Code Black

Who's got your back in the backcountry? Lisa Richardson investigates the untold story of last winter's avalanche tragedy at Revelstoke's Boulder Mountain.

By Lisa Richardson

WHEN HIS DAY BEGAN at 5 a.m. on March 13, 2010, heli-guide Todd Guyn knew it was going to be a long one. Saturdays are changeover days at Canadian Mountain Holidays heli-ski operations in Revelstoke; a new intake of clients was arriving that day, as the current guests departed.

By that stage of winter, Guyn was counting the days until the season was over. "I'd say it was the worst season for heli-skiing ever." Guyn has been working for CMH since 1995, managing their Revelstoke operation for the last three years. "I don't know if I had a stress-free week," he admits. "It was a tough time to be a ski guide."

There were three or four active surface hoar layers in the top metre of snow that day, and the Canadian Avalanche Centre had been issuing special public avalanche warnings for the past four weeks, urging backcountry recreationalists to stay away from avalanche terrain because of large "unsurvivable" avalanches being triggered in even low-angle areas. For almost a month, they'd been skiing the same terrain, big 20-degree, flat, boring glaciers. "We had very few options," remembers Guyn. "It was super, super touchy."

Guyn gathered with the CMH team at 6 a.m. for the daily guide's meeting to go through the pre-breakfast regimen: reviewing weather conditions and stability reports from all commercial opera-

group, skiing until noon on high alert, picking terrain and microterrain features carefully, always looking over their shoulders. When they went to meet their incoming guests that afternoon, the clients were keen to ski. "They'd come from another lodge," says Guyn, who explains they were already familiar with all the safety training. "There was no time to even breathe." They saddled up, were out the door and back in the helicopter at 1:30 p.m. But the day wasn't even close to over.

SITTING ON THE Trans-Canada Highway in the Columbia Mountains, wrapped on either side by the Selkirk and Monashee Mountains, Revelstoke, British Columbia, has emerged over the last decade as a winter tourism mecca, boasting 12 to 18 metres of snow annually that attracts all snowsport enthusiasts, including a healthy snowmobiling population.

The Snowmobile Revelstoke Society sells 15,000 to 20,000 trail passes a year and estimates a 30 to 40 per cent increase in volume since 2002, when an economic impact study put snowmobiling's contribution to the Revelstoke economy at \$8 million. The ease of backcountry access for weekenders from Alberta and Saskatchewan, along with skiers who duck resort ropes and sledders who pin it up

LAST YEAR, ACCORDING TO MANAGER BUCK CORRIGAN, THE REVELSTOKE SEARCH AND RESCUE GROUP AVERAGED ALMOST ONE CALLOUT A WEEK. FORTY-THREE MISSIONS. FIVE FATALITIES.

tors in the region and assessing the run list, marking each of the 222 runs in their tenure red, yellow, or green. After a near seven-week drought, almost a metre of fresh snow had just fallen. A bluebird forecast and those buried weak layers had everyone on edge. By the standard consensual process, the eight staff guides green-lighted just five runs. "This snowpack is not getting any better," said one guide. "And it's Saturday. You know what that means." "It would be a miracle," added another, "if something didn't happen today."

