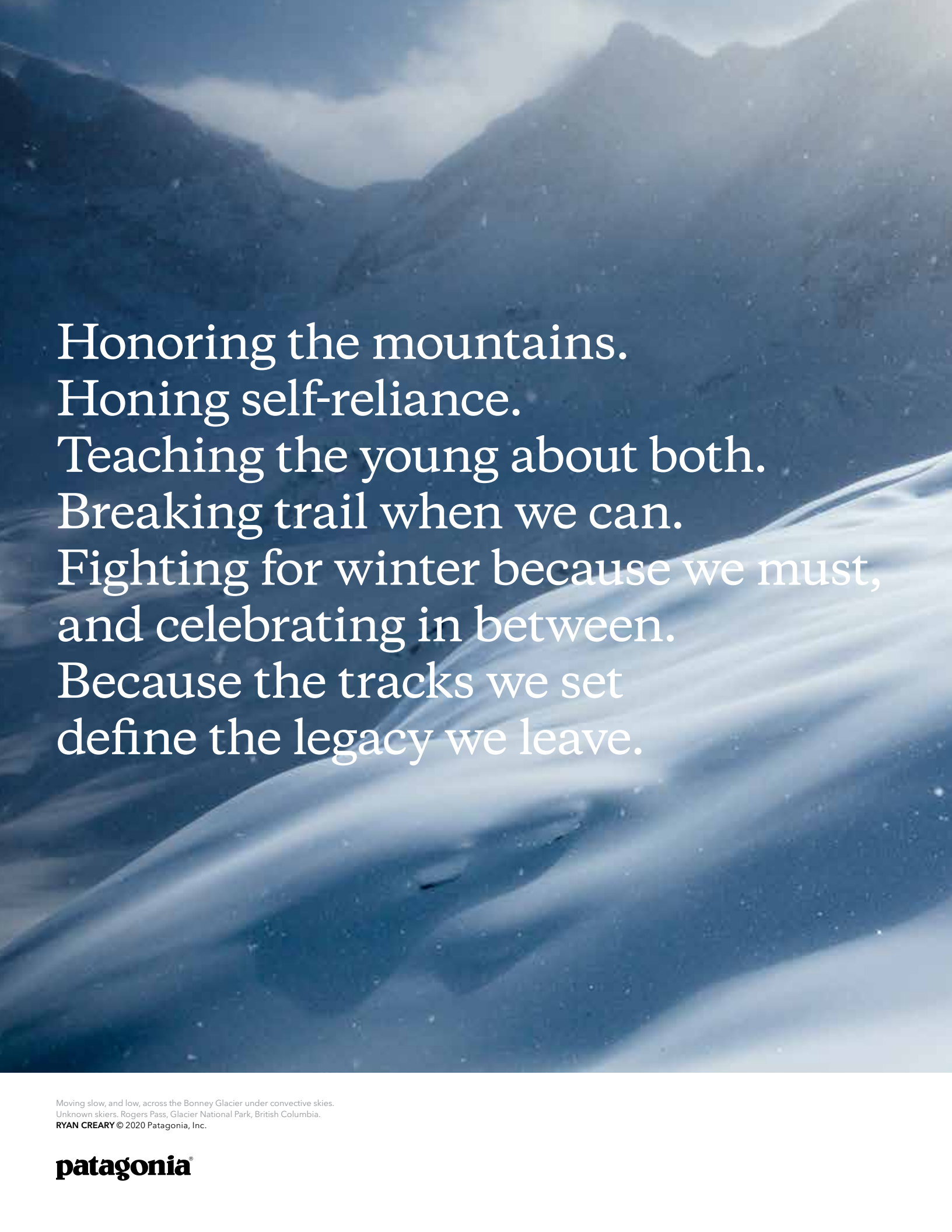




# ski patrol

Official Publication of the National Ski Patrol  
nsp.org + Fall 2020 + Volume 38 Issue 1

**COVID-19  
MINORITIES AND SKIING**



Honoring the mountains.  
Honing self-reliance.  
Teaching the young about both.  
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Fighting for winter because we must,  
and celebrating in between.  
Because the tracks we set  
define the legacy we leave.

Moving slow, and low, across the Bonney Glacier under convective skies.  
Unknown skiers. Rogers Pass, Glacier National Park, British Columbia.  
RYAN CREARY © 2020 Patagonia, Inc.

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Cover photo: Agnieszka Hansen  
Left photo: Andre Gonsalves  
Photo above: Joey Wallis



### ERRATA

The image on page 24 of the summer 2020 issue of *Ski Patrol Magazine* captioned as "White Pass Ski Patrol" was not the entire patrol, but those members of the patrol who are multiple generations of families who patrol at White Pass. *Ski Patrol Magazine* apologizes for the error.



# NATIONAL SKI PATROL MEMBER BENEFITS

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NSP continues to offer great benefits to our members, who work so hard to keep active sports safe. As we adapt to our changing times, we will continue to offer our members the same great benefits, but we've made adjustments to be responsible with our budget as we face new circumstances this season.

## ONLINE STORE AND CATALOG — NO PRINT CATALOG

You will not receive a print catalog this year. But, you will have the opportunity to sign up for regular email updates with deals, savings, and more! Watch upcoming Partner & Store Spotlight and Sweep emails for more details.



## SKI PATROL MAGAZINE

We will continue to publish three issues of *Ski Patrol Magazine* packed with information and stories about ski patrolling, training, issues facing our members, and product updates. **The winter 2021 issue will be digital this year.** Look for more information in upcoming Sweep e-blasts and on the Magazine tab of the Member Homepage at [www.nsp.org](http://www.nsp.org). We'll also be sending information about other forums for NSP news.



## EDUCATION AND PROGRAMS

NSP continues to offer gold-standard training and education to all of our members. Our program leaders are continuing to monitor the COVID-19 situation and provide regular updates at <https://nsp.serves.org/covid-19-updates/>.





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# ski patrol magazine

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# Letters

## from the Editor

By Candace Horgan, Editor



When we were going into production on the summer magazine in March, our world was just beginning to experience drastic change. Vail Resorts had announced it was shutting down its ski resorts for the season, and here in Colorado, Governor Jared Polis then shut down all ski areas in the state for a month, effectively ending the ski season.

The coronavirus has affected our entire society in ways that could not have been anticipated when the pandemic broke out. Many of us have lost family members or friends to COVID-19 or seen them spend extended time in the hospital in the ICU on a ventilator, intubated and isolated to try to stop the disease's spread. Some of these patients have recovered, only to experience long-term complications. When it seemed like the curve was flattening, the premature relaxation of social distancing and mask mandates caused it to spike again.

Normally at this time of year, we patrollers might be looking at our *Outdoor Emergency Care Refresher Workbook* and eagerly awaiting our first patrol gatherings of the season, thinking about how the first snow will lift our spirits and bring anticipation for the ski season. Now, the industry must come together to meet the challenge of opening our resorts while doing everything possible to keep guests and staff safe.

As COVID-19 spread and cases spiked, we have had to reexamine our basic methods of doing business. For instance, the OEC Refresher Committee eliminated the skills requirement for the 2020 Cycle A, suggesting it be rolled into 2021 Cycle B. The only Cycle A refresher requirement is the completion of the online knowledge-based testing.

Instructors have also gotten creative. An OEC class I have taught for nine years will move to virtual-based learning using a video conferencing system. The annual Flight For Life Colorado Search and Rescue Conference has also been moved to a virtual conference this year.

With cases on the rise, patrollers have often embraced the challenge and looked for ways to assist. In this issue, we have a spread examining the ways some patrollers have helped their community and its citizens deal with COVID-19, whether that was working in a hospital and being on the front lines or simply donating

equipment to local response teams.

COVID-19 has also changed the way people respond to medical incidents. Ambulances across the country adopted new protocols for providers regarding PPE, decontamination after a transport, and even the running of the ventilation and air conditioning systems in the ambulance. In hospitals, providers found themselves rapidly responding to evolving PPE guidelines that included the donning of face shields and gowns, as well as N95 masks or isolation breathing systems.

The National Ski Patrol leadership also recognized the extraordinary circumstances of the evolving pandemic and published ways that patrollers could help their communities as the need for testing evolved. The leadership also created a seven-page document that can be downloaded from the website that discusses COVID-19 and has recommendations for education. In this issue, NSP National Medical Advisor Chuck Allen, D.O., has written an article about COVID-19 and how patrollers can stay safer during the pandemic.

While COVID-19 is on everyone's minds, it was not the only important issue hitting the national consciousness. After the George Floyd incident in Minneapolis, protests erupted across the country, and the issue of systemic racism was front and center. Even the industry seemed to recognize the issue; in an article on *Travel Weekly*, Vail Resorts CEO Rob Katz is quoted from a letter to employees as saying, "While I'm sure most everyone in our industry believes they are tolerant and welcoming, we need to acknowledge that there are parts of the culture of our sport that are clearly not inviting." (<https://www.travelweekly.com/Travel-News/Travel-Agent-Issues/Ski-industry-examines-lack-of-diversity>) The Lakewood office staff and leadership have been having discussions internally about how the NSP can promote more diversity among our membership. In this issue, Eryka Thorley writes about minorities in skiing and patrolling. There is also a video interview I conducted with two Black patrollers that is on the NSP YouTube channel that does a deep dive into that topic.

The industry is also examining ways to address another significant topic: climate change. In this issue, we have a feature by Lindsay DeFrates that looks at how ski resorts, and more specifically patrols, are helping to promote sustainability and environmental conservation at their resorts.

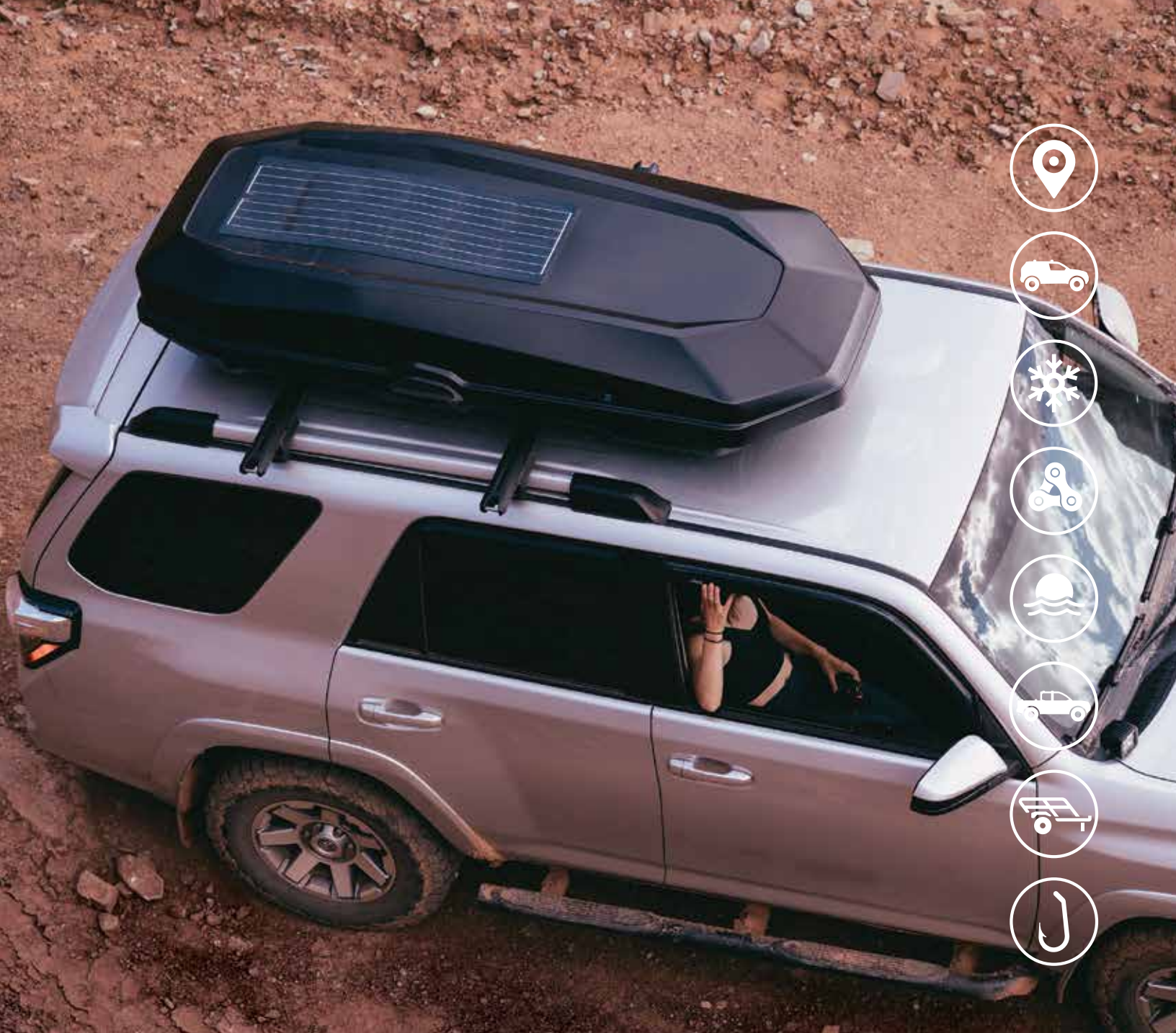
There is plenty more to find in this issue, including an article about uphill at ski resorts and one about how young adults are promoting the High Fives Foundation's "B.A.S.I.C.S" program that promotes safety among young athletes.

While we are still unsure of how COVID-19 might affect the coming ski season, we do want to promote the latest and greatest gear from our NSP partners. The annual Gear Guide can be found in the middle of this issue with hot new skis, boots, bindings, and more.

Lastly, due to the uncertainty regarding how COVID-19 might affect the ski season, as well as Vail Resorts' late August announcement that there will be a reservation system for the coming season to limit numbers, NSP leadership has made the difficult decision to postpone Powderfall until April 2022. We hope to see you at Breckenridge Resort in Colorado then.

Please stay safe out there, and if you have any COVID-related questions, don't hesitate to reach out to your division or national leadership team. +





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# Letters

## to the Editor

### Right Call for the Fall

It is comforting to know that our NSP task force composed of NSP's national medical advisor, OEC Program director, National Board Executive Committee, Education Committee chair, and NSP staff are taking the coronavirus seriously in their weekly meetings. Their recent determinations for conducting remote fall refreshers and implementing the CPR/BLS requirement modification for the 2020-21 season are superb calls. Prioritizing personnel safety ahead of "mission training" indicates good leadership skills, discipline, and accountability practices. They did not normalize a culture and become overly focused on mission training rigor and strict adherence to standards, but instead applied reason and vigorous oversight for what could have been high-risk participation in refresher-CPR activities across our organizational echelons. Their decision was determined to be in the best interest of our entire organization.

In doing so, they have specifically implemented new visions for full-spectrum safety, standards, and evaluation functions while effectively updating NSP training standards when absolutely necessary. Their actions have placed substantial emphasis on the strength of effective oversight for what could be high-risk activities and increased safety and risk management processes. They have made the decision that our patrollers truly are our greatest asset and have aptly demonstrated that they (acting in their various leadership capacities) owe to us (the membership) the commitment to continually evaluate how we operate and how we can be more effective. Kudos to that group!

Glenn Minuth  
Mt. Lemmon Ski Patrol, Arizona

### Cartoon Feedback

Thumbs up. The B-Net cartoon is right on. We need some humor these days.

