

O'Hara 2011

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Mustelids – The Seldom Seen Hunters of the O'Hara High Country

The growling was loud, aggressive, abrupt and fearsome, and was emanating from the thick undergrowth ahead of us, and fast approaching! I had no time to react, but a surge of adrenalin coursed through my body, setting every nerve on edge for whatever I might have to do. A grizzly?

Suddenly, like two woolly cartoon characters having a brawl, two wolverines appeared only 15 meters ahead on the same faint deer trail we were on, coming directly towards us! They were obviously having a serious disagreement, and the world around them was irrelevant! Irrelevant that is, until a split second later when they noticed us. I carry my binoculars on my belt in a handy pouch, and by the time they stopped in their tracks, I had a clear bead on the two individuals of a species rarely observed in the wild. They filled my eight-power binocular view and I could see the twinkle in their eyes! What did they do? They froze on the trail, stared us down for a solid 5 seconds, and then beat a hasty retreat. The entire event was over within 30 seconds, but it was a powerful moment for the four of us who witnessed this tiny glimpse into the lives of a little-understood carnivore.

We had been hiking up a ridge in the Moraine Lake area, in search of the perfect fall larch colour that a late September hike promises. The wolverines we met belong to a group of carnivores called *Mustelids*, a group with which I have long been fascinated. Talking with a biologist later, we thought perhaps this pair was an adult chasing off its offspring, kicking the kid out of the nest so to speak, encouraging it to depart and set up a territory elsewhere.

It's surprise encounters like this that help fill the gaps in our scant understanding of these amazing carnivores. And for me, it's an intense personal joy to be privileged enough to happen upon a sighting like this. I have been lucky, having seen wolverines half a dozen times in various Rocky Mountain locations. A few years ago, for example, just on the other side of Abbott Pass during an avalanche course I was taking, I watched a wolverine traverse a high couloir, climbing effortlessly with dogged determination in the steep snow, eventually disappearing over the top on an unknown mission.



Wolverine tracks in fresh September snow, right beside our tent. Photo by Brian Keating

These are the high elevation access points for these amazing hunters, as they move from one area of search to the next. I have seen their tracks on glacier passes too, moving between watersheds. And on another trip, my wife and I followed 'a day in the life of a wolverine', as interpreted through its tracks in the snow up a steep forested valley. To ascend, we used climbing skins on our skis to follow the spoor on a journey to a destination only the wolverine knew. The tracks were often arrow-straight, only veering from their trajectory to investigate a point of interest like a fallen log, or what must have been an interesting scent. Along the way, we encountered what we believed was a wolverine food cash of a grouse, or a very calm "kill and pluck" event with the feathers strewn about in a concentrated area.

The big carnivores like wolverine certainly get most of the press; however, a smaller Mustelid captured the attention of a film crew I was working with in the meadows above Lake O'Hara a few years ago. I was interpreting the alpine environment for an upcoming television segment and we were discussing the fuzzy seed heads of the Western anemone, the ones that look like a 'hippy on a stick'. Suddenly a Least chipmunk appeared, and began to feed on the seed heads. Catapulting up like a Kung-Fu fighter and grabbing the plant's stalk, the tiny energetic rodent pulled the entire plant to the ground and then performed a few swift nibbles to decapitate the seed head. Holding it in his dexterous paws and eating as if he was rapidly chewing a cob of corn, fuzz flew as he consumed the seeds with enthusiasm. The chipmunk did this repeatedly, until out of nowhere, a Long-tailed weasel appeared and gave chase to the little chipmunk. It was a Serengeti sighting in miniature! The chipmunk narrowly escaped. The entire scene was captured by our quick-acting camera operator.

Judging by the tracks of weasels in the snow in the O'Hara area during the winter, I am sure these predator-prey scenes play out daily. For us to observe it all, however, is simply a matter of luck, of being in the right place at the right time, and being tuned in enough to notice. Amazingly, weasels are likely the most common carnivores in the O'Hara area.

