CREATING A CONTROLLED BACKCOUNTRY ACCESS SYSTEM IN JAPAN

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ABSTRACT: As is increasingly known around the world, Niseko, Japan, is one of the snowiest ski destinations. Along with the development of local resorts, more and more people began heading into the backcountry—and the number of avalanche accidents and deaths continued to rise. As this trend became apparent, the main author began to consider the possibilities for a system that would help protect guests heading away from the ski areas, but would fit with unique Japanese perspectives, history and group dynamics.

KEYWORDS: Japan, avalanche control, cultural and historical factors

1. INTRODUCTION

As the number of international travelers coming to Japan in recent years has continued to grow, I have been very interested to find that there is a perception, particularly among North Americans, that Japanese traditionally do not ski in the trees for spiritual reasons. That is, there is the belief that the Japanese see the forests as sacred, so they didn't ski in them because they did not want to disturb the spirits of the trees.

It is true that Shinto, the native religion of Japan, does see *kami*—spirits or powers, more than Western concepts of gods—in the natural world. But this has never kept people out of the woods in summer or winter!

My first backcountry experiences, in fact, were more than 50 years ago, when my father brought me from my hometown of Sapporo, the biggest city on the northern island of Hokkaido, to the resort of Niseko. He taught me how to use skins, how to climb, and how to ski in deep snow. He also gave me my first lessons in about the dangers of avalanches, even though people didn't really understand why they happened. So people were very careful, and with the skinny skis and floppy boots of the past, plus the deep, deep snows of Niseko, there weren't that many people

out there. There were very few injuries or fatalities.

I believe that the traditional Japanese concepts of senpai and kohai helped. The senpai is the senior and most experienced person in the group, or the upperclassman in school. The kohai is the junior. People did not go out into the mountains that often as individuals until recently. In the groups, the kohai were expected to follow the instructions and guidance of the senpai, but the senior people also had to take responsibility for the safety and training of the younger ones. Because of this, there was a very strong sense of shared experience as well as responsibility and caution, which I think often helped keep people out of danger. Today, of course, people often go off by themselves into the backcountry: they don't have access to the years of experience a senpai could have provided them. and accidents are far more likely to happen.

2. TROUBLES GROWING

From about 30 years ago, we in the patrol at Niseko could see an increase in avalanche accidents, injuries and deaths. It really started to grow about 20 years ago. Japan was starting to come out of a period coinciding with the boom years of the economy, where it was enough just to go skiing and be seen in fashionable clothing and brand new gear. At the end of this, as skiing actually became less fashionable, the people who were skiing were looking for a more authentic experience, and that included backcountry skiing.

There already were some Japanese ski pioneers who had set the way, especially my friend Yoichiro Miura and his skiing in the Himalayas, and Tsuyoshi Ueki, who made the first descent from the

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summit of Denali. They had already pointed the way for people who were interested in Alpinism and skiing, and especially deep powder skiing, which both men are very well known for in Japan.

Along with some 15 meters of snow annually, one of the appeals of Niseko is that it's very easy to get to the summit of local mountains. The top of Mt. Annupuri, the tallest mountain within the resort area, is 1308 meters, and the lifts take people up to 1150 meters. So, fortunately or not, almost anyone can get to the peak without too much trouble.



Fig. 1: Easy access at the top of Mt. Annupuri. A day with good weather may see hundreds making the 20-minute walk from the lift, including people with all levels of preparation and experience.

The problem was that, over ten years, I found myself digging eight fatalities out of the snow, and assisting in many more rescues. The mayor of the town at the time was also a member of the local SAR group so we began to talk about what we could start doing to make things safer, with an understanding of the particular situation in Niseko.

3. DIGGING AROUND THE ROOTS

Over the years, we saw the situation that was producing the dangers, and it was mostly with the issue of wind loading. We're very close to the Japan Sea in Niseko, and storms come with heavy snows and high winds off the ocean. That meant a lot of wind loading off the ridges, of course, which too many people—and it was almost entirely Japanese at the time—thought this meant great, deep powder to ski in. Too often, they were wrong.

