The wolf (*Canis lupus*) occurs throughout mainland Alaska, on Unimak Island in the Aleutians, and on all of the major islands in Southeast except Admiralty, Baranof, and Chichagof. This range includes about 85 percent of Alaska's 586,000 square-mile area. Wolves are adaptable and exist in a wide variety of habitats extending from the rain forests of the Southeast Panhandle to the arctic tundra along the Beaufort Sea. Presently wolves are common over much of the state with the highest densities in Southeast Alaska, where Sitka black-tailed deer are the major source of food for wolves. Densities are lowest in the coastal portions of western and northern Alaska, especially after periodic rabies epidemics. Rabies has not occurred in Interior or Southeast Alaska in recent times. Although the distribution of wolves has remained relatively constant in recent times, their abundance has varied considerably as prey availability, diseases, and harvests have influenced their numbers.

**General description:** Wolves are members of the family Canidae. Early taxonomists recognized about 24 New World and eight Old World subspecies of *Canis lupus*, with four subspecies thought to occur in Alaska. Recent studies of skull characteristics, body size, and color suggest that differences are slight with considerable overlap in the characteristics of wolves from various areas. Only two Alaska subspecies are now recognized. Wolves in Southeast Alaska tend to be darker and somewhat smaller than those in northern parts of the state. The pelt color of wolves living in Alaska ranges from black to nearly white, with every shade of gray and tan between these extremes. Gray or black wolves are most common, and the relative abundance of each color phase varies over time and from place to place. Most adult male wolves in Interior Alaska weigh from 85 to 115 pounds (38.6-52.3 kg), but they occasionally reach 145 pounds (65.3 kg). Females average 10 to 15 pounds (2.5 kg) lighter than males and rarely weigh more than 110 pounds (50 kg). Wolves reach adult size by about 1 year of age.

**Social habits:** Wolves are highly social animals and usually live in packs that include parents and pups of the year. Larger packs may have two or three litters of pups from more than one female. Pack members often include some yearlings and other adults. The social order in the pack is characterized by a separate dominance hierarchy among females and males. Fighting is uncommon within packs except during periods of stress, with the dominance order being maintained largely through ritualized behavior. Although pack size usually ranges from 2 to 12 animals, packs of as many as 20 to 30 wolves sometimes occur. The average pack size is 6 or 7 animals. In most areas wolf packs tend to remain within a territory used almost exclusively by pack members, with only occasional overlap in the ranges of neighboring packs. Wolves that are primarily dependent on migratory caribou do, however, temporarily abandon their territories and travel long distances if necessary. In Alaska the territory of a pack often includes from 200 to 1,000 square miles of habitat with the average in Interior Alaska being about 500 to 600 square miles.

**Life history:** Wolves normally breed in February and March, and litters averaging about five pups are born in May or early June. Litters may include from 2 to 10 pups, but most often 4 to 7 pups are born. Most female wolves first breed when 22 months old but usually produce fewer pups than older females. Pups are usually born in a den excavated as much as 10 feet into well-drained soil, and most adult wolves center their May and June activities around dens while traveling as far as 20 miles away in search of food, which is regularly brought back to the den. Wolf pups are weaned gradually during midsummer. In mid- or late summer, pups are usually moved some distance away from the den and by early winter are capable of traveling and hunting with adult pack members. Wolves are great travelers, and packs often travel 10 to 30 or more miles in a day during winter. Many young adults disperse each year, and have been known to move from 20 to 700 miles from their original range. These are usually yearling wolves, and numerous long distance movements have been documented in Alaska and Canada. In spite of a generally high birth rate, wolves rarely become abundant because mortality is high. In much of Alaska, predation by other wolves and hunting and trapping are the major sources of mortality, although diseases, malnutrition, and accidents also act to regulate wolf numbers. Predation by other wolves is a major cause of death because wolves defend their territories from other wolves. Dispensing wolves are common and often find it hard to find suitable habitat that is not already occupied by other wolves.

**Food habits:** Wolves are carnivores, and in most of mainland Alaska moose and/or caribou are their primary food, with Dall sheep being important in limited areas. In Southeast Alaska, Sitka black-tailed deer, mountain goats, and beaver are the most important sources of food. During summer, small mammals including voles, lemmings, ground squirrels, snowshoe hares, beaver, and occasionally birds and fish are supplements in the diet. The rate at which wolves kill large mammals varies with prey availability and environmental conditions. A pack may kill a deer or moose every few days during the winter. At other times, they may go for several days with almost no food. Since wolves are opportunistic, young, old, or debilitated animals are preyed upon more heavily than healthy middle-age animals. Under some circumstances, however, such as when snow is unusually deep or prey is scarce, even animals in their prime may be vulnerable to wolves.

**Management:** The food habits of the wolf often bring it into conflict with humans who in many parts of the world are also hunters of big game animals. Although the wolf has coexisted with big game animals for thousands of years, under some conditions the impact of predation contributes to local scarcities of game which arouse some people's concern. In most non-coastal systems with moose and caribou, wolves and bears together maintain game populations below levels at which their food supply would be damaged.

Various studies of wolf ecology have shown that the balance between wolf and prey populations can be disrupted. For example, severe winters in combination with wolf and bear predation can drastically reduce a big game population. Because many of Alaska's big game populations and their habitats are less productive than those in lower latitudes and because predators such as wolves and bears are common here, human hunters have to limit their harvest in many areas. In some areas wolves numbers may need to be controlled in order to avoid relatively long periods of prey scarcity which could result in little or no harvest for people and also low numbers of wolves and other furbearers.

Wolves are often seen and heard in most parts of Alaska by those willing to spend time in remote areas. The long term future of the wolf in Alaska is secure, and Alaska will probably continue to deal with the challenges related to the effects of wolf predation on big game populations for a long time.