

# The Kootenay Mountaineer

*The newsletter for people with year-round pursuits.*

2018 Spring Equinox

## **Message from the President**

### **Bonnington Traverse Hut Update**

Last fall engineering reports were completed on the Bonnington cabins and to no one's surprise they are in need of numerous repairs. Dave Heyduck has put together a five-year plan and budget for the work required.

The cabins are owned by forestry and KMC is their custodian. On March 9, Dave Heyduck, Bruce Reader and myself met with Justin Dexter of forestry to review the engineer reports and present Dave's plan and budget. Justin is fully supportive and has allotted funding through his budget. That funding, along with the cabin revenue, grant money, and sweat equity from KMC members will ensure the cabins survival well into the future.

Work will begin this summer – watch for an opportunity to help out.

Happy hiking

Sandra

### **A Chance Encounter – and a warm Thank You!**

*Bruce Reeder*

On March 6, our 16 year old family friend from Germany, Christoph, and I had just arrived at the summit of Mount Beattie. We were enjoying a quick lunch when we were joined by an energetic group of high school students. This group of twelve or so students were participants in the L. V. Rogers Adventure Tourism Leadership and Safety (ATLAS) program out on a navigational exercise with their teachers, Graeme Marshall and colleague.

In conversation, we realized the connection! The ATLAS program had just received notification of this year's \$500 donation from the KMC, and I was a member of the executive of that very organization. With all of us on skis ready to drop into the powder below, Graeme rounded up the students and they warmly thanked the Club for its support. I was happy to highlight to them the importance we place on youth engagement in the Kootenay outdoors, and to invite them to join the Club in the years ahead! What a perfect location for a heartfelt thanks!

Finished with the formalities, we then all dropped off into the powder of the country we love so much!

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### **Article submission guidelines:**

Plain text is great. No need for PDF or Microsoft Word files. Simply cut and paste your text into an email to [newsletter@kootenaymountaineeringclub.ca](mailto:newsletter@kootenaymountaineeringclub.ca). Attach your full resolution photos to the email. Lots of photos, please.

The newsletter is published four times a year at the times of the solar calendar.

### Mount Lepsoe

December 12, 2017



### Boxing Day Turkey Burner Ski Tour

*Ken Holmes*

Fifteen people expressed interest in the traditional KMC Turkey Burner ski tour to Mount Plewman. However as the date got nearer this number kept dropping with reasons varying from imminent baby, family priorities, seasonal sickness and too much to drink on Christmas night.

Eventually, seven people got together on a bitterly cold Boxing Day morning with temperatures of about minus 15 at the parking lot in the clouds at 1440 metres (4723 feet).

As we progressed up the trail towards Mount Plewman it got brighter until we emerged to sunshine and a brilliant blue sky. Unfortunately first Rhonda and then Felix had problems with their climbing skins not sticking, probably due to the cold temperatures, and unfortunately they had to turn back..... And then there were five.



So Fred, Llewellyn, Eric, Adam and I continued up the trail in nice powder snow through the forest into the basin. Unfortunately as we climbed into the more open south slopes towards Cutblock peak we encountered wind affected, slabby snow which we thought would not be nice to ski.



So we changed direction and climbed up to col between Mount Plewman and the “bump” at 2160 metres (7084 feet)... the so called “50’s Ski Movie” peak on the Rossland Range map. We had lunch here in sunshine and warmer temperatures than we had experienced lower down at the highway. A good spot for lunch with great views of Old Glory and over the “Kootenay Ocean” valley cloud towards Kootenay pass.



After an enjoyable ski down a north-east facing slope to tree line, we decided to skin back up to the top of the “bump” and have a second ski run down the other side, also east facing.



The snow on this side was even more enjoyable as we progressed down to the usual challenging “luge run”, which follows the summer Old Glory trail, to the old road through the cut-block and back to the parking lot where temperatures were still in the region of minus 15.



We were, Fred Thiessen, Llewellyn Mathews, Felix Belczyk, Rhonda Shears, coordinator Ken Holmes and grandsons Eric Derosa and Adam Derosa.

## **Evening Ridge**

By Goody Niosi

Third time's a charm. Luckily for us – this time the old adage held true. We were supposed to snowshoe up Evening Ridge on December 20. A storm rolled in. We postponed to December 29 – a storm rolled in. But finally, on January 3, everything came together to make it a perfect day: sun, blue skies, nice temperatures (depending on where you draw the winter line at “nice”) and driveable roads.



Eight of us set off up the trail at 9 a.m. Co-leader Ben Aubin in front and me bringing up the tail – so much easier to stop and take a hundred and four photos (true, accurate number).

We were incredibly fortunate that skiers and possibly other snowshoers had created a super switchback trail – nice and easy all the way to the top of the first hump. There in the sun, we stopped for a snack while at least one of us (not mentioning names) took off his shirt in a salutation to the sun.



Before moving on, Max put his shirt back on and we proceeded down. I believe it was P'nina who said, “Why isn't there a bridge?”

Why not indeed? But there isn't so we went down before climbing up the next much larger hump. We topped out at the crest of Evening Ridge at 12.30 p.m. The brave idea had been to go on along Whaleback Ridge. But my foggy memory had forgotten that you have to go down quite a way before going up again to Whaleback – and we were hungry and the top of the ridge was a lovely spot. We were pleased to call it a day.



At 1 p.m. we began to hoof it back – not surprised to run into quite a few skiers coming up. It was, after all, a perfect day to be out. Back on the first hump, the group divided: all but two of us opting to zip down through nice deep snow on Ben’s “shortcut.” Richard and I went back the way we came.

I was quite sure that the larger group would be waiting for us at the bottom, cooling their heels – perhaps even verging on impatience. Surprisingly – no one met us at the bottom. Had they gone straight back to the parking lot? Well, of course not – remember what they say about shortcuts – when someone says the word, add an hour to your time.

The “shortcut” group did eventually catch up to us slowpokes and we made it back to the cars 6.5 hours after setting out, just as the sunset was painting Ymir peak in soft shades of gold.



*Statistics: 9 kilometres. Elevation gain – about 700 metres. Time 6.5 hours.*

*We were: Ben Aubin, Richard Epton, Paz Costa, P'nina Shames, Peter Martyn, Jocelyn Martens, Max Karpinski, and Goody Niosi*

## **Decadent Trip**

*January 7*



## **Mount Beattie**

*January 10*

*By Goody Niosi*

In winter, trips don't always go “quite as planned.”

I've discovered that it's always a good idea to have a Plan B in your back pocket – and, at times, a Plan C through F. Happily, on January 10th we only had to go down to the second letter of the alphabet.

Jan10 marked the fourth annual Al Sinkie Memorial Trip up Evening Ridge – although this year it turned out to be Mount Beattie.

Thirteen of us gathered at the trailhead at 9 a.m. Ben Aubin and I co-leading the snowshoers while Peter Jordan took over the ski contingent – which was a small one this year – Just Peter and Chris Cowan. Peter noted that the avalanche risk was listed “considerable” and suggested we might be best off avoiding Hummingbird Pass – and that meant a trip up Beattie instead. And so it was decided.

I'll address the weather first. Oh sure, I'd been considering a postponement when I looked at weather reports, but as Sheila Sinkie so succinctly put it, if you wait for good weather in the winter, you could be waiting for a while. We went ahead with the trip. While it was raining in Nelson, Whitewater had snow – and lots of it.

It snowed all the way up – so much so that I couldn't take a single photo with my (sadly) non-waterproof camera. Thanks to Chris and Val we had a few photos to document the trip.



Back to weather: it snowed all the way up only to have the snow turn into even more snow at the top. Oh – and the snow was deep. We know that for sure when Simon decided to hurl himself into a tree well – very deep! He

noted that he'd done this expressly for the purposes of research.

At the top we took in the view, admiring the snow-covered trees and grey – um – mist I think. The good news: the trees were so gloriously fairy-tale beautiful that views were not missed.

Chris and Peter had a lovely schuss down to the bottom – we snowshoers also travelled down much faster than up, despite a few spills. (who me? Um – maybe...)

Last words: we had a wonderful group, everyone had fun, and we all got to play in the snow. What more can you ask of a January day in the mountains? Oh – maybe one more thing: Sheila brought treats to share around. Even those who generally forgo sweets, dove in. No wonder they were Al's favourites.

*We were: Cameron Carter, Laura Ringer, Tony Holland, Tina Baldwin, Sheila Sinkie, Valerie Utgaren, Susanne Storzo, Simon Lindley, Vincent Paquier, Chris Cowan, Peter Jordan, Ben Aubin, Goody Niosi*

#### **.....CBC Tower**

#### **.....Cherry Street Station**

#### **Somewhere on Elephant Mountain**

*January 23*

*By Goody Niosi*

Bright and early on Tuesday morning January 23, three of us gathered behind the Safeway in Nelson. "Only three of us going today?" Ben asked. "Did I not give enough notice for this snowshoe?"

Sheila and I were of the opinion that five minutes warning was plenty of time – so off we went. Our aim was the CBC Tower above Pulpit Rock and the Flagpole. Ben thought we might only make it as far as Cherry Street Station. We collectively agreed on a 1 p.m. turnaround time as four hours uphill seemed plenty good enough.

We started out energetically, strapping on our icers for the bottom section and carrying our snowshoes on our backpacks. Once on the flagpole trail, we switched to snowshoes and followed the well-beaten path up. And that's where the easy uphill slog stopped.



Absolutely no one had been rash enough to go farther all winter judging by the lack of even the slightest indent to show where a trail might be.



But hey! We're on a ridge – we can't get lost, right?

Well no, we couldn't get lost, but we could find lots of blowdown, tree wells, shrub wells and other deep places to sink up to our armpits.

