

# Skiing on the Icefields, 2011 By Ben Gadd

I was invited to present this talk in November of 2011 at the Mountain Equipment Co-op store in Edmonton, where they were hosting an even they called “Snowfest.” It was their way of welcoming winter, and, of course, selling lots of col-weather outdoor clothing and winter-sports gear to attenders. Since then I have given the talk at other venues. It has always been well received. For the record, my last update to this talk was 8 January, 2024.



Ah, Canada in winter. But there's winter, and then there's *winter*.



The background image is a wide-angle shot of a vast, flat, icy landscape, likely an icefield. The horizon is low, and the sky is filled with heavy, dark clouds. A bright, glowing light source, possibly the sun or moon, is positioned in the upper left quadrant, creating a strong lens flare and illuminating the scene. The overall color palette is dominated by deep blues and greys, with the bright light source providing a stark contrast.

# **Icefield Skiing**

## ***in the Canadian Rockies***

Winter on the icefields of the Canadian Rockies. As enjoyed on skis.





And what kind of skiing am I talking about?  
Icefield skiing has some things in common with Nordic skiing. In Canada we are way into Nordic skiing.  
Here's a photo I found on the web of a couple enjoying Nordic skiing.  
They seem more interested in each other than in where their skis are pointing. Just an observation.  
Nipping about on set tracks and groomed skate-skiing trails is all well and good. I have done it a lot.





But there are all those other people out there. Crowds of them. I can get really tired of that, and I'll bet you can, too.



For me, the solution is to get together with one or two friends and head out into untracked snow in the Rockies. No crowds up there. No noise other than the wind and the sound of our skis sliding along.







We reach places such as this, near the treeline on the way to Helen Lake in Banff National Park. That's my son Will in the photo, back when he was Willy, eight years old. He has since grown into a world-famous climber and mountain guide.



Here's my younger son Toby, showing his dad how to telemark the big slope leading down from the summit of Mount Thompson and onto of the big icefields that lies along the continental divide.





This has got to be the ultimate form of skiing. Underneath us is perhaps ten metres of snow and then the thick glacial ice of the Wapta Icefield.

I took this photo on a lovely day in March. The sun was shining, the temperature was about minus five Celsius and there was hardly any wind. We were making buttery turns in ten centimetres of fresh powder. Everything was perfect.

But at other times the weather on the icefields is more like this...



We were trying to return to our mountain hut in a whiteout. This is when the clouds are touching the snow and everything is the same shade of gray. The light is flat. There are no shadows, so you can't tell the angle of the slope. No landmarks are visible. It's weird.

But for this I had GPS. And I knew how to use it. So we got back okay.

Which points out the importance of having a good leader for your group. And you should show that person the proper respect.





I'm the guy in the blue jacket.







The largest glacier in the Rocky Mountains is the Columbia Icefield.



# Columbia Icefield


*215 square kilometres  
(83 square miles)*



It's located where Banff National Park and Jasper National Park meet. It also lies at the point where North America's three continental divides join.

Did you know that there were actually three continental divides, not just one? I have a slide talk about that, too. But not today. Today we are skiing icefields, meaning those big upland glaciers along the divide. Of which the Columbia Icefield is the largest. It covers 215 square kilometres. You're seeing only part of it here.



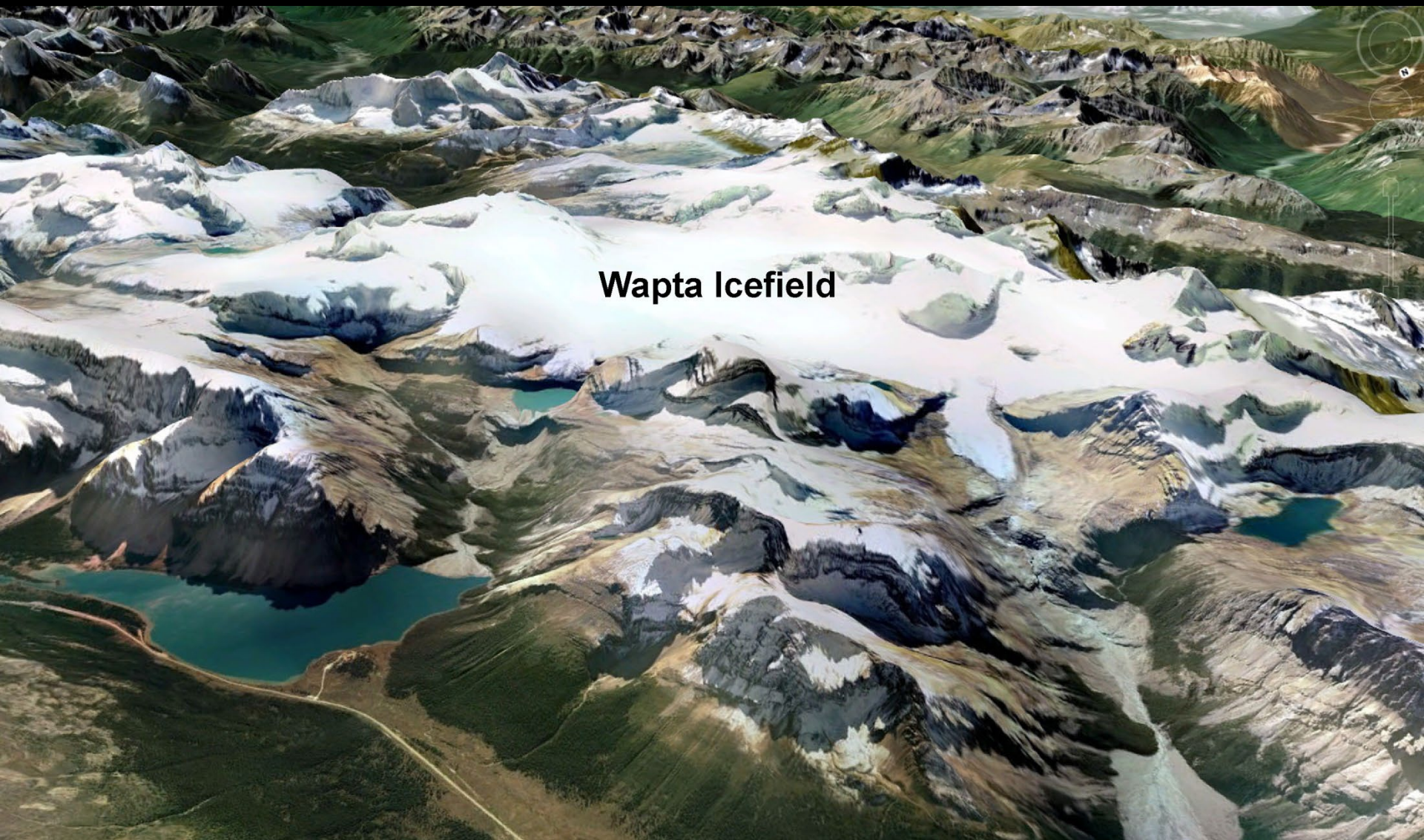


## Mt. Columbia

3747 m

That's Mount Columbia, summit elevation 3747 metres above sea level. It's the highest peak in Alberta. And the second highest in the Canadian Rockies, after Mount Robson. Which is not found on the Columbia Icefield. Mount Robson is west of Jasper.