I began to think about the kinds of people who were coming, and why they were coming. We began to look more carefully at where accidents were happening and the conditions that preceded them. I then tried to think of a way to put the in-

formation to use in keeping people out of dangerous situations, and to win the support of people in the area.

In Japan, rules which emerge over time through consensus are often more important than more formal, written laws. Also, there is a process known as *nemawashi*. It literally means "digging around the roots," like the process before you replant a tree—you have to carefully work around the tree or the transplant just won't work. In business in Japan, for example, it's important that a new idea be circulated before any meeting is made to make a decision on implementing it or not. An idea that hasn't been presented to senior managers and talked about will never be accepted if it is suddenly thrown out during a meeting, even if it's a very good idea.

Niseko Local Rules is a good example of the consensus-based system that had emerged over time. It's a little different from what we hear about, for example, surfers' or skiers' local rules in North America, where the rules may be more about protecting access to territory or waves. In Niseko, local people knew the conditions that would result in increased avalanche danger, and the terrain where avalanches were most likely to occur. This had solidified over time into an unwritten set of rules that locals knew and shared. If you accessed the hills in the wrong spot, skied right after a heavy snow- and windstorm or entered territory the Rules said were out of bounds, you showed that you weren't a local, and you weren't respecting the local traditions.

At the same time, other patrollers and I were researching how access was being handled in other parts of the world. We found something that we thought would work well along with the Niseko Local Rules in the gate system we read about in places like Jackson Hole in the US. Under the Local Rules, people were already accessing the mountains through roughly nine different spots off the top lifts of the different areas, so we thought that the best first step would be to solidify the Niseko Local Rules and establish designated access points where we could at least provide information, and possible also close access during bad conditions.

At first the ski areas didn't listen to us. It's important to remember, too, that in Japan often one ski area is actually a collection of several resorts run by different companies. Niseko is no different, with five different companies running the lifts around the area. So when we first started talking about this system some 20 years ago, some peo-

ple did support the idea, but many others did not. So we kept on doing the root-digging process, and informally began to position patrollers at the locations where we wanted to have formal gates.

It wasn't about policing the hill, and it never has been about the patrollers limiting access or checking that people have proper avalanche gear. It was more about providing informal information to guests and beginning to share information more actively between the different area ski patrols across the mountain.

4 GROWING SUPPORT

Slowly, I began to hear from more and more of the top people of the resorts that, "This is might be something we should really listen to." As we began to get this kind of support, we were able to continue to develop and formalize the gate system, and to actually write down and distribute the Niseko Local Rules so that everyone has access to the same basic information and understanding about why things are the way they are on our mountains. But I think many readers might be surprised how this process continued to move forward without that many formal meetings—things developed and continued to grow naturally. Of course there were town meetings where things were voted on formally, but, again, the slow building of a consensus on what we should do is the way things often happen in Japan. It might seem from the outside that meetings go on endlessly without much progress. but in fact the roots are being carefully tended to, so when it's time for action things can move very smoothly.

Communication remains an important part of the daily avalanche control activities in Niseko. I get up every day at 5 am, and begin gathering the information for a one-page report that we translate into English, type up in Japanese and English, send by email to the patrol centers, print and post at all of the gates, as well as on the Internet. Because we are so close to the Japan Sea, and most of our weather patterns come straight off the ocean, we rely heavily on real-time data from the Japan Coast Guard², which is almost ideal for forecasting work. I also use current weather information on the hills as well, because we are extremely concerned about wind speeds and directions as well as the conditions at different altitudes. But I'm not writing the reports on my own; from the early hours of the day, and throughout

the day, I'm in radio contact with patrols at all the ski areas. It's not a post-and-forget situation; we continue to update our information throughout the day, and often change the reports, or open and close gates, depending on the information we get from the hill and other sources.