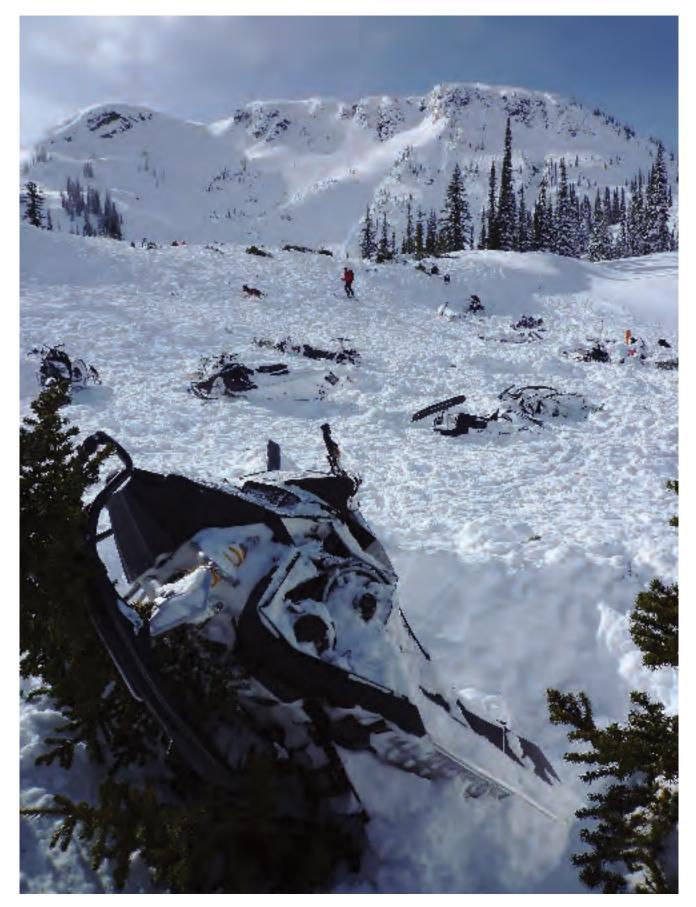
CMH guide Tim Pochay admits he was feeling spooked that day. "Normally, the amount of snow we get fixes the avalanche dragons, flushing out instabilities, sealing things up. After Friday's storm, we had four weak interfaces plus a massive load. I went out heli-skiing on Saturday morning and I was really scared something was going to happen."

Pochay and Guyn worked together all morning with a private

groomed trails into enticing terrain, keep the local search and rescue chapter busy. Last year, according to Manager Buck Corrigan, the Revelstoke search and rescue group averaged almost one callout a week. Forty-three missions. Five fatalities. It's hard for a group of volunteers to keep up with that kind of demand.

On Saturday, March 13, 2010, following a three-day snow-mobling event in Revelstoke, an impromptu group of snowmobilers and enthusiasts gathered on Boulder Mountain's Turbo Hill for some of their own sled racing. At 3:27 p.m., a 150 metre-wide, size 3 slab avalanche was triggered by two snowmobilers onto a crowd of 200 spectators, who were sitting directly in the avalanche's path, leaving debris between 2.5 and 5 metres deep.

Multiple beacons were activated. A succession of 9-1-1 calls gave conflicting numbers of people involved: 200, 10, 50. The RCMP asked Selkirk Mountain Helicopters to get some eyes on the scene.



The damage done by Boulder Mountain's massive slab avalanche, March 13, 2010. The slide's fracture line can be seen beneath the rock band near the mountain's top. Photo: Brad White

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Meanwhile, the local ski hill, Revelstoke Mountain Resort, received a transmission through their radio system, reporting a very large avalanche with 100 people buried. They called it through to their colleagues at Selkirk Tangiers Heli-skiing, who began to mobilize their rescue plan, calling on CMH, Parks Canada and warning the hospital to expect mass casualties.

In British Columbia, the RCMP is responsible for public safety. But the emergency response is delegated to volunteer search and rescue (SAR) teams, under the Provincial Emergency Program. One thousand searches were conducted last year by just 2,500 volunteers with 87 sanctioned SAR groups. The province valued the contribution at \$5 million.

Buck Corrigan and Wally Mohn, co-managers of Revelstoke's search and rescue team, would have known the proper protocol to



An example of highmarking, with onlookers positioned dangerously in the runout zone. Photo: Gallatin National Forest Avalanche Center

coordinate the response. But that weekend, Corrigan, a retired 35-year veteran guide with CMH, was in Whistler working on a helisling team for the Paralympics. Mohn, a retired staff sargeant for the RCMP, was out of town due to family obligations. There was no search manager on call. As people began to respond to the Boulder Mountain emergency, no one really knew who was in charge. But there was no time to wait.

Jeff Honig, Selkirk Tangiers Heli-skiing's manager, was watching his dispatcher's face as she took the call from Revelstoke Mountain "Revelstoke, do you need help?"

"Voc"

"How many do you need?"

"Send everyone."

