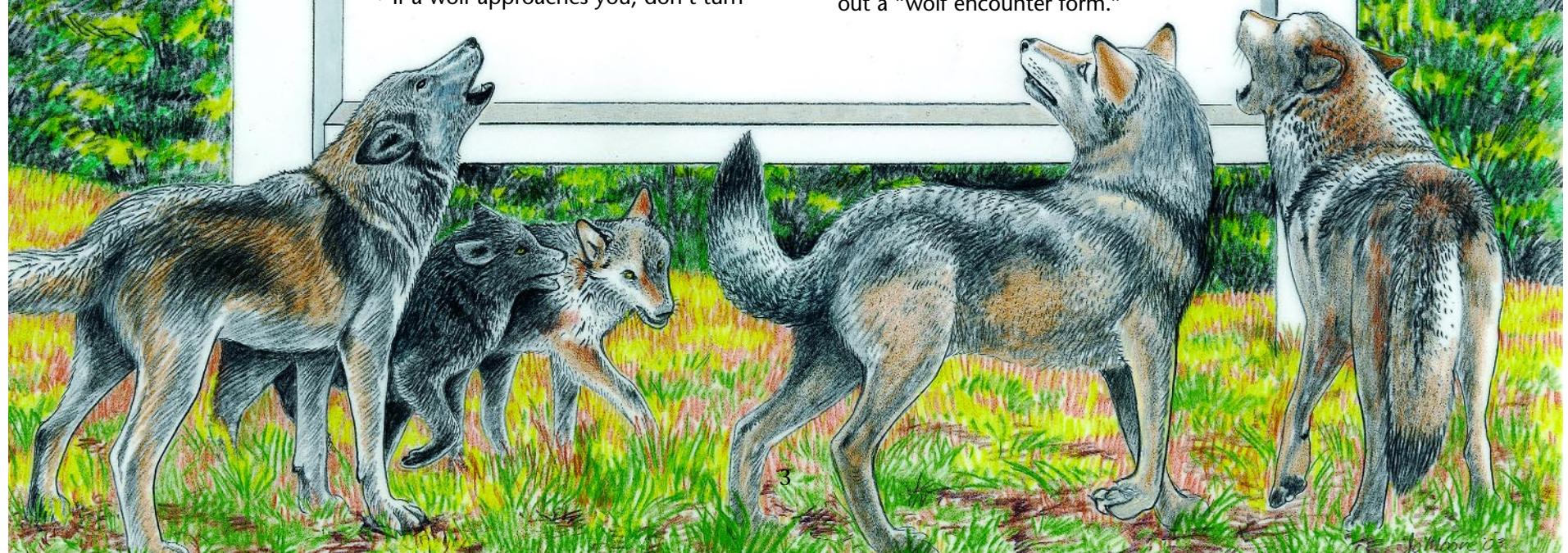
The removal of these weaker individuals may decrease the competition for food among the healthier prey animals that remain. The same principle applies to wolves: Wolves that are sick, injured, weak or slow to master hunting skills either die or disperse. Over many generations, this helps prey and predator alike become better adapted for survival.

## Close Encounters of the Wolf Kind

Keep Denali's legendary wolf packs wild!  
Follow these rules.

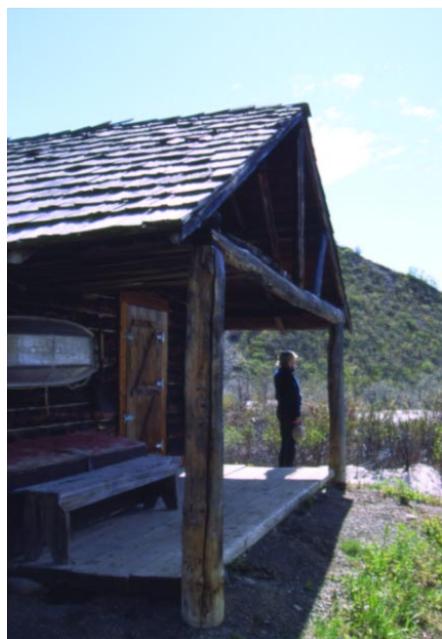
### WOLF WATCHING RULES

- Please don't feed the wolves! Don't use food or other enticements to encourage wolves to stay near a campground or viewing area for photos or other reasons. Feeding wild animals makes them dependent on humans and can lead to fearless behavior. It is also against the law and punishable by a \$150 fine.
- When traveling the park road on the bus or in your vehicle, stay inside and keep quiet. Don't hang out of the windows or throw food or objects out of them
- If you are traveling on foot or by bike, don't approach any wolf or allow it to approach you within a quarter mile. Getting too close to wolves can lessen their natural wariness of humans and reinforce fearless behavior.
- If a wolf approaches you, don't turn your back on it or run away. Back away slowly. Wave your arms, stomp your feet and yell, bang pots and pans or make other loud noises.
- If you are camping, maintain a clean campsite and don't allow wolves to approach. Don't leave food, trash or personal belongings unattended. Wolves are naturally curious and attracted to human odors and objects; don't entice them and get them used to the presence of humans.
- Don't leave pets unattended. Walk dogs only on the park road or within campgrounds or parking areas and dispose of their waste properly.
- Report any encounters with wolves to the nearest park ranger, or go to one of the two park visitor centers and fill out a "wolf encounter form."