The snow was deep (note this redundant

statement). With only three of us rotating through to break trail, the going was mighty slow. It was also hard – I am talking work! To compensate, the trees were wondrous ice queens – just gorgeous. It started to snow as we went up – but not heavily – lovely, fluffy flakes.

We struggled on and at 1 p.m. found ourselves on top of a knoll in the midst of a fairyland of white trees. Ben estimated that Cherry Hill Station was still an hour distant.

We had lunch and headed back down –straight down in many cases. This was fine near the top where we had the soft cushion of deep snow to sink into. It got far more interesting lower down where a layer of ice lurked under a thinner covering of snow. The cry "Man down!" echoed frequently across the landscape. By the time we started heading down the flagpole trail, falling down became a highly-desired result – once down, it seemed a wise choice to stay that way rather than get up – it was just so comfy!

We navigated the Pulpit Rock trail down in icers – except for Sheila who stubbornly refused to take off her snowshoes until she was on bare rock. A shout-out here to the volunteer with the shovel who carved out steps on the iciest sections.

This means I fell only once on that part of the hike. Yay!



*Statistics: 6 hours 45 minutes, about 1,000 metres elevation, and a hair shy of 10K.*

*We were Ben Aubin, Sheila Sinkie and Goody Niosi.*

## **Mount Crowe Back Country Ski Trip**

**January 28.**

The phone buzzed frequently with incoming emails when I posted this trip early in the week...so much so that I asked Doug to co-lead with me, since I prefer not to limit numbers on trips. We had 13 people ask to join, but by the time Sunday arrived we were down to 6. No need for a co-lead but just as well Doug was there anyhow for our choice of route.

We drove up the snow covered highway and rammed by Rav into the last available berth in the snowbank up at Strawberry Pass, to find that the 3 Nelsonian Crew and lone Trailite were already there and eager to head out. Spirits were high.

It had snowed close to a metre during the past week, with a temperature around minus 5. We set a good pace up past the Cookie Jar Cabin and into the usually windswept White Owl Pass. The wind whistled and the scraggy pines near the pass groaned in advance of yet another storm, this one threatening to unravel the beautiful winter conditions with rising freezing levels... but that is all in the future... the snow conditions were picture perfect.



Despite the crotch deep powder we had a nice uptrack to follow, thanks to the usual Rosslanders that frequent the area as well as a couple of early bird KMCers launching out for Mt Neptune.

Doug suggested we make our descent via the west side of Crowe rather than my planned route down to the cut block on the northwest side. I had some misgivings about this one... "Those trees look pretty tight". Others, more confident skiers than me, were more enthused.

We reached the Crowsnest cabin and Vincent pulled out a DVD that was in his pack. We had to break it to him that there wasn't a DVD player in the basement of the cabin. There was no wood at the cabin. Onward to

the summit, which we reached in about an hour 45 from the trailhead.



A short snack, skins came off, and we decide to follow Doug's suggestion. "There's so much snow... and how much bushwhacking can there really be?" We charged off, hitting some really nice glades with beautiful skiing. The hoots and howls of the powder hounds resounded.

Again the trip leader got slagged for spending his time fidgeting with his GPS. "Where are you". "We just go straight down". Straight down is where we went as it is where the gps points. With a few tight spots, Doug went into a hole and the rest managed to skooch around him. Surprisingly, there as little bushwhacking.

It was so much fun that people wanted to go back up as we reached the cut block above the mosquito cabin. Dan and Zuzanna head for the Mosquito cabin while the rest of us went back up. We took a different line this time, heading straight for the Crowsnest cabin from the summit and straight down more or less from there. Skiing was pretty much just as good. There was one little steep glade that woomped a bit that we took singly. Happily we had brought the beepers, shovels, and probes.





Down we went to the cabin for a well deserved rest and some eats. Zuzanna had a lovely fire going there.

Surprisingly, there was hardly anyone around. We figure it was because of the Rossland winter carnival.

After lunch and a few complaints of “it’s cold out there” we headed off down the trail past the Red Dog cabin and reached the trail head in about 20 minutes. It was around 4:30 and just getting dark when we got back to Castlegar, raining in the valley by this time.

A great time was had by all. Great snow. Great group energy. Thanks everyone.

*11 km. 920 metres of up.*

*Chris. (co-ordinator)*

*Participants: Doug Clark, Chris Cowan, Dan Derby, Zuzana Zach, Annie Taiatini, Vincent Pauquier.*

### **Grizzly Cabin Snowshoe**

*January 27*

*Photos Vivian Lenardon and Cindy Kozak-Campbell.*

We had packed a trail to the Grizzly Cabin 6 days before this trip so everything was set for an easy day, but a few days later it snowed and snowed and our trail was completely obliterated.

We parked at the Paulson Summit weather station and started our trek. It was snowing heavily. The snow was soft and deep which meant that the person in front sank in over a foot with each step they took.



Consequently the hard going required frequent changes of the front trail breaker. We snowshoed up a hill and then down and

along old roads towards the swamp. On our way we found logging machinery working. A huge stockpile of logs had already been stacked beside the road. This surprised us as when we passed this area a few days earlier there had been no sign of logging.

From the logging area we proceeded to the bridge over Michener Creek, where we left the road and followed the creek to a large swamp. An otter had very recently travelled up the snow covered creek as its tracks were still very obvious in spite of the continuously falling snow.





After we entered the forest at the end of the swamp it took us a while to locate the cabin as our previous tracks had disappeared. It had taken us 3 hours from our vehicles to the cabin but a nice warm fire with lunch and good company soon raised our spirits. The trip back to the vehicles only took us 1 hour and 15 minutes.

On our way back through the swamp we saw that a lynx had crossed over our tracks.



We were Richard Epton, Janis Gilbert, Brenda Haley, Cindy Kozak-Campbell, Vivian Lenardon, Mary Prothro, and leaders Ed and Hazel Beynon.

## Crowe Mountain

*February 1*

*By Goody Niosi*

Our intrepid and occasionally improvisational leader, Ben Aubin, took us on a roller coaster ride of a snowshoe trip to Mount Crowe February 1. And when I say roller coaster, I mean up and down all the way.

The weather forecast was iffy, but six brave souls decided to chance it. We set out from Strawberry Pass just before 9 a.m.



It snowed. And the wind blew. And it snowed some more.



After doing creative things with layers of clothing – someone mentioned peeling an onion – we started going up. It didn't take long to appreciate the terrain – a winter wonderland that grew more impressive with every painful metre gained.

By the time we arrived at Crows Nest Cabin it had stopped snowing and we were decidedly warm. Still, we broke for a snack, got a nice fire going, and reluctantly left to make our way to the top. We had no long views, but oh the close-ups! Trees straight from The Snow Queen.

We explored the ridge and even got just a tiny piece of sun behind the clouds – for about 30 seconds – but it was something lovely!



And then – down. Of sure, we could have taken the boring old road – but why do that when you've got deep, deep snow and can schuss down on your snowshoes? Heck, we made it to Bear Hollow Cabin by 12.15 – some of us taking a more “creative” route than others.

Lunch – and then what every full tummy fears most: a relentlessly steep uphill to gain almost exactly the altitude we'd lost. What's more, we had to

break trail all the way. Yes, we rotated through and those rotations got shorter and shorter the higher we got.

But we made it! Whew! And once we started angling downhill toward the trailhead again, we suddenly had views!

And so we got back to the parking lot after a bit more than 6 hours, having done about 10K and elevation shy of 1,000 metres.

It should be noted that Bear Hollow Cabin has a wood stove that no longer works. And when we signed the register, a few of us noted that in 2017 we'd had to use a stick dipped in ashes to scribble the date.

So we opened the book – to find the last entry was from 2017 – KMC – scribbled with a stick dipped in ashes. Well, we'd do better this time, we said. Except nobody had a pen and, once again, we resorted to a stick dipped in very old ashes.

Next year, one of us will bring a pen.



*Ben Aubin, Peter Martyn, Paz Costa, Liz Krebbers, Richard Epton, Goody Niosi*



### KMC Trip Registration List

Date FEB. 7, 2018 Coordinator DAVE WATSON

Destination MT LEPSOE -WEST

Non Members must sign a KMC waiver prior to the trip.

Name	KMC Member	Telephone	Emergency Contact Name	Emergency Contact Telephone	Allergies/Medical Conditions (relevant)
BOB MCQUEEN	YES				
DAVE WATSON	"				
JILL WATSON	"				
DIANE PAOLINI	"				
THOM VOLPATTI	"				
ANDREA VOLPATTI	"				



## Mount Lepsoe Snowshoe

February 9

By Goody Niosi

The morning of February 9 dawned auspiciously – by 8.30 a.m. the skies over Strawberry Pass were blue with only a few white, fluffy clouds marring the azure ether and other poetic descriptions of a sky colour that has been inordinately rare this winter.

At 9 a.m., nine of us set out on Ben Aubin's route, which involved snowshoeing on the Seven Summits Trail to Lepsoe Cabin (yes, that involves getting off the trail briefly – but then getting back on it) – going up to the top of Mount Lepsoe and then coming back down the steep north ridge and re-joining the trail somewhere along the way.

Stage one of the plan went well – we hoofed it up through the trees, the sun making actual shadows!



And then the sun vanished and never came back, despite the fact the Chris Cowan (otherwise affectionately and awesomely known as 'infallible weatherman') said it should have been sunny all day.



We arrived at the junction to Sunspot cabin at 10.30 a.m. and unanimously decided to add a small wrinkle in Ben's well-thought-out plan by heading to Sunspot for a snack, bypassing Lepsoe Cabin, and going straight for the peak. Well, why not? What's a snowshoe trip without some fluidity?

