Newsletter #42

September 23, 2025

Greetings

New Videos

We have added two videos to our YouTube channel at https://www.youtube.com/@oreamnos2012 The first is titled **So Many Predators**. We list the predators that threaten mountain goats from the smallest to the most dangerous. The second video is **Escarpment Goats.** Many local residents live or work close to escarpment goats but never notice. The herd of mountain goats on each escarpment is small in numbers but when you add up all the escarpment populations, these mid-elevation goats are of major importance. The following text version adds various details that are missing in the video.

Escarpment mountain goats

Some of our local mountain goats live in alpine areas. Others live in low-elevation creek or river canyons. Still others live on escarpments. Escarpments are cliffs that separate two level land surfaces. Our local escarpments have forests top and bottom.

FIGURE 1 ESCARPMENT

The advantages to living on an escarpment include an abundance of forage and browse in the neighbouring forest as well as shelter from wind and snow. Winter temperatures at mid-elevation escarpments can often be warmer than in nearby alpine areas. Mountain goats can escape from predators by climbing down the escarpment cliff from the top, or up the escarpment from the bottom.

The disadvantages of goat habitat on an escarpment may include exposure to a greater number of predators that reside in the local forest. Escarpments are often small – less than 5 hectares. Mountain goats make up for the small area and limited resources of any one escarpment by travelling on forest trails along a string of escarpments. There is no separate winter pasture. The herd stays on one escarpment or chain of escarpments all year round. The forest trails connecting escarpments can be less than a kilometer in length or more than 20 kilometers. The longer the trail, the greater the chance of being ambushed by a predator. On the other hand, random travel along a series of escarpments may serve to avoid or confuse predators.

Access to forage and browse in the forest surrounding an escarpment is limited to approximately 100 meters from the cliff face. Beyond that limit, goats may not have time to run to the nearby cliff to escape a predator.

Escarpments are lower elevation than alpine and often subject to human disturbance such as logging, farming and roads. If logging starts in one location, the goats simply move along forest paths to safety and quiet. When the logging ceases, the goats move back.

During the rut, mature male mountain goats may search for a mate by travelling forest trails from one nanny herd to the next along a series of escarpments, thereby increasing genetic diversity.

In winter, some alpine mountain goats move down from the alpine and on to escarpments in the trees to escape the wind and deep snow in the alpine. An entire herd can become “invisible” to human observers on an escarpment. The herd can be hidden from helicopters by trees. Backcountry skiers don’t normally see the goats – they don’t usually travel near escarpments in winter.

In our region, there is a substantial population of escarpment goats and none are subject to hunting due to the small populations, with the exception of the First Nations harvest.

Escarpment goats may prove to be an important source of both genetic diversity and population if alpine mountain goat populations decline. Escarpment goats demonstrate that mountain goats are not alpine residents by necessity. Instead we should define mountain goats as cliff dwellers, no matter the elevation.

The re-population of British Columbia by mountain goats over the last 18,000 years, after the Fraser Glaciation, involved dispersing across large low-elevation forest over hundreds of kilometers. No doubt, chains of escarpments were a factor in that dispersal.

Laurence Turney's research on canyon and escarpment goats is field biology at it's best. See his classic study at [Habitat use by mountain goats near Nadina Mountain]

Mountain goat years

The lifespan of mountain goats is somewhere around 12 calendar years. Typical lifespan for humans varies from 70 to 80 years depending on the country, or about 6 times that of a mountain goat. That means that a mountain goat grows through life phases 6 times as fast as a human. Weaning, maturation, senescence – it all happens at a faster pace.

When does a mountain goat attain sexual maturity? How about primiparity? 3 calendar years? 4 calendar years? Or some fraction of a year in between? It gets very confusing to define life stages for mountain goats in calendar years. We need a finer scale to appreciate the fast pace of a mountain goat's life.

An accurate age scale would be two calendar months for each mountain goat year (MGY) or six times the rate of growth of a human. Using that standard, a kid weans at 4 or 5 MGY, becomes a yearling and independent of it's nanny at 6 MGY or one calendar year. A yearling starts at 6 MGY and ends at 12 MGY or two calendar years. Primiparity for a female may occur at either 18 MGY or 24 MGY (3 or 4 human years) but sexual maturity first shows near the rut in November, a fraction of a calendar year.

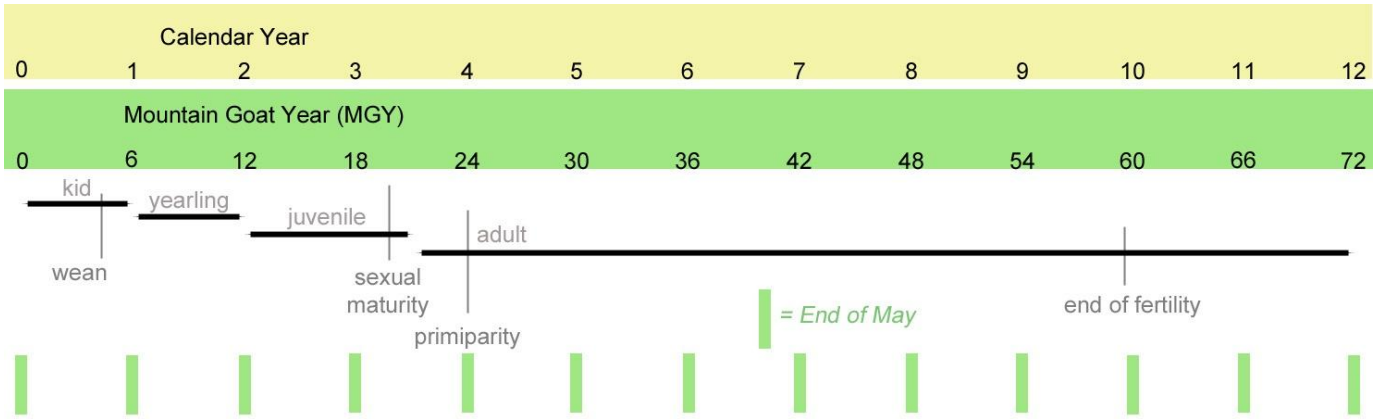

FIGURE 2 MOUNTAIN GOAT YEAR COMPARED TO CALENDAR YEAR – WITH EXAMPLES OF LIFE STAGES

The fine scale of the Mountain Goat Year expands our ability to accurately define life stages and demographic data. The life stages in the scale above are up for debate and research. Are we talking the average life stage or extreme examples? Lifespan of mountain goats in captivity may exceed 17 calendar years but here we are talking wild populations with all the random natural hazards. The principle of a modified age scale

could be applied to other short-lived species. That would make it easier to compare life stages from species to species.

FIGURE 3 BILLY WATCHING AN SMALL FIXED-WING AIRCRAFT FLY BY - NO PANIC

Until the next time,

Jim Easterday / Co-founder and director

BC Mountain Goat Society

Smithers BC

250-847-4802

mtgoats@bcnorth.ca www.mtgoats.ca www.bcmountaingoatsociety.ca