## The “First Family” of American Wolves

If you take the bus into Denali National Park, the driver will likely point out a small cabin overlooking the braided waters of the East Fork River. This is the cabin used by biologist Adolph Murie, who was commissioned by the National Park Service in the late 1930s to study the impact of wolves on the park’s Dall sheep.



ADOLPH MURIE'S CABIN BY JOEL BENNETT

Armed with pencil, notebook and compass, Murie closely observed wolves in the East Fork area of the park and produced *The Wolves of Mount McKinley*, the first published study of wolves in the wild. In this landmark work,

Murie noted that wolf packs are basically families and that for every successful attempt at taking prey, wolves make many unsuccessful ones. He concluded that the East Fork wolves usually preyed on the most vulnerable Dall sheep: lambs and old or debilitated adults.

Remarkably, Murie presented his findings in a way that appealed to scientists and laymen alike. According to Alaska historian Timothy Rawson, with the publication of Murie's study in 1944, Denali's East Fork wolves and their offspring “became the ‘First Family’ of American wolves, delighting many thousands of readers and visitors.”

Research on Denali's wolves continues. Throughout the park, aircraft, radio telemetry, molecular genetics and biochemistry are being used to gather data to further our understanding of the ecology of gray wolves and their prey in the Denali ecosystem.

Look for Murie's classic study and other books about Denali's wolves, such as *The Wolves of Denali* by L. David Mech and “*Changing Tracks*” by Timothy Rawson, at the Denali visitor center bookstore.

## Fast Facts About Wolves

**Appearance:** Denali's wolves belong to the species known as gray wolves (*Canis lupus*), although they can be gray, tan, brown, black or white. Their eyes are yellow or greenish-brown. Adult wolves stand 26 to 32 inches at the shoulder. The average weight is 87 pounds for an adult female, 100 pounds for an adult male.

**Food:** Wolves are carnivores. They eat mainly meat. Their prey consists of caribou, moose, Dall sheep and sometimes beaver, snowshoe hare and ground squirrels.

**Social Structure:** Wolves are social creatures. In Denali, packs or family groups have ranged from two to 29 wolves, but usually are made up of five to eight animals. A typical pack includes a breeding pair of adults, three or four pups born in mid-May and possibly a couple of older offspring. Adult pack members work together to hunt and care for the young.

**Communication:** Wolves communicate through facial expressions and body postures, scent markings and a wide range of vocalizations including barks, whimpers, growls and howls.

**Lifespan and Mortality:** Wolves in Denali may live as long as 12 years, but less than half make it to their third birthdays. Most wolf deaths in the park result from confrontations with neighboring packs. Wolves also die from starvation, disease, accidents, injury and old age. Subsistence hunting and trapping are allowed in some areas of Denali National Park and Preserve. General trapping and sport hunting are allowed on the state lands bordering Denali with the exception of a 125-square-mile buffer zone outside the eastern end of the park that helps protect the East Fork and Mount Margaret packs when they leave the park to hunt.

To find out more about wolves,  
check out the following Web sites:  
[www.nps.gov/dena](http://www.nps.gov/dena) | [www.defenders.org](http://www.defenders.org)

## The Big, Bad Wolf: Fact vs. Fiction

Remember the fairy tale of Little Red Riding Hood and how the wolf ate her grandmother? Here's the true story: There's no such thing as the big bad wolf. Wolves are not naturally aggressive or dangerous to people. In fact, in North America there have been only 18 reported wolf attacks since 1969 and no documented fatalities. Domestic dogs, on the other hand, are responsible for more than 4.7 million bites and a dozen fatalities a year.

Wolves are wild animals and behave quite differently than their domesticated relatives. For example, unlike Spot and Rover, wolves usually do not show aggression by growling, barking or raising their hackles.

Wolves are naturally curious but wary animals and typically stay away from areas of human activity. In recent years, however, several wolves in Denali have displayed increasingly bold and sometimes fearless behavior. “Fearless” describes wolves that

have become comfortable enough with human presence and activity in the park to approach or follow people, take shoes and backpacks and sniff around tents.

Fearless behavior develops when wolves frequently encounter people and are encouraged to approach or rewarded with food. This behavior can lead to serious problems, so please follow the “Wolf Watching Rules” listed on page 3 and help keep Denali's wolves wild.