Skip Millor  
Genesee Valley Region Alumni Advisor, New York

I love the cartoons in the summer edition of *Ski Patrol Magazine*. Please continue them.

Marc Bober  
EMARI Nordic Patrol

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## Lindsay DeFrates

Lindsay DeFrates is a freelance writer and mom of three who lives in Glenwood Springs, Colorado. She and the family adventure on the slopes, trails, and rivers of Western Colorado and Eastern Utah. She can be reached at [www.roaringforkwriter.com](http://www.roaringforkwriter.com).



## Gray Dinsel

Gray Dinsel is 17 years old and volunteers as a ski patroller at Bear Creek Ski Resort in Macungie, Pennsylvania. He has been patrolling for two years and really enjoys the experience, especially the people he gets to work with. He is a certified EMT and will be working with a local fire department in the near future. He became a ski patroller to help the community and to test if he wanted to go into the medical field. As of now, he plans to major in biochemistry or biomedical sciences and become a surgeon.



## David Flynn

David started skiing in the '80s before completing a year as a ski instructor in Pennsylvania. This was followed by two years with a local patrol, then his current NSP Alumni status. David and his wife, Rosemary, organize the OEC training dinners for two of the Pennsylvania patrol's candidates. David is the author of the *Search for the Alien God* five-book series on Amazon and Apple. His articles can be found in *Catholic Answers Magazine*, *American Thinker*, and *CNSNews*, among others. His grad degrees include a master's in catechetics at Christendom Graduate School and a master's in computer science at Loyola. David and Rosemary have both competed at U.S. triathlon nationals.



## Brett Gehrke

A pro patroller at Belleayre Mountain Ski Center in New York, Brett Gehrke serves as Mountain Travel and Rescue advisor and gondola evac instructor. He doesn't look far for inspiration and thanks all the patrollers lucky enough to be depicted, who will remain forever anonymous in his illustrations. He has worked as a mountaineering/climbing guide and trapeze instructor/catcher. Other seasons are spent fly fishing, sailing, golfing, and kayaking. He volunteers as a guide for Sam's Point Preserve, an EMT for the local squad, and an operator for invasive species eradication on the river. He lives with his wife, Dale, who is his art director and a patroller, on the Hudson River in New York. See more illustrations at Patrol Penguins on Facebook or contact [Patrolpenguins@gmail.com](mailto:Patrolpenguins@gmail.com).



## Doug Ginley

Doug Ginley continues to serve on the Loveland Ski Patrol in Colorado, going into his 48th year. Over the course of his patrol career, he has held many patrol, division, and national positions. Most recently, he just finished six years as the national program director for Instructor Development. In his role as NPD, he spearheaded efforts that created an updated *Instructor Development Manual*, an online ID course, a *Continuing Education Manual*, and the creation of an NSP instructor skills review course. Doug continues to serve as an Outdoor Emergency Care, Outdoor Emergency Transportation, Mountain Travel and Rescue, and ID instructor.



## Kim Henneman

Dr. Kim Henneman is a Utah Wasatch Range native. She moved to the Midwest to get her veterinary medical degree from Purdue, but quickly moved back to Utah for the outdoor life. She became certified in acupuncture and chiropractic in the early 1990s and worked on her first avalanche dog shortly thereafter. She has helped form the new specialty discipline of canine sports medicine and rehabilitation. As a veterinarian who is board-certified in both dogs and horses, Dr. Henneman currently writes and gives workshops all over the world, consults regularly with avalanche and SAR dogs, and helps canine athletes competing in numerous disciplines, including as a multi-year Iditarod trail veterinarian. Her goal is to bring knowledge from every discipline to help active dogs everywhere.



## Doug Martland

A Massachusetts native, Doug was uphill at the resort long before it was the hip thing to do. He patrols at Blue Hills Boston, is an American Mountain Guides Association Apprentice Rock and Ice Guide, an AMGA Certified Single Pitch Instructor, and a climbing guide for Eastern Mountain Sports. When not skiing, climbing, or hiking with his wife, kids, friends, and clients, he's an attorney in Massachusetts and a freelance writer.



## Scott Powers

A machine-learning engineer by day and occasional night, Scott is a splitboarder extraordinaire. After uphill all winter, he spends the off season climbing, backpacking, orienteering, and making his own gear. He also brews a mean post-tour refreshment. Scott patrols (on a snowboard) at Blue Hills Boston.



## Eryka Thorley

A native of Michigan's Upper Peninsula, Eryka Thorley first headed to the mountains for college at Montana State and has since hailed the West as home. She started patrolling at Big Sky Resort in Montana 14 years ago and recently retired from patrolling at Eldora Mountain Resort. She lives with her husband, Jake, who is currently a ski patroller, and daughter, Wynter, in Nederland, Colorado. Thorley teaches avalanche courses in the Rocky Mountains and organizes hiking trips in the Alps for Alpinehikers, a U.S.-based company.



# From the of Meegan Moszynski

## Retention and Resiliency

What a summer! From the onset of the COVID-19 pandemic to the release of *Outdoor Emergency Care*, 6th ed., to an increased focus on bike patrols, the National Ski Patrol has been busy over the past few months.

As you know by now, many ski areas shut down early in March and missed out on their lucrative Spring Break weeks. Although some resorts allowed the public to continue accessing terrain on foot, others shut down completely to avoid crowds of disappointed alpine touring skiers and riders who were not ready to end their season. The season that the National Ski Areas Association's Kottke Survey had projected to be "a promising ski season in much of the country" — on track to result in the fourth best year on record — came to an abrupt halt and, along with it, any real certainty about what the next year may look like.

Mid-March is usually the beginning of a quieter time here in Lakewood. The registration period has ended for the year, the marketing team is regrouping and planning ahead for the upcoming summer and winter seasons, and most travel dies down. This year, however, was quite different for us: as we adjusted to the sudden implementation of a work-from-home schedule and experienced some key staff turnover, the team came together to maintain momentum and redirected priorities to continue supporting our members and sustain our functionality and the durability of NSP.

We started to focus communications on what NSP and its members were doing during the pandemic. We shared stories of patrollers who swiftly shifted their work from on-hill to community-based in order to support local clinics that needed qualified medical providers. We encouraged partners to support the Goggles for Docs program started on a whim by a doctor and a crowd-sourced spreadsheet. Our work became more of a resource for information than ever before, and we strove to be a reliable go-to for our members.

All this happened during the launch of the sixth edition of *Outdoor Emergency Care: A Patroller's Guide to Medical Care*, to which editors Ed McNamara and David Johe, M.D., and many others contributed innumerable hours of phone calls, emails, texts, and conference calls to complete on time. This bright spot amid a time of uncertainty and darkness helped us all keep going. The new text reflects current medical research and practice standards, and every chapter in this new edition has changes and updates.

Four months into this "new normal," we are starting to see the forest through the trees. The launch of OEC6 has been successful, with several positive comments coming into the office about how it reads well and is a well-organized and up-to-date resource for OEC technicians. The budget process, which forced us to figure out how to forecast through a once-in-a-century pandemic, resulted in a collaborative project among the national office staff, NSP Finance Committee, and national board of directors. The acquisition of a Payroll Protection Program loan helped maintain the stability of the national office throughout this time as well.

The Bike Task Force worked hard throughout the spring and early summer months to research how areas were adjusting to a COVID-19 summer. The group has tracked which areas were opening and how they were operating and abiding by local, regional, and national health



guidelines. The state and regional ski associations have been meeting several times a month to discuss summer and winter operations as well, and NSAA has created a steady stream of webinars to keep members informed and supported as they plan for the upcoming year.

The NSP's national medical advisor, national OEC Program director, Refresher Committee chair, National Board Executive Committee, National Education Committee chair, executive director, and other key leaders and staffers met weekly for several months to discuss NSP's response to the pandemic. The group produced a national "COVID-19 Response," which addresses issues related to patrolling during the pandemic and is available both on the member website and public website. This response is high-level and can be adapted and customized for areas, regions, and divisions as they see fit. Many individual NSP programs are working on a program-specific set of guidelines as well, which will be shared with our membership and posted on the website as they become available. This conversation about NSP's response to the pandemic will remain fluid as national guidelines evolve and the fall season approaches, and the group will update the national response as needed.

The best part of these last few months has been the opportunity to see how resilient and resourceful our members can be. When the Western areas shut down early, many patrollers wanted to use their training to help their community. We tracked all the stories of members helping throughout the country and created a map to document this work. This ambition and determination reminded me of NSP's core values: excellence, service, camaraderie, leadership, integrity, and responsiveness. Now, more than ever, members are finding ways to help their communities during a time of crisis.

The education and training of NSP are more important than ever as we enter a challenging winter season. The ongoing training that NSP provides to its members, particularly with the introduction of this year's brand-new OEC text, is the cornerstone of NSP's membership. Although refreshers will look different this year, with the minimum requirement of an online-only session, the importance of maintaining that training and connection with your patrol will be vital. The other benefits of NSP membership — pro deals, the NSP Online Store, this magazine, frequent e-newsletters — add to the benefits that your membership provides. Renew your membership to remain part of "the family" and preserve your free access to refreshers and training materials.

As you reconnect with us this fall to get set up for the winter season, you'll hear a new voice on the phone: that's Cece Palmquist, our new registration manager. She will help set up and edit rosters, process billing, and answer any questions about registration. She can guide you through the "temporarily not patrolling" process as well. Cheri Overton will be a familiar voice to many of you, and she can help anyone who has patrolled for at least one year become an Alumni member if you no longer plan to patrol. Elizabeth Kim will provide support for Member Services and NSP Online Store questions. We are all here to help you and support you in getting ready for the winter.

Stay safe, stay healthy, and stay in touch! We hope to see you all again soon. +



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# Chatting with the

## NSP 2020: The Good, the Bad, and the Ugly

BY BRIAN RULL, NSP BOARD CHAIR



As I type this article, I reflect back on my appointment as national chair in January 2020, at a time in which I was developing my 2020 leadership strategy and having no idea of what was coming in the way of the coronavirus and the impacts it would have on our lives, our organization, and more specifically, ski area operations and NSP events. The title of this article provides some insight of where we were, where we are, and where I believe we are going before we close out 2020, so let us rollback to where we started — the January National Board and Officers Meeting.

### The Good

Going into the January meeting knowing that there were no other board members who applied for national chair consideration made it a bit easier in building a meeting agenda with my mentor and outgoing National Chair Rick Knight, who I had the honor of serving under as assistant national chair for two years. The two of us, working in conjunction with Executive Director Meegan Moszynski and the support of our fellow board members, accomplished some monumental goals — many of which will be written into the NSP history books. Board, division director, and national office relations improved dramatically over these two years; as evidenced by recent board voting records, we no longer have a divided board. The days of politicking swing voters to meet a simple majority win at the expense of a disenfranchised minority are over. We now have meetings where debates adhere to principles of candor with respect, we disagree without being disagreeable, and decisions pass with consensus — not only in votes cast, but also by those against backing the decision of the board. I am truly honored by the support I have received from my fellow board members and proud of the team I have been entrusted to lead.

My first official act upon accepting the national chair position was to appoint my assistant national chair. For those of you who have attended a board meeting recently, you will recall that this is usually done at some point over the weekend while the incoming national chair builds out the national committees and appointments of national program directors and advisors. Knowing how crucial effective leadership is to organizations, I immediately informed the board of my decision to appoint Chris Pringle as my assistant national chair and requested board ratification, which was unanimous, and we closed the first evening with a solid leadership continuity plan.

The following morning, meeting participants were surprised to see two additional seats at the board table. One was front and center with a Patagonia Patrol Vest and represented the interests of our members — in my opinion, the true “principle customers” of this organization. The patroller chair symbolizes my core belief that our members come first, and the patrol vest serves as a visual reminder for every decision we make. The second chair (to my immediate right) was reserved for another critical voice within our NSP leadership structure — our division directors, who serve a crucial



role in our line leadership. It is my belief that the division director representative deserves a seat at the board table to truly “weigh in” on (discuss and debate) matters of consequence to NSP divisions.

Of additional significance was a change to the ordering of presenters during official board discussion and debate. Prior to my assuming the chair, committee chairs (and, occasionally, board members) presented motions and then moved directly into board discussion and debate, most of the time concluding such debate prepared to vote on the motion, but holding to entertain a quick “weigh-in” from the division directors. This always seemed to be to be a bit of an awkward process since it was apparent that board members had already reached conclusions and the division directors would need to be either for or against. The new process I implemented allows for the presentment of the matter followed by immediate weigh-ins by the representatives of the division directors, national office, and applicable national program director and/or national advisor prior to discussion and debate by the board. This simple change has had a significant impact on our ability to function as a leadership team, and I am hopeful it will continue beyond my tenure as national chair.

As you can tell, I take great pride in the improvements to our processes and the positive impacts to the transparency, trust, and collaboration of your NSP national leadership team. We closed the January meeting energized and ready to take on whatever challenges came forth in 2020 ... or so we thought.



A Patagonia Patrol Vest on display at the board meeting to represent the membership of the NSP.



## The Bad

It did not take long for us to get blindsided by one of the greatest problems experienced by NSP leadership — COVID-19. It impacted me as early as my flight home when I was unfortunate enough to sit next to an Asian woman who coughed the entire flight and postured as if she suffered from emphysema. A few days later, I had the same. It took two Z packs and a prednisone dose pack before I beat whatever ailed me. I would like to think that I am a COVID-19 survivor, but I am too stubborn and would prefer to spend my money on something fun versus a COVID-19 antibody test.

Within a few weeks, COVID-19 was all we were hearing about. Then the real shocker came when federal, state, and local authorities started mandating social distancing — which brought our ski seasons to a screeching halt. While it was too late to do much with spring 2020 NSP events, we mobilized a COVID-19 Committee comprised of leaders from our Outdoor Emergency Care and OEC Refresher Committees, Education Committee, national medical advisor, executive director, assistant national chair, as well as myself to commence contingency planning for the 2020 OEC candidate courses and refreshers, as well as summer bike patrols. While our COVID-19 Committee was compiling information and developing formal recommendations for board implementation, I was forced to make some difficult executive decisions.

First and foremost was the cancellation of all national face-to-face events, as well as national officer and staff travel. In as much as scene safety is embedded in our core training, I believe the same holds true for training and administrative events. The health and welfare of our staff and membership is our top priority right now, and until we have assurances that we can adequately mitigate the risks of pandemic exposure, the risks of physical travel and face-to-face events outweigh the benefits of social distancing through virtual meetings and isolated events. Just as we do in patrolling, we will rise to the challenge and weather through the adverse conditions we train and work in. What we cannot accomplish in 2020 due to social distancing restrictions, we will simply defer and double down on in 2021. Please stay tuned by reading national and division email updates, as well as the NSP COVID-19 member page, which is updated regularly.

## The Ugly

Being an attorney by trade, not a week goes by that I am not told a lawyer joke. As most of you know, there are a lot of funny lawyer jokes, but there are not many “good” lawyer jokes. I emphasize good in the sense of “acts of good lawyers” versus some negative connotation of lawyer character. Laughing aside, I think we all have friends who are good people (despite being lawyers), yet we acknowledge that the poor ethics of a few have negatively impacted the reputation of the whole. Further, it is not just lawyer jokes. There are far more stereotypes created by acts of just a few — police, doctors, politicians, even clergy. We have been fortunate to not have patrollers targeted, and we need to do what we can to keep patroller jokes within the walls of ski schools.