We left Sunspot reluctantly – it was warm – and headed up the track following a ski-touring route, which soon petered out. But we went on, Chris valiantly breaking trail. Eventually we knew we'd have to go up and we

did, breaking trail all the way to the ridge. From there, we took a right turn and soldiered on to the top. There wasn't a single view to be seen. Effectively, we were inside a cloud – but oh the glorious tree sculptures! It was a wonderland, a fairy world – and other poetic descriptions that are too effusive for a staid trip report.



At that point there was a small discussion about the wisdom of taking the steep north ridge back versus heading back the way we came. But we did come to the unanimous decision of taking the fast route down. Given the preponderance of trees and lack of significant cornices, this seemed an excellent choice. The very top was madly steep and slippery, resulting in some bum sliding, many shrieks (laughter), and several face-plants.



Lower down the heavenly powder provided tons more opportunities for howls and giggles and creative tumbles.



Then came the next big choice: Lepsoe Cabin for lunch or back to Sunspot? By this time, Ben had come to the conclusion that Plan C (Sunspot) was the better choice.



We agreed and headed back there, where we encountered a group of three snowshoers who had kindly started a fire and warmed the Spot up very nicely.

After a late lunch, we zipped back to the trailhead in no time at all. One of the best snowshoe days ever! At least, that's my humble vote. Coming down the ridge was huge fun – with the caution from Chris that it's not a route to be taken lightly and requires intelligent decision-making and the right snow conditions.

Quick stats: in 6 hours, we hiked 11 kilometres and gained somewhat over 700 metres in elevation.

*We were: Ben Aubin, Chris Cowan, P'nina Shames, Peter Martyn, Paz Costa, Richard Epton, Andy Gullen, Simon Lindley and Goody Niosi*



## **Lemon Creek Rail Trail X-Country ski**

**February 11**

**By Goody Niosi**

Marilyn Miller couldn't have picked a more perfect day for the x-country ski expedition to see the swans north of Lemon Creek. February 11 dawned cold and crisp – the sun was shining – everyone was happy and eager to go.

Fifteen of us set off, making our first stop exactly 10.2 seconds from the start. Hey! Why turn down an actual outhouse?

And then we were off again. Conditions on the trail itself were a tad icy – at least that's my excuse for falling about 10 minutes into the trip – that and the fact that we had to cross a road with bumpy edges.

The swans were beautiful, making their signature trumpet calls out in the estuary. We stopped to admire them and then skied farther to the “big bench.” This is an aptly named bench and a landmark on the trail. We actually managed to seat almost all of us on it in the warm sunshine facing out to a glorious view!



After munching on sandwiches and brownies that Sheila passed around (hugely appreciated!) we put our skis back on and turned back. I should say that by this time, Helen, Rick and Miriam had caught up with us – they were on their own walking trip and we casually joined forces: walking because Helen had a broken arm and Marilyn a broken shoulder blade.

Within seconds of turning back, my right-hand pole caught up in a bit of ice, jerked me back, whipped my arm at a terrible angle behind me and I went down. Yes – I heard the tear. Ouch!

As luck would have it, Grant Falck is a doctor and checked me over. We determined that, although it hurt a lot, it wasn't broken and the shoulder was not dislocated – just a ripped tendon. Once I got over the nausea and managed to get to my feet with the assistance of several people, I kept skiing. What the heck, right? Work through the pain, get back on the horse and all that. But I fell twice more – I blame it all on shock and ice (you always have to blame something!) – and so I took off my skis and carried them back the rest of the way. Yes – three injured soldiers walking abreast on the trail – Helen, Miriam and me.



Small accident aside, it was a glorious club trip. We took lots of photos, soaked up the sun, and skied on one of the prettiest sections of the rail trail. You can't ask for more than that.



We were: Marilyn Miller, Eric Marks, Nanci Suuban, Goody Niosi, Louise Hammerich, Grant Falck, Cameron Carter, Carolyn Crichton Jan Osborne, Ron Osborne, Robin Shepard, Diane White, Sheila Sinkie, Richard Epton, Hamish Mutch

### White Queen

On February 14, KMC snow lovers took to their snowshoes today to pay homage to the snow gods. It had been days since there was some fresh powder, but on the night of the 13th, the skies opened and laid a new blanket of white for us to play in.

We ascended the usual trail up and then made a sharp right, just before the old mine tailing, and took the ski uptrack to our summit. The day was crisp and mostly clear, with plenty of sun.

At the top, the wind was biting, but that didn't stop us from enjoying our lunch and Valentine's treats. Our group was diverse and lively, and all were energized by the great snow, sunshine and good company. Several had not been to White Queen before.

In all, we covered 8.9 kms roundtrip, and ascended 648 metres. Our total time out was about five hours. On this day of love, there were two couples amongst us, but all of us were loving our playground in the snow.



We were Peter Martyn, P'nina Shames, Ben Aubin, Richard Epton, Janis Gilbert, Rick Mazzocchi, Gail Curry, Cameron, and Val Utgaren.

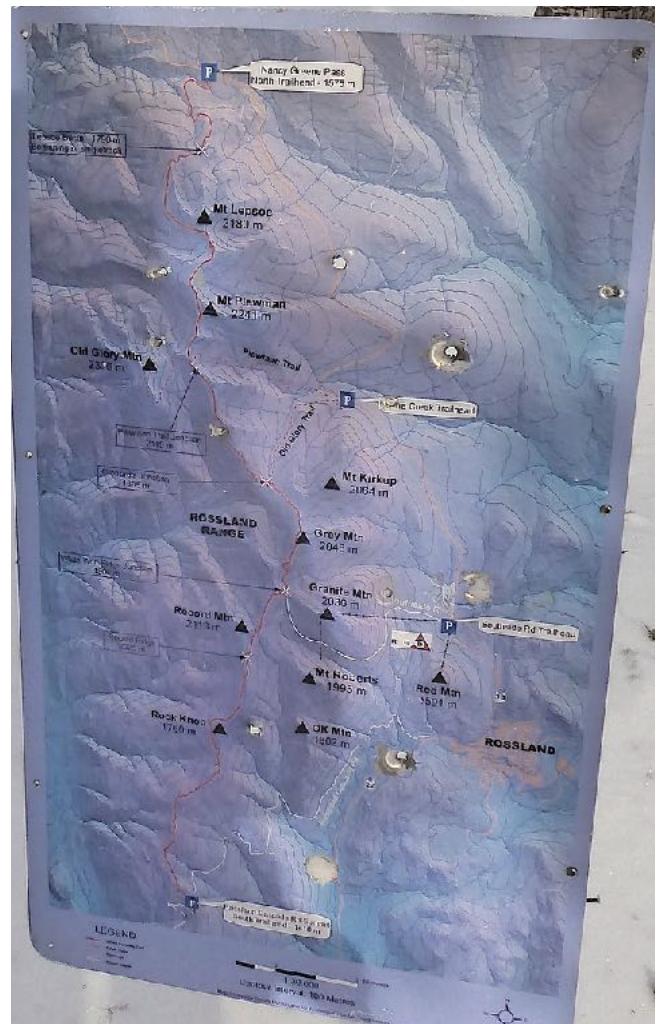
### Record Ridge and Rock Knob

February 21

By Goody Niosi

You know it's going to be an "interesting" snowshoe trip when you get to your first fork in the road and someone asks the trip leader, "Which way should we go?"

And he says, "I don't know. I've never been here before."



And – if you want to make it even more interesting – you have a guy with a GPS with the track on it – he's plunging up into the bush, hopefully following the trail. Meanwhile, one of us (me) notices a trail right beside us. "Uh – I think it's here!" you say.

Guy plunging up in the trees yells back. "Great! How did you find it? Your GPS app?"

"Nope – just looked."

Yep – that's pretty well how our snowshoe trip on Record Ridge started on Feb. 21. Fearless leader, Ben Aubin pulled it together with his usual five minutes notice and four of us set off on a very (very) (did I

mention very?) cold morning. Naturally, this meant we had the entire area to ourselves. Also – no one had been on the trail possibly forever so we had to break the entire way.

Once we got ourselves on the trail (see explanation above) we did quite well for ten minutes. At that point, Frank and Ben thought, “Why stay on the trail when we can head straight up to the ridge? After all, we’re on snowshoes! We make our own trail.”



Okay then. We went up to the ridge, which then meandered down after a few minutes and brought us back to the trail. On we went through seriously photo-worthy scenery and then we really did begin the climb: our goal – Rock Knob. After considerable panting and puffing, we crested the top with gorgeous views all around.



We even found a sheltered spot for lunch and then began the fun part of the day – slipping down through the powder. It took remarkably less time on the return trip to cover the distance.

I’ll give a big thumbs up to this destination. Sure, it’s farther than Strawberry Pass but if you go, you can pretty well count on having the whole place to yourself and now, thanks to our intrepid group, there is an actual track. Whether or not you want to follow it – well, that’s a whole other discussion.