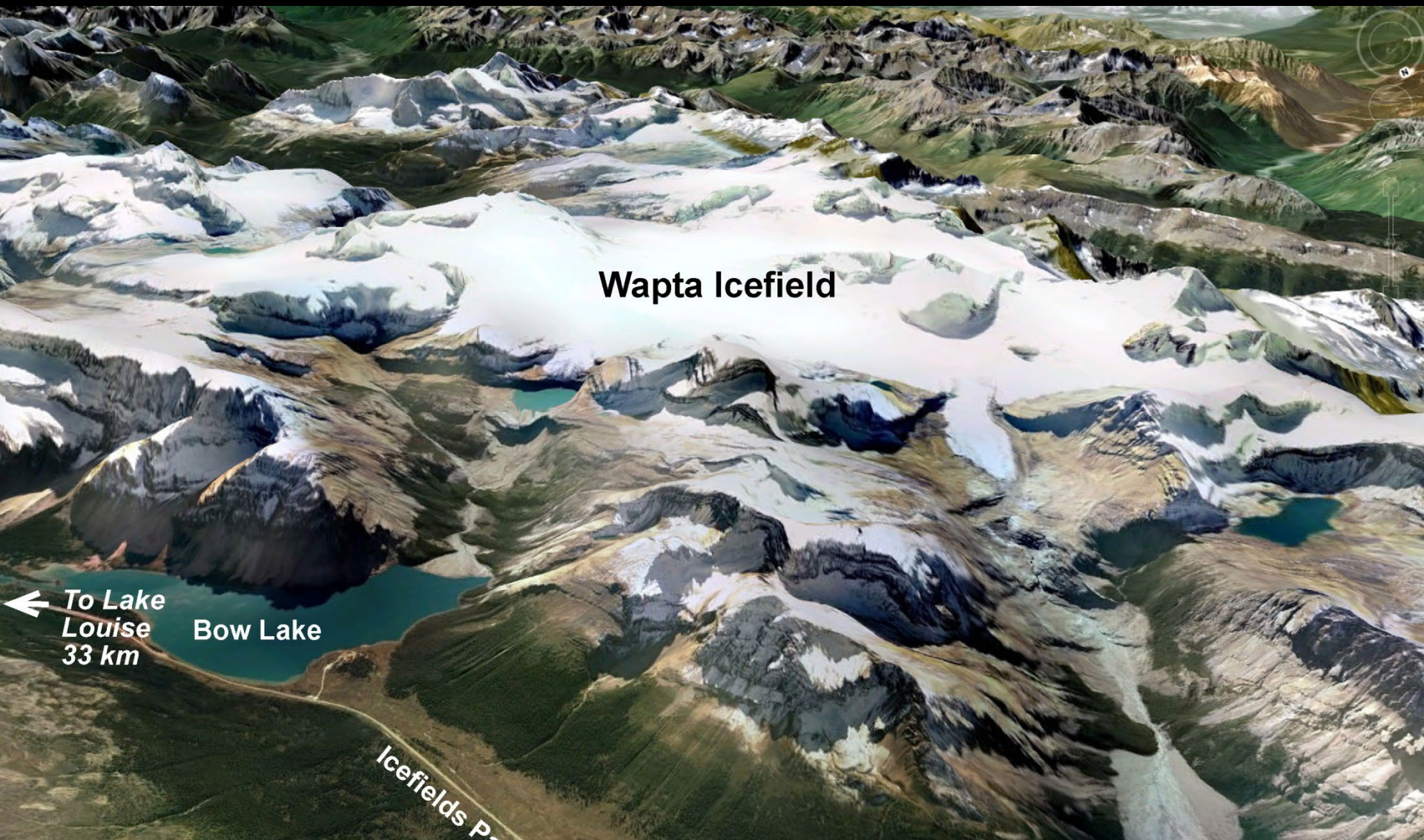




## Wapta Icefield

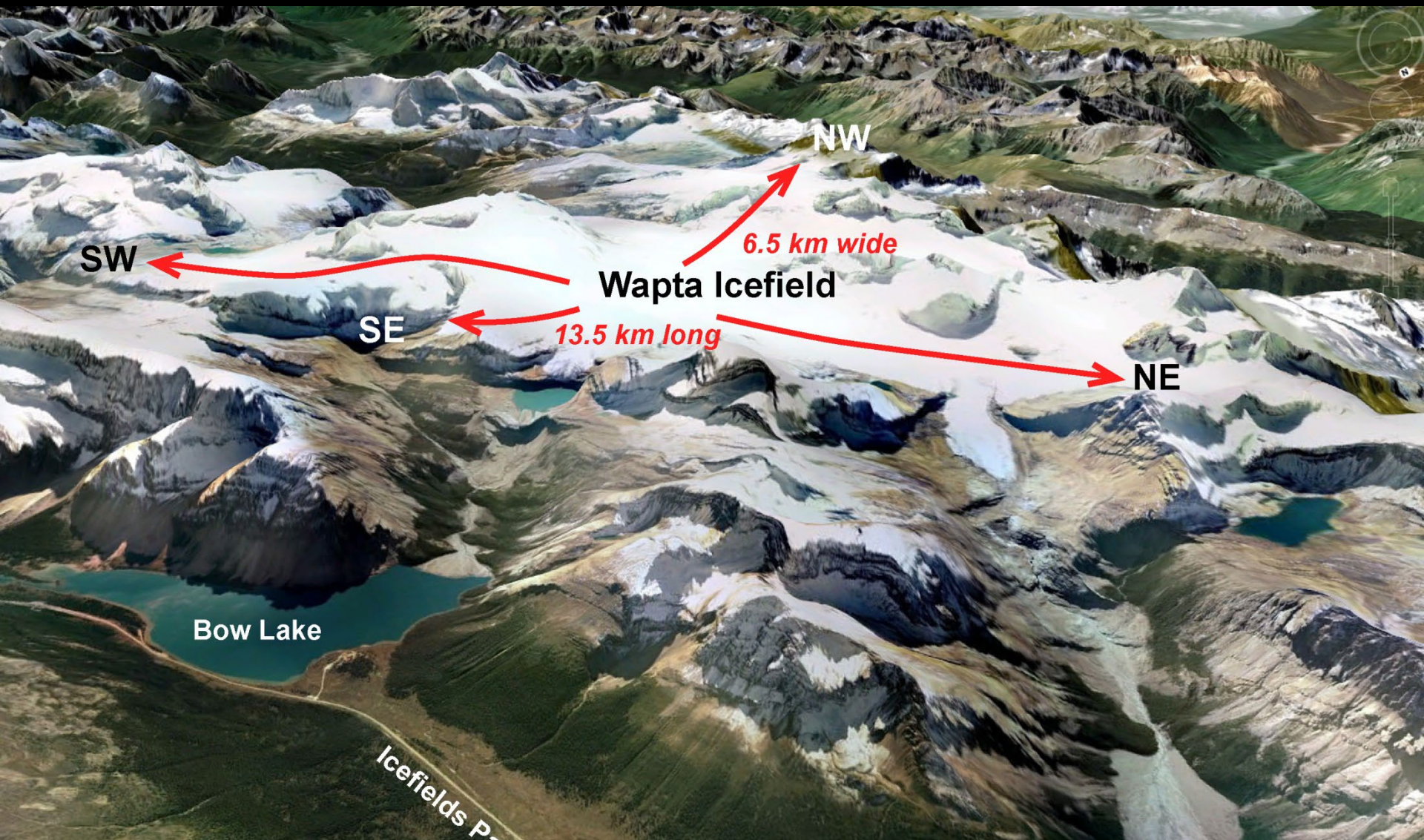
I have crossed the Columbia Icefield, and I have climbed Mount Robson, but like many other skiers I am more attracted to the Wapta Icefield.





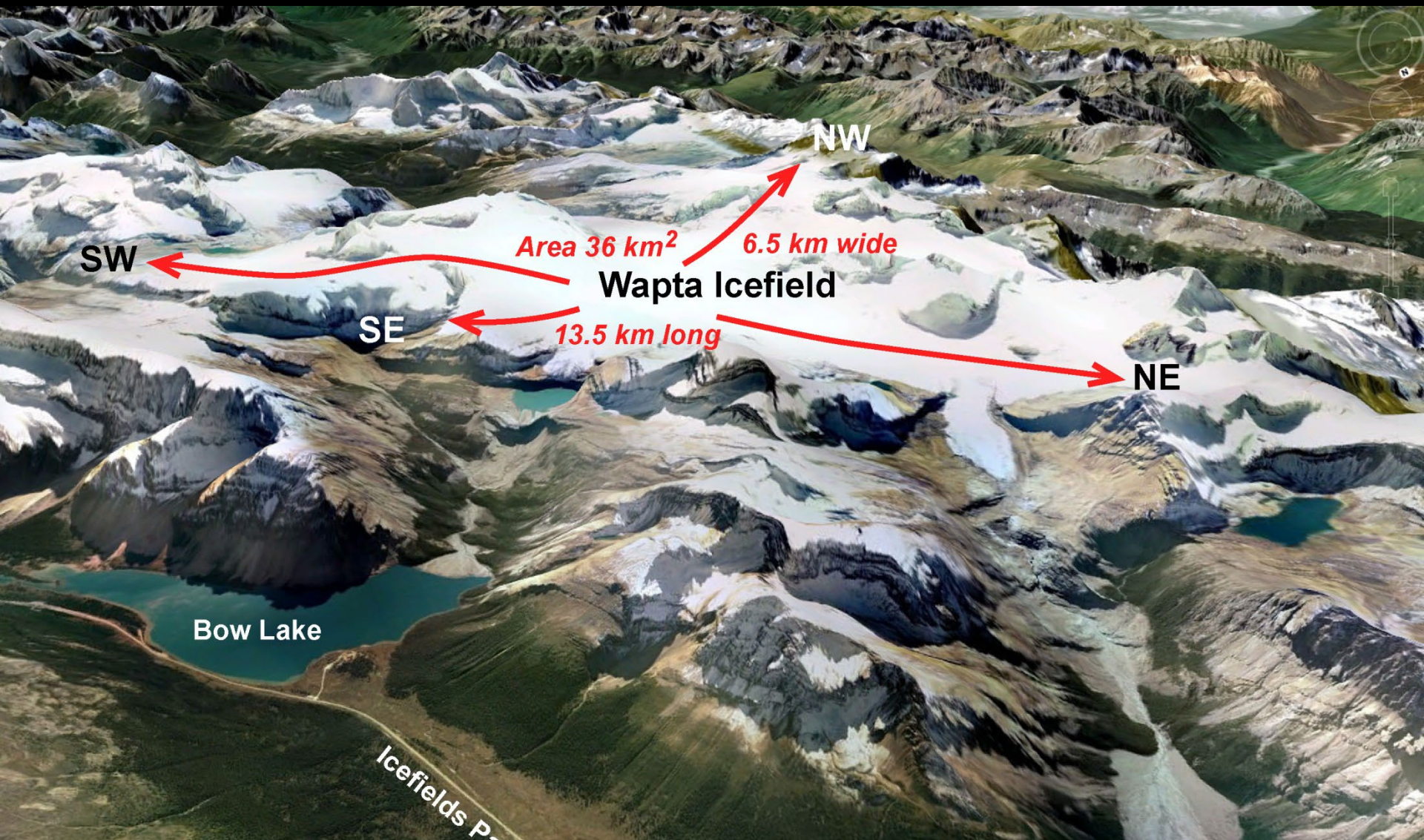
It's easy to get to, located about 30 kilometres north of Lake Louise.





