

MOUNTAIN GOAT (*Oreamnos americanus*)



By Errin Armstrong

The mountain goat is a hoofed, even-toed mammal of the order Artiodactyla, which includes species such as cattle, deer, antelope, camels, sheep, giraffes, and hippopotamuses. While not a true goat, it is goat-like in appearance and it is the only North American representative of a tribe whose ancestry can be traced to old world European sheep and goats. It is a prevalent species in British Columbia and can often be seen along roadsides within the Rocky Mountains.

Characteristics

The mountain goat is a striking and unique-looking animal. It has a pure white coat ending in long hairs on the legs, which gives it the appearance of wearing shaggy pants. A crest of long hair runs from the neck and shoulders along the spine to the rump and ends in a short tail. The mountain goat's coat is made up of a dense undercoat which is about 5cm (2 inches) in length and coarse outer hairs which are about 20cm (8 inches) long. This coat thickens in the winter to protect it from the cold and the whitish colour acts as camouflage in the high-elevation, often snow-covered terrain it inhabits. The mountain goat lives in regions that are wintry for up to nine months of the year. Its chin is bearded and both sexes have a large but narrow head topped with slender, black horns that curve slightly backward. These horns can grow anywhere from 15 to 30cm (6 to 12 inches) in length and are very sharp (mountain goats are known to inflict serious damage upon one another in rare, but vicious fights). The mountain goat has a large, humped shoulder and strong forelegs, these along with their cushioned, rubbery hooves for traction, allow it to jump quickly and climb and cling to steep, rocky terrain. The sexes are very similar in appearance, the most noticeable difference being the considerably larger size of males. The male mountain goat stands about 1 to 1.2 metres (3 to 4 feet) high and can weigh up to 130 kg (300 pounds). Females generally do not exceed 1 metre (3 feet) in height and weigh an average of 15 percent less than their male counterparts.

Its tracks are similar to those of the bighorn sheep and show spread toes in a squarish shape with a “V” in the front. The mountain goat is known for dragging its feet between steps, creating a furrow between its tracks that is most evident in the snow.

Taxonomy

Kingdom: Animalia
Phylum: Chordata
Subphylum: Vertebrata
Class: Mammalia
Order: Artiodactyla
Suborder: Ruminantia
Family: Bovidae

Life Cycle

Mating season for mountain goats, called the rut, occurs annually between November and early January. Their social order is matriarchal in nature and male goats, or billies, are only dominant during peak mating season. Some fighting over females, or nannies, occurs during the rut and males often show evidence of puncture wounds from these battles. The hide of the male goat actually thickens on the haunches at this time of year to protect it from rival attacks.

Young mountain goats are born in May or June after a gestation period of approximately six months. Nannies usually give birth to one baby, or kid, although twins are occasionally known to occur. Kids are carefully guarded by their mothers and although these nannies isolate themselves prior to giving birth, they congregate with other mothers and newborns to form nursery herds in the late spring. The presence of adults with kids is a sure way to distinguish between billy and nanny goats. Newborn mountain goats are able to keep up with their mothers within hours of birth, but are very small and vulnerable to predators. Kids generally stay with their mothers until the next breeding season.

The mountain goat can live up to 14 or 15 years in the wild, but most do not live more than 12 years. They will often die when their teeth are worn down to the gum line – thereby impeding their ability to chew and digest food. In captivity, have been known to live for 16 to 20 years.

Habitat

As the name mountain goat implies, these animals live on steep, rocky slopes in mountainous alpine and sub-alpine regions. Due to the high elevation, these areas are snow-covered for most of the year – and yet the mountain goat is perfectly adapted to both the inhospitable climate and the terrain. The mountain goat’s preference for this difficult terrain may have begun as a means of avoiding predators. Now the mountain goat has physically adapted to climbing along steep cliffs and rocky ledges and its thick coat enables it to withstand the cold weather.

The mountain goat’s territory extends along the high mountain ranges of north-western North America from the Pacific coast to the Rocky Mountains – from south-central

Alaska and the Yukon Territory through British Columbia and the Alberta Rockies and down into the States of Washington and Idaho. Mountain goats live in small herds scattered throughout these areas and can be found from near sea level to over 3,000 metres (10,000 feet) above sea level.