As many of you who know me know, I tow a hard line when it comes to treating each other with dignity and respect. I have had to deal with too many instances of bullying and harassment within the ranks of NSP leadership and have fought hard to foster equality and respect within our leadership ranks. While we are making some real progress, we can all acknowledge there is room for improvement. Code of conduct complaints and appeals regarding



From L-R: Intermountain Division Director Kevin Johnson and NSP Board Chair Brian Rull.

bullying and harassment are fewer and farther between than when I came on the board four and a half years ago. I am hopeful that this is due to change in conduct versus a mistaken belief that such conduct can go unchecked.

What troubles me more than anything right now is the real ugly that we have recently discovered exists within the ranks of our membership — sexual offenders. I have been informed through news media blotters of several instances of charges being brought against alleged sex offenders who happen to be NSP members. Of critical importance is that each of the incidents involved allegations of inappropriate behavior toward minors, but they have no connections with NSP training or patrolling.

To counteract the threats of potential bad actors, the NSP board, the division directors, and the national office have been working diligently to implement youth protection policies and procedures to foster risk mitigation through member training and supervision. The conversation began with the National Ski Areas Association and others following the passage of the Safe Sport Act by Congress and recent headlines about abuse of young people in other arenas. The policy provides for NSP leadership and others interacting with our youngest members to receive awareness and mitigation training and makes a strong statement that the NSP values our young adult members and takes this issue seriously. The details of the new youth protection policies and procedures enacted by the board can be found in Chapter 13 of the *National Ski Patrol Policies and Procedures*. We now have a dedicated team to fast-track investigations and document code of conduct violations under Chapter 13. Sanctions will include an immediate suspension pending the outcome of criminal proceedings and immediate expulsion upon conviction. One thing is certain — during my tenure as national chair, I will do what I can to enforce a zero-tolerance policy for any such conduct unbecoming an NSP member.

Training opportunities should be working their way through division communications, some of which may be mandated depending on leadership classifications and/or instructor certifications, but highly recommended for all who are willing to step up and become advocates for NSP youth protection. We are still working on the details of implementing systematic background checks for NSP leaders, instructors, and select programs/events. Additional information will be forthcoming over the next few months, so please keep an eye out for emails and website updates. +

# Patrol Penguins

BY BRETT GEHRKE





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## ALASKA DIVISION

## Alaskan Reaches Milestone as NSP Patroller

Dave Hendrickson, age 89, is in his 69th year of membership in the National Ski Patrol, and he has seen and lived the ski industry's ascension in the U.S. His association with skiing began at an early age while being raised on a ranch in North Park, Colorado. At the time, skis were used by local ranchers as a mode of winter transportation.

Dave's introduction to the sport was at the age of four, being pulled behind a horse on homemade barrel-stave skis. His first real skis were made for him by his grandfather, who would bend slats of white pine over a form to make the curved ski tips, resulting in 7.5 to 8-foot-long Nordic-style skis. Bindings consisted of pieces of old canvas belting screwed to the side of the skis with some lacing to hold in the foot. Later, they used a strip of rubber inner tube, stretched between the toe and heel, to keep their feet in the binding. A long, narrow shaft of lodgepole pine was used for balance on downhill runs. He advanced to steeper hills at Berthoud Pass, Colorado, where the ski hill consisted of a rope tow powered by a Model T engine.

After high school graduation, Dave joined the U.S. Air Force in 1951. He was subsequently shipped north, docking in Whittier, Alaska, in 1952 on a troop ship along with 1,600 other recruits. According to Dave, "We were mustered on deck, where it was probably snowing 4 to 5 inches per hour. The heavy snowfall, plus the weight of soaking wet troops and duffels, caused the ship to list considerably." A train ride from Whittier to Elmendorf Air Force Base in Anchorage, Alaska, took them along Turnagain Arm, where they were constantly threatened by avalanches.

*Denali patrollers enjoy the spring sunshine at Arctic Valley Ski Area in 2012. From L-R: Barry Bruno, Bruce Rein, Dave Hendrickson, Mark Heysell, and Patrol Director Andy Sullivan. Photo by Andrew Sullivan.*

At Elmendorf, Dave learned of the Arctic Valley Ski Area in the nearby Chugach Mountains. The hill was operated by the Fort Richardson Army Base for the morale, welfare, and recreation of the troops, as well as training soldiers to be equipped to travel on skis in combat.

Due to his Colorado skiing experience, he soon became involved with the local ski patrol, which helped Army medics control some of the injuries incurred by the soldier skiers and family members. This patrolling led him to join the National Ski Patrol in 1952 and become a member of the Denali Ski Patrol formed at Arctic Valley in 1956. A year later, this patrol would get the award as the outstanding patrol in the nation.

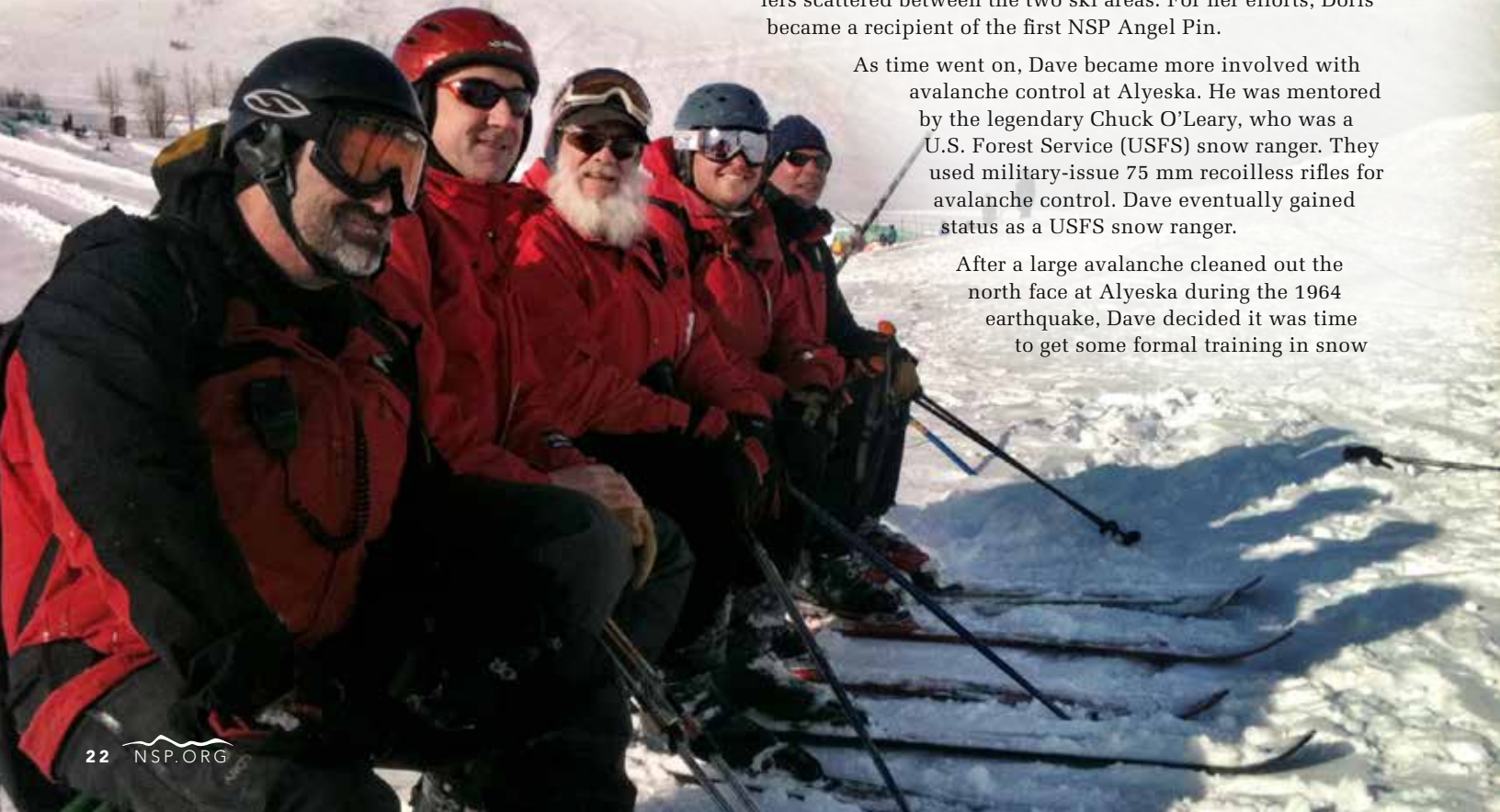
Dave's involvement with avalanches and snow safety began in those early years at Arctic Valley with the Denali Ski Patrol. He says, "The slopes on the mountain were 33 to 35 degrees in places, with only high mountain berry bushes for anchoring. Due to high winds, cornices formed on the ridgetops. I used my talents mostly for ski cutting to break down cornice build-ups and learned how to teach others this craft."

From 1952-59, Dave advanced from patroller to assistant patrol director and was patrol director at Arctic Valley from 1959-62. He received National Appointment Number 2586 in 1963. The Anchorage Ski Club is currently in its 83rd year of operation.

With the opening of the first lift at the Alyeska Ski Area in 1960, Dave, as Denali Ski Patrol director, took on the responsibility of setting up volunteer patrolling at this new ski area near Girdwood. The two areas were covered by a single Denali Patrol. This arrangement continued until 1976, when Alyeska formed its own Sourdough Patrol. Dave's wife, Doris, handled all the administrative work associated with scheduling patrolers scattered between the two ski areas. For her efforts, Doris became a recipient of the first NSP Angel Pin.

As time went on, Dave became more involved with avalanche control at Alyeska. He was mentored by the legendary Chuck O'Leary, who was a U.S. Forest Service (USFS) snow ranger. They used military-issue 75 mm recoilless rifles for avalanche control. Dave eventually gained status as a USFS snow ranger.

After a large avalanche cleaned out the north face at Alyeska during the 1964 earthquake, Dave decided it was time to get some formal training in snow





Dave Hendrickson and fellow Denali patrollers with certificates after completing an avalanche level II class in 2008. From L-R: Dave Hendrickson, Doug Griesel, Barry Bruno, Vicky Hanson, Mark Heysell, and Ben Siwiec. Photo by Andrew Sullivan.

science. As such, he arrived “unannounced” at one of the early National Avalanche Schools organized by the USFS held at Berthoud Pass. He talked his way into the class, which consisted of a group of noted USFS rangers, several of whom were World War II 10th Mountain Division veterans. This

included the Stillman brothers, Monte Atwater, Ed LaChapelle, Dale Gallagher, and Roland Emetaz. In 1968, Dave became a life member of the American Association of Avalanche Professionals, later to become the American Avalanche Association (AAA). He later chaired that organization’s ethics committee

With abundant on-snow experience under his belt, Dave joined the cadre of NSP Avalanche instructors, teaching his first courses for patrollers and later for the general public. In subsequent years, Dave was an instructor at several National Avalanche Schools and was one of the group that authored the *NSP Avalanche Instructors’ Manual*. He was Alaska Division Avalanche advisor through 1982. Dave also attended several of the early International Snow Science Workshops (ISSW), including one in Davos, Switzerland. At the Breckenridge ISSW in 1992, he presented a paper on

dealing with the effects of blowing snow on ski slopes. Dave and wife Doris were on the organizing committee for the 2012 ISSW meeting held in Anchorage.

In recent years Dave has relinquished many of his major responsibilities with the Alaska Division, but has stayed active as an on-hill patroller, not letting his 89 years slow him down. He also keeps current his Avalanche instructor level 1 and 2 certifications and is an instructor trainer.

This year, Dave received a Distinguished Service Award from the NSP and has been nominated to the NSP Hall of Fame. His commitment to the NSP is legendary, inspirational, and untiring. Kudos to Dave for his vision, countless volunteer hours, keen insights, and dedication to the skiing public’s safety and well-being.

**Joe Kurtak**  
*Alaska Ski Patrol, Alaska*

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## EASTERN DIVISION

## Gore's Pre-YAP Feeder Program

Many ski areas have training programs for young ski school instructors, but the one at Gore Mountain in New York State has a novel twist. The state-owned ski area has had a Snow Sports "Instructor in Training" program for young people for 20 years. Though Gore has 134 pro and volunteer patrollers, it has always been difficult to get young people involved.

In October 2019, my youngest daughter called me with questions about a new program listed on Gore's website called "Instructor/Patroller in Training (IPT)." She said it was for kids aged 13-15 who wanted to be patrollers or snow sports instructors and would be a 15-week, all-day Saturday and Sunday program.

The next day, I met with our patrol director, Mike McClure, to inquire about the patrol's involvement. He explained mountain management wanted to expand the Instructor in Training program to also be a gateway for prospective young patrollers. Knowing how intense Mike's preseason workload was, I offered to take on the challenge of putting the ski patrol part of this program together. After explaining the details to my daughter, she and her husband signed up my 13-year-old grandson.

Over the next couple of weeks, I began developing ideas on how to make the learning experience fun. I met several times with Snow Sports Director Gail Setlock and IPT Program Supervisor Biff Daino, and we developed a plan. Two ski instructors would keep the kids on



Kids in the "Instructor/Patroller in Training" program. Photo by John Beach.

Saturday mornings and literally "ski and ride the wheels off them" while teaching on-snow and instructional skills. The theory was that the kids had been cooped up in school all week and needed some Adirondack fresh air and exercise. In the afternoon, the patrol team would take over.

Many, but not all, of the participants had prior involvement with the Snow Sports Program. They spent the first couple weeks cautiously sizing up me and the new patrol half. Program rules were strict. Cellphones were banned, and they were

required to be at the mountain ready to go by 9 a.m., a challenge they all embraced

The composition of the class was interesting too. Most were members of the National Honor Society, Boy or Girl Scouts, were involved in at least one sport other than skiing, and played a musical instrument. All were overachievers and very motivated.

My goal was to give them an overview of what it takes to operate a ski area from several perspectives. I introduced the kids to several of the department supervisors, who each explained and showed what their part in mountain operations was. One day was spent with our head snowmaker skiing and riding around the mountain to show the size, cost, and complexity of our snowmaking system. Time spent with the lift maintenance and grooming departments was another eye-opener, since that work is largely done out of the public's view. Another unique highlight was a bus trip to our local rescue squad with our young adult patrollers for a visit and hands-on tour of a LifeNet helicopter. The fact that the flight nurse was one of our own pro patrollers was an added bonus.

Perhaps the most memorable time for me was a day in the base first aid room that turned out to be one of the busiest of the season in terms of incoming sleds and ALS ambulance calls. With strict orders from our three nurses and me to stay out of the way, the group was mesmerized by the fast



Relaxing during the "Instructor/Patroller in Training" program. Photo by John Beach.

## Outdoor First Care Training during COVID-19

and furious pace of a day in the life of a patroller! By midday, the kids were begging to help. We let them help patrollers repack sled bags, hang wet blankets on the drying rack, and pull empty sleds out of the way; they all gladly stepped up. When it was time for the group to go back to meet their parents, over half asked if they could stay longer to help.

After the first couple weekends, they couldn't wait to see what the next patrol adventure would be. I was a little worried about running out of interesting things to do, but besides learning some basic first aid skills and the numerous roles and responsibilities of the people it takes to run a ski area, students also participated in and received certification for an accredited CPR/AED course. One day was spent at Gore's Nordic Center learning backcountry first aid skills, how to build a shelter and a fire, and how to tie knots used for rope rescues from our region Mountain Travel and Rescue advisor. Another day we had two New Jersey Region Nordic patrollers come up to run the students through a series of challenges and games on Nordic equipment, which many had never tried.

