

## BRITISH COLUMBIA MOUNTAIN GOAT SOCIETY

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Mountain Goats On the Move

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When most people think of mountain goats, they think of high rocky cliffs in the open alpine. But there are times when mountain goats travel down into the timber all the way to the bottom of the valley. One time is on the way to eat soil at a mineral lick located low in the forest. The other time is to move to a different mountain, a process known as dispersal.

Anytime mountain goats venture into a forest, they are at risk. Their legs are short compared to the long legs of a deer or moose or any other ungulate swift enough to outrun a predator. Short legs are excellent for balance and a low centre of gravity but they make a mountain goat slow. A bear or wolf can run at twice the speed of a mountain goat. But slow is fine in the alpine. A mountain goat simply scrambles to a nearby cliff so steep that a predator cannot follow. In most forests, there is no safe cliff nearby and a mountain goat is easily ambushed or chased until caught.

Most mountain goats live their entire lives on their home mountain. But each year a small number of goats leave their home and travel to another mountain nearby. A dispersal can be a few kilometers or as many as 30 km. The dispersal can be for a day, a month, a year or for life. A dispersing goat may return to their home mountain or may continue to disperse again to another new mountain. The record for dispersal distance is 300 km and 100 km is not unusual. It's not clear why mountain goats disperse, but most goats that disperse are two to three years of age, the "teenagers" of the mountain goat world.

The majority of dispersing mountain goats are young males which may explain why so many young males simply disappear from the record. You can imagine the hazards. Not only does a dispersing goat have to avoid predators, they have to swim swift rivers or wide lakes where drowning is a risk. And they have to reach a new mountain before snowfall in the fall. Otherwise they may flounder in soft powder snow, due again to their short legs.

Dispersing is high risk but necessary, even vital. Most mountain goat herds are isolated from other herds. Isolation over a long time can result in inbreeding and a lack of genetic diversity that can weaken

the herd and trigger a local extinction. Dispersal helps that. A new goat that arrives from another mountain can contribute their genes to the mix and "save" a herd suffering from inbreeding.

Dispersal makes it possible for mountain goats to inhabit mountains that have good habitat but no existing herd. During the last ice age 14,000 years ago, most of BC was covered with glaciers up to 1500 meters thick. Research shows that mountain goats at that time lived in an ice-free corridor in the Yukon to the north of BC and in the United States to the south. As the ice melted, the mountain goats dispersed into BC from the north and south from one mountain to the next until today, when most mountain goat habitat is occupied.

Today, if a herd of mountain goats suffers a catastrophic loss or extinction, other dispersing goats may take over that mountain and save the day. So it is important that mountain goats are able to easily disperse across valleys, even those valleys filled with farms, roads and people. Barbed wire fences must be built so that goats can pass through without injury. Multi-lane highways may need overpasses or underpasses to allow mountain goats to cross without being hit by vehicles, especially in dispersal corridors where goats frequently move In a predictable path from one mountain to another.

Our BC Mountain Goat Society recently surveyed local residents in the Bulkley River valley to record sightings of dispersing mountain goats. In two weeks, we received 23 reports that stretched back over the last ten years. Thankfully we did not receive any reports of injury or death of dispersing goats but the numbers suggest that people witness only a small portion of the total number of dispersing goats.

On one occasion, a local trapper tracked three mountain goats that walked down residential streets through the heart of the town of Smithers to reach a rocky bluff near the train station. What an adventure for that trio of mountain goats.

Prepared by staff

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