And finally, to complete my *Mustelid* sighting series, I can list a forest species that is also very common around O'Hara, the Pine martin. If their winter tracks are any indication, they must be very prolific, or at least a single individual must cover an immense amount of ground between snowfalls, leaving their typical loping *Mustelid* two-by-two tracks in the snow. These carnivores take down prey too big for the smaller weasel species, and too small for the larger wolverines to bother with, filling the midsize hunting niche nicely.

I was winter camping in Banff not far from O'Hara, at about the same elevation as the Lodge. Three of us had comfortably slept inside a quinzee (a snow igloo), that we had made the day before on our multi-day winter ski traverse. When we emerged from our dwelling early the following morning, we noticed Pine martin tracks in the freshly fallen snow. He had loped across the meadow up to our quinzee, climbed on to the very top of our snow dome, and obviously poked his head into the ventilation hole that we had punched through the roof with our ski poles. We were oblivious to his short visit. He no doubt took in the smells and sounds of our presence,

Mustelids - continued

and perhaps the odor of our chef's special the night before, or of our mulled wine. I can only imagine his beady little black eyes piercing the night and his nostrils twitching in the upwelling scents emanating through the ventilation hole. He then wisely decided to depart to continue hunting his normal prey of chipmunks, voles and other small vertebrates of the Rocky Mountains.

Another time, camping in the valley bottom of a Rocky Mountain forest, I was standing quietly brushing my teeth when a Pine martin appeared with a baby in her jaws! I watched in fascination as she moved three youngsters from one den location to another, a behaviour she performs several times during the first few months of raising her family.

All *Mustelids*, no matter what species, are top-level predators. The wolverine's presence especially signifies an intact, healthy ecosystem. Without them the balance shifts, and there is a cascading effect down the entire food chain. This relationship has been honed over hundreds of generations of survival and fitness. In the high forests and

alpine habitats around Lake O'Hara, there is a finely-tuned equilibrium of predator, prey abundance, weather, and luck.

These carnivores belong to a special club, that of the extreme all-weather survivors. They somehow manage to make a living in a land-scape of seemingly sparse food resources, and their intelligence, stamina, and ability to take down a variety of prey makes their survival possible. *Mustelid* survival is achieved under the harshest conditions imaginable: sub-zero temperatures and impossible winter conditions for as long as five months of the year.

I will never forget any of my *Mustelid* moments, a time of wildlife watching to be cherished and remembered.

Brian Keating has just retired from his role as Head of Conservation Outreach with the Calgary Zoological Society, and is now a professional speaker, TV and radio broadcaster, and trip leader, taking people to some of the best wildlife locations on the planet. His adventures can be followed on his web site at http://www.goingwild.org/

Yoho and Glacier National Parks Celebrate 125 Years

In 2011, Canadians celebrate the 125th anniversaries of Yoho and Glacier National Parks and the centennial of the world's first national parks service.

The birth of Canada's second and third national parks is inextricably linked to the completion of the Canadian Pacific Railway in 1885. Steel rails were laid across three mountain passes – Kicking Horse, Rogers and Eagle, providing access through seemingly impassable terrain and uniting the country from coast to coast.

To capitalize on the mountain scenery and avoid hauling heavy rail-way dining cars up and down the steep grades, the CPR developed Canada's first mountain luxury hotels: Mount Stephen House, at the bottom of Kicking Horse Pass, and Glacier House, near the summit of Rogers Pass. These hotels were much more than accommodation. They served as base camps for the exploration of the vast mountain land-scapes surrounding them.

CPR President William Cornelius Van Horne saw the lucrative potential of mountain tourism. In 1886, two Dominion Park Reserves, now Yoho and Glacier national parks, were created to protect the areas around the new hotels. These two new parks together with Banff, established one year earlier, became the foundation for one of Canada's most enduring legacies: the world's first national park service, which began one hundred years ago in 1911.

Inspiring Places

Yoho and Glacier national parks have inspired art, science and adventure since those early beginnings. The splendour of areas like Lake O'Hara and the Illecillewaet Glacier has been the muse of many artists including Lawren Harris and J.E.H.MacDonald of the Group of Seven.