Fig. 2: Sample, Niseko daily avalanche report

5. UNIQUE IN JAPAN

Establishing the gate system and the formal Niseko Local Rules makes us unique in the country. In fact, at least one other large-mountain resort area on the main island of Honshu has basically taken the Rules and applied it to their area. I am concerned, though, (and this may again be very Japanese) that the "feeling" is wrong. What I mean is that they have created something that looks good, especially in this age where there are so many more international guests skiing (often more than Japanese on weekdays), but the rules aren't respecting that area's own customs and traditions—meaning the real conditions there. We have Japanese researchers who are actually studying the Niseko Local Rules system, because it wasn't something aimed at making things look safe and

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thus promote tourism, but about preventing accidents from happening.

Being unique in Japan also means that our funding has to be local. The parks system in Japan is quite different from North America and Europe; professional avalanche prevention activities here are almost entirely focused at building preventive barriers to protect homes and roads. We currently have a budget of about ¥800,000 (roughly US\$8,000) annually provided through the ski areas. It's not much considering the work that has to be done, and the fact that we now have about 5.000 people accessing the gates every day. We know that the gates are very important; if we didn't have them, people would be jumping the ropes, something that happened a lot during the earliest days of the boom in international travel. Japanese are better, I guess, at respecting signs and ropes, but there are very few problems now.



Fig. 3: Gate 2, at the top of the Annupuri lift.

Posted information includes the daily report; a patroller will also be stationed here to provide information.

Things have changed over the roughly 13 years that we have had the nine gates and the Niseko Local Rules in operation. Explosive control was not even a possibility 20 years ago. The Niseko Village resort now uses dynamite on two valley areas where there is an actual possibility of damage to property below without control, and about a third of their patrollers now have a license to handle explosives. The big difference for Niseko Village is that the resort is on land leased from the government, where others are on national park land where it would be very difficult to get permission. But we probably would not use explosives in the rest of Niseko anyway, because of issues of cost and responsibility, and the fact Niseko is relatively isothermal and the snowpack will settle naturally, given enough time (and closed gates to keep people out in the meantime).

6. FOR THE FUTURE

What I am proud of is that today, with thousands of skiers accessing Niseko peaks through the gates, the number of avalanche-related incidents has basically fallen to almost zero. One regret is that I am not a scientist, and data recording is not my strength, so I can't provide a lot of hard data on this—but we know it's true. Things continue to evolve naturally, too. There are sometimes calls from within our community that we should in fact become more like policemen and turn back people from the gates if they don't have proper equipment (it's not a bad comparison, as Japanese police usually wait at their koban, or police box, for trouble to come to them, not unlike our patrollers at the gates). I have never felt that that was the Niseko way of doing things, however. We do believe in letting people choose their own actions, provided we have a good system established. When people have good information, access to local knowledge like the Niseko Local Rules and wellestablished access points through the gates, they tend to want to act in the right way and not be an outsider.

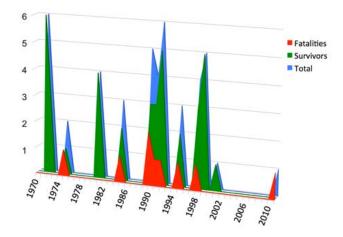


Fig. 4: Officially reported avalanche accidents in Niseko. Early spikes tended to be accidents involving one group in large incidents; the increase in the 1990s is clear (although this is not complete data; many non-fatal accidents go unreported. Source: Niseko Police Department).

The other big challenge is in finding someone to take on the central role in the information gathering and sharing of daily communications.

Through the good work of the Japan Avalanche

Network (JAN), more than 500 people in the country have at least Level 1 training (equivalent to the Canadian Avalanche Association course of the same name). But, sadly, there isn't the funding to make this something that someone could see as a potential career. Even so, though, I'm not a director in the western sense in many ways; it was by consensus that I have come to represent a large community of dedicated patrollers and resorts that has come to understand the necessity for avalanche control in Niseko. It's a common understanding that won't go away, I'm sure, so the Niseko Local Rules and the gate system will surely remain and help prevent people from needlessly being injured or killed in avalanche accidents.

CONFLICT OF INTEREST

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