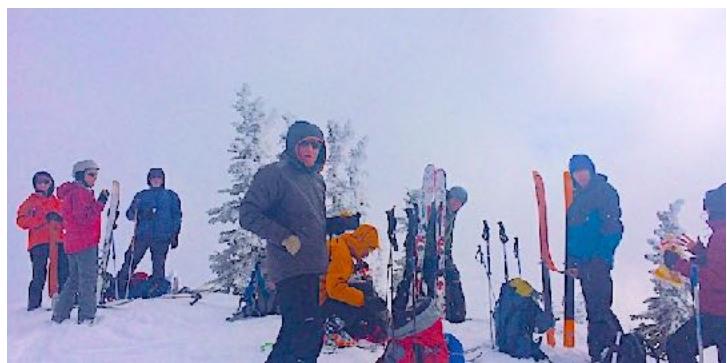


*Quick stats: about 4.5 hours round trip; about 400 metres elevation gain and about 8 km round trip.*

*We were: Ben Aubin, Frank Fodor, Rick Mazzocchi, and Goody Niosi*

#### **Mt. Plewman - Cut Block,**

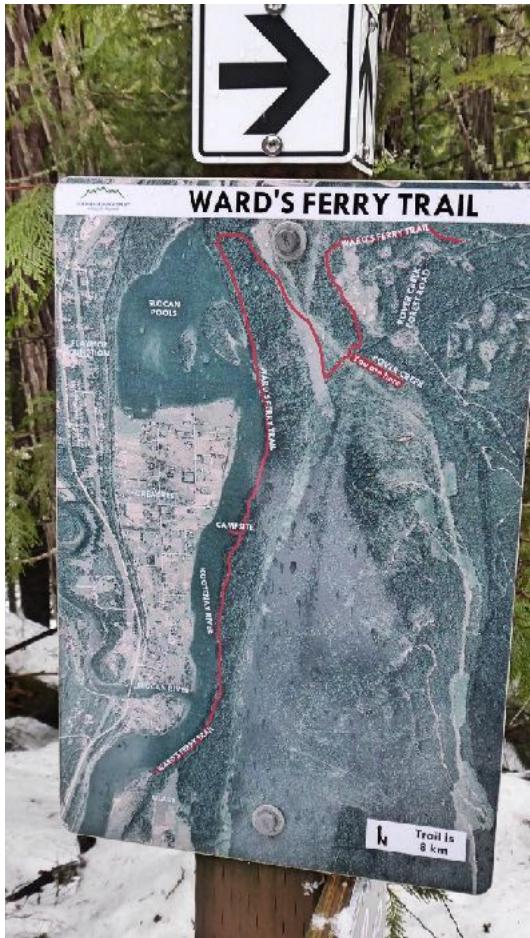
On Feb. 28, 2018 a hardy 9 people joined a ski tour to the locally named “Cut Block Peak”, a sub peak of Mt. Plewman in the Rossland Range. Starting on highway 3B at the Plewman trailhead we proceeded to climb for 2 hours up the east ridge on a ski trail obviously made by the local 30 something gang (steep) to Cut Block Peak at elevation 2158 m, a climb of 715 m (2346 Ft.). After a shortened lunch because of a cold wind (see picture) we setup groups of 3 to ski down the cutblock on the south facing slope in great untracked powder dropping 428 m (1404 Ft.) to the Plewman Trail for the ski back to the vehicles. Lots of wide smiles and yahoos when we regrouped at the Plewman Trail. A relatively short trip of 4 hours return but a good grunt getting up to the “peak”.



*We were: Jill Watson, Diana Paolini, Ken Holmes, Peter Oostlander, Doug Clark (photo), Murry Bennett, Tia Hall, Llewellyn Mathews and Dave Watson (leader).*

## **Ward's Ferry Trail**

By Goody Niosi



Fearless leader Doug Clark proved his stamina and courage – not necessarily by getting all eighteen of us safely from point A to point B on our Ward's Ferry snowshoe trip March 3 – but for the fact that he successfully managed the vehicle logistics without losing a single driver or passenger.

Doug did explain the logistics to us – my attention wandered shortly after he said something about a car drop-off at trail's end and then a four-vehicle parking at the ferry and, after that, a meeting at Playmor Junction. From there on, I have vague memories of driving in a gaggle of cars to the beginning of the trail, after which the cars magically disappeared – and then, at some later point still – one car re-appearing with more people in it – something about a driver pick-up or drop-off as I recall.

Through some mysterious magic, we were all present and accounted for shortly before 10 a.m. and set off on our snowshoe trip. Five minutes after the start, we changed the designation to snowshoe obstacle course. Climbing over, under, and around trees and shrubs

added a certain, shall we say “charm” to the beginning of the trip.



We forged on until we arrived at a new bridge – so impressive that everyone had to stop and take photos. I'd never seen it in its original state – apparently it had been a rather log-like structure. And here was the new one in all its steel and wood glory!

At this point, three people left us to head back, leaving 15 to venture forward. It was on the downhill trek to the river

that we began to have our doubts about the wisdom of snowshoes.



Who knew the snow would have melted so quickly? This was not necessarily a bad thing. As Vicki pointed out, some of us were pretty darn excited by the presence of dirt! (real live soil.)

We had lunch at the large wooden structure, recently built I understand – replacing a precarious rope that helped get people past a steep and slippery section. After that, fine views of the river opened up and we

continued on. By this point only one person was still hiking in snowshoes.

At the end point of the trail, four people disappeared in Ingrid's car. We waited, speculating where they had gone. After 20 minutes, the bets were running heavy that they were toasting a happy day at the local pub.

But apparently not. Four vehicles finally arrived, we piled into them and headed back to various points along the way. All this was part of Doug's magic shuttle.

A super day that I think everyone enjoyed. It did, however, convince me that any hike I lead will have these instructions for the meeting point: meet at trailhead. Get yourself there as best you can.



*Quick stats: total hiking time – just under five hours; distance (sign says 8K – my gps said 9.8K – you pick); elevation gain – 100 metres or negligible.*

We were: Doug Clark, Vicki Hart , Brad Howard, Scott Wilson , Kathryn Kimmerly, Norm Koeber, Ray and Michelle McDicken, Ingrid Enns, Doug and Linda Clark, Ed and Hazel Beynon, Goody Niosi and Simon Lindley , Helen and Rick Foulger, Brenda Haley, Val Utgaren

## **Mount Lepsoe Snowshoe**

*By Goody Niosi*

There's something to be said for spring snowshoeing, especially if you get high enough – and Mount Lepsoe near Strawberry Pass was the perfect destination on March 12.

Rick Mazzocchi gathered his motley crew at the trailhead at 9.a.m. and we set off, Rick and Ed choosing to carry their snowshoes for the first part. Five minutes and six postholes later, Rick put his snowshoes on. Ed held out until we were past Sunspot Cabin. Brave? Stubborn? Smart? Who can tell?

The bluebird day was perfect. We couldn't see so much as one tiny puffy white cloud lurking on any far

horizon. The higher we got, the more beautiful the views – or should I say "expansive."



We followed the Seven Summits Trail until Rick opted to go right somewhere past the Lepsoe Cabin turnoff instead of left. Well, he said later, there were ski tracks and how could he resist following a ski track?

We did meet up with the Seven Summits again.

We then followed yet another ski track – this time a brilliant one that gradually, in a long switchback, carried us up and up, past fine views of Old Glory to the top of Lepsoe.

Made it in about three hours.



We found a perfect sunny spot for lunch. I'm sure it's been the first lunch stop in months that didn't require us to layer up.



We then opted to hike along the ridge before slipping and sliding down through the trees to the Seven Summits once again. And did I mention that we had powder all the way down? Can you say “fun?”

We didn't realize what deep knowledge Rick had of the place until we were back within the area of Lepsoe and he mentioned that we could short-cut back to the parking lot via a draw, circling around Sunspot and getting on another trail through the last section of woods.

Awesome track! We loved it.

We arrived back just shy of six hours round trip. We did about 620 metres elevation gain and pretty close to 12 kilometres walking, trudging, sliding and occasionally falling, tumbling, and face-planting.

In other words, we deemed it a perfect day with Rick getting two thumbs up.



*We were: Rick Mazzocchi, Ed and Hazel Baynton, Glen Wallace, Liz Krebbers, Scott Wilson, Goody Niosi*

## **Pilot Peninsula**

**2018-03-17**

We couldn't have asked for a better day! It was a calm, sunny Saturday morning with the promise of double-digit highs, when a group of fourteen KMCers took an early Kootenay Lake Ferry across to the Pilot Peninsula trail. We were hoping to claim the first snow-free hike of the season and we were not disappointed!



We warmed up fast in the spring sun as we hiked between pebble beaches with huge views of Kootenay Lake. Our final destination was a beach about 6.4km down the trail where we basked in the sun and admired the distant snowy peaks across the lake. It was St Patrick's Day and several beers emerged with lunch to properly celebrate the holiday and beautiful weather.



*We were: Abby Wilson, Andrew Woodward, Scott Wilson, Brenda Haley, Richard Epton, Dale MacKenzie, Paula Bodogh, Jan Osborne, Emmy and Rob Vuik, Nancy Suuban, Robin Sheppard, and Heather Myers.*

## Rossland Range Recreation Site - Cabin Coordinates – Updated - Jan. 13, 2018

Cabin name	UTM - NAD 83/WGS 84	Latitude	Longitude	Topo Map	82 F/4	Decimal degrees	Decimal Minutes (For Pilots)
Crowes Nest*	11U 0435652/5452345	N49° 13' 84"	W117° 53' 01.21"	N49° 22051,	W117° 88367	N49° 13.231'	W117° 53.020'
Viewpoint	11U 0434314/5454278	N49° 14' 15.90"	W117° 54' 08.51"	N49° 23775,	W117° 90236	N49° 14.265'	W117° 54.142'
Mosquito	11U 0434833/5452247	N49° 13' 10.35"	W117° 53' 41.65"	N49° 21954,	W117° 89490	N49° 13.172'	W117° 53.694'
Red Dog	11U 0434214/5451662	N49° 12' 49.23"	W117° 54' 11.87"	N49° 21367,	W117° 90330	N49° 12.820'	W117° 54.198'
Chimo	11U 0433398/5451788	N49° 12' 54.94"	W117° 54' 52.31"	N49° 21526,	W117° 91453	N49° 12.916'	W117° 54.872'
Booty	11U 0435102/5450142	N49° 12' 02.30"	W117° 53' 27.13"	N49° 20064,	W117° 89087	N49° 12.038'	W117° 53.452'
Sunspot	11U 0434675/5449386	N49° 11' 37.65"	W117° 53' 47.79"	N49° 19379,	W117° 89661	N49° 11.627'	W117° 53.797'
Lepsoe Basin	11U 0434361/5448699	N49° 11' 15.29"	W117° 54' 02.90"	N49° 18758,	W117° 90081	N49° 11.255'	W117° 54.049'
Barking Spider*	11U 0435154/5448943	N49° 11' 23.49"	W117° 53' 23.87"	N49° 18986,	W117° 88996	N49° 11.392'	W117° 53.398'
Not so secret*	11U 0435803/5447578	N49° 10' 39.54"	W117° 52' 51.02"	N49° 17765,	W117° 88084	N49° 10.659'	W117° 52.850'
18100*	11U 0435242/5446163	N49° 09' 53.51"	W117° 53' 17.91"	N49° 16486,	W117° 88831	N49° 09.892'	W117° 53.299'
Eagles Nest*	11U 0435493/5449720	N49° 11' 48.77"	W117° 53' 07.58"	N49° 19688,	W117° 88544	N49° 11.813'	W117° 53.126'

### Notes:

- UTM - used by most backcountry travelers. In an emergency call 911
  - Decimal Minutes - used by pilots and BC Forest Services.