In the early 1900's, geologists like Charles Walcott, who discovered the Burgess Shale fossils, and naturalists like Mary Vaux, who studied glaciers and botany, expanded our understanding of the natural world. This tradition is carried on by today's park scientists and has established Parks Canada as an international leader in conservation.

Adventurers have always been drawn to the parks' challenging wilderness landscape. Beginning in 1899, the railway brought Swiss mountain guides to teach hotel guests how to climb safely. One of the most impressive adventurers was Gertrude Benham who put her guides to the test. In 1904, on one bold adventure, she left Lake Louise, went over Abbott Pass to Lake O'Hara, then descended along Cataract Brook , rounded Odaray Mountain, climbed Mount Stephen and descended into the town of Field. She covered 35 kilometres, 2,800 vertical meters and a daunting route even by today's standards. Swiss guides and early mountaineers like Benham began the Canadian mountaineering tradition.

These scientists, artists and adventurers helped to establish a time honoured legacy that continues to shape the culture and communities nestled near the dramatic peaks, glaciers and rivers of Yoho and Glacier National Parks.

Now, it's your turn to be inspired. Today you can enjoy these parks much as early adventurers experienced them, because Canada's National Parks are protected for all time. Come and celebrate Yoho and Glacier national parks as we look forward to the next 125 years.

Sharon Morgan, Park Interpreter, Lake Louise, Yoho & Kootenay Field Unit, Parks Canada Agency



Alpine Club of Canada members relax on mountain, British Columbia. Glenbow Archives PD-327-101.

You can make a difference.

Be a part of O'Hara by becoming a member of Lake O'Hara Trails Club and/or making a donation.

Membership is \$25 and entitles you to receive the annual newsletter in your mailbox each year. Memberships fees and donations are fully tax-deductible.

Download a Membership/Donation form on line at www.lotc.ca or simply forward your full name, address and phone number with membership and/or donations to:

Lake O'Hara Trails Club PO Box 98, Lake Louise, AB. TOL 1E0

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2011 Trail Report



On the Huber Ledges looking towards Oesa.

Lake O'Hara Trails Club

Our Mission

The role of Lake O'Hara Trails Club is to inspire and facilitate:

- > the stewardship of the trail system and
- > the appreciation of the cultural and natural history of the Lake O'Hara area.

Our Vision.

Lake O'Hara Trails Club, as an independent and respected steward, facilitates an appreciation of the Lake O'Hara area which inspires visitors to contribute to its stewardship and sustainability and ultimately a broader commitment to natural and wild spaces everywhere.

Our motto

Preservation through Appreciation.

What did your donation fund in 2010?

LOTC once again provided a contribution to Parks Canada to fund a trail crew in the O'Hara area according to our Memorandum of Understanding. We were happy to see Matt Cadden back with new crew member, Benoit Duplantis. The crew spent 700 manhours in the area from June through late September.

 Morning Glory and Linda Lakes trails: removing rocks and root obstacles, recondition trail - 34 man-days.

- Lake Oesa Trail: rock work on lower switchbacks - 12 mandays.
- Huber Ledges: leveling, moving/removing rocks, defining trail - 12 man-days.
- 12 crew-days were spent on what was classified as routine maintenance.

In addition to this trail work, LOTC members met with the crew and their supervisor, Kim Baines in late June to assess other trail initiatives for the area.

What's on for 2011?

LOTC funding will once again help sponsor a Parks Canada trail crew to work at O'Hara. This year the crew will work on:

 Grandview - re-establish a clear route to avoid short-cutting between the cut-off at Odaray Prospect Trail and Highline traverse.

This is the seventh year that LOTC will provide funds to Parks Canada in support of a crew at O'Hara. This program is funded with donations.

Le Relais Day Shelter

Le Relais is operated on a non-profit basis by LOTC under a service contract with Parks Canada and with the assistance of Lake O'Hara Lodge. The shelter is a drop-off and pick-up point for the buses and is the O'Hara source for information on trails and trail conditions, weather, and wildlife sightings. Le Relais is also the location of the evening Speaker Series which runs from mid June to mid September.

The operation is funded through the sale of snacks, beverages, books, maps and exclusive O'Hara merchandise.