ANGELA THREATFUL spends many of her winter days in the Boulder Mountain access parking lot. As the executive director of the Snowmobile Revelstoke Society, she manages to squeeze a \$215,000 budget into machine time, fuel, trail maintenance, snow-clearing, outhouses and 10 salaries for herself, groomer operators and booth attendants who manage a grooming program under an agreement with the Ministry of Tourism, Culture and the Arts. "We're pretty proud of our program," she says. "It's tight. It's a really strong program based on the operating capital we have. A lot of volunteer hours and a lot of effort." The society has a maximumuse policy that caps the sale of daily trail passes at 1,000. On busy weekends Threatful does laps of the parking lot, checking on staff, ensuring emergency accesses aren't blocked, checking in with regulars as they come back from a day of riding.

Her husband, Revelstoke born and bred Roland Poitras, was snowmobiling that Saturday with friends. With 35 years of sledding in the region, he knows the terrain intimately and started volunteering with the Revelstoke Search and Rescue seven years ago as a way of giving back. Now he rides with his SAR vest tucked amongst his radio, basic first-aid equipment and avalanche gear.

Threatful knew conditions were challenging that day. She posts current weather conditions on the website and a link to the Canadian Avalanche Centre. She knew from the vehicles in the parking lot how many sledders were out and who many of them were. But her stress didn't start cranking until about 4 p.m., when her phone rang. A reporter from the *Calgary Sun* told her 200 people had just been buried in an avalanche at Turbo Hill.

Threatful took a deep breath. "Oh."

"Does the Snowmobile Society have any comment?" She hadn't heard from her husband.

"Oh? No. No comment."

Threatful's husband Poitras and a small group of friends were on their way out of a mellow drainage below Boulder Mountain when they were flagged by some other riders. "A big slide has come down!" Poitras and his crew beelined it to Turbo Hill in 15 minutes. "The bottom of the path was 150m wide. The whole thing pretty much fractured," he explains. "There was a big gathering at the bottom, in the bowl. It all funnels down, tapers down, and that's where

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Resort. The helicopter blades were just winding down. He hustled his guides back into their ski gear and took off knowing only this: 100 people were suspected buried; their hangar is fifteen minutes from the scene; search and rescue volunteers are likely an hour away; and when it comes to avalanche rescue, time is of the essence. They were halfway there when word came over the aviation frequency from Selkirk Mountain Helicopter's pilot, confirming their fears: "It's big."

Todd Guyn and Tim Pochay, also en route after dropping off their guests, remember the pilot's initial reaction as more along the lines of, "Oh, my fucking god. It's massive." The adrenaline began to surge. The official confirmation came from Selkirk Mountain Helicopters — a large scale rescue was needed. Head office for CMH in Banff checked in.

they all wound up sitting [as spectators]. It's the stupidest place." The avalanche had swept through the entire gallery.

But by the time Poitras arrived, "There were holes where people who'd been buried had been dug out. Maybe ten holes," he says. A probe line of 40 people was working across the debris field methodically. "It was regimented," recalls Poitras. "I don't know who took charge of things, but whoever it was, they sure knew what they were doing. There was no point in us interfering." Poitras called it in over his radio and began setting up a helicopter staging area about 300 metres from the slide path, cordoning off the scene and restricting access to people helping with the rescue efforts, ensuring their avalanche transceivers were turned off.

A group of survivors were giving CPR to a victim, keeping at it for at least 45 minutes, not stopping even when the first helicopters



began to land. "Injured people were walking around like a bunch of zombies. Some wanting to help, not knowing what to do," says Poitras. He organized six snowmobilers to work the slide area, picking up any injured parties who were still mobile and doubling them down to the staging area. "Everyone had their hands full, but there was only a two-hour window to get these people off the hill," he says. "A lot of people had lost their sleds. It was chaos. Total chaos."

When the first helicopter arrived, Poitras and his crew had a family ready to go. "Five-person family from Montana and I think four of them were injured," he says. A broken leg. A 12-year-old boy cut from his eyelid down to the cheek. His grandfather with a suspected heart attack.

Honig of Selkirk Tangiers touched down next with seven guides. "Flying over the ridge and first seeing the scene, it looked like a war

Heli-skiing, Revelstoke Mountain Resort and Canadian Mountain Holidays had flown in and evacuated all of the avalanche victims who were unable to make the two-hour snowmobile ride out to the parking lot. Twelve pilots with those organizations, including Selkirk Mountain Helicopters, managed their own air space, landing and taking off from the debris field to the hospital and later the airport, without incident. Office staff, dispatchers, off-duty guides, ski technicians and hotel staff manned callouts, arranged transfers of injured people from the airport to the Queen Victoria hospital, where 50 staff, including six physicians, had assembled.