Like other ruminants, the mountain goat has a highly-developed digestive system with a multi-chambered stomach that allows it to digest the stunted vegetation available to it above the timberline. It feeds on sedges, grasses, flowers, herbs, mosses and almost any low-growing tree or shrub. As winter approaches and food becomes scarce, its feeding habits shift from grazing to browsing and it will eat whatever plant matter is available. It spends its summer grazing in high alpine meadows and migrates down toward the tree line in search of food in winter. The mountain goat will also chew cud, which is to regurgitate, re-chew and re-ingest partially-digested food in order to extract from it as many nutrients as possible.

Along with its complex digestive system, the mountain goat has also adapted to its cold, mountainous habitat by developing a thick white coat to keep it warm and to act as camouflage in the snow. Every spring the mountain goat sheds this coat, leaving tufts of hair strewn along the cliffs and rocky ledges it inhabits. By July, most have completely shed their old coat and have grown a new one in preparation for winter.

Behaviour

The mountain goat social order is matriarchal in nature and adult females with kids are dominant. The only exception to this rule is a brief period of male dominance during mating season, or rut, after which the males leave the female ranges, either voluntarily or by eviction. Mountain goat relations are generally friendly, although in difficult winters dominant females may evict other goats from select habitat. Nannies are also fiercely protective of their young, which are vulnerable to predators. Nannies, kids and immature mountain goats generally form small herds and will often combine these to form larger nursery groups in the early to mid-summer. Billies may form small groups of their own and do not associate with nannies except during mating. They often travel considerable distances in search of females during the rut.

Male and female mountain goats are relatively docile animals and move at a deliberate pace even when alarmed – perhaps because careful footing is so important in their steep and rocky terrain. With the exception of mating season, female goats are known to be more aggressive than males and will typically win territorial fights over choice bedding spots, salt licks and food resources. Mountain goats will defend their territory fiercely from smaller goats, but most confrontations between goats are mainly a show of dominance and strength through posturing and displaying of horns and do not involve actual fighting. A submissive pose is adopted if a mountain goat prefers to avoid a confrontation, which can result in injury and occasionally in death. Displays of dominance are also often effective against bighorn sheep which share the mountainous habitats with mountain goats. These displays can even scare away predators.

Threats

Mountain goats are not currently endangered, although their slow reproductive rate leaves them vulnerable in comparison with other similar species. British Columbia has the largest mountain goat population in the world with approximately 100,000 animals.

Natural predators of mountain goats include lynx, cougars, wolverines, wolves, bears and golden eagles – which are known to snatch small kids above the tree line where other predators have difficulty hunting them due to the steep, rocky terrain. Accidents are the greatest cause of injury and death among mountain goat populations, and are the natural result of navigating the steep cliffs and rocky ledges that form their habitat. Goats are often found with missing teeth and healed wounds consistent with falls. Lack of food during the winter months can also result in significant mortality rates as persistent hunger leaves goats susceptible to disease and parasites and increases their vulnerability to predators and accidents.

Mountain goat hunting is on the rise, and since males and females look so similar it is not uncommon for females to be mistakenly shot by hunters – leaving behind orphaned kids. Human activities such as mine development and road construction also have an effect on mountain goat populations and contribute to long-term loss of crucial habitat.

Efforts to preserve mountain goat populations include relocating goats to protected parkland and developing permit systems to prevent over hunting. Much can still be done to prevent human encroachment on the mountain goat's habitat – a factor that is increasingly impacting this unique and beautiful animal.

What We Can Do To Help

The mountain goat is one of British Columbia's most visible species and has found its way into the camera lens of many a Rocky Mountain traveller stopped along the side of one of our province's high mountain passes. Its natural docility allows for easy observance by interested onlookers, although it can unfortunately also leave the species vulnerable to hunters. The mountain goat is a resilient creature, however, and is one of very few species able to thrive in the inhospitable and difficult terrain of the northwest's alpine and sub-alpine regions.

When you stop along the side of a road to take pictures of these wild animals remember not to feed them. A wild animal can become dependent on humans for food and will become violent and potentially attack humans when this food is not available. Also remember not to litter along the side of the road, as animals will try to eat litter left by humans resulting in possible vehicle strikes.

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