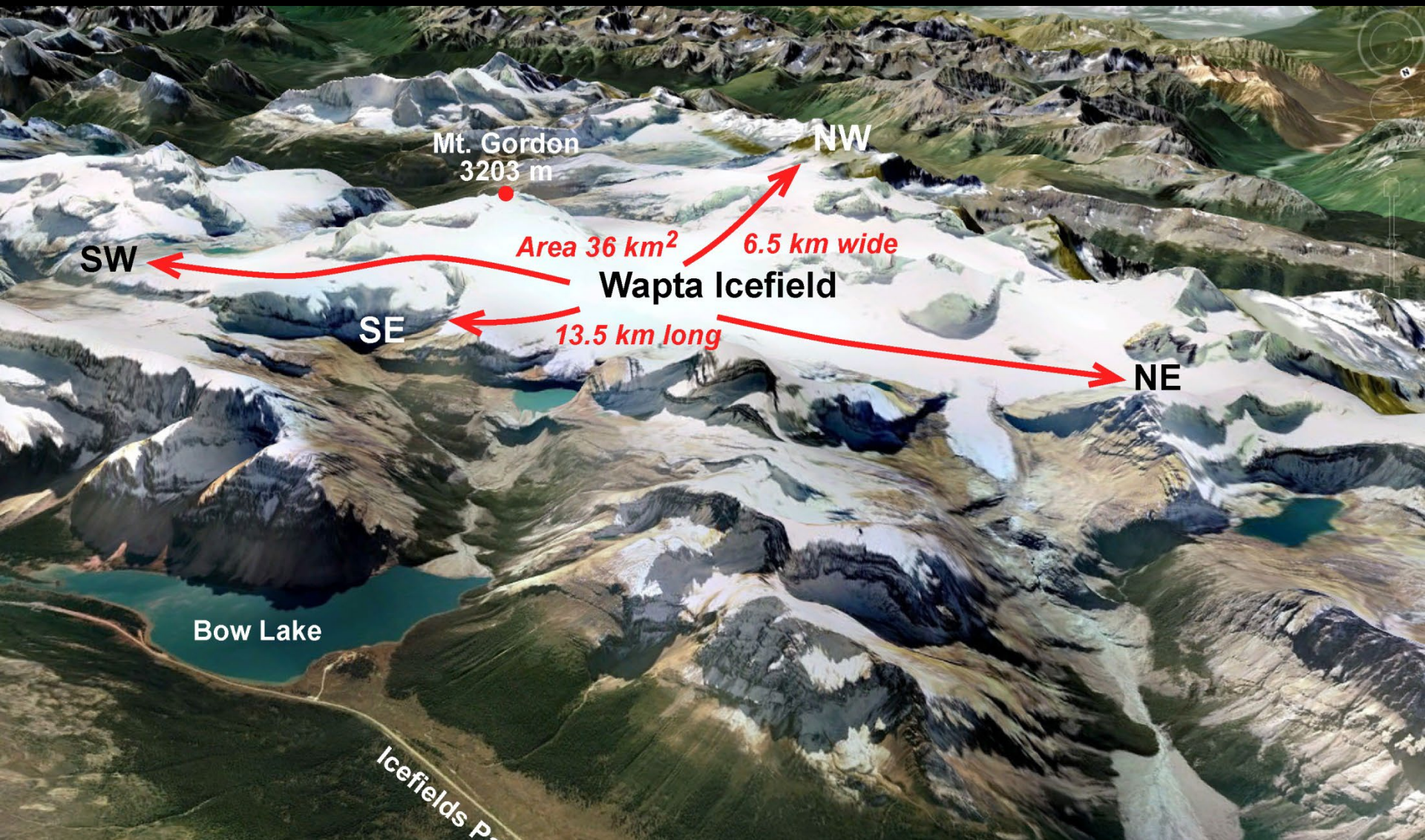
Here are the dimensions, 6.5 kilometres wide and 13.5 kilometres long.





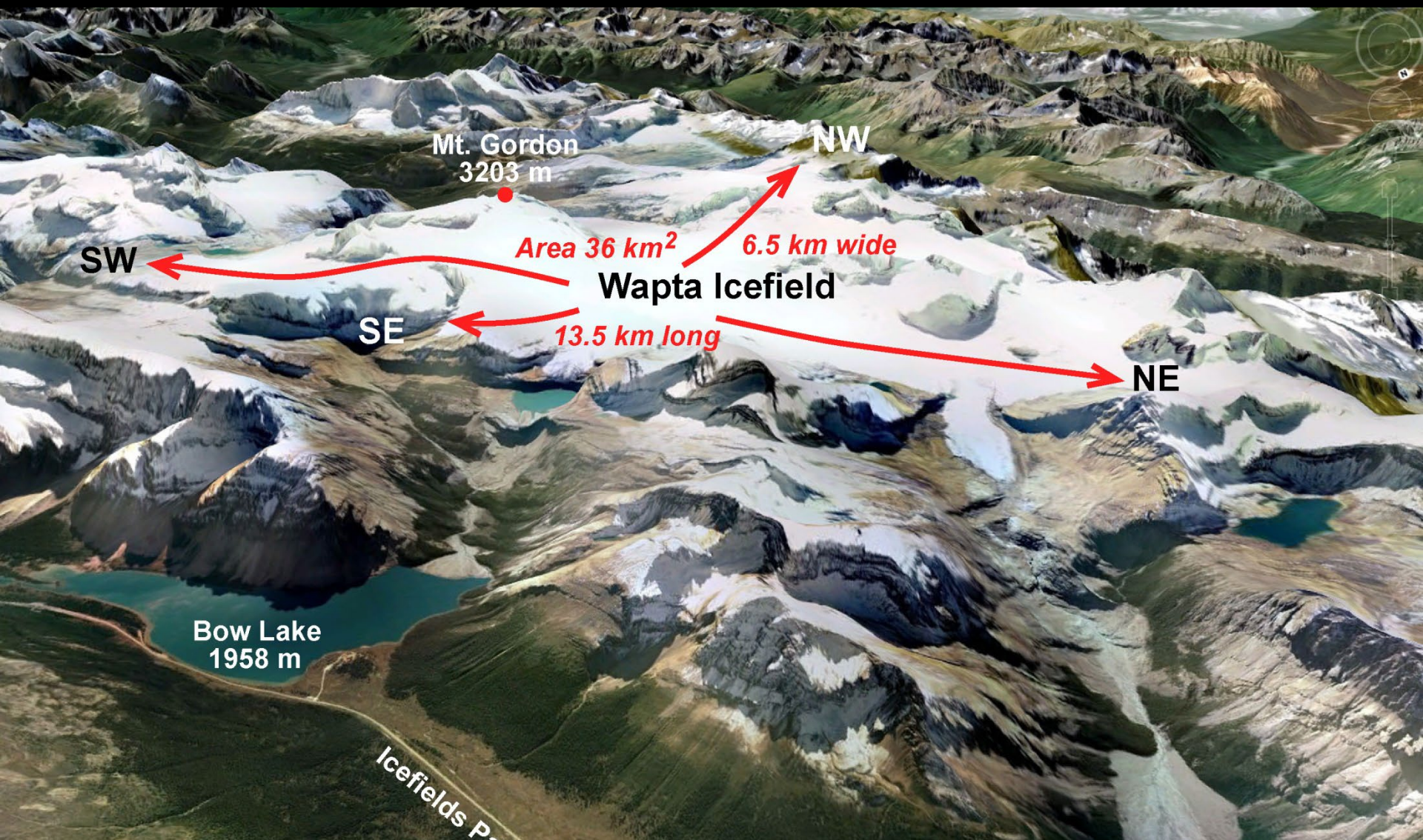
The area is 36 square kilometres.





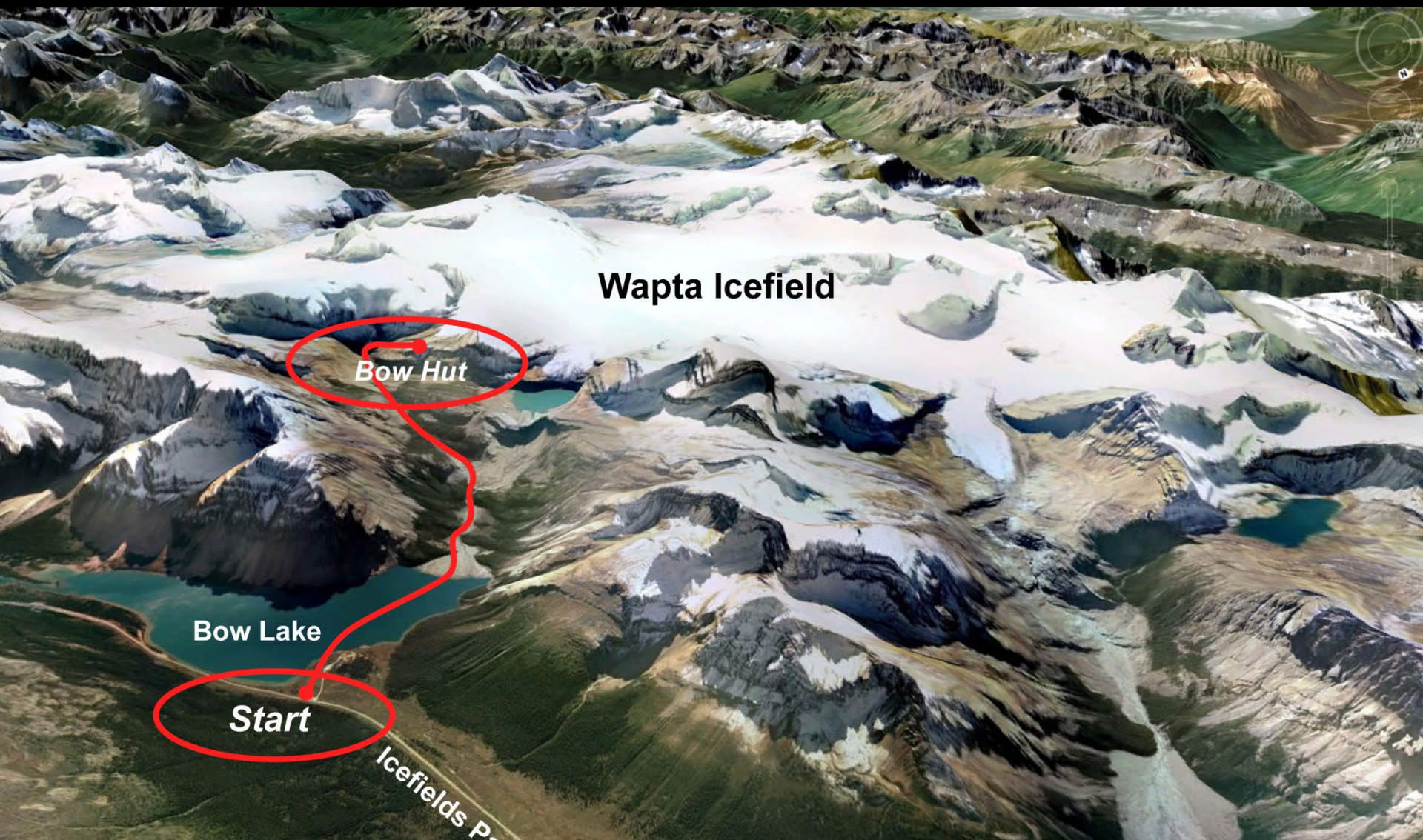
Highest point is the summit of Mount Gordon, 3203 metres above sea level.