"We shut down every lodge in the Columbia Valley," says Guyn. "Gothics, Adamants, Monashees. I've never seen anything like it. It was huge. A huge event. I still cannot believe there were only two fatalities." When Guyn and Honig flew away from the site, right on the edge of darkness, they couldn't know that everyone had

"A LOT OF PEOPLE ARE OVERWHELMED BY THE AVALANCHE COURSES. THEY ARE SO IN-DEPTH AND TECHNICAL, ESPECIALLY FOR THOSE WHO STRUGGLE WITH TRADITIONAL LEARNING... WE NEED TO MAKE THESE COURSES SO EVERYONE CAN ACCESS THEM."

-ANGELA THREATFUL, EXECUTIVE DIRECTOR, SNOWMOBILE REVELSTOKE SOCIETY

zone," he recalls. "Bonfires on the avalanche debris. Stuff everywhere: helmets, windshields, parts and 150 people on site. People fixing and digging out sleds. You see the size of the avalanche and you know that it's bad. But you don't know how many people are hit, caught or buried."

After touching base with Poitras, Honig started to set up a field command. It was 4:03 p.m., exactly a half hour since the avalanche. "It was a bunch of zombies walking around, shocked, white, and injuries everywhere, from minor bumps and bruises to head trauma, neck and back, internal injuries, broken bones," describes Honig. "Kids. Seeing a kid amidst all the other stuff, banged up, cut up, his boots blown off, screaming for his parents... that was pretty full-on." Within minutes of arriving, Honig's guides had prepared a critical patient in need of immediate evacuation and he flew with them to the hospital.

CMH's first helicopter, with Guyn, Pochay and Liliane Lambert on board, arrived right behind Honig. Guyn's guides scattered and started first aid. Guyn tried to get a handle on the situation. "They had a rough probe line set up, but no one was really in charge. I talked to three individuals: 'Whose in charge? How many people are missing?'" A frustrated Guyn got many answers:

"We don't really know."

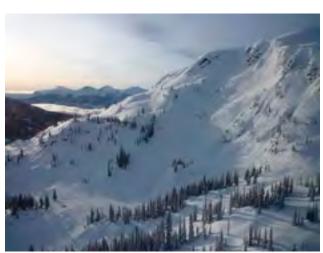
"Mavbe 50."

"We think we've got everyone."

"Basically, I had no idea," recalls Guyn. "I'm standing there, trying to formulate a plan, more and more resources are coming in. It's clear we need to clear the site. It's crazy. People are driving around on their machines, doing CPR, digging out machines." Guyn yelled, trying to get everyone to turn their transceivers to send, but eventually he gave up on the idea of conducting any kind of beacon search — there were too many signals. Pochay and Lambert started working their way down the slide doing triage. Within seconds they had each identified critically injured survivors, placed them on spinal boards, with neck braces and oxygen, and loaded them onto helicopters.

Between 4 p.m. and 5 p.m., the time it took for the official search and rescue response to rally from Nelson and Nakusp, 49 professional ski guides and ski patrollers from Selkirk Tangiers

made it off the mountain. The debris was massive. The search had seemed impossible. Honig remembers, "It was a little eerie flying out of there, wondering how many other people were there. It's what we had to do, but at the same time, it didn't feel quite right." The helicopter swung away, leaving a war-zone and three lonely sets of headlights, as Roland Poitras and two companions set off to



A heli view of Turbo Hill, the scene of the accident. Photo: Ian Tomm/Canadian

conduct a thorough ground sweep of the mountain. They wouldn't get back to the parking lot, where Angela Threatful was anxiously waiting, until 11:30 p.m. Threatful's nightmares didn't end there. Two men were killed in the Boulder Mountain avalanche on March, 13, 2010. Thirty-one people were injured. Every snowmobiler in Revelstoke was suddenly in an uncomfortable spotlight.