All Le Relais sales are cash or cheque.



You can help us make a difference

Pick up your copy of the one-page trail map for a donation. Map proceeds support trail work and Le Relais operations.

Become a member of LOTC. Receive a reflective bumper sticker logo and the annual newsletter by mail.

Make a tax-deductible donation in person or by mail. All funds from memberships and donations are dedicated to trail work and the Speaker Series.

Support our annual art raffle. Buy your tickets at LeRelais and Lake O'Hara Lodge.



Tommy and Lawrence Re-issued

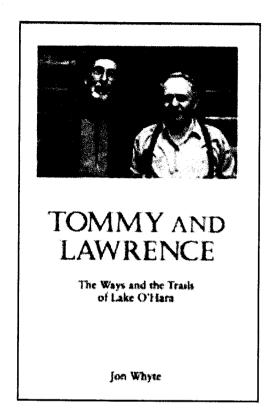
In the early 1980s, poet and historian Jon Whyte, on behalf of Lake O'Hara Trails Club, created a charming little book entitled Tommy and Lawrence, the Ways and the Trails of Lake O'Hara. The book was published in 1983. This book tells the story of George 'Tommy' Link and Lorenzo 'Lawrence' Grassi the two men who built the magnificent trail system at Lake O'Hara and made the area accessible to the public.

Long out of print, the club commissioned Chic Scott and his company. Assiniboine Publishing Limited, to create a revised edition of this book. This second edition has been extensively edited and includes many additional historic black-and-white images, a map of the area, a 16-page section of beautiful colour images of the Lake O'Hara region, an update of work done on the trail system since 1983 and a colour

A member of Lake O'Hara Trails Club board of directors, Chic Scott has completed this task gratis as his contribution to the club and to those who love Lake O'Hara.

Tommy and Lawrence, the Ways and Trails of Lake O'Hara will be available for purchase this summer at Le Relais and is widely available at book shops in the Bow Valley. Proceeds from this book will be used to further the mission of the club:

"To inspire and facilitate the stewardship of the trail system and the appreciation of the cultural and natural history of the Lake O'Hara area."



Chic Scott

Be part of it!

Your support of Lake O'Hara Trails Club will help us to fulfill our mission. Your 2011 donations will be used to fund:

- · Trail work on Grandview.
- Speaker Series.

Cost of a two-man trail crew for a ten-hour day is \$375. Cost of one evening speaker is \$150.

Every donation helps us to make a difference.

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Replies, cheque or postal money order to: Lake O'Hara Trails Club Box 98, Lake Louise, AB ToL 1Eo

The Moving Rock at Lake Hungabee

If you've hiked in Opabin, you've heard the rocks coming down from Schaffer Ridge. On the second floor of the Lake O'Hara Lodge, there is a photograph of a substantial rockfall from Schaffer, and a member of our club was fortunate enough to have narrowly missed being in its path. It's a good reason to stay well away from the foot of Schaffer Ridge's abrupt walls. But did you know that there are other rocks moving more slowly in the Opabin, and a lot less catastrophically?

Towards the end of the maintained trail system in Opabin, there is a car-sized rock that is slowly but surely making its way downslope towards Hungabee Lake. This rock is a trapezoidal block of Precambrian Gog quartzite that measures about 90 cm x 160 cm x 350 cm. Assuming a density of about 2.6 grams per cubic centimeter (typical of quartz), this rock weighs about 13,000 kilograms - as much as a city bus. It moves a tiny distance each spring. It has gouged a trench at least 22 metres long and almost a metre wide behind it and, like a small motorboat, it has a "bow wake" of soil pushed up in front of its downslope end. It is clearly moving, but not very fast. There are a few other examples, but this is the biggest this writer has seen.

How can this be? The slope on which the rock lies is a typical glacial deposit of tillite. That is to say it is a mass of silt- and clay-sized glacially-derived soil containing mixed clasts of local rock of many different sizes. On the slope above Lake Hungabee, the soil is matrix-supported; the extremely fine-grained silt and clay make up a large fraction of the hillside, and the larger rock clasts are mostly "floating" within the fine-grained matrix.