• Cabins to be removed or replaced.  
 This list is also found on the website at <https://kootenaymountaineeringclub.ca/club-info/documents/docs/RosslandCabinsCoordinates.html>

Steed Hut, Summer



Steed Hut, Winter

## Hiking Strathcona Provincial Park on Vancouver Island

By Goody Niosi

For those of you considering hiking farther afield this summer – and possibly thinking about a visit to Vancouver Island, let me urge you to head straight for Strathcona Provincial Park.

I hiked it for more than twenty years before moving to the Kootenays. Strathcona has it all: alpine, old growth forests, scrambles, rocks, lakes, tarns, day hikes, traverses and, above all, true mountain beauty.

Strathcona has two main access points, both easily reached (read – no logging roads.). The first is Mount Washington near Courtenay; the second is west of Campbell River.

Most Strathcona hikers begin their explorations at Mount Washington. Drive up the paved(!) Mount Washington Parkway and follow the signs to the Raven Lodge Nordic Centre. Park and study the map at the trailhead. You can do three main loops: the very short Paradise Meadows loop over boardwalks that protect the delicate flora, the longer Lake Helen McKenzie loop that takes you up and past two gorgeous lakes and through the meadows, and the all-day Kwai Lake/Cruikshank Canyon/Whiskey Meadows Route that



*Cruikshank Canyon*

keeps you in the sub-alpine all day, allows you to pass half a dozen glorious lakes and innumerable tarns, and brings you to the edge of a deep canyon.

Overnights? Kwai Lake has tent pads and an outhouse as does Circlet Lake – both (but especially Circlet) are excellent staging areas for multi-day trips. One of my favourite outings is camping at Circlet and doing a mountain a day: day one – Albert Edward, sixth highest on Vancouver Island and reminiscent of Mount Brennan – just a long walk to the top; day two:



*Mount Albert Edward on left*

Castle Crag – a brilliant walk around glorious Moat Lake and up the back side of a rather formidable-looking tor with an option to continue over the top of Mount Frink and back down; day three: Jutland Peak across from Albert Edward. None of these are walks in the park – all are beautiful and immensely rewarding.



*Castle Crag*

Circlet Lake is also the start of the increasingly popular Jack Augerpoint Traverse that leads the hiker over the top of Mount Albert Edward, down to Ruth Masters Lake, past several other peaks with options to bag them, and finally down to Buttle Lake. You need two cars and at least three days. Those who have done it insist that Ruth Masters Lake is the prettiest lake anywhere ever! (no hyperbole there.)



*Hair-trigger Lake on way to Circlet Lake*



*Camping on Flower Ridge*

From the Campbell River Side, my favourite multi-day is Flower Ridge – aptly named. It's a long slog up switchbacks to the ridge (four hours at least with a big pack) but once up there – wow! This is nothing like our Kootenay or Rocky Mountain Ridges – this ridge is hundreds of metres wide, filled with tarns, alpine flowers, small lakes and offering views of most of Strathcona's surrounding peaks. Set up camp at the top, hike to the end of the ridge the next day, climb to the top of Central Crags, admire the views of Cream Lake and hike back to camp – it's a full day. Hike down the third day.



*Hiking Flower Ridge toward Nine Peaks*



*Crest Mountain*

Other favourite hikes from this end: Crest Mountain – another huge ascent to arrive at a flat-topped peak littered with tarns – a fabulous exploration. Expect to spend a minimum of an hour at the top just getting to the summit cairn and back.



*Camping on Phillips Ridge*

Phillips Ridge is another multi-day of incomparable beauty. This is the staging point for the climb up the Golden HInde – Vancouver Island's tallest mountain. You don't have to get to the top to make this a great multi-day adventure – the ridge itself is challenging enough – and beautiful.



*Baby Bedwell Lake*

Another favourite is Bedwell Lake/Cream Lake – one of the few Strathcona Hikes that requires driving on a dirt road – but it's dirt – not rutted logging – easy by Kootenay standards. You can camp at Bedwell or Baby Bedwell Lakes and from there – oh the hiking! What a landscape, ending at a turquoise mountain lake set inside a perfect bowl. This is also the staging point for all kinds of mountaineering expeditions like Big Interior, Setpimus and Tom Taylor.

Those are just a few favourites – there are so many other hikes to explore: Landslide Lake, Marble Meadows, Della Falls, Mount Myra – it's a hiker's paradise. A worthy destination for hikers who want to travel farther afield.

## KMC Kokanee Cabin Ski Report for 2018

By Terry Huxter

The 2018 KMC ski week straddled Valentines Day and the mountains were extremely loving to us. We arrived at the cabin on February 10th after a period of warm weather and heavy snow falls. The avalanche conditions were rated high. Conditions changed dramatically at the start of our week. We started our week with night time temperatures of 19C Saturday and 28C Sunday. The rest of the week the temperatures sat around -11C. The only instability we noted over the week was the crown of a past avalanche several kilometers away on Boomerang which was visible from Grizzly Trees on Sunday. Otherwise our week had not so much as a whumpf.

The morning of Valentines Day we woke up to 20+ cm of new snow that had fallen at -11C with very little wind so we all exhausted ourselves ripping this up on the slopes around the cabin, pushing ourselves to that extra last run

because it was so much fun. The 15th was even better. Contrary to the forecast, the skies cleared to a brilliant blue with no wind. The exceptional clarity of the air made for breathtaking views in all directions. Views from Tanal / Granite Knob Col for three of us; Happy Valley for four others; and Grizzly Trees for another 8 skiers, all enjoying the 20 cm of perfectly preserved powdery snow. For the trail breakers, up tracks on the steeper slopes were a shuffle of skis below a sparkling surface, the skis only breaking above the snow on the corners.

This particular day we were fired up by poached eggs on toast and rib sticking porridge for breakfast. We returned to appies of many cheese varieties, dates,

apples, nuts and smoked salmon, jerky and salami with crackers, before a feast of ham, scalloped potatoes and two salads, plus cake, cookies and nut chocolate pieces for dessert, washed down with red wine. Feasts on this scale were produced every day and combined with the excellent snow to make this an exceptional week at the Kokanee Cabin.

Dinner time conversations, however, were not always so comfortable for all of us. It seems membership in the KMC requires you to live inside some defined boundaries, for example in the west the Granby is the boundary, (but whether this means the river or the watershed is not spelled out). If it is the river one of us at the cabin should not have been there. It was further pointed out that this members trail building skills

seemed to have deteriorated drastically. Senior club members graduated him/her through their apprenticeship program several years ago. Today on the way to Grizzly trees one turn on an otherwise flawless up track caused two skiers to lose their skins and one to fall over.



An undisclosed number of buckets of honey were needed to allow this member to 1) avoid immediate removal from the cabin by helicopter at his/ her own expense 2) remain a member of the KMC and 3) keep his/ her trail building credentials.

Sandra and Laurie reported the only wildlife siting of the week (exempting other skiers) at Grizzly Trees . A curious pine martin was peeking out at them from the cover of a large spruce tree and once comfortable with their presence started circling other trees in a playful manner. The next time up they saw its tracks using their up track.

Some notable firsts for the week were:

• For the first time in the memory of the trip coordinator, Ken Holmes, the wine supply ran out. Thankfully this happened Friday evening. As our group always seems to be light on baggage, I don't think this will happen again.

• Possibly related to this rapid wine depletion, it was the first time I can remember that well over 50% of skiers were in bed before 8 pm. This made it tough to find 5 players for Oh Hell. More usually 4 could be mustered for euchre.

• Hugh Ackeroyd was enjoying his first week as caretaker and custodian of the cabin. He had recently retired as area coordinator for Kootenay Parks so was well acquainted with the cabin and the park. On several days groups of us benefitted from both his passion for skiing and trail breaking expertise.

• Thanks to a tweaking of the electric generation system this summer, we enjoyed the use of a microwave oven for the first time. This and two electric kettles could be used with no power issues.

Our flight out was quite an adventure as it coincided with the next storm cycle. It was solidly grey, low visibility with snow falling heavily. I would have called it atrocious flying weather. Nevertheless, the chopper made 4 trips before 11:30 AM using tree top flights down Kokanee Creek and shoreline flying low over the West Arm with a tail wind strong enough to keep the air sock horizontal at the heliport.

We were:

*Ken Holmes, trip coordinator. A big thank you, Ken, from all of us.*

*Sandra Fuller, Laurie Heyler, Andrea Vowell, Birgit Vierheilig-Chart, Jocelyne Martin, Tom Braumandl, Paul Madigan, Peter Jordan, Bruce Reeder, Nigel Tuffrey, Jeff Ross, Llewellyn Matthews, Ron Stockerl and Terry Huxter.*

## Kiosk and signs for Hummingbird Pass trailhead

Over the last year, the KMC has worked on a project to install a kiosk and signs at the Hummingbird Pass backcountry skiing trailhead, on the road to Whitewater ski hill. We received a grant of \$4127 from Columbia Basin Trust in support of this. Whitewater also contributed some money towards printing the signs.