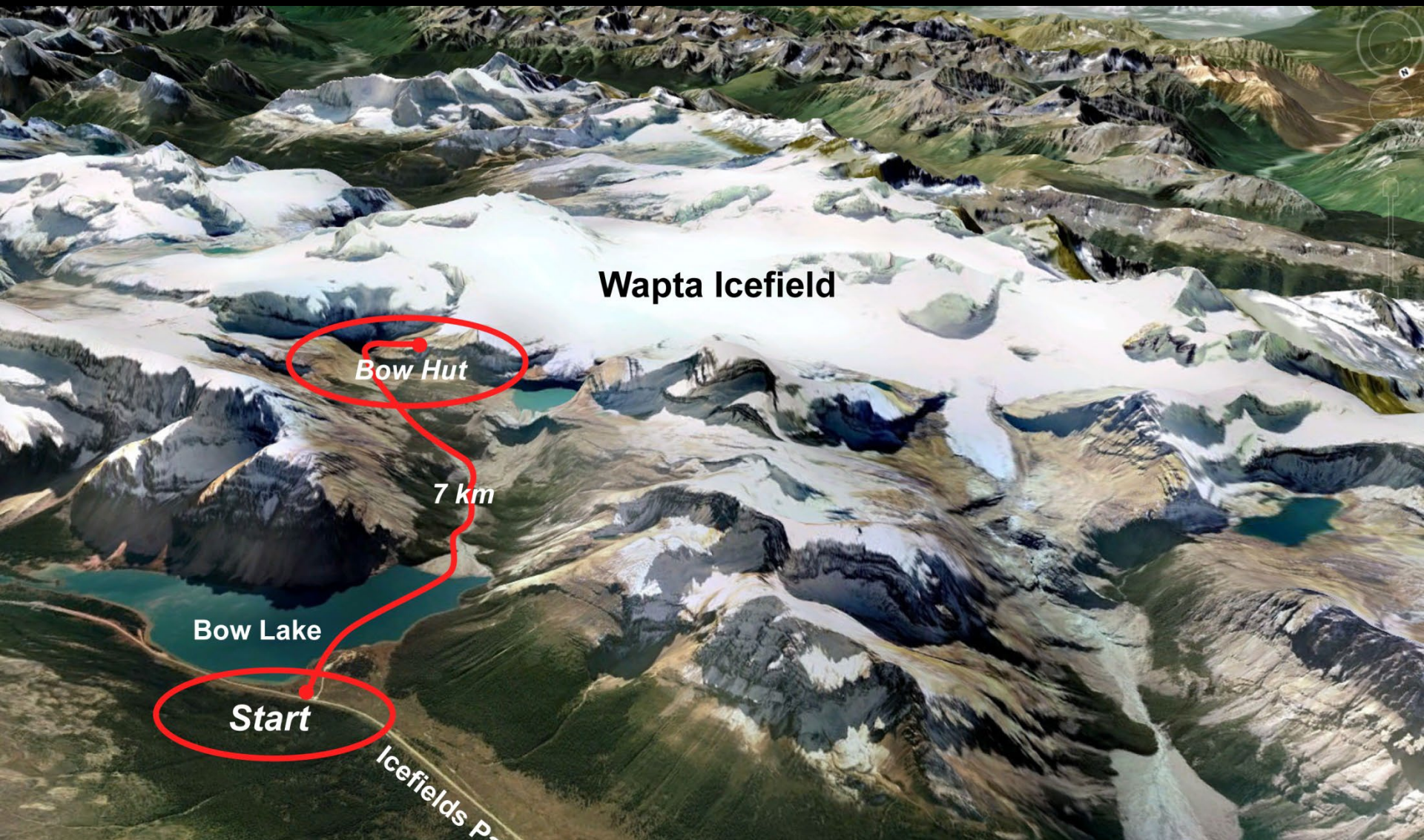
That's 1.3 vertical kilometres higher than Bow Lake. Farther along in the show I'm going to take you up there, to the summit of Mount Gordon.





Bow Lake is the starting point for most ski trips to the Wapta. Here's the approach route.

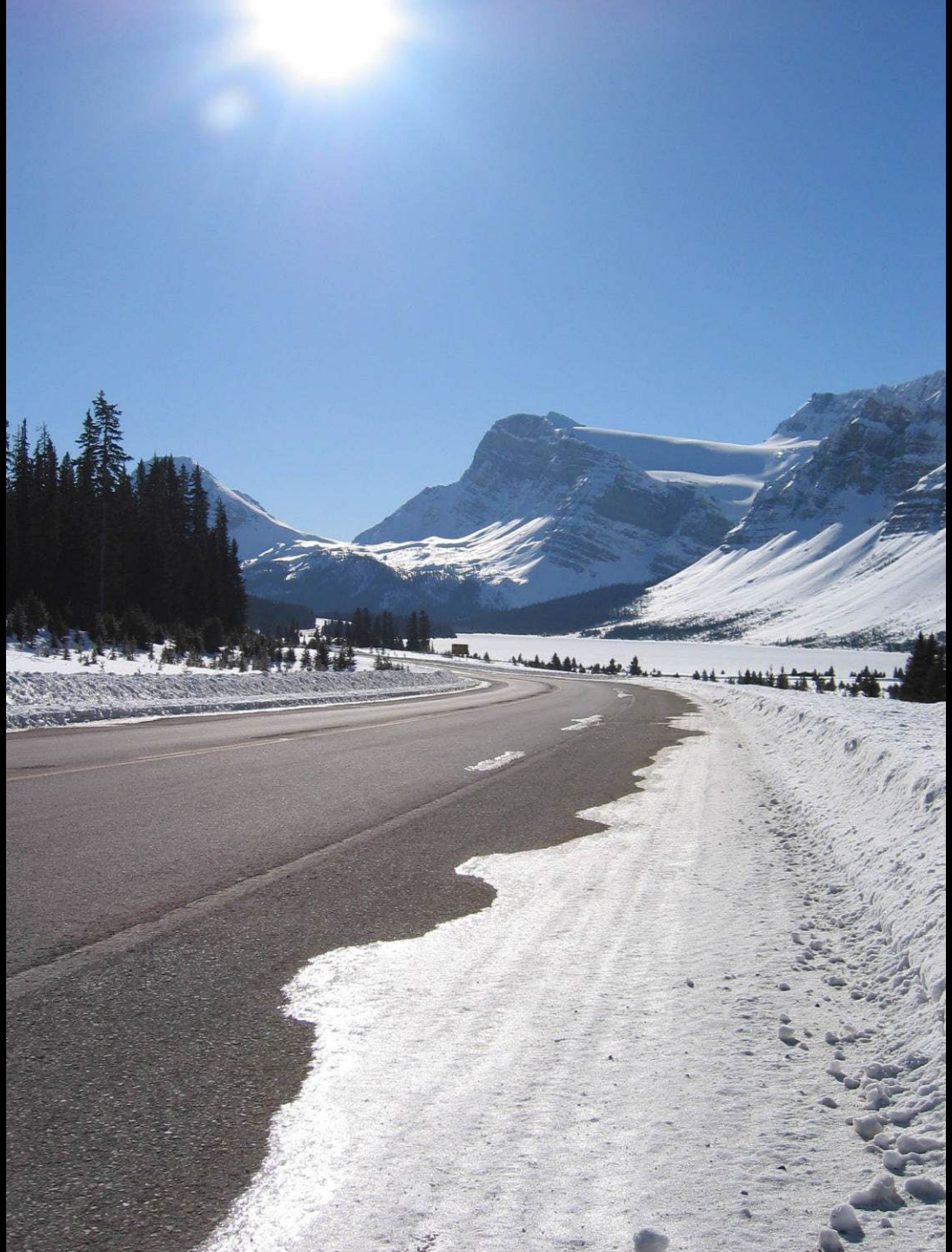




It's seven kilometres from the highway to the Bow Hut, which is the usual objective for the first day.



Those last few images were from Google Earth, showing the icefield and its surroundings in summer. But of course, my friends and I ski it in winter. As we did on the trip I'm going to tell you about.





One of those friends is Mark Addison, a fellow Jasperite. He's my doctor.



Mark Addison



The other is Lonnie Springer, like me an expatriate American from Colorado. I have known Lonnie since the 1960s, when we were both growing up in Colorado Springs.

Some people believe that Lonnie and I both left the States to avoid the draft. But actually we left because Colorado has no icefields. Not that we knew of Canada's icefields at the time. Back to the story.

Mark had not skied the Wapta yet, but Lonnie had been there with me before. I was a veteran of many Wapta trips.

In 2004 Mark told me that he'd really like to go. I got hold of Lonnie, who was able to join us.



Lonnie Springer





On the morning of February 23<sup>rd</sup> the three of us rolled into the parking lot at Bow Lake.  
This raven was already there, looking for a handout.  
As we put on our skis and shouldered our packs, I reminded the bird that feeding  
wildlife in the national park was unlawful. Disappointed, it flew off.



It was a gorgeous day, pleasantly mild. We started across Bow Lake without needing jackets or gloves. We had picked the date for our trip knowing that the best time for skiing the Wapta is from mid-February to mid-March.

The temperature is up from the deathly cold of January, and the days are getting longer. Plus the weather is inclined to be pretty good.