Feedback from the kids at the end of the season noted that, in addition to the Snow Sports instruction and drills, what they loved the most was the hands-on activities with the patrol. Looking back, I think the Gore Ski Patrol and Snow Sports departments' unique joint venture delivered a program that was well worth the fee paid by the parents. The main objective was met: to spark an interest in young skiers and snowboarders to become snow sports instructors or join our young adult patroller program. Gore has historically retained about 80% of prior year graduates as snow sports instructors; time will tell how many pursue becoming patrollers.

This was one of the most rewarding patrol projects I have ever had. I later learned that their inside joke was based on a phrase I was always barking when we visited patrol stations, base first aid, and the LifeNet chopper: "Don't touch anything!" I can't wait to help with this program next season.

**John Beach**  
Gore Mountain Ski Patrol, New York

The coronavirus and COVID-19 have had a big impact on ski patrolling, especially training. NSP leadership decided to conduct Outdoor Emergency Care refreshers this year online with no hands-on. It is uncertain how OEC classes can/will be conducted. Outdoor First Care, although having an online component already, still requires a hands-on class.

A new bike patrol, American River Bike Patrol, was started about one year ago and began formal operations this June. Many of the patrollers were new to the National Ski Patrol and needed Outdoor First Care and CPR to qualify as bike hosts. The initial OFC class was scheduled in May but cancelled because of the COVID-19 pandemic. Two classes were conducted in June and July with accommodations guided by NSP and the state of California. Both limited groups to 10 or less and required careful COVID screening, masks, and gloves

The first class was in two large rooms in a local church. At that time, local regulations allowed inside groups of up to 10. All attendees completed a COVID-19 screen and NSP liability waiver in advance. Everyone had their temperatures taken upon registration and was sent either to CPR or OFC. OFC candidates were asked to bring a housemate, and all training and testing was to be done in a pod of three consisting of the instructor, candidate, and housemate. All wore masks, and candidates also wore gloves. Two candidates did not have housemates; they were assigned to a pod and rotated with the matched candidate to do the scenarios. They were not allowed to touch the housemate and carried on all hands-on activities either on themselves, on a manikin (e.g., bandaging on a foam roller), or instructed the matched candidate to do the hands-on. The matched candidate and unmatched candidates alternated taking the final practical as they did with the practice scenarios. The first class went well, but there were concerns about COVID-19 compliance.

The second class was held at an old elementary school. All classes were held outside and conducted under portable awnings. Again, the OFC was conducted in pods of three (instructor, candidate, and housemate) or four (instructor, matched candidate, housemate, and unmatched candidate). The instructor



OEC instructor trainer Nancy Stromswold giving feedback to one of the OFC pod groups. Photo c/o Jim Margolis.

used a modification of the practical final questions to set expectations; demonstrated an assessment including COVID-19 screening as part of scene safety; history taking using SAMPLE; AVPU including oriented to time, place, person, and event; taking a pulse and respiration rate; SAILER for reporting; and FAST-ED for stroke assessment. They also demonstrated bandaging on a foam roller. Although, we had more unmatched candidates, the second class went smoother, and all involved felt it was accomplished in a COVID-19 safe environment.

Utilizing candidate-housemate-instructor pods, COVID-19 screening, social distancing and masks, and conducting training in the outdoors, two safe and effective OFC classes were conducted, and 24 new bike hosts completed their first aid training. It is recommended that similar accommodations could be utilized to do OEC classes, OEC and OFC recertification, and on-hill care and training. +

**"Doc" Jim Margolis**  
Eastern Sierra Region Medical Advisor



The author (in black shirt) getting the class organized at the start of the day.



# TIPS *from the* VET! PEAK PERFORMANCE

## CONDITIONING THE K9 CORE FOR WORK

BY KIMBERLY HENNEMAN, DVM, DACVSMR (EQ, K9)

**W**ell, it has been quite a year so far, hasn't it?! Schedules are altered, seasons cut short, and we still do not know what the fall will bring. Since there is not much good in moaning about the virus that has upended everyone's lives, take advantage of downtime and normal outside hiking time to do some core fitness training with your avalanche dogs. This is not the same level of conditioning that we get by taking our working canine out for jogs, runs, hikes, or even training sessions. A study done on over 400 competitive agility dogs showed that 62% had weak core muscles despite their high level of fitness. Dogs with weak core muscles are more likely to suffer injuries that can cost dollars and time, as well as make it harder to heal.

### WHAT EXACTLY IS THE "CORE?"

In humans, the core is mostly considered to be the torso muscles of the abdomen and back. These muscles working together and in opposition are what essentially transfers the motion of the legs into stabilized yet flexible movement. With four-legged animals, the core becomes more complicated by also being responsible for perpetuating movement through the air after the hind limbs have pushed off, supporting the weight of the body and momentum when the front limbs strike the ground. The core is what allows for efficient absorption of the energy of landing and the spring-back recoil that starts the next phase in movement.

Core muscles are usually considered to consist of the large back postural muscles such as the epaxial muscles above the spine (multifidi, longissimus, and iliocostalis), the hypaxial muscles below the spine (quadratus lumborum, psoas major), the abdominal muscles (the straight rectus abdominis and the angled internal and external obliques), and the small, postural muscles that line the inside of the pelvis. The secondary core muscles are those that attach the limbs to the body, including the chest pectoral muscles, the muscles of the upper thigh and hip, as well as those that hold the shoulder blade to the torso.

*“The core is what allows for efficient absorption of the energy of landing and the spring-back recoil that starts the next phase in movement.”*

Core muscles have two main functions: create stable mobility and allow for flexible stability. Through connecting fascia, these muscles all work together to stabilize both static and moving posture. Straight and stable posture, in turn, gives the body the flexibility to absorb sudden forces that might cause injuries. Core muscles also assist movement by creating efficient power and focusing the forces needed to control complex twisting, shearing, and rotational movements. Through the functional fascial lines (connecting fascia that link from one end of the body to the other) that bind all the muscles of motion together into more complex movements, the core muscles also control forward, backward, and sideways flexion.

Weak core muscles can lead to increased injuries such as:

- torn cruciate ligaments (especially if on uneven terrain or if a leg is “postholing” through snow)
- intervertebral disk or back muscle problems
- iliopsoas, hamstring, or groin muscle tears
- shoulder or elbow injuries due to overuse of the front limb muscles to stabilize landing and generate movement.

### HOW IS CORE FITNESS DIFFERENT THAN REGULAR FITNESS?

The core muscles are not only the critical muscles that drive and stabilize motion, they also may act as critical “pumps” for stretching and releasing the fascia, which is important for blood, lymphatic (immune system), and nerve functions for the whole body.

Core muscles must be exercised specifically, much like doing focused exercises for limb muscles (e.g., curls to strengthen the biceps). Going for a run, chasing a ball, or running after rabbits does not necessarily work those core muscles. Further, the faster an animal is going, the less likely that core muscles are being worked. Good core muscle fitness protects the body, especially the limbs, from injuries caused by excessive and uncontrolled movement.

There is a simple test to see if your dog's core is strong. Ask the dog to sit and balance on their hindquarters in a begging position. If they can't do it, or even sit straight with legs flexed under with a straight, flat back, then you need to start with simple core exercises. Take it easy initially, and don't overdo it. If your dog can do 10-15 seconds of sitting up to "beg" on their hind legs, you can start with slightly more difficult exercises, or at least do them more often. All exercises can be easily incorporated into hikes, walks, or before, during, or in-between field search exercises or real deployments.

### SIMPLE CORE EXERCISES FOR AVALANCHE DOGS

Exercises are broken down into those that help with mobilizing stability and those that help stabilize mobility. In the first, we want to increase balance, proprioception (the body's neurologic ability to know where the feet and body are without looking), and flexibility. Strengthening these aspects helps to reduce injuries. Exercises to help mobility are those designed to increase core muscle strength and power. When the core muscles are strong, an avalanche dog will have better speed, strength, and agility on any kind of snow. The less energy that is needed for muscle activity, the more there is for the nose, and the longer a dog can work a problem without tiring.

To start working on your dog's core strength, add 5-10 minutes of basic mixed exercises for any 30-60 minutes of hiking, walking, or running. If you are doing hikes and runs with more effort (e.g., steep hills and elevation) start with shorter reps of exercises. If you are thinking you want to do these exercises in a young dog (less than 8-9 months old), or a retired, geriatric dog, first consult with a certificated or board-certified dog rehab veterinarian or technician to make sure that these exercises are appropriate for your dog. These are the simple exercises that I like handlers to start with:

- **Crunches:** Make the dog sit (standing is for a little later), and using a treat, have the dog lean forward without allowing them to raise the rear from a sitting position — you can do it with the dog's head reaching up or reaching forward. The dog is allowed to take small balancing steps with the front feet but is not allowed to move their rear end off the ground. As the dog improves



Figures 1a and 1b: Katie (a 6-year-old, high-drive Australian Kelpie) does the crunch forward then the crunch up. Notice how the back and flank muscles change with the posture shift.



Figures 2a and 2b: With the front end elevated, Katie shows standing crunches up and forward.



Figures 3a and 3b: With the rear end elevated, Katie shows sitting crunches up and forward.



Figure 4: The Double Diagonal Leg Lift (RF/LH) — make sure both diagonals are done equally.



in doing this exercise on the flat, try doing it standing or sitting with the front or rear elevated. This is an excellent exercise for correcting sloppy sits and poor posture. It also works to build abdominal strength while stretching and increasing flexibility of back muscles (see Figures 1a-1b; 2a-2b; 3a-3b).

- **Single leg lifts (Around the World):** With your dog standing, lift each leg up one at a time and hold it for 10-15 seconds. If the leg or the dog's balance wobbles a lot initially, there is not much core strength, so start with 5-10 seconds per leg. Do this exercise 1-3 times per repetition, 2-4 times a day. If your dog is more advanced and can do this exercise easily, try doing two legs at a time — one front and one rear. Do both sets of diagonals and both legs on each side. Support the dog's torso with your legs as you pick up one leg at a time. Once the dog is balanced against your legs, gradually slide your legs away from the dog until it is standing on its own. When it is time to make this more difficult, have your dog try it standing downhill, uphill, and sideways (change which side is uphill) either on a hill while you are outside or on blocks/steps if inside (see Figure 4).
- **Walking over poles or through a ladder:** These are excellent exercises for developing proprioception. As a dog becomes more advanced, try getting several PVC pipes, drop them on the ground haphazardly like pick-up sticks, and have your dog pick its way through them.
- **Side bends:** Use a treat to get your dog to bend to the "four quadrants" (front foot -> elbow; back foot -> hip). These can be done with the dog either standing or sitting (do both). No cheating allowed though! Don't let the dog swing its rear end away to get to the treat. The bend (stretch) must come through the entire torso without foot movement. It is harder than it looks.
- **Sways:** With your dog standing, place your hands on either side of their hips. Gently push the hips



Figures 5a and 5b: First, a gentle push to the left, then a gentle push to the right.



Figure 6: The Marine Crawl (for 3-4 steps). Notice how the tail is being used for balance.

from one side to the other in small movements — don't hold the dog's hip up with the hand opposite of the push, let the dog catch herself. If the dog has to take a step to catch her balance, you are pushing too hard. It should be a gentle sway that involves small changes in the postural muscles of the pelvis and legs (see Figures 5a-5b).

- **The Marine Crawl:** Put your dog in a down position and have him or her crawl to get a treat without getting up. This is fatiguing, so don't do too much (see Figure 6).
- **Sit-to-stand:** This would be like lunges for humans. Make sure that the dog's posture in the sit is even and tight (no sloppy "puppy" sitting) before you ask for the stand.
- **Sit-to-down:** As it sounds, have your dog do several progressions from sit to down. Never start the next movement if your dog is not in proper posture first (either a straight, tight sit

or a symmetrical Sphinx position in the down).

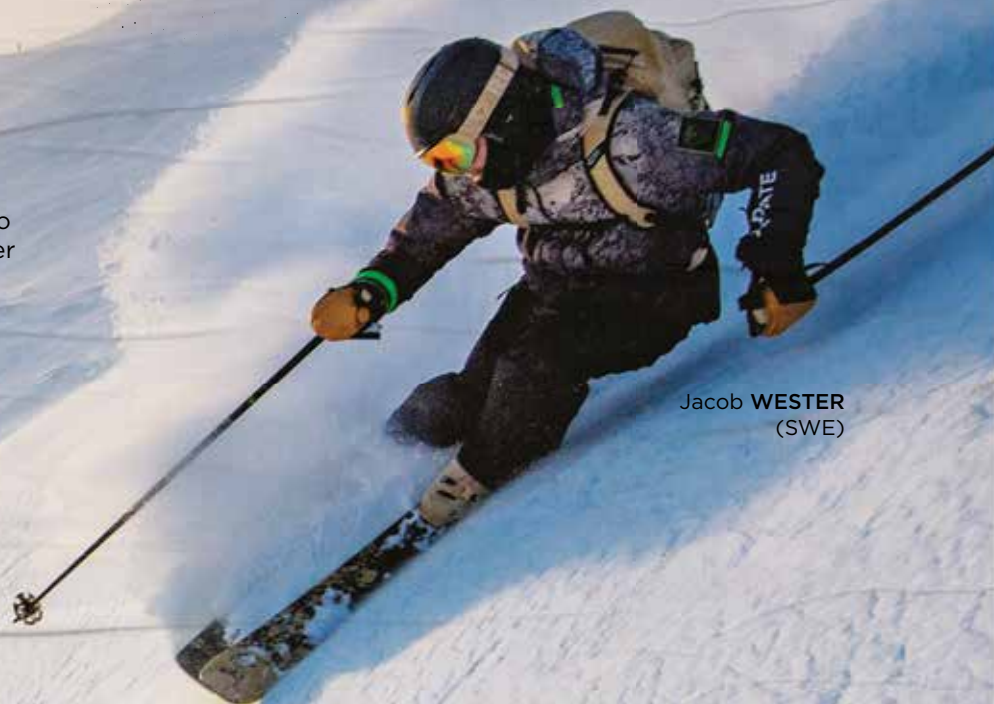
This should give handlers plenty of options to keep core exercising fun and varied for them and their dogs. Remember that rest is just as an important component of fitness as work. I know you high-drive folks out there — you can push yourselves, but not your dogs! If at any time you start to notice your dog shutting down mentally or fatiguing physically by sitting or lying down crookedly, call it good and give them a break. If you did not reach your goal, do another short session later in the day.

There are more exercises that can be done as a dog advances in fitness, but we'll have to cover those later, or you can find a certified rehabilitation veterinarian or technician in your area. Even doing 10-15 minutes, three times a week, will shortly create benefits in your dog's strength and endurance — whether romping in your yard, scrambling over mountain rock scree, or working the toe of a slide. +



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# FROM THE *Director's* CHAIR

PATTY ASSELIN, MOUNT BOHEMIA SKI  
PATROL DIRECTOR

BY ERYKA THORLEY

PHOTOS BY JOEY WALLIS



*Fresh tracks at Mount Bohemia.*

With some of the steepest tree skiing in the Midwest and the deepest snow, Mount Bohemia is hard to beat and difficult to compare to anything else within a 1,000-mile radius. As a disclaimer, I am totally biased, as I spent some of my most memorable powder days at this Midwest mountain during my adolescent years. Located

in Michigan's rural Upper Peninsula, Mount Bohemia offers the longest ski runs and most vertical drop anywhere in the Midwest. Patty Asselin has been the patrol director at Mount Bohemia for the past 11 years, and we were lucky enough to chat with her about growing up in the "U.P.," her background, and what it's like to patrol at this unique northern ski hill.