Last spring, we installed some warning signs provided by BC Parks, in the West Five Mile Creek valley where skiers sometimes get lost. This winter we built the kiosk, and installed a map and other signs. The kiosk was custom-built by Kyle Wiebe.

The map is available on our web site, under "mountain-info/maps/". It is designed to be used in the Avenza Maps smartphone app.

Thanks very much to Fred Thiessen, Barb Hanlon, Elena Cigala-Fulgosi, Bruce Reeder, and Sandra Fuller who helped with the project.

Peter Jordan

## **Topographic maps, devices, and smartphone apps – a comparison**

These days, fewer people are using paper maps on hiking and ski trips, and more people are using smartphone mapping apps. This winter, a group of us got together to compare several different apps, and also looked at how they compare to GPSs and old-fashioned maps.

### **Paper maps (and their equivalent as printable PDF files)**

There are several options for paper topographic maps. The most familiar maps for most people are the 1:50,000 federal government topographic maps, which have been around since the 1950s. In the Kootenays, most of these maps were last updated in the 1980s. Usually they have a contour interval of 100 ft, and they have a 1 km grid (the “UTM” or Universal Transverse Mercator grid). Some newer maps have 40 m contours, but these were interpolated from the old 100 ft contours, so there is a slight loss of precision.

For decades, these maps were the most useful ones for outdoor use. They were printed on high-quality paper which was somewhat waterproof and stood up well to heavy use. Recently the printing and distribution of the maps has been outsourced, and the paper quality is somewhat variable. So if you can get your hands on old maps, they’re worth keeping.

If you use a GPS, or if you try to refer to published GPS coordinates for things like huts or trailheads, you are likely to find that the UTM coordinates on the 1:50,000 maps are slightly off. (Techno-nerd alert – the following may be obscure to some readers.) This is because the geographic datum used for older maps is NAD 27 (North American Datum 1927), while newer maps use NAD 83 or WGS 84 (World Geodetic System 1984) (these last two are essentially the same). The difference between the old and new grids is around 200 m in the Kootenays (which can be quite significant if you’re searching for the snow-covered Grassy Hut). The datum is always noted in the legend in the map margin, along with the magnetic declination.

The federal government topographic mapping has been distributed as a digital database in several formats, for use by software developers and map publishers. Paper maps which are essentially identical to those published by the government are available in some retail stores. (Valhalla Pure sells good-quality 1:50,000 maps printed

by GoTrekker. These are the same as the government-produced maps, with the addition of hillshading.) Several digital versions of the 1:50,000 maps are used by developers of smart-phone mapping apps – the most common is called Toporama.

Beginning in the 1980s, the BC government produced new 1:20,000 maps with 20 m contours. These maps are made using digital technology – the raw data are stored as a grid of points with about 80 m spacing, with additional points in complex terrain. The maps have some errors (big ones in some map sheets), but in general, they are more detailed and accurate than the older 1:50,000 maps. The BC government produced these maps mainly for internal use and to sell the data to industry, and they made no effort to make them available to the general public. They were never sold as paper maps.

Recently, the BC government has made these maps available free on a web site, in “geo-PDF” format. These are PDF (Portable Document Format) files which can be viewed on a computer or smartphone. They are georeferenced, which makes it possible to view them in mapping software while showing your present location, as well as waypoints and tracks. The maps can be downloaded from this site:

<https://www2.gov.bc.ca/gov/content/data/geographic-data-services/topographic-data/topographic-map-viewer>

### **GPS (Global Positioning System) devices**

GPSs have been around since the 1980s, but they came into wider use after about 2000, when the US military stopped degrading the satellite signals. The technology has greatly improved over time, and GPS receivers are now incorporated into smartphones and many other devices. Dedicated GPS devices haven’t changed much since 2000, nor has the price dropped, but they are still very useful for outdoor recreation and for work purposes such as forestry. Consumer-level GPS units (and smartphones) have a useful resolution of about 10 m, provided satellite reception is good. (It may not be good in narrow valleys or under dense forest.)

Garmin is the biggest manufacturer of GPS units, and they make many models. I use the Garmin GPSmap 64s which is a popular model for recreation. This model, and several similar ones, use micro-SD cards (a smaller camera data card) to store maps. GPS units can be used on their own without added maps, but their

usefulness is greatly increased if you add maps. Garmin is very much into copy protection and charging high prices for everything, so maps cost money. Presently the price of a GPSmap 64s with the BC Backroads maps (which are based on the BC government 1:20,000 maps) is about \$465. Without any added maps, it's about \$340. Maps for almost anywhere in the world can be purchased on micro-SD cards which can be swapped into the GPS unit, or they can be downloaded (at a cost, as they have to be Garmin-compatible) and added to empty space on an existing card.

GPS units are much more rugged than smartphones. The 64s (and similar models) is waterproof, and uses AA batteries. GPS units have navigation functions that are not available or are less functional on smartphone apps. However, a disadvantage is that the screens are small, and not nearly as bright and high-resolution as smartphone screens. Because of this, and because of the cost of maps, smartphone apps that simulate the functions of a GPS are becoming more popular.

A useful feature of GPS units is the ability to record waypoints and tracks. Waypoints and tracks from elsewhere can also be copied onto your GPS before a trip. Waypoints are an essential feature, and they are very simple to record and use. For example, they can show where a trailhead or cabin is, or where you hid your bicycle in the bush before beginning a hike. Tracks are a bit more difficult to use, and take up a lot of storage space (less of a problem these days with gigabytes of storage on memory cards). They are useful for things like recording the route of a trail to draw on maps or to pass on to friends. Some people like to use tracks to keep a record of how far they've skied or what elevation they've gained and lost on a trip.

Waypoints and tracks are stored as files in the GPS. The common storage format is called GPX. If you plug your GPS into a computer, it's seen as an external hard drive, and you can copy the GPX files to your computer or vice-versa. The GPX files can be used in Garmin Basecamp software (which is free) and also can be viewed in Google Earth.

### **Smartphone mapping apps**

In the last few years, smartphone map and GPS apps have become very popular. These apps are often free or cheap, and many maps are available on the internet. Of course the initial cost of a smartphone is high

compared to a GPS, but you probably have a smartphone already.

Smartphone apps have a considerable advantage, which is that the screen is bright and highly visible compared to the screen on a GPS unit. A disadvantage is that smartphone batteries are usually good only for about a day of use, so it's not really practical to use them on multi-day trips in the backcountry (unless you also carry a backup battery and solar panel). Batteries in a GPS unit are also only good for a day or two, but they use AA batteries which are easily replaceable in the field. Recording tracks can greatly reduce battery life on a smartphone, but it doesn't seem to make any difference on a GPS unit.

With most smartphone apps, you don't need to be connected to the internet to use them. Maps can be saved ("cached") to your smartphone memory to be used offline. It's advisable to turn your smartphone to airplane mode when using it as a GPS, to save battery life. Also, smartphones can interfere with avalanche transceivers, so they should always be in airplane mode (or off) while backcountry skiing.

I have found that my phone (an iPhone 6) is quite sensitive to low temperature, and will stop recording a track, or even turn itself off, if it gets too cold. If I keep it in an inside pocket to keep it warm, it won't reliably record a track because satellite reception is reduced. Some other people don't seem to have this problem, so various makes of smartphone are probably different when it comes to low-temperature performance. For normal navigation (that is, not recording tracks), this isn't an issue – you can keep the phone in a warm pocket, and pull it out only when you need to look at it. There are many smartphone apps available, and many are free, or at least have a free introductory version as well as more advanced version which you have to pay for. However, be aware that there is no such thing as a "free" app. The companies which develop these apps make their money by tracking your movements, and selling the data to Google or Facebook or whoever will pay for it ("the product is you"). (So next time you illegally cross the border, or hunt on private land, or go Christmas shopping in a big-city mall, you may want to turn your smartphone off.)

We compared several popular smartphone mapping apps, and this is what we came up with. Most apps are available both in iOS (Apple iStore) and Android versions.

## **Avenza PDF Maps (the newer version is just called Avenza Maps)**

This app has been around for a while, and it is very popular for professional use by people who work in the bush, like forestry workers and firefighters. Avenza is a Canadian company, based in Toronto.

It works by loading maps in the geoPDF format onto your phone. These maps can then be viewed on your screen, just as they would appear in Adobe Reader on your computer, or if printed. Your present location is displayed, along with your coordinates which can be shown in UTM metres or in degrees and minutes.

Waypoints and tracks can be recorded, and exported or imported as GPX or KML files. An additional feature which makes it popular for foresters and other outdoor workers is that photos and field notes can be recorded and linked to the waypoint.

A variety of maps are available to download from the Avenza Map Store (typically a few \$ each, but sometimes free). The best selection is for Canada and the US, but there are also some from overseas. (This seems to be limited – for example, I didn't find any useful topographic maps for hiking areas in the Alps.) Locally, a good selection of maps is available for purchase – for example, Nelson area mountain bike trails and BC Backroads maps. The federal government 1:50,000 map sheets in the Toporama format are available free on the map store. Topographic maps for the US at a scale of 1:24,000 are also available free.

The main usefulness of Avenza Maps is its ability to load maps from external sources in the geoPDF format. Anyone who has access to ArcGIS (a widely used professional GIS system) can make geoPDF maps. The KMC recently made such a map for the Evening Ridge-White Queen backcountry ski area (<http://kootenaymountaineeringclub.ca/mountain-info/maps/>). A very good map of the Paulson cross-country ski trails is available from the Castlegar Nordic Ski Club (<http://www.castlegarnordic.ca/trails-map-0>). The Nelson Nordinc Ski Club has a more basic, but still useful, trail map ([http://nelsonnordicski.ca/?page\\_id=24](http://nelsonnordicski.ca/?page_id=24)). It's worth putting Avenza Maps on your phone just to have the cross-country trail maps.