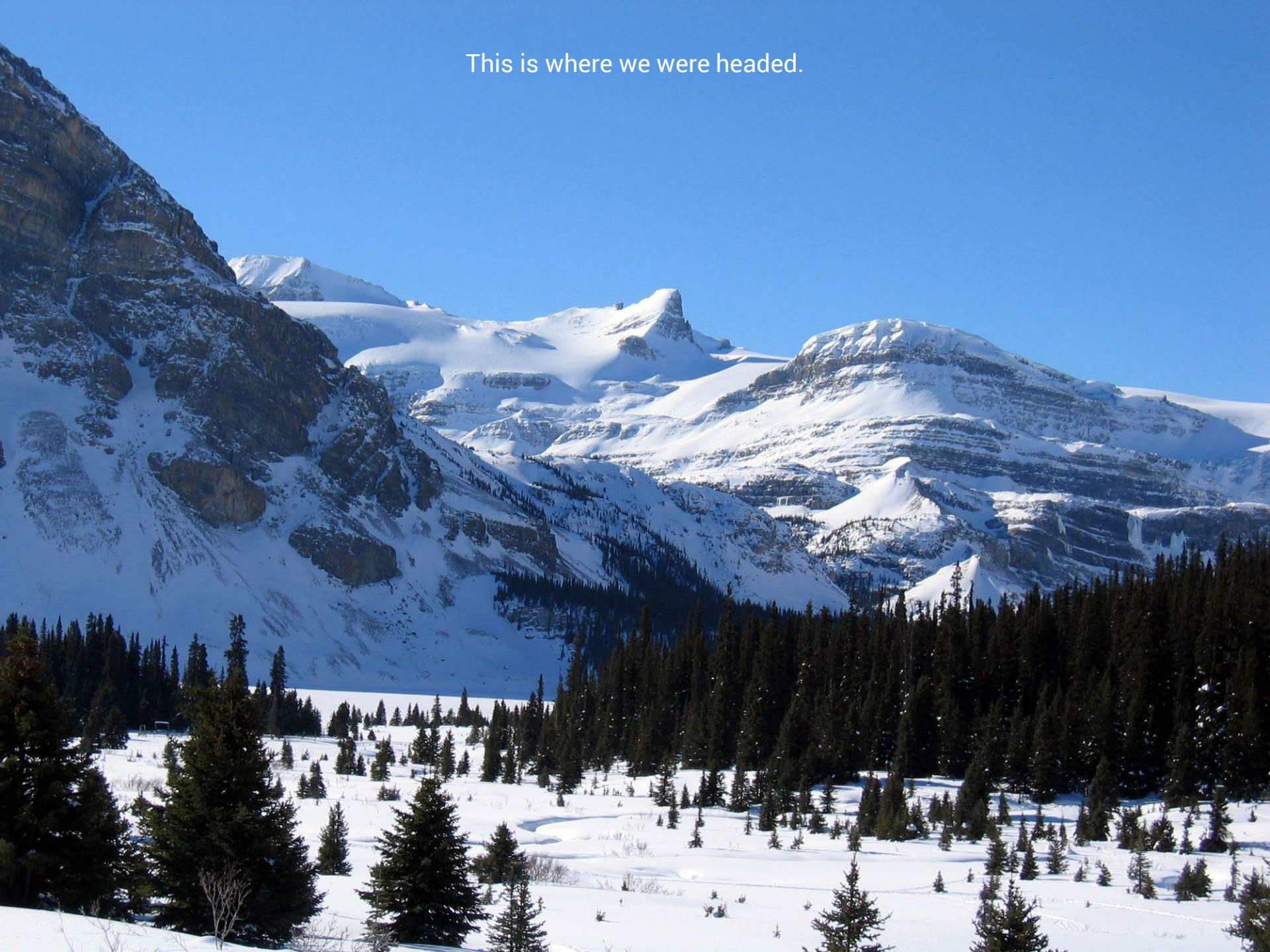
As you can tell, the weather that day was outstanding. All I could think of was that we were wasting it getting to the hut. This is something we could do in anything short of a blizzard. It was for tomorrow and the next three days that we needed good weather.

But hey, maybe the high-pressure cell would hold.





This is where we were headed.





Bow Hut. We are going to have to gain 420 metres of elevation to get there.

**Bow Hut  
2378 m**





By the way, the sharply pointed mountain is Saint Nicholas Peak.

**St. Nicholas Peak**  
2970 m

**Bow Hut**  
2378 m



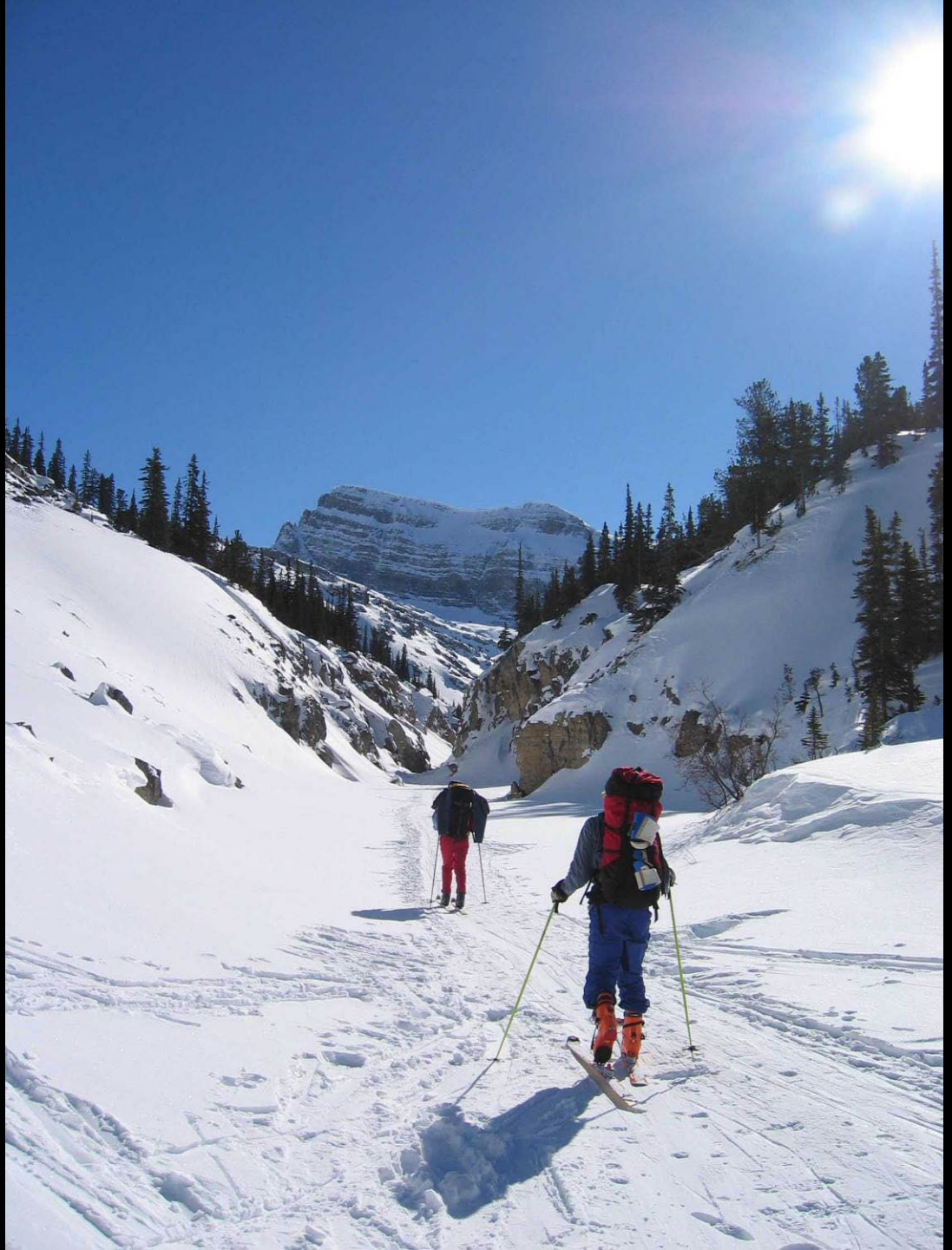


Saint Nick is our lodestone as  
we finish crossing the lake...





And start following one of the streams that flows into it. That stream is under the ice and snow on the floor of the gorge ahead of us. There's a bit of open water to dodge here and there.





Later on we climb out of the gorge...





And into the open country above the treeline.





There's the Bow Hut, still pretty far above us. How are we going to surmount that cliff?  
By going around the left end...

Bow Hut







Which is pretty steep, but we have climbing skins on our skis to give us the grip we need.





After another hour of steady effort, we reach the hut.



Off come the skis.





You can see the three kinds of skis we had for this trip.

Mark's, the red ones on the left, are downhill skis with special bindings that allow the heel to lift.

Mine are the yellow ones in the centre. They are narrower, longer and lighter than Mark's. The bindings are Nordic, with three pins in front that allow my heel to lift, too. When I want to lock my heels down, I can snap on cables for that. Lonnie's skis are on the right. The cables are in place. His are classic Nordic skis, the longest, narrowest and lightest of all. But like all the other skis in that photo, they have metal edges for dealing with the hard, windblown, crusty snow we're likely to find up here.





Just for comparison, here is what I used to ski on in the seventies, eighties and nineties. These skis were even narrower, nice and light, made of wood. But there were no metal edges. And they broke rather easily.

After gluing the tails back on twice, in 2000 I went with those yellow aluminum-and-fibreglass jobs you saw in the previous slide. No more breakage.







The Bow Hut was built by the Alpine Club of Canada in 1989. It holds up to thirty people. This is the kitchen and dining room. The big pots are for melting snow, which is the only source of water in the winter.