Patty is dedicated to her craft and her people. It's not every patrol director that cooks a Crock-Pot of grub every weekend to feed their staff while also individually training them on sled-handling skills. Continuing with our "From the Director's Chair" column, meet Patty Asselin; my guess is that you will be booking your trip to Mount Bohemia in no time.



*Night skiing at Mount Bohemia.*



Marking hazards at Mount Bohemia.

**SPM: How long have you been patrolling? And how long as the patrol director at Mount Bohemia?**

**Patty:** It will be 32 years this season. I started at Mont Ripley, which is in Hancock, Michigan, and is owned by the local university, Michigan Tech. A ski pass is included in their tuition payment as a university student. I've been the director at Mount Bohemia for 11 years, and I've been skiing there since it opened in 2000.

**SPM: Did you move up the ranks at Mount Bohemia, or start at a different ski patrol and mountain?**

**Patty:** I worked as a secondary patroller at Mont Ripley but don't do that anymore. I was at Marquette Mountain for one season in 1995 or so.

**SPM: What got you first involved with ski patrol?**

**Patty:** I like helping people and I love to ski. I had friends that were patrolling, and it looked like fun. I started patrolling in 1989.

**SPM: What got you started skiing in general?**

**Patty:** Well, I didn't start skiing until I was a junior in high school. Our local hill had a little rope tow, and I started out with the old clampdown skis and ski boots and used my Sorel boots in them. My parents owned a grocery store, and two of their really good customers were big-time skiers. They came into the store



Patrollers riding the chair at Mount Bohemia.





On scene of an accident at Mount Bohemia.

and said that I was a hot dog and that I was going to get hurt if I didn't get the right equipment. I actually got my first boots, bindings, skis, and poles from ACE Hardware in Calumet in 1969. I then raced on the Calumet ski team the next season, 1969-70.

**SPM:** *Having just started skiing the year before, how'd you do as a ski racer?*

**Patty:** I did OK for one year and raced the next year. The lady that I took instruction from, her sister was a top leader in skiing around my hometown and I beat her in one race and that was all I needed to do. That was good enough for me. It was a lot of fun. Good memories.

**SPM:** *Where are you from originally?*

**Patty:** My parents had a store in Calumet. We spent all our time in Eagle Harbor when school was out for the summer. I grew up in Calumet and Eagle Harbor, Michigan.

**SPM:** *What is the thing that keeps you coming back year after year to patrolling?*

**Patty:** It's the family, the camaraderie, and helping people and loving to ski. I've been quite involved with all region activities. I'm the Women's Program advisor [North Central Region] and have been for the past five years. Additionally, I was the administrator assistant to our division director. I always wanted to

be a nurse, so I guess this is the next best thing to it. I'm an OEC instructor, toboggan instructor, and CPR instructor. I'm also a first responder in our area.

**SPM:** *What makes your program at Mount Bohemia unique?*

**Patty:** Our skiing is the best in the Midwest as far as being like Colorado skiing. We have tree skiing. We have no grooming, which is very unique. We also have no snowmaking, so we have to pray hard for enough snow to ski. We don't have a big lodge. We're very rustic, and I love that part. The yurts are great. They did build some log cabins down the road for lodging.

On busy days we have three buses that



Evacuating a patient through the trees.



The bus that can be used to bring a patient back from the Outer Limits area.

pickup skiers because we've grown so much. When you reach the top of the hill, you can choose to either go down an open run, which is either the Bear's Den or the Front Side, or you can go into the Extreme Backcountry or Outer Limits or Haunted Valleys. The bottom of Outer Limits and Extreme Backcountry is where the bus picks you up and shuttles you around to the chairlifts. They are updating our trail map, as we have so many new runs.

**SPM:** *Can you describe your ski patrol program and operations for those of us not familiar with them?*

**Patty:** We have five local ski patrollers and 16 primary ski patrollers, but we get a lot of secondary patrollers or people that sign on for specific dates. During the week we have a program where patrollers ahead of time sign up for certain weeks and get paid and lodging to be there. It's kind of like a vacation. They could come and ski and not have to pay for anything while they are there. They were getting breakfast and dinner with that, but with COVID-19 I'm not sure if we are going to do that this year. Monday through Friday they would be on the slopes and I would go in on Monday to orient them to the hill and our equipment and give them a tour. We have a lot of people that have been back for years now during the week.



*Tree skiing at Mount Bohemia.*

**SPM:** *How many patrollers do you have at Mount Bohemia?*

**Patty:** Our 16 primary patrollers are all volunteers, as are our secondary patrollers. Our general manager pays everyone's dues, which is really nice. If we get 12 days in by the end of the season, he'll reimburse our volunteer patrollers \$250 per person to help reimburse costs. If you worked 14 days or more this past year you received \$1,000 at the end of the season.

**SPM:** *How do patrollers become involved with your program?*

**Patty:** We don't have OEC training classes because we are so spread out.

People will contact the general manager, and then they forward it to me. I'll try to find out what region they are in and how to connect them with an OEC class if need be. Once they are done with the OEC course, I'll then train them on toboggan skills and other skills specific to Mount Bohemia. I prefer to train people myself on toboggans because no one has tree skiing like us in the Midwest.

**SPM:** *What happens if there is an accident in your backcountry terrain?*

**Patty:** Our backcountry or Outer Limits terrain filters riders down to a road where there is a bus to take them back to a chairlift. If an accident happens in this





Playful Bohemia patrollers in patrol headquarters.

terrain, we have a special bus that we use to slide the toboggan into the back of the bus in between the seats. This is used for our non-walking patients. As soon as we have an accident, everyone hears about it over the radio. The bus driver will hear this and head to the road to pick us up with the toboggan.

**SPM: What does your rookie training typically entail?**

**Patty:** We practice our chair evacuation a few times a year. Because we are so separated geographically, we do one training in the fall connected to a fall running race that the resort hosts. It's a two-day event, and that Sunday we do

a chair evac practice during that time. We then do another one in the snow, but usually we host three practices a year to cover the whole patrol so that everyone has an evac practice each year.

**SPM: Who's the longest-running patroller in your group, and how many years on average does your patrol have?**

**Patty:** It's me. We have some new people now but it's close to 20 years of experience.

**SPM: Do you have young adult patrollers in your program?**

**Patty:** We started two patrollers, but they haven't yet finished. I'm not sure what is going to happen to their training with the pandemic. They live in Wisconsin and have a lot of other activities going on. They were supposed to finish in March but now we're not sure what's going to happen.

**SPM: How else do you engage with the local communities?**

**Patty:** It's tough up there because we're all so spread out. We do fall chairlift

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rides for visitors to see the fall colors. The top of the resort is the highest point around, and from there you can see Lake Superior. They set up tables at the top and they can have a picnic up there and then ride back down or walk. We also host a running race in the fall. The general manager constructed a yurt that is a hostel so people can rent a hostel spot up there during their stay. They do a ski movie night on Thursdays in the winter and live music on Fridays and Saturdays, which was my sister, Jan Arnold. People love her up there.

**SPM: For those that have never visited Mount Bohemia, how do you access this remote mountain?**

**Patty:** It's an hour to get from Houghton [the largest city nearby] to Mount Bohemia. When Michigan Tech is in session there are more people, but the town itself is 8,000 people.

**SPM: There is a lot going on at Mount Bohemia. I know my parents, who visit a few times a year, mentioned a hot tub at the base and some wild parties ...**

**Patty:** You'll need to check the special events page for more details, but the general manager put in a pool and a hot tub a few years ago. It's just a different breed of skiers up there. In general, they are backcountry skiers, but you also see typical families. There are families that have taught their little skiers how to ski up there. It's a different clientele. It's not the clientele that would go to a big resort area like Pine Mountain or another resort in the Northern Midwest.

**SPM: What is your annual snowfall?**

**Patty:** Our average snowfall is 273 inches. I think this past year we had 268, and the elevation is 1,500 feet (vertical drop 900 feet) with 550 skiable acres with 105 runs. The longest run is 2.3 miles.

**SPM: When is typically the best time to ski at Mount Bohemia?**

**Patty:** When God gives us enough snow. Likely the end of January or early February is probably the best time.

**SPM: What is the most significant call or challenging call that your group has recently handled?**

**Patty:** We haven't had an emergency in the cliffs lately. That would be our most

challenging call, and it's been a while.

**SPM: What is the required medical certification and experience for your paid and volunteer patrollers?**

**Patty:** We require everyone to have an OEC.

**SPM: Do you have medical pros in your program?**

**Patty:** No, we don't.

**SPM: What are some traditions at Mount Bohemia?**

**Patty:** One of our traditions is that every Saturday and Sunday I bring a Crock-Pot of food, and we all look forward to that. Anything that you can put in a Crock-Pot that will feed a lot of people: sloppy joe, pulled pork, stew, chili. We can have anywhere from 5-10 patrollers staffed on the weekend.

**SPM: How much time is spent on medical calls for your patrol?**

**Patty:** On average about 63-65 medical calls a year.

**SPM: Do you have summer operations that you assist with?**

**Patty:** Yes, there is a summer adventure program with biking and hiking, and they have a pontoon boat that visitors can take fishing and kayaking. Myself and our patrollers are not involved with these operations.

**SPM: What else do people need to know about Mount Bohemia?**

**Patty:** We have night skiing every now and then. It's only on the front side under the lights. We found out that if you ski from the time it opens to the time it closes it really kicks your butt, so there are usually only a handful of people that may be out there. It's nice to see the lights on the hill. It's very unique because of our location. Our skiing is like skiing out West. You won't find backcountry skiing better than Mount Bohemia in the Midwest, and we offer cat skiing at our nearby Voodoo Mountain. People are friendly and welcoming, and you can buy a season pass for \$99 if you buy it early, plus it gives you a few free days at a number of resorts around the country. +





David and Rosemary Flynn enjoy a day of skiing. Photo c/o Dave Flynn.

# Marriage & Patrolling

HOW OUR PATROLLING CANDIDACY  
STRENGTHENED OUR MARRIAGE

BY DAVID FLYNN

When my then-girlfriend Rosemary and I finished a tour with the ski school, we decided that the next step in our evolution was to try out for the patrol. For us, there were several obvious benefits, such as learning to ski better, new friends, and medical training that turned out to be lifesaving later. I purposely exclude skiing for free in that list because after hotels, skis, radios, and injuries we spent more than two season passes, by a lot.

Patrollers seem to come in three basic groups:

1. Single or single again skiers.
2. Married with spouse not on the patrol. These come in two flavors:
  - a. Spouse skis and kids on the racing team, etc.
  - b. Spouse hates the cold, the snow, and doesn't ski.
3. Married where both are on the patrol. We know several patrollers who met patrolling and later married. Though we were already together, we didn't get married until we were patrolling.

## Beginnings

As candidates, we studied the Outdoor Emergency Care textbook's 36 chapters together. We had great instructors and took the course material very seriously. My wife got a 99% on the final exam, while I scored a 94%. To strengthen our skills, we decided to organize eight weeks of open OEC practice sessions at our home that included dinner cooked by me. This helped us and the candidate class.

On exam day, my wife flew right through while I had to redo one station. Still, we remained very much a pair in this somewhat stressful experience. We passed all the Federal Emergency Management Agency and CPR tests, then we went into Outdoor Emergency Transportation training on the snow in early January.

We did our first candidate year as the lesser skiers in a pack of eight, despite my past as a beginner ski instructor. My wife had less time on the snow than I did but was honestly every bit as good or better. Rosemary was younger and untainted by bad habits, which was an advantage. However, the ski year was so warm we never

even got to the practice test. The season ended weeks early. So, we were told to just return for year two.

## Honeymoon

After our first year as candidates, we got married and invited the patrol to the wedding. Then we spent six days at Lake Placid, skiing five of those. No matter where you patrol, it is inspiring to be on a mountain that has hosted two Olympics. The history and the town were amazing.

On the hill, we befriended their patrol. The insider info they gave for their five Olympic slopes made for a far better ski experience. We talk to the patrol at every mountain now because no one knows what is safe, open, or closed better than they.

## Second-year challenges

On our second candidate year, they split us up on day one, which was troubling. There was some talk that they might take just one of us, rather than both. This was stressful because we did not want to train or patrol half-and-half. We had perfect attendance, were on time, and even spent two days a week in the nearby hotel so we could get more snow time. I was skiing three to four days every week, and we had bought better gear on pro deals. We had no life other than work and our hill.

As we approached our first OET exam, Rosemary had a bad twisting fall and lost a couple weeks of training. Then she had another fall on a mash-potato double black run that got her a sled ride to the bottom. I tore a labrum on a hip that already was bone on bone, which I did not know till an MRI later. I tested positive two weeks later for a crippling injury that I was not yet fully aware of.

Our postseason medical bill was over five figures after the flexible spending account and secondary insurance. In the end, we just ran out of health and money and converted to alumni status instead of going on with patrolling.

We maintain our OEC and pro status as NSP alumni. We get an Ikon Pass and still ski with the patrol 10 times a year. On many occasions, we are their guests. We volunteer and help with fundraising

events. We also still run the 10-week, two-and-a-half-hour OEC Program after Labor Day for candidates. For patrollers who attend, that means dinner on us, then two hours of OEC practice at our home with instructors we invite. We pay for everything, and Rosemary's company donates \$50 to the patrol every time they come. That usually comes to about \$1,000 yearly.

Our ongoing benefits are skiing with our friends, medical training, and volunteerism. We love the patrol's mission, and we still do all the FEMA training, CPR, and OEC refreshers plus the 10-week practice at our place. Consequently, we have kept all our skills. Having a pulse oximeter helped me realize I needed a BiPAP after low O2 numbers showed up when skiing at high altitude. Basically, we have saved ourselves and several others through what the patrol has taught us.

Our marriage is stronger because of what the patrol gave us. We have the best friends we've ever known. We entered the patrol as nationally competitive triathletes and having HAM radio licenses, but the knots, medical training, and ability to throw line over a branch at home all come from the patrol.

We have noted some patrol families manage an entire skiing culture, with either kids ski racing and a parent patrolling, or both parents and their children patrolling. If you marry another patroller, you partner with a very giving person who knows how to help you if you choke on something or need CPR.

As for my wife and I, we will keep our OEC up until we rejoin a



David and Rosemary Flynn in patrol gear. Photo c/o Dave Flynn.

patrol or there is only one of us left. We love our new friends, skiing, and our travels to Colorado and Vermont.

If I could give one piece of advice through all of this, marriage is made stronger by the extraordinary things you share with your spouse. Faith, children, ski patrol, triathlon, and charitable work all make a foundation that is unique to you as a pair. I have seen my wife in times that required courage and strength, when she was freezing cold, and when under pressure during a bad injury we worked. We are now inseparable, just as it should be. Thank you, NSP, for that foundation! +

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# B.A.S.I.C.S

## AMBASSADOR PROGRAM FOR YOUNG ADULT PATROLLERS

NEW PROGRAM PROMOTES HIGH FIVES SAFETY MESSAGES

BY GRAY DINSEL

**A**t 10:30 a.m. on Feb. 2, 2020, a teenaged skier fell off a jump in the terrain park at our ski area. He was not wearing a helmet and hit his head on the snowpack and then lost consciousness. Fortunately, he regained consciousness by the time ski patrollers arrived. His mother later emailed the patrol to thank them, stating, "He has a concussion and will be OK. He will be returning to the mountain again but this time with a helmet."