FOR 70 YEARS, the Canadian Avalanche Association (CAC) has collated data of avalanche incidents and fatalities to focus its increasingly strained budget into education campaigns and outreach efforts. But in the last five years, something had changed. Snowmobiling has skewed all the data. The five-year trailing average

of fatalities has shown a steady decreasing trend for backcountry skiers. It's the snowmobilers who are dying.

"Stunningly aggressive terrain choices" wrote the Canadian Avalanche Centre's Operations Manager John Kelly in a fierce choice of words after 19 snowmobilers died in 11 separate avalanches in 2008-2009. Those deaths caught sufficient attention that in November 2009, British Columbia's coroner convened the fourth ever Death Review Panel to ask what was going on. A month later, the panel concluded,

"Modern snowmobile technology allows riders to access more terrain than ever before. This almost unimpeded and rapid access to vast, often complex terrain creates a requirement for intricate decision-making, comparable to that exercised by professional mountain guides in helicopter-accessed ski operations. The heliski operations are also characterised by quick access to almost boundless mountain terrain, but the guides have the benefit of advanced professional training and make their decisions in the context of daily observations of local conditions and professional team-based planning."

The snowmobilers, however, were flying blind; their technology had advanced faster than the culture of safety had kept up. But now, unblinking scrutiny was turned their way.

Both the Snowmobile Revelstoke Society and the Revesltoke Snowmobile Club, non-profit organizations run by a core group of mostly volunteers, started burning out at the volume of debriefings and follow-up meetings that came next. Threatful was also working with the BC Snowmobiling Federation (BCSF), advocating for the prevention of reflexive backcountry closures. "We have fought the idea that the CAC would have the ability to say, 'This area is unsafe and should be shut down for days.' It's too difficult for them to make an accurate assessment of every area," says Threatful. "Education and awareness are far more beneficial than making decisions for people. So, how do we get people to make informed decisions?"

The Society had already been working with the BCSF to put on safety courses for riders. They put out educational material. They post the Canadian Avalanche Centres's number at the trailhead. Angela Threatful asks,

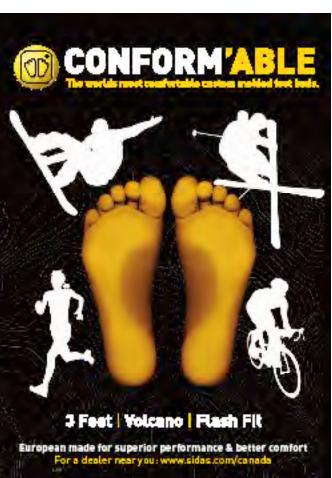
"Is there room for growth and development in this area? Absolutely. But it's dependent on funding. The avalanche centre certainly has funding issues. We have funding issues as well. The BCSF definitely has funding issues. Right now the CAC is about promoting the complete package of avalanche safety, whereas the club and society are saying, 'How do we get more awareness to more people?' A lot of people are overwhelmed by the avalanche courses. They are so in-depth and technical, especially for those who struggle with traditional learning. Point blank, I'm getting the guys here who work on the rigs. They're fabulous equipment operators, but not the most skilled readers in the world. We need to make these courses so everyone can access them. It's difficult to reach the whole group of users and that's what I'm trying to get.... We recognize avalanche safety is very important, but how technical does it need to be to start off? In the past few years, awareness has grown. People are becoming more aware. Are they using these skills? Looking at Boulder Mountain, at the lines of people probing, they had the equipment. They were able to use it. They were organized. There was some organization there, so obviously awareness did work to some degree. Now, if I could just get them not to sit right in the way of an avalanche path, I'd be doing great."

-Valhalla pure-



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For John Kelly, each and every avalanche accident of the season is a mark of personal and organizational failure, especially the preventable ones. Still, he shuts down the notion this is some kind of Darwinism at work. "This is work that has no finish line and there will always be some challenge to counter new trends and activities that put people at risk in avalanche terrain," he says. "Skiers, heli-skiers, mountaineers absorbed many tragedies over a half century before the message sunk in. It is unfair to expect snowmobilers to absorb the same wisdom in a couple of years. However, we insist vigorously that there is no need to have the same slow learning curve for snowmobilers as there was for the other user groups. Let's learn and shorten decades of tragedy into a few years of hard knocks."