Yes, it's a wood stove. When Parks Canada built and maintained huts on the Wapta Icefield in the 1960s and 1970s, the heating was by means of diesel-oil stoves. Turned out not to have been a good idea. Many users didn't know how to operate those stoves, and the instructions were poor. Several times I arrived at the previous version of Bow Hut to find diesel fuel leaking onto the floor. Somehow the older hut didn't burn down. But that's only because diesel fuel is much less dangerous than gasoline or propane. Propane is safe enough, though, to use in the new hut for lighting and cooking.

So heating is by that wood stove in the photo. Firewood is flown in by helicopter. Pretty expensive, but again, safety is the issue.





An adjoining room is used for sleeping. You roll out your bag onto one of the thick, cushy foam mattresses. I always try to get a spot close to a window. When the hut is full, those thirty people generate a lot of heat, even through their sleeping bags. And someone always insists on starting a fire in the stove in that room. It gets downright hot in there. But if I'm next to a window I can open it to get some relief from the cold air coming in.

At first, people who have not been to Bow Hut before disapprove of me for opening that window. But later, as they lie there sweating in their sleeping bags, they wish that they, too, were next to a window. The other problem when trying to sleep in the Bow Hut is that people snore. Heck, I snore. So I offer ear plugs to the people beside me. And I use them myself.



There's no cook at the Bow Hut. No hut-keeper. You are expected to look after everything yourself, leaving the place clean and tidy when you depart. You reserve space for your group through the Alpine Club of Canada, which owns and operates the hut. In 2011 the cost was about twenty bucks a night per person. By 2023 that had gone up to fifty dollars. But people are happy to pay it.

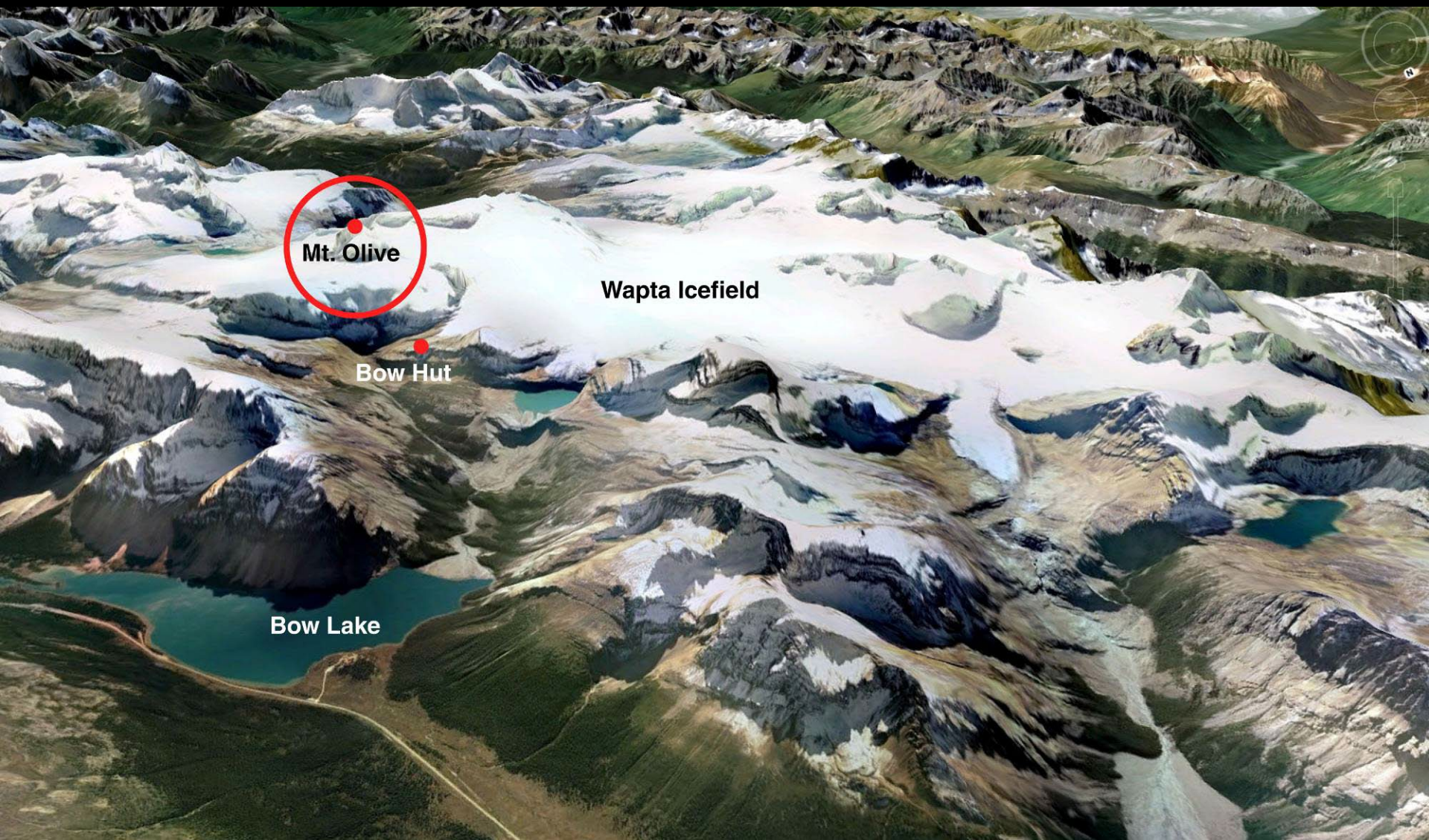






The next morning we leave at dawn to go adventuring on the Wapta Icefield.





Today our goal is to climb Mount Olive.



## Mt. Olive, 3130 m (10,270')



I remember thinking, hmm, the weather isn't great. But I have been up this mountain several times already. It's not a difficult climb, and I know the route well. We should be able to do it.





We leave our skis partway up. From here we are going to follow a rocky ridge.  
Not the one in the background. That's the route to the summit of Saint Nicholas Peak at the end.  
We are already higher than Saint Nick.



We are headed the other direction on that ridge. You can just make out the rocky summit of Mount Olive ahead.







For comparison, here's a view of the same ridge on a clear day.



The important thing is to stay on solid ground. If we venture too far to the left we will be walking on a cornice of snow that the wind has built out over the east face of the peak, which is a huge cliff. Falling through a cornice is a common way to get killed in mountaineering. One friend of mine died that way, and another was badly injured.

Some years ago I was walking up this ridge with a group of icefield newbies. One member who was walking just ahead of me kept straying too far left, even though I warned her repeatedly. Then she stepped onto the cornice and started to sink into it. Yikes! I had to grab her arm and pull her back. "Oh," she said. *"That's what you meant."*





On the summit, Lonnie took my picture. Not much to see up there in the clouds that day, but I do have frosty hair and a good set of snotsicles.





This is where I took that photo  
of Lonnie.





And the one of Mark.





Then it was time to make our way back down the ridge. We were in luck. The clouds were lifting.







And by the time we got back onto the icefield the weather had improved a great deal.





For the first time all day, the light was *not* flat. We could see the topography ahead of us well, and that gave us a good run back to the hut. Which appears in the photo just right of centre.





Here's a shot of part of that slope in perfect weather, with Saint Nick on the left. The three skiers climbing the hill give a sense of the scale.

Those wiggly descending tracks were made either by a big group coming down or by those same three skiers after making multiple runs. Some people come all the way up to the Bow Hut in the fall, before the ski areas open, and in late spring after they close, just to ski this slope over and over.





But we are not going to go up for another run. We have done enough for today. We are tired.





Especially Mark, who is from South Africa and has never done anything like this in his life. But he is very happy. Having climbed a peak, most of the way on skis, he can now call himself a ski mountaineer.





The next day we decided to try for Mount Gordon, five kilometres away on the other side of the icefield.





And this day the weather was much better.

As we approached Saint Nicholas Peak, I was reminded of climbing the mountain in 1971, on my first trip to the Wapta Icefield. My friend Gil Arnold, another Colorado climber, was along. The two of us followed the left edge of the peak, along the boundary between the sun and the shade.



I went first on the rope.  
That's Gil belaying me  
around his ice axe shoved  
into the snow.






And that snow was quite steep. But it was firm and unlikely to slide. We hoped. It didn't. We reached the top safely and walked off the summit along the ridge I showed you previously.





## Mt. Gordon, 3203 m (10,510')

A photograph of two skiers standing on a vast, snow-covered mountain slope. The skier on the left is seen from the back, wearing a dark blue jacket, red pants, and a large black backpack with yellow straps. A yellow bag with a small screen is attached to the top of the backpack. The skier on the right is seen in profile, wearing a light-colored jacket, blue pants, a tan hat, and a red and black backpack. Both are holding ski poles. The background shows a wide expanse of snow leading up to a distant peak under a blue sky with wispy clouds.

Today our climb of Mount Gordon will be a straight ski ascent. No need for rope up there. And for those of you who might be wondering why we are skiing all over this big glacier without being roped together in case one of us falls into a crevasse, the answer is that *everyone* skis all over the Wapta Icefield without roping up. Most of the crevasses are well covered with winter snow. Your skis spread your weight across the surface. Hardly anyone ever falls in. Well, I did once. Skied right into a crevasse while enjoying myself at speed ahead of a group of friends in a whiteout. Didn't see the crevasse at all. Suddenly I felt myself airborne, then WHUMP, I landed between two walls of blue ice. Fortunately there was a thick plug of snow in the crevasse, and it kept me from falling the rest of the way down the thing. Off to one side I could see the snow forming a ramp to the surface. With my heart in my mouth, I skied up it. "Watch out for the crevasse!" I yelled as I emerged. The others were standing right there, amazed that I had survived.





So don't get ahead of your companions while skiing across an icefield. On one trip I remember when a skier from Quebec joined us as we skied up Mount Rhondda, another summit on the Wapta. That's him in the photo. The guy was young and strong. He kept forging ahead, ignoring my calls to come back.



This is what awaited him just beyond that edge of snow. I knew how close he was to those cliffs, and we all yelled hard to get his attention. Fortunately he turned back in time. And he was happy to follow us for the rest of the day.