While the outcome was not bad, wearing a helmet could have diminished and even prevented the severity of the incident. Ski patrol should be about injury prevention as much as treating injuries after the fact. The High Fives Foundation B.A.S.I.C.S program (Being Aware in Critical Situations) aligns with patrol in this goal, as stated in its mission statement, which is to "prevent injuries before it's too late."

### THE HIGH FIVES FOUNDATION B.A.S.I.C.S PROGRAM

The High Fives Foundation is a nonprofit organization based in Truckee, California, that focuses on preventing life-changing injuries and providing resources if they occur. The High Fives Foundation B.A.S.I.C.S program is a safety initiative geared toward young athletes that has a goal of preventing injuries and promoting smart decision-making on the mountain. The High Fives Foundation uses informational videos on its website to promote

this safety message. Some of the topics include mountain rescue, collisions, helmets, and terrain park safety. We encourage everyone to visit the website (<https://highfivesfoundation.org/basics/>) and watch these videos.

### B.A.S.I.C.S AMBASSADOR PROGRAM FOR YOUNG ADULT PATROLLERS

When I first heard about the High Fives Foundation through a National Ski Patrol email, I thought it would be a great idea to leverage the program to directly promote mountain safety on the slopes. As a ski patroller, I have frontline access to interact with young athletes. I encounter many teens that enter our patrol room with head injuries that could have been prevented. The emergency medical services system "is also expected to serve a role in the larger health system through public education and prevention efforts," says Christopher Coughlin, a Ph.D. and the author of EMT Crash Course.

Since peer-to-peer interaction can be a powerful avenue of influence, I worked with High Fives to develop the "B.A.S.C.I.S Ambassador Program for Young Adult Patrollers (YAPs)." The program is designed to have young adult patrollers promote and teach the B.A.S.I.C.S program in three ways. First, we can speak with the public face to face and hand out our informational safety cards. One of the best ways to do this with young skiers/boarders is on the



Tabling with info about the B.A.S.I.C.S program.



Helmets are Cool sticker.

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**SEND US AN EMAIL FOR A CHANCE TO  
WIN HELMET, GOGGLES, AND SWAG!**

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chairlift. Second, we distribute pamphlets and show videos at an information table at the mountain during business hours. Finally, we can perform a B.A.S.I.C.S presentation in a group setting by showing videos and facilitating Q&A sessions.

### WHAT I AM DOING WITH HIGH FIVES

Locally at the mountain where I volunteer, I started deliberately initiating conversations with young boarders and skiers not wearing helmets. They have been receptive to my safety message and respectfully took my information card. Late in the season one Sunday afternoon, I set up an information table with a fellow young adult patroller, Nolan Fogarty. The table was placed at the base of Bear Creek Ski Resort with support from my patrol director, Phil Barker. The table, under a popup tent with a High Fives banner hanging behind us, had a monitor playing a loop of the short (roughly 90 seconds) B.A.S.I.C.S videos, High Fives safety stickers, and informational safety cards.

After educating individuals on the B.A.S.I.C.S program, we handed out the cards and gave out candy as a favor for stopping by and listening to our message. I crafted these informational safety cards using a simple business card template, and High Fives completed the cards with their logos and color themes.

These cards remind the public to always wear a helmet, put the ski lift bar down, and know their skiing ability/environment, which are my three favorite safety messages.

I am also planning on giving a B.A.S.I.C.S presentation to our lift operators and ski/ride instructors in fall 2020. These presentations reiterate High Fives safety messages and subtopics in elaborate detail. I am also looking into scheduling these presentations at local high school ski clubs.

I was really stoked to roll out the B.A.S.I.C.S Ambassador Program at the YAP Seminar at Smugglers Notch in Vermont. Although the seminar was cancelled this year due to COVID-19, I would like to thank my fellow young adult patrollers Corbin King, Maddy Bennett, Dean King, and Mason Rinker for being the first ambassadors to join the program. They said they will promote the B.A.S.I.C.S program at their mountain.

While the B.A.S.I.C.S program is geared toward young adults, all ski patrollers can help by handing out informational safety cards and politely advising the public to follow the reminders on these cards. Together, we can reduce the number of injuries on the mountains. Contact me at [knowb4ushred@gmail.com](mailto:knowb4ushred@gmail.com) if you want to be a B.A.S.I.C.S ambassador or if you just want some information cards. +

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Photo: BCA Direct Sales Coordinator, Dana Dowling, Loveland Pass, CO



# COVID-19 AND PATROLLERS

RESPONDING ON THE  
FRONT LINES AND IN  
THE COMMUNITY

BY CANDACE HORGAN

As ski areas across the country shut down in late March in the face of the evolving coronavirus pandemic, many patrollers watched in horror as hospitals in hot spots like New York City were overwhelmed. Some of us were already working in medical response, either in the hospitals or on ambulances responding to patients. We saw the patients who struggled to breathe, the patients who were intubated and placed on ventilators, the patients who eventually beat COVID-19 only to experience long-term complications like blood clots and shortness of breath.

By our nature, patrollers want to help when we see people in trouble. As COVID-19 erupted and communities faced a strain on resources, many patrollers sprang into action. The National Ski Patrol posted a request on Facebook and Instagram for patrollers to send us their COVID-19 experiences; here are a few of their stories, in their own words.



**KRISTEN YOSHIMURA,**  
**Winter Park Ski Patrol, Colorado**

I work at a rehab hospital in the Denver area that was a receiving facility for COVID-19 positive patients needing rehabilitation after being discharged from a hospital ICU. After being on vents for so long, it was our job to get them rehabilitated and back home. They would get fatigued walking 5 feet!

**LYDIA SARNEVITZ,**  
**Ragged Mountain Ski Patrol, New Hampshire**

I am a patroller at Ragged Mountain in Danbury, New Hampshire. Most recently, I have become a fully vetted member of Team Rubicon, a disaster relief organization helping in the fight against COVID-19 and other natural disasters. I am vetted for Navajo Nation, although on standby for deployment. In the meantime, I have taken the role of state wellness leader for New Hampshire, Vermont, and Maine. I have not yet interacted with COVID-19 patients, but I am on standby for Navajo Nation. Due to the restrictions, that is in part why they got me invited so quickly into a wellness leadership position. This is definitely a result of the level of skill I have gained as a National Ski Patrol OEC-certified patroller.



**MIKE FYFE,  
Donner Ski Patrol, California**

I am a health services supervisor for the Santa Cruz Chapter of the American Red Cross, where as a patroller and retired firefighter/paramedic I use my skills during our new and updated disaster deployments during the COVID-19 crisis throughout the U.S. In the Red Cross we have been trained in what we call non-congregate shelters; during this virus crisis, we will try and put people in motels (separation for safety) and give them instructions on how and when each member needs to have their temperature taken and recorded. If we do have to open a shelter, they will have to go through a screening process before they even enter the shelter.



**PENNY PISANESCHI COLLINS,  
Sugar Bowl Mountain Safety, California**

I donated a bunch of my California fire-season N95 masks to some local hospital employees. I also made contributions to Interfaith Food Ministry because hunger is growing for our vulnerable populations.



**KENNETH KOSTUK, Ski Sundown Ski Patrol, Connecticut**

This is what Sundown Ski Patrol Inc., donated on March 20 to UConn John Dempsey Hospital ICU at the request of one of their patrollers who is an RN in their ICU. We donated 40 boxes of gloves, six jumpsuits, 12 gowns, one case of non-rebreathers, one case of nasal cannulas, and six BVMs.



**JOSH BROWNING, Cannon Mountain Ski  
Patrol, New Hampshire**

Rural New England has so far been doing extremely well flattening the curve and slowing the spread to vulnerable, medically underserved communities. I was pursuing my dream job in orthopedic surgery at a small, well-respected ortho group here in New Hampshire. I studied with them during PA school. When COVID-19 hit and everything shut down, I signed with an ER immediately after to make an impact, but I was lucky — many of my classmates are still struggling to find jobs in any specialty with all the furloughs going on.

I am not working on a COVID-19 floor or in an ICU, so I do not see much severe COVID-19. Our ED has converted a pod

to negative pressure rooms with tarps, and we do rapid tests on anyone with suspected COVID-19. Some patients may slip through the cracks, as the last time I looked the sensitivity and specificity of the COVID-19 tests are around 73%, which has happened at my facility.

This lack of accurate and adequate mass testing creates another problem with rationing of PPE. When a person tests negative, out of necessity many facilities deem patients low risk and require only a surgical mask for low-risk care activities in-patient. It's hard to believe that we are 4-5 months into this pandemic and many large ERs around the country and first contact workers are still struggling to obtain the levels of PPE that we have seen with many other countries around the world with full TyVek suits and P100 respirators. Our facility has N95s of various types and we have gowns, gloves, and face shields, but most days I am just in a surgical mask and safety glasses, which is understandable in our current outbreak levels here.

It is challenging to do procedures in all the PPE. It is challenging just communicating with patients, especially those hard of hearing. It makes you feel like your skin is crawling when you have a patient

who refuses to wear a mask because "they can't breathe with them on" and you can feel their warm breath on the outside of your flimsy surgical mask as you examine them. It's disheartening to see the failures on a national scale by not activating more companies via the Defense Production Act to secure PPE. It is terrible wondering how all the people may be suffering chronic conditions at home, not able to or afraid to come in and get care. It is ridiculous to see many people not wearing masks, and some peers you may have respected at one point openly arguing against the "hoax China virus" on social media. I erased it months ago. It's like watching a hurricane slowly approach and waiting our turn to surge.

Despite the challenges, each day practicing medicine, like patrolling, is a great day. I think we are going to face some serious challenges for the winter season if numbers keep increasing, which they will with schools. If co-infection with the flu increases mortality, we are in for some very somber times this winter. I hope that our ski areas will open, and we will all have powder days soon, but I look to South America which should be in the full swing of winter and see that most resorts remain shuttered.





#### **MARK PETROZZI, NSP National Outdoor Risk Management Program Director**

Along with working with the National Ski Areas Association on the development of some of the Pandemic Playbook content and most recently helping develop COVID-19 signage for resorts to deploy this coming winter, as chair of the New Hampshire Passenger Tramway Safety Board I helped develop New Hampshire's summer (and now winter) COVID-19 lift operations guidelines. As an outgrowth of that, I have also been serving as an adviser for the New Hampshire COVID-19 Reopening Committee with respect to outdoor recreation businesses and activities. Finally, I have been working with numerous ski industry clients (large and small) with respect to assisting them in their efforts to apply general and state-specific guidelines to their particular operations.



#### **THE AUTHOR, Echo Mountain Ski Patrol, Colorado**

Personally, I had just earned my paramedic license as COVID-19 erupted. I have been working on an ambulance and have transported a few COVID-19 positive patients. We do not use the AC in the ambulance when the patient has COVID-19, so wearing full PPE, including a gown made of a non-breathable material, and spending time in the back with a patient during a long transport can be uncomfortable. We also cover the patient's mouth with a surgical mask, in addition to our own PPE, which can make patient interviews and assessment more difficult.

## **NSP COVID-19 RESPONSE**

An NSP task force comprised of volunteer and staff leadership has been meeting weekly to review current medical evidence and best practices to develop direction for NSP members. In July, the group produced "NSP's Response to the COVID-19 Pandemic," a document available on the website that provides general information, FAQs, and resources for consideration as your patrol prepares for the upcoming season. An updated Response, which includes the recommendations from NSP's National Medical Committee on face coverings, was posted in August. Each patrol will need to work with its own area management and local authorities to develop a plan, protocols, and procedures appropriate to its own setting and circumstances.

Additional steps have been taken by programs to adjust for training in a time of COVID-19. For OEC, the minimum requirements for OEC Refresher Cycle A will consist of completion of the OEC Refresher Workbook 2020 Cycle A and completion of the OEC 2020 Cycle A Refresher Training online portion only. The Refresher

Workbook is available online as a downloadable PDF, in addition to the mailed copy sent out in July. The OEC Committee, Mountain Travel and Rescue Committee, and Nordic/Backcountry Committee have produced guidelines for their program courses during the pandemic. Other programs are finalizing similar guidelines tailored to their own courses.

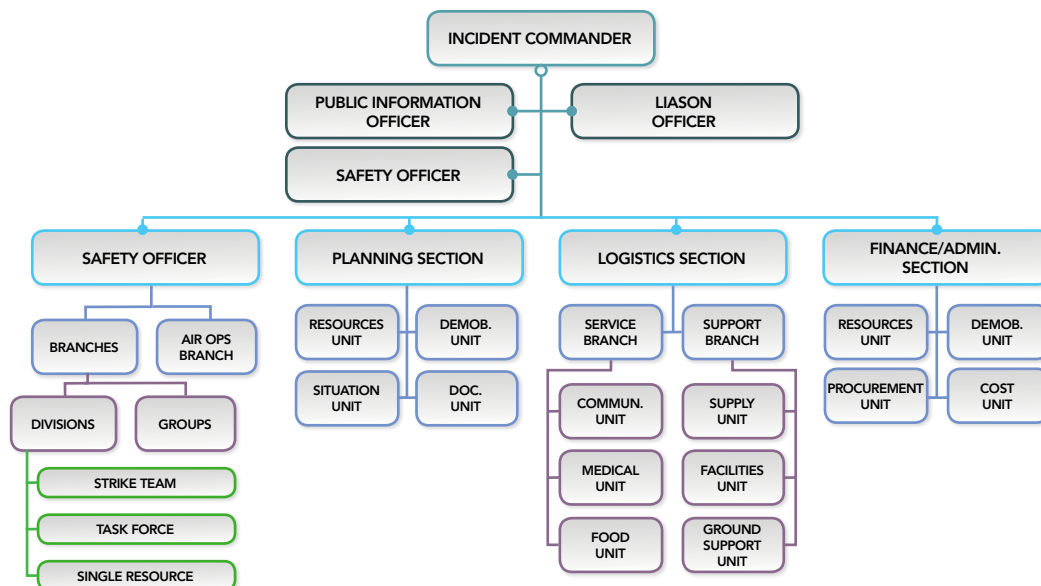
Also unique to this upcoming winter, NSP patrollers will not be required to complete the annual CPR skills demonstration. All patrollers must still have current credentials in CPR for the Professional Rescuer from an NSP-approved agency. Patrollers must also meet any local protocols for demonstration from their community or area management.

As the COVID-19 pandemic remains ever-changing, be sure to check your inbox and the COVID-19 webpage (<http://www.nspserver.org/covid-19-updates>) frequently for up-to-date news. NSP is committed to the safety of our members and industry leaders. +

# WHY YOU NEED ICS

EVERYTHING YOU WERE AFRAID TO ASK

BY CANDACE HORGAN (WITH INPUT FROM THOMAS MINER)



Some NSP patrollers are still raising questions about the National Ski Patrol board of directors decision to require the Incident Command System IS-100 as a required training course. In the winter 2021 issue of *Ski Patrol Magazine*, we will run a feature by Thomas Miner that goes into all the benefits of getting trained in the Incident Command System, but we thought we'd start with a short teaser to the topic.

The ICS grew out of wildland fire response in California in the 1970s and was formally codified as part of the National Incident Management System in a directive from then-President Bush after the terrorist attacks of 9/11. ICS has been implemented not only by U.S. agencies, but by other countries, including Canada and Australia.