BC government 1:20,000 map sheets (see link above) are available free and can be loaded into Avenza. Maps from this and other external sources are downloaded onto your computer, and from there to your phone using iTunes (for Apple devices) or the equivalent for

Android users. They can also be transferred wirelessly using Dropbox. Loading maps can take a while, as Avenza has to process the map and convert it from Adobe PDF format to its own format.

With the free version, you can only load 3 maps from external sources (that is, maps that aren't obtained from the Avenza map store) onto your phone at one time. This is a significant limitation for most users. However you can unload the maps, and load three different ones when you want to go to a new area. You can upgrade to the paid version for about \$40 per year, which allows you to load as many external maps as you want. (There is also a more expensive professional version, which doesn't have any additional features useful for recreational users.)

## **Gaia GPS**

This is a popular mapping app, from a company based in California. There is a free version which provides a quite detailed topographic map, and all the typical GPS functions such as your present location and coordinates, waypoints, and tracks – these can be imported and exported.

The maps work in a very different way than with Avenza. On an index map, you go to the area of interest, and the program automatically downloads the map data and caches it in your phone's memory, for offline use later. In BC, the map data it uses is the BC government 1:20,000 topographic database. It doesn't download map sheets; rather, it downloads the raw point data, and then it automatically generates contours on the fly for the area you are viewing. This is very impressive technology, and it is quite fast. It appears to use less storage capacity than Avenza to cover the same area. The maps are seamless, and you don't see the transition from one map sheet to the next. If you zoom in, contours are shown with an interval of 10 m. This is rather misleading, as it makes the map appear more detailed and accurate than it really is – the 10 m contours are fictitious, since the precision of the original maps is really only 20 m.

The maps have very good visibility and contrast, which is an advantage in bright light conditions. The app is easy to use, and doesn't require any special technical expertise.

The maps show quite a few trails. These seem to have been obtained from a community of users who have contributed tracks. Popular areas (e.g. the mountain

bike trails near Blewett) have many redundant trails, not all of which are likely to be accurate. If you are online, some of the trails link to photos and other information provided by users – a mixed blessing, as there's no way to verify how accurate the information is.

There is a paid version (called a membership subscription) for about \$35 a year. This enables you to download maps from additional sources, including satellite imagery. There appears to be a good variety of map sources for Canada and the US, and for a few European countries, for paid members. According to their web site, it is possible for paid users with technical expertise to georeference their own maps and import them into the app. (I don't have a paid subscription, so I haven't tried any of these features.) Topo Maps Canada (this appears to be available on the Apple site only)

This is a very simple free app which has been around for a while. It displays the federal government 1:50,000 maps, and that's all. However, it's free and very easy to use. It has basic GPS functions, such as waypoints (called flags) and tracks (called trails), which can be imported and exported. There is a very basic navigation function, which gives you the distance and bearing to a flagged location.

To download maps, you click on the areas of interest on a base map. The maps are downloaded as tiles (about 10 km square), not as map sheets. Once downloaded, the maps are saved in memory for offline use.

There are two sources of map data: Canada Base Map, which you don't want to use; and Toporama, which gives you the 1:50,000 maps, more or less as they appear on printed paper maps. The contour interval is 40 m, and treed areas, streams, and roads (not up-to-date) are shown. The maps are seamless, and you don't see the map sheet boundaries.

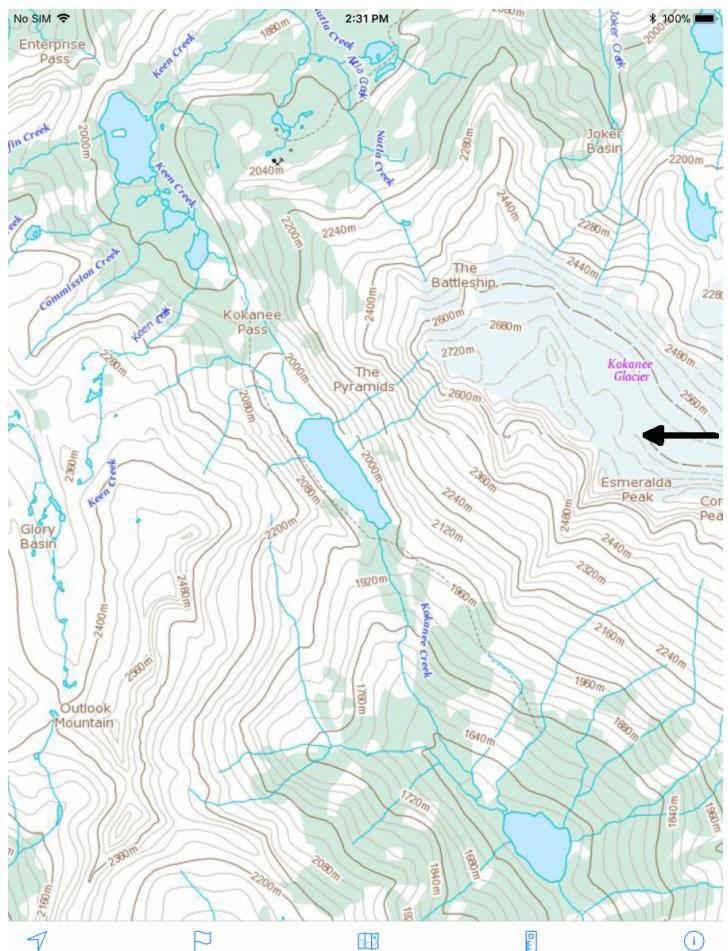
The maps do not have a north arrow (they're always oriented north), a scale bar, or a kilometre grid. This is somewhat disconcerting if you're used to using paper maps. However there is a distance tool – you can easily drag a line or curve on the map, and the distance is displayed.

## Canada Topo Maps (for Android)

This similarly named app was pointed out to me by Llewellyn Matthews. (I don't have an Android device, so I can't try it out.) The two apps are not related in any way – this app is from a German company (ATLOGIS), that from its web site looks like it has a lot of products and expertise worldwide in mapping and remote sensing. From the app description, its maps use the Canada 1:50,000 maps including Toporama, as well as satellite imagery, and it has lots of GPS functions. There is a free version and a pro version for \$16 (US\$?). Looks like it's worth a try.

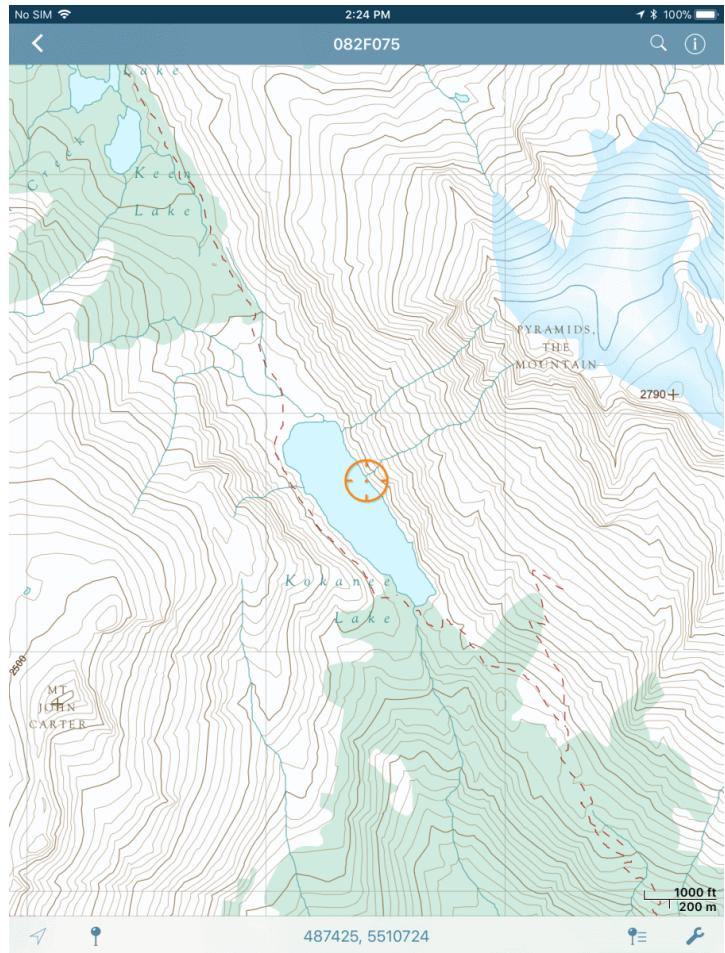
### Examples

The following screenshots (from an iPad) show some examples from each program, which illustrate the general appearance of each app, as well some of their limitations.