But the knocks didn't seem to be getting through. Even after all the media coverage of Boulder Mountain, six days later, the commercial operators were called again to attend another rescue at Eagle Pass, just east of Revelstoke. Tim Pochav was still rattled. "A bunch of my co-workers were gearing up and I said, 'No, I don't want to go.' It was a lot. I'd been scared all winter," he concedes. "Last year was the worst year in my ten years of heliguiding. Always looking over my shoulder, keeping an eye on the guests. And then you see the evidence of what you've been afraid of steamrolling over a bunch of people. I was over it. It was like being in combat or something."

As a company, CMH began looking at their response policies. Safety Manager Jon "Colani" Bezzola says, "These are the discus-



Bad news travelled fast. The Boulder Mountain tragedy made international headlines within 24 hours. Initial reports suggested up to 200 snowmobilers had been buried.

sions that are happening right now within our company, trying to get an idea of what the guides think, and some people are saying, 'We can't be too zealous about things. We can't rescue the whole world, at all times.' Obviously, if they come up on something, they'll definitely respond. But how far out of their way should they go?"

Jeff Honig and his crew at Selkirk Tangiers Heli-skiing also responded to the Eagle Pass avalanche, where one man was killed when snowmobilers in a separate group triggered an avalanche on his party. "We had a little here-we-go-again moment," admits Honig. "There were people pretty choked about it. For me, I just let it slide. If someone's in trouble, I want to help. But at a certain point people do need to take responsibility for themselves. You can't rely on the commercial operators. If that's your safety net, that's not good enough. Trouble is that it's a pretty good safety net. But how many times is a ski guide going to come back and cut a guest's day short, because the guide is going off to a rescue?"

Roland Poitras is thinking it might be time for more training. "I've taken avalanche courses. I think I want to take a level one this year. You need to have it," he states. "We're trying to make things safer and better for every year we do this, and education is the key." He'll probably pressure his riding companions into taking the course with him. "I don't ride with anybody who doesn't know how to use their gear. It's fine for them to ride with me,

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—JEFF HONIG, MANAGER, SELKIRK TANGIERS **HELI-SKIING**

because I know how to use mine...but if they don't know how to use theirs, that's not going to help me, is it?"

A laundry list of recommendations came out of the Death Panel report and the Boulder Mountain debriefings, but when actions land in the laps of non-profit organizations that are already stretched, funds need to be found. The BC Snowmobile Federation has agreed to dedicate one dollar from every trail pass sold to the Canadian Avalanche Centre. The Revelstoke Snowmobile Club launched a fundraising drive for the CAC, and Revelstoke Search and Rescue has found several major new patrons in the community to help fund the purchase of a new repeater.

CAC's John Kelly appreciates those efforts. But he's set his sights on a different money trail. "This is not a problem with the clubs. They're not rich; they're volunteer operations, mom and pop operations, community people," he clarifies. "The dynamic that brings snowmobilers into contact with avalanche terrain is driven by manufacturers, by the improving quality of their machines and the aggressive marketing of tourism activities. The clubs are just the foot soldiers. They hire a groomer, but he's paid for by interests in attracting people to the community and that's where we have to approach people for participation."

Strategic alliances take time to build. Meanwhile, the dust is still settling from the winter of 2009-10, and tensions between mountain cultures remain like shallow layers of surface hoar. But everyone who was impacted by March 13, 2010, shares a singular hope: that some good will come of it. "That was the worst scenario I could have imagined. I wouldn't want anyone else to have to go through that," says Todd Guvn.

"It's the worst situation I've ever seen. But our community rallied behind us," adds Angela Threatful. "Do I want the heli companies and Revelstoke Mountain Resort to know how very truly grateful I am for their contribution? Absolutely. They stepped up when we needed it. Our hospital system absolutely stepped up to the plate. I'd never realized how much emergency social services did until we needed them. The RCMP was there. Not everyone that responded or helped us was a snowmobiler. And that speaks volumes for our community. We 100 per cent needed them. And they were there."

The alarm bells are quiet for now, but one question hangs in the silence: who will be there next time?

Lisa Richardson is a regular KMC Contributor.

OF INSPIRED SVANASTRE



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