So stick together on an icefield ski tour.

Okay, back to Lonnie, Mark and me on our way up Mount Gordon in 2004.







As we started up the peak, the clouds rolled in.



Time to haul out the GPS and  
plot a safe route to the top.





Eventually we saw the summit cairn, a stack of rocks. We got there okay. But we took no photos there, or on the descent or on our way back across the icefield.







This is what we would have enjoyed on a better day. That's my son Toby, again, showing off his telemark technique.



Back at the hut, Mark was very interested in how this GPS thing worked. I know what he was thinking. What if Ben becomes medically incapacitated out there and can't operate it? He was right to worry. The following year, in 2005, I went to see Mark about chest pain. Turned out that one of my coronary arteries was nearly plugged with plaque. Mark sent me to the University of Alberta hospital for a stent, which fixed the problem. But really, I could have suffered a heart attack on the Wapta Icefield.





The next day the wind came up. We tried several times to leave the hut for some skiing on the hill above, but every time we did so the wind forced us back. It was the strongest wind I had ever experienced up there.

Then, from out of the blowing snow came a party of six skiers. Somehow they had made it all the way up from the valley floor. Must have been pretty wild crossing Bow Lake, I figured, completely out in the open.

As they sat down around the stove, I asked, "Is it as bad down there on the lake as it is up here?"

"Don't know," one of them said.

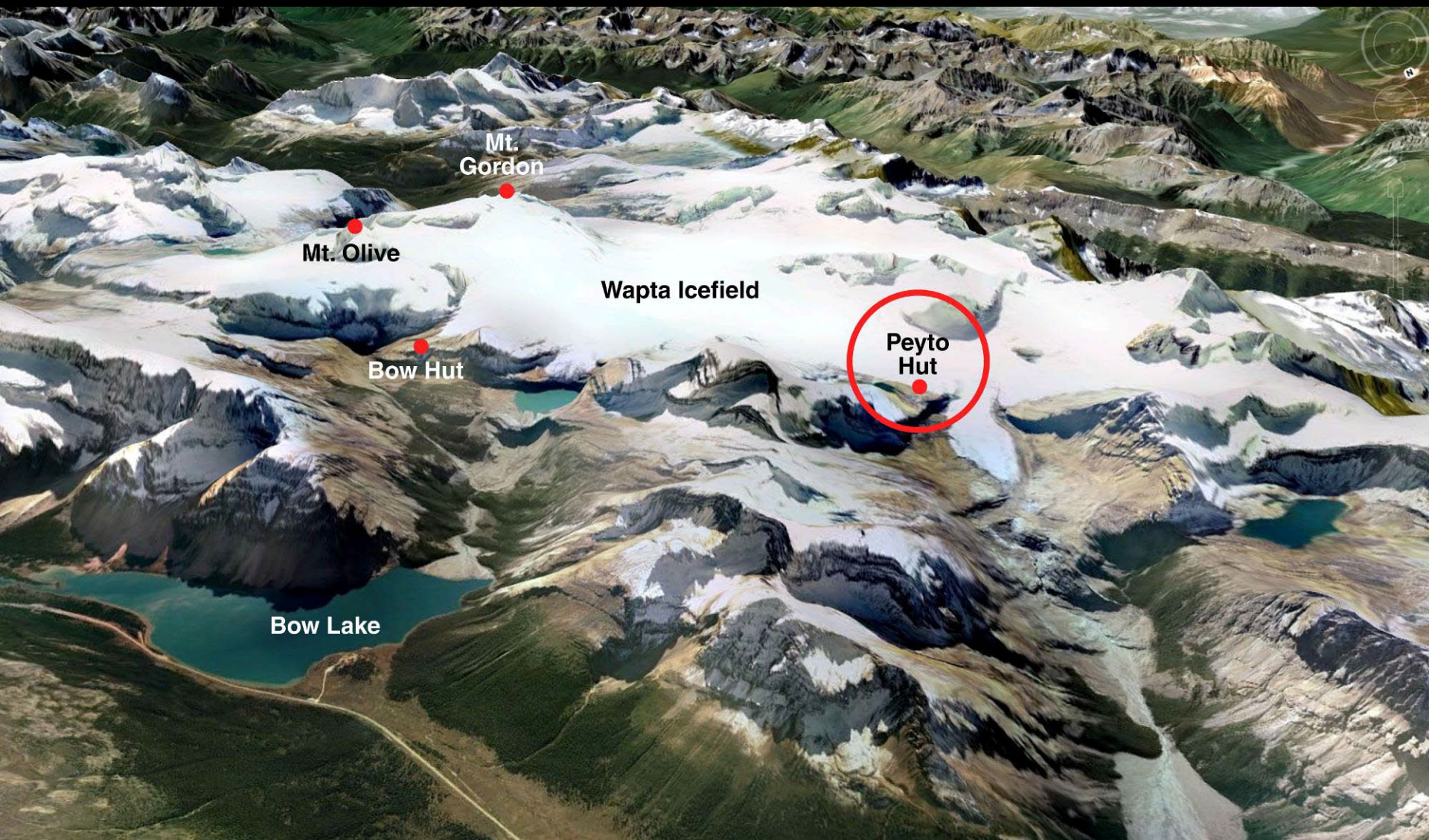
"We came from Peyto."

"From *Peyto*?!" I exclaimed.

Peyto Hut was six kilometres away across the icefield. This party, which included two women, neither of them particularly large, had gone over the crest of the Wapta Icefield in a gale. Wow!

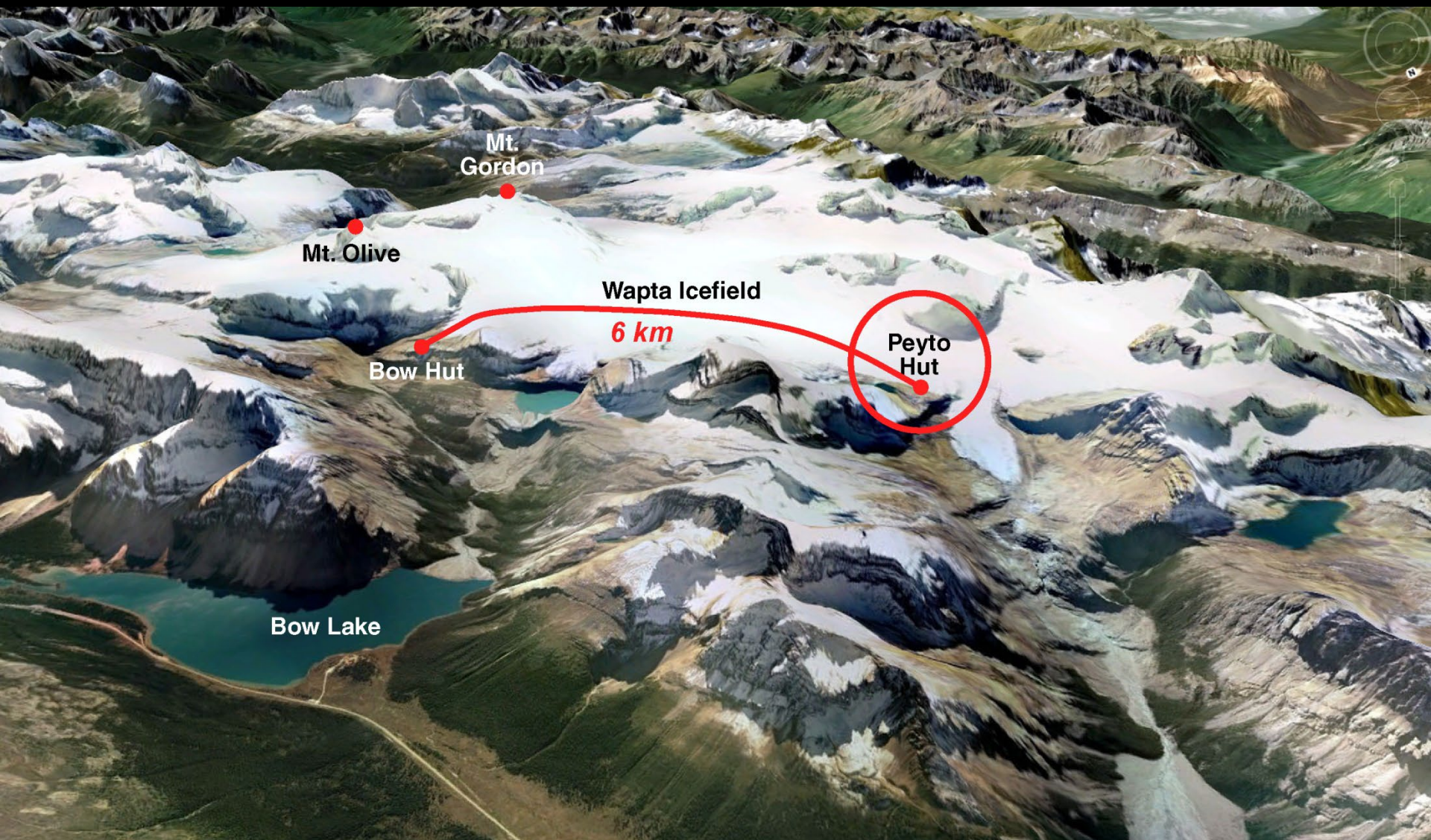






The wind died down overnight, and for our last day's tour we decided to visit the Peyto Hut.





As I said before, it was six kilometres away. But as icefield tours go it was an easy objective. Plus we would have shelter once we got there. We could eat our lunch inside the hut.



For a while it was touch  
and go. The clouds rolled  
in. Could have been a  
repeat of yesterday.







But the sky cleared, and we crossed the icefield in excellent conditions.





What's this, way out on the glacier? We saw it from about a kilometre away.  
Yes, it's a weather station, automatically reporting the temperature, humidity, air pressure and wind direction and speed to folks in some office far away. Few of them will ever set foot up here.  
If only they knew what they were missing. But at least they have the data.