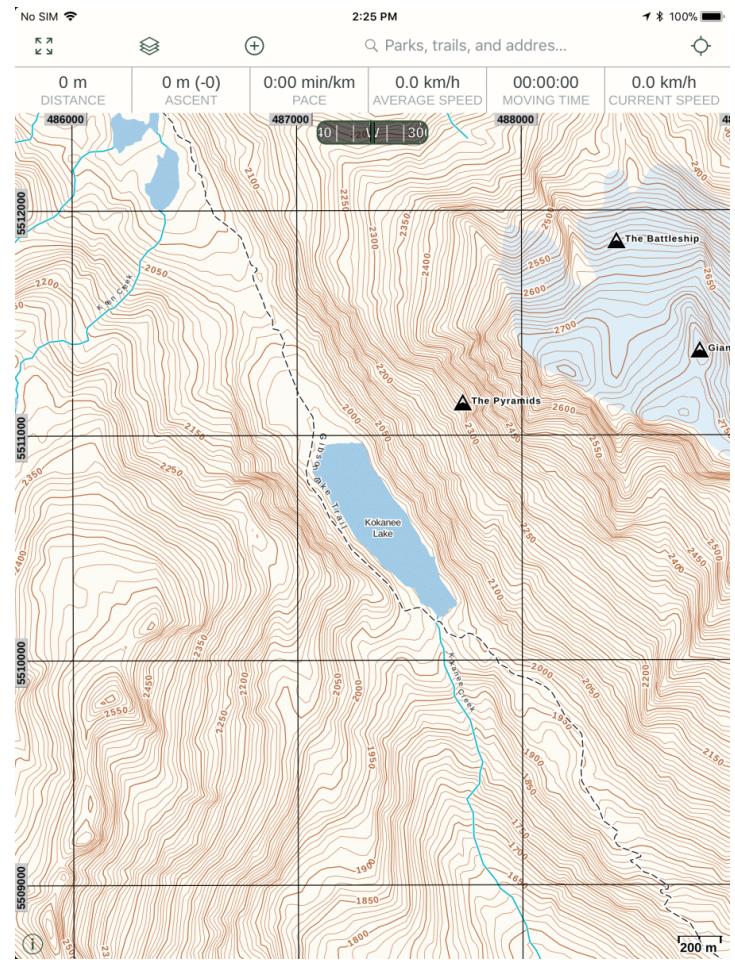


**Topo Maps Canada screenshot**, showing the area around Kokanee Lake. The map is essentially as it would appear on a 1:50,000 paper map, except the km grid is not shown. Some trails are marked, although these are incomplete. The arrow shows a discontinuity between two adjacent map sheets (82F/11 and 14),

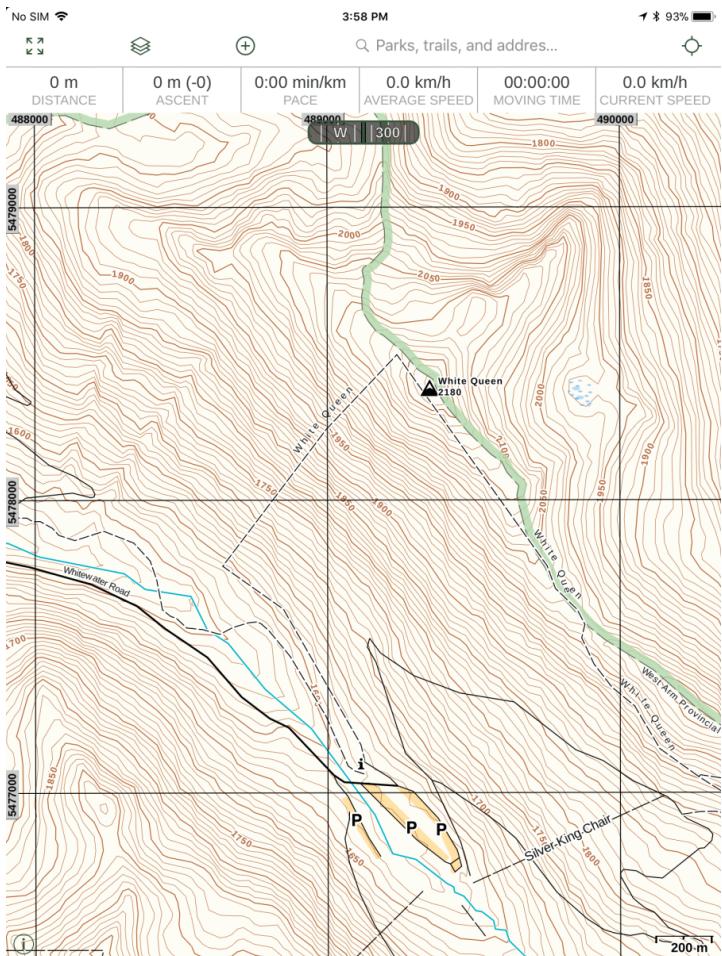
illustrating that there are some inaccuracies in the topographic database.



**Screenshot of Avenza Maps** showing the same area, part of the BC mapsheet 082F075. The map appears exactly as it would on a printed map. Note, some of the names are a bit funky, and some peaks are not named. There are not very many contour labels. The coordinates are shown for the bullseye at the map centre. The tools in the margin enable you to record waypoints and tracks, import and export data, and change settings.



**The same area in Gaia GPS.** Although the contours appear more detailed, this is misleading, as the topographic database is exactly the same as on the Avenza map. Naming of peaks is inconsistent. For some reason, there is a slight discontinuity along the same mapsheet boundary as in the Topo Maps Canada example.



**Another area (White Queen, near Whitewater ski hill) as it appears in Gaia GPS.** This example shows vertical banding with an 80 m spacing, indicating a small systematic error in the grid point elevations used to generate the contours. Also, the White Queen “trail” shown is quite inaccurate – it was probably based on a user-supplied GPS track which was improperly recorded.

### **The bottom line**

All the apps reviewed are quite useful, although Topo Maps Canada is less functional than the others.

Topo Maps Canada (iOS) is recommended for users who want a free, simple way to quickly get 1:50,000 map coverage. Canada Topo Maps (Android) is a different product entirely, and looks like it's much more capable.

Gaia GPS is the most sophisticated app, and is probably the most suitable for recreational users who want detailed topographic maps, and good GPS navigation and recording features. The free version is adequate for basic use.

Avenza Maps is the most useful for technically knowledgeable users who have access to custom-made

georeferenced maps, or who are willing to take the time to download 1:20,000 topographic maps from the BC government web site. With the free version, a good selection of commercial maps can be purchased for a few dollars each. The paid version lets you load as many of your own maps as you want.

There may be other useful apps out there – these are just the most popular ones that we know about.

*Peter Jordan, with help in the field from Fred Thiessen, Delia Roberts, and Elena Cigala-Fulgosi.*

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### **Useful Weather info from the Internet.**

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As most of us are aware, weather is a key factor in the enjoyment of the outdoors. Here are some questions that come up all the time in winter.

What's it like up at the xc ski area? Is the snow any good? Paulson xc doesn't have cell phone coverage, and the report is generally a day old, and things may well have changed.

How much new snow is there up at the pass? What is the condition of it? How is it likely to change in the next couple of days, like between now and my planned trip on Saturday?

Here are some of the sites I use, that give me useful info on what to expect. Because, being weather, It will likely be different from what it was a few days ago when you were there.....or maybe it won't.

Drivebc.ca. Current temperature, snowfall since the last measurement, and the previous 12 hours, snow depth. Camera. If there's snow on the trees.... Good sign. You may notice if it's melted off. Not a good sign if there's been snowfall recently. The road often melts when the snow isn't melting, since they're using salt on it.

### **U of Washington Weather Radar composite**

<https://www.atmos.washington.edu/weather/radar.shtml>

tells you if it's precipitating, and where the precipitation is. Takes a bit of interpretation/interpolation. The West Kootenay falls between the Spokane and Silverstar radar, so precipitation in this area sometimes doesn't show up all that well... You can interpolate in the gap. Doesn't tell you if it's snowing or raining. There are other ones like intellicast that have an algorithm that does.

## Satellite imagery

Pacific infra red image from U of W. Shows you what's coming at us from the Pacific. The colour is the cloud top temperature, or surface temperature if there's no cloud. The thicker the cloud, the colder it is, generally, but most of the juice is in the lower half of the atmosphere.

[https://atmos.washington.edu/~ovens/wxloop.cgi?ir\\_common\\_full+12](https://atmos.washington.edu/~ovens/wxloop.cgi?ir_common_full+12)

## Pacific Visible Image...

*Great for during the day. Easier to interpret than the IR.*

[https://atmos.washington.edu/~ovens/wxloop.cgi?vis\\_common+12](https://atmos.washington.edu/~ovens/wxloop.cgi?vis_common+12)

More U W Weather loops...Geek out if you feel the urge for more weather info...

<https://atmos.washington.edu/~ovens/loops/>

## Computer Model Graphics. (Geek Alert)

I use this page every day for a quick and dirty look at what the model projections are. Useful things are the precipitation envelope on the surface panel, and the 850 millibar temperature, which basically tells you where the freezing level is going to be. The models are very good at the upper levels! 850 millibars is approximately 5k feet or 1500 metres (Strawberry Pass!)

<http://mp1.met.psu.edu/~fxg1/ewall.html>

GFS is the American model. CMC is the Canadian one. They're generally available around 8 PM in the evening for the 00z run, and same time in the morning for the 12Z one. One hour later in daylight saving time.

## Computer Model Output

*(Most useful one if you don't want to get too geeky)*

[spotwx.com](http://spotwx.com).

You pick out a spot, chose a model, and get the projections for how much precipitation, temperature, sometimes freezing level, winds (not reliable) etc for the spot you pick. Remember that the spots are model heights, and the model smooths the terrain, so check out the model height you picked and correct the temperature for the difference as best you can. The average lapse rate is about 5 deg per km but it varies from 10 deg/km (summer or behind cold fronts) to inversionary. The really nice thing about spotwx is that you can get a login name and it will remember the

points you've chosen for your model output. Also remember that the long range models like the GFS and Global tend to overdo the precip a little bit.

If you want a good weather discussion of ski weather for the week ahead... you can't do much better than [avalanche.ca/weather/forecast](http://avalanche.ca/weather/forecast)

Nice graphics, and enthusiasm. Some nice educational vids from David Jones, of EC, as well.

I've not mentioned avi hazard here. Obviously the more it snows, the more hazard, more so if it warms up and there are weak layers buried. Beyond that, I defer to the Avi experts and daily bulletins.

*Chris.*

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## Winter Wonderland

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All images by Goodi Niosi

*Editor's note: I stole all these pictures from Goodi's trip reports. They say more about winter beauty in the mountains than they do about the trips themselves.*