The principle benefit of ICS relates to managing large-scale incidents, known as mass casualty incidents. An MCI, by definition, is an incident that is beyond the scope of initial available resources. In a small rural agency, a two-car collision with six patients could become an MCI, whereas in an urban environment, an MCI could involve dozens or hundreds of patients (think of the Las Vegas shooting of 2017).

When an MCI happens, several agencies will end up responding. The implementation of ICS enables these agencies to function under a unified command structure and quickly and efficiently communicate with one another. For instance, many ambulance services use different radio frequencies for their dispatch; in

an MCI, they would not be able to communicate with each other to quickly dispatch ambulances to the right location, but with ICS implemented, that is easily accomplished.

ICS is a required training certification for any 911-response agency. The training is an online course accessed from the Federal Emergency Management Agency website (<https://training.fema.gov/nims/>). Typically, 911-response agencies will require not only IS-100 but ICS-200 and IS-700 as well.

One thing that has been learned from after-incident debriefs is that MCIs are often very chaotic scenes. The implementation of ICS adds structure so that the responding agencies can work well together and quickly and efficiently work the problem to its end. ICS and NIMS by their very nature are scalable as well. They can easily be implemented for a small local incident and used up to a large-scale incident involving thousands of patients and hazmat response.

So, why should you, the everyday line patroller, embrace ICS training? First, with many resorts going to four-season offerings, it is not a matter of if, but when, there will be an incident that requires multi-agency response. However, perhaps the simplest incident to consider would be a lift derailment. Many patrols already train for lift evacuation, and there have been several over the last decade, including one at Great Bear Ski Valley in South Dakota in February 2020 in which no guests were injured.

Imagine a scenario where a lift derails and

there are 20 patients strewn on the ground and an additional 100 guests remaining on the chairlift who need to be evacuated. Would your patrol be able to quickly evacuate 20 patients? Could your base area first aid station handle that many patients, or would ambulance transport be required?

In this scenario, multiple agencies would likely respond, including fire and emergency medical services, and possibly police as well. Using ICS would enable ski patrol, mountain operations, lift maintenance, fire, EMS, and police to all function under one command and talk with each other. An incident commander would be established, functioning as the overall leader of the crisis response and directing resources to where they are needed.

Taking the IS-100 course will enable you to understand how this system operates and functions. IS-100 consists of only 105 slides and should take you no longer than a couple of hours to complete. If you have not already taken IS-100, please understand it is now required as part of your patrol training and sign up for it as soon as possible. Your local Outdoor Emergency Care instructor will be responsible for creating an Incident Command course on the NSP website that you register for; you should then submit your certificate of completion to the instructor.

Look for much more on the importance of ICS and how it functions in Thomas Miner's feature in the winter issue of *Ski Patrol Magazine*. +



# SKI RESORTS PROMOTE SUSTAINABILITY







## PATROLS, LIKE ARAPAHOE BASIN, TAKE A LEADERSHIP ROLE

BY LINDSAY DEFRATES

PHOTOS BY ARAPAHOE BASIN

The morning meeting runs smoothly. Tony Cammarata, the operations director/ski patrol director at Arapahoe Basin for the last 10 years, runs through the daily assignments of duties. He then covers the pass-on topics like first aid and safety discussions. The content, the commentary, and the heavily caffeinated audience are much like every other patrol meeting happening that January morning across the country.

There are, perhaps, a few differences. Behind him, for example, a large TV screen displays the information about updates from their physician adviser with a classic PowerPoint presentation, and instead of a clipboard, Cammarata holds a tablet. In fact, among the on-duty members of this 60-person patrol there is not a single piece of paper in the room. In the next room, there are also containers for both recycling and compost that many patrollers bring to the mountain from housing that does not include these options for waste disposal.

Once the morning meeting is completed, the patrollers file out into the wind, the rising sun, and the glittering hoarfrost. Behind them, the lights in patrol HQ turn off automatically, while the thermostat and humidity control do their best to balance out the damp funkiness left behind by a bunch of patrollers.

Cammarata checks in with mountain operations and then sits back down at his desk to work on ordering some new tower pad covers from a local provider.

The building above the patrol offices and locker rooms, including the Kids Center, is entirely off the grid, powered by a 14-kilowatt solar panel array and geothermal energy.

Wherever one chooses to look at Arapahoe Basin Ski Area in Keystone, Colorado, or at any of hundreds of other mountains around the country, evidence of the ski industry's commitment to sustainability is everywhere. From the carpooling to the solar panels, from the roadless construction of new lift lines to the proud membership in Protect Our Winters (POW), from the first-year patroller to the mountain operations director, changing the course of climate change and prioritizing the health of their mountain ecosystem is woven into their everyday routine.

For many, it is the sum of the details. Compost and recycling in the locker room. Boot warmers on a timer. Thermostats and humidity control in every station. A paperless patrol HQ.

For others, it is the symbol of a national movement, the letters "POW" embroidered on a red and black uniform with a neatly restitched seam.

Patrol headquarters at Arapahoe Basin, with the solar panels on display.





Recycling bins on the front side at A-Basin.

## THE [CARBON] COST OF BUSINESS

Arapahoe Basin is not unique in its interest in creating sustainable on-mountain operations and combating climate change at the global level. Hundreds of ski resorts across the country have, in the last decade, sought out ways to minimize or eliminate their carbon emissions, whether through onsite renewable energy or the purchase of carbon offsets. Snowmaking has seen an impressive switch to more efficient technology and more conservative water use. Even building amenities like toilets, lightbulbs, and kitchen waste have been reassessed with sustainability in mind. In fact, it is difficult to find a single mountain that does not list these types of changes they have made recently.

The motivation behind this urgent shift to a more sustainable outdoor industry comes from the recognition that we are already experiencing the effects of climate change in the form of shorter winters, higher snowlines, and more prolonged wildfire seasons. In the West, the mega-drought of the Colorado River drainage continues, and invasive species threaten native plants and animals.

Yet, the relationship between the ski industry and climate change is complex and leads to some apparent contradictions. For one, ski mountains have everything to lose as winters become warmer and moisture unpredictable. On the other side, however, travel to mountains, the local impact on water sources, massive base village developments, and even the carbon footprint of new and better gear every year continue to rack up a carbon footprint that is undeniably massive.

In 2018, for example, 12 editors and staff at *Outside Magazine* decided to tally up their carbon footprint from one ski season and came to the hefty number of 32,508 pounds of carbon emissions (<https://www.outsideonline.com/2176981/calculating-carbon-footprint-our-skiing>). Between flying and driving to ski mountains, and the associated gear purchases, just 12 relatively eco-conscious

people left behind 16 tons of carbon emissions.

In context for global carbon emissions, during the 2018-19 season the Rocky Mountain Region ski resorts alone saw upward of 59 million visitors.

Another significant environmental impact of ski mountain operations is the use of snow guns and artificial snow. As the snowlines in all major mountain ranges creep upward, snowmaking becomes an essential part of opening the mountain every year, especially on the East Coast and in the Alps. Yet even areas renowned for excellent snow, like the Colorado Rockies, face all-too-bare slopes as opening day approaches. On the four mountains of Aspen, for example, Aspen Skiing Co. (SkiCo) estimates that it uses about 903-acre feet of water for snowmaking operations every season. It is easy to say that the water is replaced directly into the drainage, but dumping water from the bottom of the drainage back up into the fragile alpine ecosystem has negative effects on the biodiversity of that area. Packed snow melts more slowly, preventing alpine grasses and wildflowers from taking full advantage of their already short growing season.

Add to that the impacts that night operations have on wildlife migration, mating, and survival during the high stress of winter and anyone with an eco-conscious bone in their body begins to think twice about strapping on their sticks for the season.

Change needs to happen, fast.

According to a 2018 study by the United Nations, in order to prevent the devastation of climate change of more than 2 degrees Celsius, the developed world must reach net zero carbon emissions by the middle of the century, and every year sooner can save lives and economies. Without immediate action, the effects, even in the least extreme models, would devastate the existence of the ski industry and wreak havoc on world economies, low-lying countries, and ecosystems across the globe.



Reforestation and deadfall removal project at A-Basin.



Recycling options during the "Festival of the Brewpubs" at A-Basin.



## COMPREHENSIVE ON-MOUNTAIN MODEL [A-BASIN]

With one of the most aggressive, comprehensive, and inclusive on-mountain sustainability plans in the nation, A-Basin is a great study of everything to get right. Their organized move toward sustainability began in 2018, after people like Cammarata and others had been individually championing initiatives without holistic support. After working with the Brendle Group (an environmental consultant group), and surveying their employees, they set the ambitious goal of seven initiatives to accomplish in seven years:

1. 75% Waste Diversion
2. No net increase in Water Consumption
3. Lead in Ecosystem Stewardship and Wildlife Management
4. 100% Renewable Electricity
5. Increase in Carpool and Public Transportation Options
6. Centralize Purchasing
7. Carbon Neutral by 2025.

This mindset, one of urgent motivation, is where people like Cammarata come in. Having worked on the slopes of Arapahoe Basin since the mid-90s, and now in the role of operations director functioning as ski patrol director, he has seen the need for changes, major changes, to business as usual if the business of ski patrol is going to survive the next few decades.

Each department at A-Basin, including lift ops, ski school, food service, and ski patrol, has been charged with creating a unique departmental plan that outlines how that job function can support the goals of the whole mountain. Cammarata is proud to say that he completed his first. "First we went for energy conservation. Automatic lights, heating, and humidity control were added

to every patrol station and the locker rooms. We dress for a cold climate, so the temperatures inside should reflect that."

Boot warmers were set to timers, so instead of blasting air all night and day, they were rigged to be most efficient. Then they remodeled the patrol headquarters.

"The changes that were made not only helped us with sustainability goals, but made for an environment that allowed patrol employees to see that we were taking care of them, giving them a comfortable, well-designed place where their uniforms and tools and everything they need for the job was deemed important. Not 'the patrollers could do without this' mindset, it was done really well with multiple goals in mind."

Along with the building renovations, tablets and workstations took over the daily use of paper for incident reports, duty assignments, and department communications. Cammarata explains the reason for prioritizing paperless is more than just eliminating waste. "Because of the uniform, and the visibility, patrol is looked to as leadership on the mountain by visitors and staff. By modeling sustainability in even small ways, we are starting those conversations that lead to a shift in culture."

Carpooling is another way in which the patrollers of A-Basin seem to be ahead of the curve. "The bus is usually too late for the morning meeting, so patrollers have gotten very, very good at riding with each other to cut down on parking woes and emissions. We encourage them to bring compost and recycling to the mountain if their housing situation doesn't allow for it as well."

Also conscious of the impact they have on their local ecosystem, A-Basin's 2017 expansion into the Beavers and Steep Gullies, including a dedicated lift, was a roadless construction, leaving as little a footprint as possible. All supplies and workers came in either on foot or via helicopter.



Arapahoe Basin is not alone in its sustainability endeavors, especially not in Colorado, or even Summit County. Copper Mountain has invested in high-efficiency snowmaking equipment and has plans to dramatically increase their 20% renewable energy mark. Aspen and Snowmass continue to implement further renewable energy initiatives by offsetting through windpower and even harnessing the methane emissions of an old mine shaft to support SkiCo's operations. Even the expansive Vail Resorts has pledged to reach a zero-net operating footprint by 2030, a massive undertaking affecting the operations of their many holdings.

## THAT'S ONE WAY TO DO IT [ UNIQUE LOCAL INITIATIVES ]

While some of the mega-resorts and high-profile names of skiing in the West get a lot of the headlines, mountain communities and operations across the country are working in different ways to reduce their impact day to day. In addition to many environmentally friendly changes such as low-flow or composting toilets, compact fluorescent bulbs, and better water storage and usage for snowmaking and on-mountain operations, a few slopes are employing unique approaches to on-mountain sustainability.

### JIMINY PEAK WIND TURBINE

Built in 2007, Jiminy Peak's wind turbine really stands out. Nicknamed "Zephyr," Paul Maloney (VP and patrol director) says, "You can't miss it." Jiminy Peak is in Massachusetts, where snowmaking and night-skiing operations put a heavy toll on the electrical grid. Zephyr provides about one-third of the electrical needs during full winter operations and puts energy back onto the grid during the slower season. Jiminy Peak won the Golden Eagle Award by Clif Bar and the National Ski Areas Association Overall Environmental Excellence in 2008 for the construction of the on-mountain wind turbine and now sources its energy from 100% renewable resources.

### WOLF CREEK GRAPE SEED OIL

For more than 10 years, Wolf Creek Ski Area in Colorado has used 100% biodegradable oil made from grape seeds in all its heavy machinery. The oil breaks down into a completely biodegradable substance in less than four weeks.

The Kids Center at A-Basin, with the solar panels on top.



The mountain is also known for its dedication to water quality, contracting with an outside auditing group to assess stream health for all water sources that pass through the mountain.

### ASPEN SKIING CO. METHANE CAPTURE

SkiCo recently partnered with local energy companies to capture methane that was venting from a coal mine in nearby Somerset County. The 3 megawatts of energy captured every year are more than the company uses in a season. The methane captured prevents it from seeping into the atmosphere, where it works as a potent greenhouse gas.

### BOGUS BASIN TRANSPORTATION

According to Dirk Anderson (environmental education and stewardship coordinator), Bogus Basin in Idaho has been offsetting 100% of their carbon footprint for years but wanted to do more locally. To cut down on the impact of visitor and employee car trips, they established priority carpool parking on weekends and holidays, designating the main lot as carpool parking only (three or more people). Bogus also partnered with Ada County Highway District commuter ride van program and provides employee transportation in 15-passenger vans. They even have a dedicated Rideshare app.

### ADVOCACY AND NATIONAL MOVEMENTS

Despite all the innovative, boots-on-the-ground solutions, the thousands of kilowatts saved or acre feet of water left in the streambeds,



Public transportation ride at A-Basin, which takes skiers back to Summit County.



Carpooling at A-Basin.

many advocates agree that simply reducing the impact of individual mountains is not enough.

SkiCo Sustainability Coordinator Auden Schindler explains, “These are admirable measures, but they aren’t climate solutions, because climate is a global problem, at a huge scale. The fix is political. It comes through movements, political pressure, elections, activism.”

An outspoken advocate for the role that large corporations should take in lobbying Washington for climate change policy, Schindler published his book *Getting Green Done* in 2009 as a look into what it means to make a real difference in the urgent crisis that is climate change. The answer in Schindler’s mind, and for all those who know how the game is played, is that real change, change that makes measurable difference, can only happen in Washington. National climate policy, energy agreements, and regulations are needed to sustain the growth and make the massive cuts to carbon emissions necessary to make real change.

With this in mind, Protect Our Winters, or POW, was established in 2007 by members of the outdoor industry who saw the need for immediate, organized, and effective change in both policy and culture. POW believes that the outdoor enthusiasts and corporations who rely on the health of the environment need to start throwing their considerable weight around with a little more intentionality. With the outdoor industry netting an impressive \$887 billion in 2018, and with the ski industry making up a significant percent of that, mountains lobbying at the national level only makes sense. POW’s model provides high-profile athletes and company CEOs a platform and system to directly contact the national leaders in charge of climate legislation. They partner with big-name outdoor brands to share their logo and mission statement (hence the embroidered uniform of the A-Basin patrollers) to help the millions of outdoor enthusiasts begin to see themselves as essential advocates for the health of the planet.

In years past, POW has brought many of these voices, both athletes and CEOs, to the very steps of Congress to leverage what they refer to as a “razor-thin margin” in order to create change with just a few strategic votes. Because of the COVID-19 crisis, however, this year POW hosted a digital Lobby Camp, helping former dirtbags learn what to say and who to speak to from the comfort of their own home. They offered training aimed at giving anyone who had the ability to pick up the phone the power to communicate effectively with the groups that make real change.