A nice run in the  
powder brought us  
closer to our objective.







I hung back to get a photo of Lonnie and Mark down there.





Peyto Hut



Here's where we were headed.



1987



As I skied toward the Peyto Hut, I remembered being there before, in 1987, with Toby.  
At that time the surface of the glacier lay not far below the hut.



2004

But that was then and this was now. A lot of melt had occurred. We had quite a bit farther to climb.







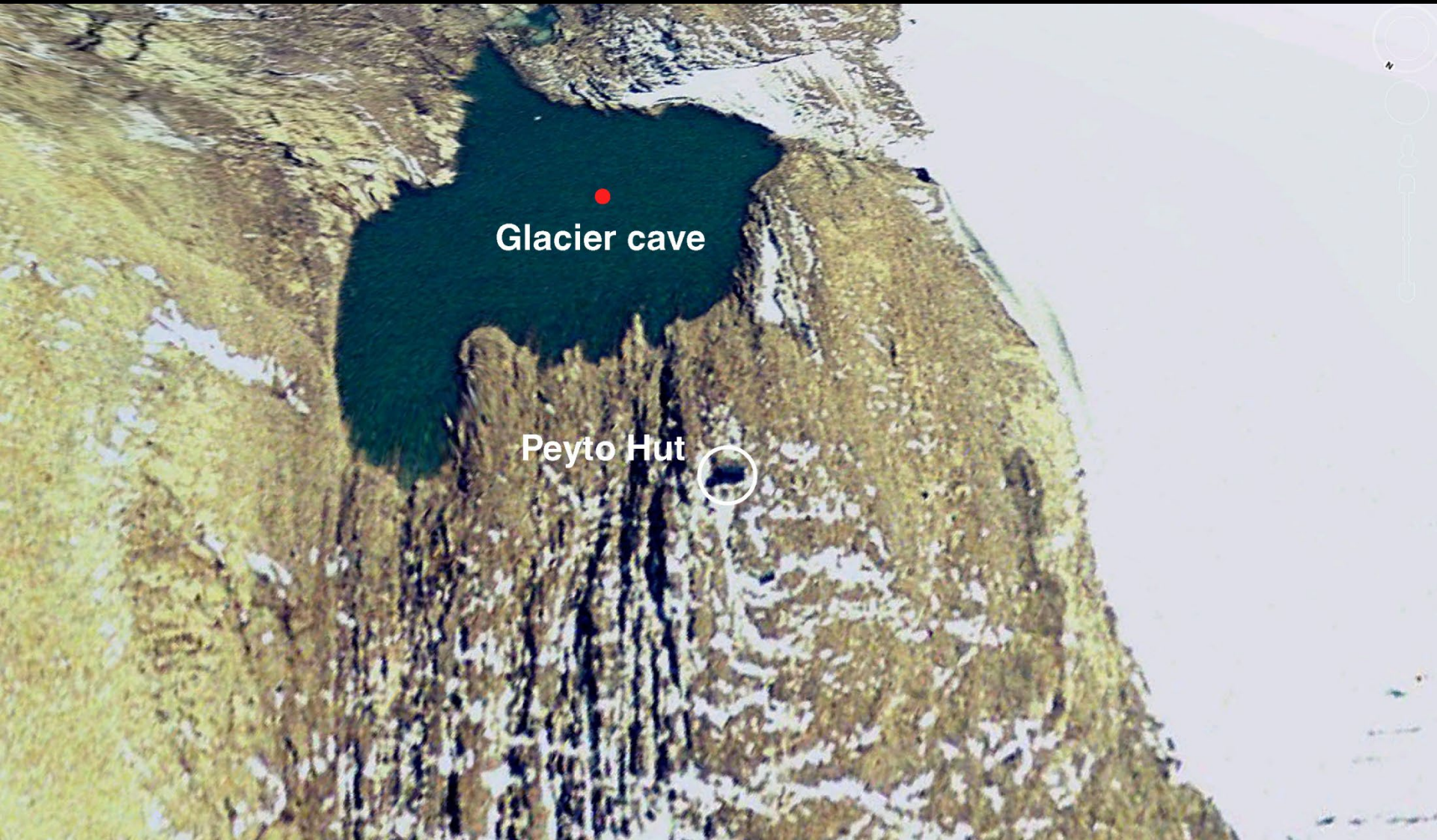
I remembered exploring a glacier cave nearby on the 1987 trip. The flow of meltwater in summer had created it. The entrance was a few minutes from the hut.



There were wonderful frost feathers in there.







But in 2004 this was gone. The location of those previous photos was now the middle of a lake. Yes, the glaciers of the Rockies are going. Global warming is real. Enjoy icefield skiing while you may.





With this sobering memory, I approached the hut.



When we got there, Lonnie was particularly happy. Firstly because he had never been there before, and secondly because the weather looked to be about to hammer us again.





So we sat inside,  
enjoying our lunch  
and considering  
the alternatives if  
we couldn't get  
back to Bow.  
Lonnie took a  
picture through the  
window of Mark  
and me in there  
thinking about  
what to do.  
The weather  
gradually got  
worse...







But I didn't really need my GPS to find the outhouse. Still, if things got really bad, I'd have a waypoint on it.





Didn't need one. The clouds blew away and we had a pleasant return trip to Bow Hut.

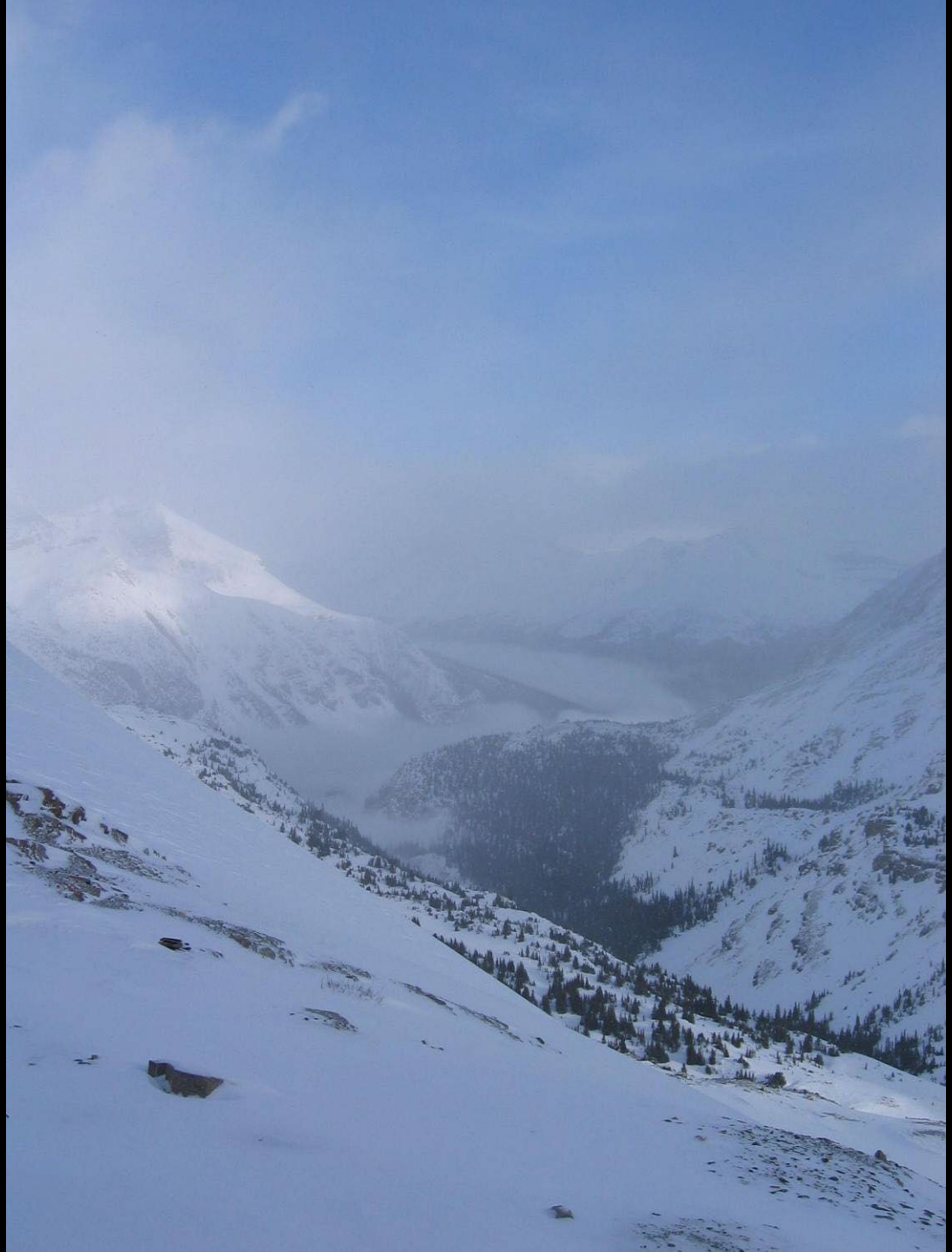


As I took my pack off, I thought, Ben, you're a lucky guy. You live in the Canadian Rockies, where we have things such as the Wapta Icefield. Plus accommodation beside it. Just simple accommodation, mind you. Let's not overdo it. The last thing I want to see up here is a hotel and a tramway to reach it. Fortunately Parks Canada agrees.





The next day we have to  
leave. Skiing back to  
Bow Lake is not easy,  
and we have to be  
cautious.





But we managed to get down  
into the trees okay.  
And I do mean *into* the trees.  
Here's Mark about to make a  
close acquaintance with one.







While crossing the lake we had a tail wind, yay!



And back at the car, guess  
who was waiting?







Just before finishing, I need to thank Parks Canada for its ongoing protection of the Wapta Icefield and everything else that's wild and beautiful in Banff National Park.





Many thanks to Lonnie Springer for the use of his photographs



END