Fine grained soils, especially clay particles by virtue of their microscopic layered structure, are capable of holding a lot of water. This becomes important when we realize the temperature changes that occur through the season in the Opabin plateau. Daytime highs in summer can be up to 30 degrees Celsius; lows in the winter can be -30. Seasonally, our big rock acclimates to average ambient temperature. In winter, this is well below freezing.

Here's where the water comes in. The matrix of the hillside above Hungabee Lake is laterally quite extensive, holding a large volume of water. The silt and clay matrix allows water molecules to migrate through it, via capillary pressure. Thermal energy always flows spontaneously from regions of higher temperature to regions of lower temperature. Water molecules in the matrix have a higher latent heat than ambient air temperature will allow in the dead of winter in the Opabin, so water molecules migrate through the matrix of the tillite towards the freezing front. An analogy can help us understand how this happens: think of the ice that builds up on the windows in your home in winter when it gets really cold (Most Canadians are well familiar with this). The frost builds up on the inside of the glass as water molecules in the relatively humid inside air migrate towards the freezing front of the glass, where they become bound up in crystalline frost patterns, losing the latent heat of their gaseous state. Other water molecules move in behind them in a natural physical process, and as they get close to the glass they, too, lose their latent heat and add to the frost build-up.

This is the same process that happens in fine-grained soils, like silt and clay in tillite. The water molecules held by the clay particles migrate towards the freezing front, and an ice lens develops each winter under our 13,000-kilogram rock. The thickness of the ice lens depends on the length and severity of the sub-zero temperatures that create the freezing front. The thickness of ice build-up is not so important as what happens when the rock warms in late spring and the freezing front no longer exists. The ice lens begins to melt and the tillite beneath it becomes slippery muck. Our 13,000-kilogram rock is perched on a slope. Consequently, the rock slips downhill a tiny distance as the ice lens melts each year.

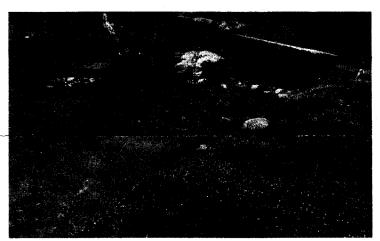
How fast is it moving? The trench behind it indicates that the rock has moved about 22 metres. If we assume that the rock was dropped by melting ice of a glacier that once filled the Opabin plateau but has since retreated, we need to know when that was. We could assess how long the area has been ice-free by measuring lichen patch diameters or counting larch tree growth-rings, but we don't have any of those



The slope above Hungabee lake. The large slab of rock near the centre of the photo, left of the trail, is migrating slowly downslope.



Looking up the slope at the rock, we can see that the rock's movement each year has pushed up a small 'bow-wake' of soil.



The trench behind the rock shows clearly, being devoid of heather, perhaps due to drainage.

data at hand for this article. Scientists tell us that, generally, the 'Little Ice Age' ended in about 1850, but local conditions can vary quite widely. We know that there has not been a major fire in the Opabin since sometime prior to about 1900, and the relict burn stumps that we see today indicate substantial trees were killed when that last big fire occurred. Given the size of the fire-kill lying about, it is hard to imagine that the hill above Lake Hungabee has been ice-free any longer than about 500 years, in which case the rock is moving two or three centimetres per year.

You can sit beneath the rock and enjoy your lunch without fear.

Stan Munn, Member, Lake O'Hara Trails Club

Skyline Hikers of the Canadian Rockies

In the 1920s, John Gibbon was head of publicity for the Canadian Pacific Railway. In order to lure tourists into their hotels and lodges throughout the National Parks, Gibbon felt it necessary to offer something other than just food and lodging. He envisioned a group dedicated to facilitating hikes into the jewels of the Canadian Rockies.

Gibbon's vision was shared by a number of outdoor enthusiasts who either lived in Banff or came to the Rockies every summer. These individuals felt the need for an organization, which would do for hikers what the Trail Riders was doing so successfully for those who traveled the trails on horseback. In 1933, Gibbon conceived the Sky Line Trail Hikers of the Canadian Rockies and the first outing was organized that year.

For the first three summers, 1933 to 1935, one four-day outing between CP lodges in the National Parks was offered at a rate of \$22.50 per day to over 50 international hikers. In 1933 the camps were staged at Lake Louise and Lake O'Hara, in 1934 at Emerald Lake and Yoho and in 1935 at Healy Creek, Egypt Lakes, Shadow Lake and Castle Mountain. But the moving of camp materials on a daily basis was problematic, so starting in 1936 a single camp was set up in one location each summer. That first fixed-site camp in 1936 was at Lake O'Hara. For the first time, hikers no longer travelled from lodge to lodge but were housed in tents, or more correctly in teepees, until 1970 when prospector-style tents similar to those used today, were adopted. Lake O'Hara was once again the first camp to use this new accommodation style. Camps were held at Lake O'Hara in 1936, 1945, 1955 and 1970. In the 70s, camp-

ing was no longer allowed outside the designated campground and the Skyline Hikers have, alas, not returned to O'Hara since that last camp in 1970.

In 1961, CPR terminated its sponsorship of the Skyline Hikers. However, through the hard work of interested and dedicated individuals, the Skyline Hikers of the Canadian Rockies became a non-profit organization and still offers camps each summer in various locations in the Rockies. Each summer, a base camp is established in a different location within the Canadian Rockies, and five 6-day camps are coordinated out of this base camp. Still run by volunteers the clubs objectives are compatible with those of LOTC. Namely:

- The encouragement of hiking in the Canadian Rockies
- The preservation of the National Parks of Canada in their natural state
- The development of an appreciation for the beauties of mountain places their flora and fauna
- Cooperation with other groups having similar aims

For 2011, Skyline Hikers will be visiting a new site adjacent to the Continental Divide near Odlum Creek in Kananaskis Country. The first camp begins on July 11th and the fifth camp runs through August 13th. Additional information is available at Skyline's website: www.skylinehikers.ca

Craig Hazle, President Skyline Hikers of the Canadian Rockies.

LOTC 2011 Art Fundraiser

The LOTC 2010 Art Raffle was very well subscribed and "Lake McArthur" by Mitchell Fenton has a new home with Bob Ferguson in Naramata Bench. We extend our thanks to those who bought tickets.

For the 2011 fundraiser we are delighted to have a donation from Georgina Hunt. Her 11" x 14" framed original is entitled "Above the Larches" and prominently features Mount Cathedral. Georgina is mainly self-taught, working primarily in oil and acrylic. Her colours are nature's colours. Georgina has paintings in private collections in the U.S., England and across Canada and her work is available in galleries in B.C. and Alberta. To learn more about this year's fundraiser stop at LeRelais. To learn more about Georgina and to see more of her work go to www.georginahunt.com

Georgina's Artist's Statement:

Art has always been a part of my life.

I grew up in the prairies with the big skies and cottage country. I now live on the west coast. But my heart is in the mountains.

It was on my trek to the west coast that I was first exposed to the mountains. This was when my artistic life made a major turn. It started my love affair with the Rockies. The sheer power and strength of these rocks enthralled me. Their beauty, their moods, their seasons, and their unpredictability all add to the attraction they have had for Canadians and artists alike. It is a force that draws me back over and over again.

Lake O'Hara is a special part of these mountains. My first visit was because of my husband's curiosity and long-time desire to visit there. Now it has become like a pilgrimage for me. I can't wait to feel the peacefulness and serenity that envelops you. I love that every time I go back I see something different. I feel privileged to be able to experience what the mountains will share with me.

I am a hiker and an artist. Hiking provides me with a never-ending supply of inspiration. The Canadian Wilderness with its majestic mountains, ancient cedars of the rainforest, delicate wildflowers, and the energy of mountain streams and crashing shorelines, create the driving force behind my art. My goal is not just to see, but hear, smell and feel that which surrounds me. The challenge in my art is to take the passion I feel for our outdoors and share it so others can pause and see all the beauty nature has to show us.





Preservation Through Appreciation

2011 Annual General Meeting

Le Relais at 8:30 PM Wednesday, July 20, 2011 All Members Welcome!