Also at the national level, the National Ski Areas Association issues its annual Climate Challenge, and to date the participating resorts have reduced 85,000 tons of carbon emissions and purchased over 230,000 carbon dioxide equivalents in renewable energy credits. As a nationwide organization, NSAA provides structure and accountability, along with consulting and press opportunities to incentivize this progress. NSAA states:

*Climate change presents challenges to the ski industry that require proactive planning, action, and bold leadership. The Climate Challenge provides a framework for participants to engage in a multiyear process that enables them to plan and implement actions that will reduce emissions, share those successes industry wide, and collaborate with others in the industry to leverage the collective power of working together on climate issues.*

## COVID-19 RELEVANCY

While over the summer many resorts are struggling to come up with a healthy reopening plan due to the ongoing pandemic, experts are urging them not to lose sight of sustainability goals. Cammarata says it best: “We’ve set sustainability goals to be accomplished in 2025, with 2030 as a long-term goal. That’s not far off, and we have a long way to go. We’ve had to change the business model, but the goals haven’t. They can’t. When this pandemic is over, we don’t want to find ourselves two years behind in sustainability. We can’t afford to lose that much time.”

## THE PATROL ROLE

On the snow and in the community, many ski patrollers are seen as leaders. Perhaps it’s the identifiable uniform, with its reassurance of aid, or the often outspoken nature of individuals who pursue passions like this one, but either way, mountain communities and visitors can spot a patroller a mile away. When it comes to sustainability, stepping into that leadership role is crucial.

It does not have to be the same everywhere, though, and patrollers can make a significant difference in the way their community views and values sustainability either on the mountain day to day, at a national level, or both. For example, Schindler suggests organizing at the national level, saying, “Ski patrollers can unite and support resort leadership that is getting political or demand or pressure leadership to act in political ways. On their own, of course, they can also act; it would be powerful if, say, ski patrol trade groups made a statement in support of the need for national climate policy.”

Cammarata, on the other hand, sees the value of the “30,000-foot view” but also recognizes the power of single interactions with tourists and other mountain employees. He says, “Advocacy groups help us stay educated and remind us why it’s important for our business to partner with them, but I do think that boots on the ground are still important to create a culture [of sustainability]. I always find that recognition of where we can contribute needs to begin with ‘We can do this better,’ even if we just stop idling the snowmobile. I want my staff to be promoters because patrollers are seen as leaders, and when other people see us going out of our way to contribute [to environmental sustainability], it helps develop a culture, and once you have a culture built it becomes second nature. Then you find yourself thinking, I can’t remember when we didn’t, and then the ball is rolling.” +



# TIME TO

**W**HEN IS THE LAST TIME THAT YOU WALKED INTO A ROOM AND YOU WERE THE ONLY PERSON WHO LOOKED LIKE YOU, THE ONLY PERSON IN THE ROOM WHO SPOKE YOUR NATIVE LANGUAGE? OR THE ONLY PERSON WHO SHARED YOUR RELIGIOUS OR POLITICAL VIEWS? WHATEVER THE DETERMINING FACTOR, WHEN IS THE LAST TIME THAT YOU STOOD OUT IN A GROUP BASED ON SOME CHARACTERISTIC THAT YOU HAVE IN CONTRAST TO THE OTHER PEOPLE AROUND YOU?

# EX



# PAND

DIVERSITY WITHIN THE  
NATIONAL SKI PATROL  
AND SOLUTIONS FOR  
IMPROVEMENT

BY ERYKA THORLEY

Ralph Green competing at Coronet Peak in New Zealand in the Adaptive Slalom. Photo by Tim Clayton/Corbis via Getty Images.





Patrollers at Winter Park. Larry Douglas in the middle. Photo by Andre Gonsalves.

For many people reading this article, it has likely been a while. Perhaps you identify as a female ski patroller and you are the only one working as a patroller on your mountain for the day. Perhaps you are on exchange in the Southern Hemisphere and cannot keep up with the Spanish discourse in the room. Maybe you are injured, and it is the first time you have had to navigate your resort with crutches or even a wheelchair. Whatever the catalyst, this feeling of “other” is real, and it can be extremely uncomfortable, sometimes even dangerous and part of what so many people around the globe are working to change under the campaign of diversity, equity, and inclusion.

Diversity has been a buzzword for at least the past decade. Yet, with increasing events around the country and globe, its popularity and recognized importance has grown significantly over the past year. George Floyd, Breonna Taylor, and Ahmaud Arbery were recent victims of structural violence against Black persons in America, and perhaps unconscious bias. With the tragedy of their deaths, segments of our country have opened their eyes to the perpetuation of structural violence that has long existed and continues to permeate the United States and many other parts of the globe.

## DIVERSITY AND THE SKI INDUSTRY AS A WHOLE

The numbers that we do have on skiing participation for persons of color is illuminating. According to the National Ski Areas Association, “preliminary data from the National Ski Areas Association (NSAA), 88.2% of visitors to U.S. ski areas during

the 2019-2020 season were white. Just 1.8% were Black.” Perhaps more important, despite increased racial awareness with movements such as **#BlackLivesMatter**, there has been little change in the social and racial demographics in the data over the past decade, which is also not representative of the U.S. population as a whole.

With the increasing focus on diversity the past few months, the number of snow sports organizations sharing statements of support is vast and includes the Outdoor Industry Association, U.S. Ski & Snowboard, Snowsports Industries America (SIA), Professional Ski Instructors of America-American Association of Snowboard Instructors (PSIA-AASI), the National Ski Areas Association, and Taos Ski Valley in New Mexico (*Ski Area Management*, 2020). In addition to this list, in June Vail Resorts CEO Rob Katz shared a letter with all employees boldly titled “We are part of the problem.” In this letter, he explains, “While I’m sure most everyone in our industry believes they are tolerant and welcoming, we need to acknowledge that there are parts of the culture of our sport that are clearly not inviting. Maybe the image we have created of the mountain lifestyle needs to be more varied. Maybe, as a fairly close-knit and passionate group of skiers and riders, our community carries a deep implicit bias. It would not be a stretch to call us a clique. Maybe it’s our fear of change. While I would like to think that I have been an agent of change in this industry, a decade later I am still running a company that has very limited racial diversity.”

Katz continues with an impressive directness, “Explicit and implicit racism, sexism or any kind of discrimination has



Mandela Echefu out on the slopes. Photo c/o Mandela Echefu.



Winter Park patroller Larry Douglas. Photo by Andre Gonsalves.

absolutely no place at Vail Resorts. Personally and professionally, we need to continue to be vigilant in creating a culture of acceptance and inclusion, expand access for communities that face barriers to enjoying the mountains, and contribute to groups that are on the front lines of standing up for basic human rights, especially for those who have historically been marginalized. But we also need to realize this is not enough.”

The June statement by Katz, who is the head of a large corporation and directs 37 ski resorts around the globe, is significant and shifts the conversation for much of the industry. As an example of this shift, just a few days after Katz’s statement Alterra Mountain Company CEO Rusty Gregory wrote a similar letter committing to improving diversity within its resorts and promising action, saying, “Merely standing against racism and discrimination does little to create change. Talk and intentions are cheap. So, I choose to act, as an individual and as your CEO.” NSAA Director of Marketing and Communications Adrienne Isaac confirms this shift, saying, “With the greater attention to non-white voices, there is a greater self-reflection in skiing than I’ve seen before.”

With the biggest influencers in the ski industry now outwardly committed to improving diversity within their operations and clientele, what next? How does the snow sports world actually increase the numbers of skiers, employees, and industry-related personnel to include a more diverse representation?

## IF YOU WANT TO SEE MORE BLACK PEOPLE ON YOUR SLOPES, ADVERTISE TO THEM

According to David Perry, the vice president of Alterra Mountain Company, strategic outreach works. He offered the example that after a targeted marketing campaign at Big Bear Mountain Resort to engage the nearby Korean-American community in Los Angeles, the resort saw a 17% uptick in Asian guests in 2019 (*Travel Weekly*, 2020). If you want to increase a specific demographic within your clientele and employees, you need to seek out these groups and work to inspire their participation, as exemplified by Big Bear’s marketing efforts.

Isaac suggests that the snow play program outreach for some of the Californian ski resorts could be responsible for a slight uptick in Asian and Pacific Islander visit increases recently. For example, Mountain High Resort offers a number of entry-level programs, including multiple “first-timers” packages, as well as many non-skiing activities like tubing, sledding, snowshoeing, snow play, and scenic sky chair rides. Mountain High is advertising “snow play” to those that may not already be familiar with skiers, and this, along with other California ski resorts offering similar programs, may be responsible for the bump in Asian skiers last season.

It is important that people can identify with those around them, including the people they see in advertising and marketing campaigns. Right now, many ski resorts are still marketing to an all-white club, with websites and outreach materials often





A young Black snowboarder out on the slopes. Photo by Share Winter.



Camaraderie on the slopes. Photo by Share Winter.



Getting out on the slopes. Photo by Share Winter.

## It's one thing to say that we need diversity, but the bigger question is how important is it to us?

illustrating homogenous groups of white people skiing. In an interview with KPCW, a National Public Radio station out of Salt Lake City, Kelly Pawlak, the president and CEO of NSAA, talks about the barriers to entry into the snow sports world, including the lack of representation within the already established skiing community. Pawlak explains, “If you do some research and nobody looks like you that’s doing it in the photos, in the YouTube videos, or on social media, you’re going to say, ‘Ummm, I don’t know.’ That’s what we know is happening in terms of, let’s say you’re a young Black girl and you’d like to go skiing. If you’re looking at the photos, if you’re looking at the videos, if you’re looking at the ski area’s social media feeds, if you don’t see anybody like yourself, you may not think that you belong there.”

Isaac echoes this, stating, “It’s true, there is a representation problem in skiing. If you do not see people that look like you in the videos, marketing materials, or staff, then you might not think you belong there.”

Mandela Echefu, a patroller at Wisp Resort in Maryland, is the only Black member on his patrol. When asked about people of color skiing at his resort, he talks about an uptick in minority groups at his resort and also the great pride that he feels when he sees other beautiful skiers on the slopes that are also people of color.

Echefu says, “In the past few years I have seen great skiers that are making beautiful turns and are typically difficult to recognize from the lift. When they ski closer, sometimes you can see that they are clearly a Black girl or guy, and I have this overwhelming sense of pride. I’ve seen younger Black kids do a double take when they see a Black guy wearing a cross, and I have a lot of respect for that. My patrol is proud to have me as a Black guy as a patroller, and I get a lot of support and recognition. It’s a point of pride on my mountain.”

Significant work is still needed as far as marketing to people of color in the snow sports world, but it is slowly changing for the better. For example, as part of its commitment to improved diversity, Vail Resorts is planning to increase outreach to minority communities and groups around the globe through expanding its already established program that hosts almost 4,500 underserved children each year at their resorts. Moving forward, Vail’s goal is to bring a program like this to each of its 34 North American resorts (*Travel Weekly*).

### SHARE WINTER

Share Winter is a nonprofit “grantmaking organization that works to improve the lives, health and fitness of youth through winter sports.” This organization was started in 2016 and aims to have over 100,000 diverse kids on the slopes every year by 2028. They are not far off, with over 45,000 youth on the slopes during the 2019-20 season. Kids participating in the program are 5-18 years old and are required to have at least four days on the slopes for a program to receive funding through their competitive grant application process.

In 2019, the National Ski Patrol, SIA, NSAA, and PSIA-AASI joined forces to support Share Winter through its winter coalition with funding focused on internships, gear, training, and access to participation (Share Winter, 2019).

Constance Beverly, the CEO of Share Winter, spoke very highly of the support from these large ski industry partners, saying, “As we work to grow a more diverse and inclusive snow sports community, we’re honored to add these outstanding partners to our efforts.” Learn more about their organization at [www.ShareWinterFondation.org](http://www.ShareWinterFondation.org).

Numerous other organizations are focused on specific outreach to

# With the biggest influencers in the ski industry now outwardly committed to improving diversity within their operations and clientele, what next?

increase participation for people of color. The National Brotherhood of Skiers (NBS) is one such organization. NBS works to improve participation from urban residents while also supporting budding Olympians. When asked why it is important for all kids and people in general to be involved in snow sports, Isaac responds, "It is the mental and physical health benefit of being out in nature. I can't over-emphasize enough how important those benefits are, especially after we've had the recent pandemic and so much screen time. The benefits of being outside are immeasurable. Additionally, it's so important to get kids involved because the data shows that the earlier you get on snow, the more likely you are to make winter sports a lifelong activity."

Getting kids involved with skiing early not only provides people with the health benefits of the sport, it also draws more enthusiasts to the sport and will eventually sustain the industry as baby boomers continue to fade from the slopes.

## HOW DOES RACE AFFECT THE NSP?

The National Ski Patrol primarily consists of white men. According to available data, there are roughly 80% men to women within the NSP, and the organization currently does not track race or

ethnicity. The lack of data that confirms NSP's self-identifying members of color presents challenges in assessing the current status of diversity and planning for strategies and initiatives to effectively increase that diversity. It is important to share this information through the lens of change and improvement versus solely criticism. In the current social climate, it is crucial to talk about the elephant in the room while simultaneously working on innovative new ideas, brainstorming and supporting one another to create a more equitable, and ultimately sustainable, longer-lasting skiing future, one that consciously provides accessibility and welcome to all skiers exclusive of race, socioeconomic background, and ability.

To gain more perspective, we spoke with Echefu about his experience as a ski patroller in Maryland, where he is the only Black person on his patrol and sometimes on the slopes at his ski resort. He offers an interesting perspective, as he is originally from Nigeria and moved to the U.S. for college when he was 18. His now-wife taught him to ski only eight years ago!

When asked about the low participation of persons of color within ski patrols, Echefu offers an analogy, saying, "It's one thing to say that we need diversity, but



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# We need to commit to the work and make outdoor recreation a welcoming and inclusive environment.

the bigger question is how important is it to us? An example could be the coronavirus and the race for a vaccine. The vaccine is really important. Are we looking for a vaccine for the NSP and other organizations to dramatically improve their diversity?"

## HOW TO ATTRACT MORE DIVERSE SKIERS

Speaking with Larry Douglas, an African-American and a 25-year veteran on the Winter Park Ski Patrol, he believes that the lack of people of color on the slopes is primarily a matter of finances. Douglas explains, "You don't see many Black kids playing hockey, it's a lot of equipment. Instead, they play basketball. With basketball, all you need is a ball."

He continues by explaining that skiing is similar to hockey and that the industry as a whole needs to better support people with the high entry costs as they begin the sport, saying, "I suggested to Winter Park that ski school teach people how to ski for free up until the intermediate level. The better you get at skiing, the more you enjoy it."

Douglas connects free skiing lessons to an overall economic sustainability for the sport. The more people that are introduced to the sport of skiing, the more economically stable the industry will be, as it has more patrons willing to buy a lift ticket, ski gear, or even lodging.

Echefu agrees about the financial hurdles into skiing, and to combat this he is launching a nonprofit in his community, Appalachian Outdoor Academy, whose mission is to introduce lower-income kids and families to various types of sports, including skiing. Echefu explains, "This is an opportunity to get the socioeconomically challenged people in my community into the outdoors, to get them to fall in love with the outdoors and expose them to outdoor careers like guiding, being a National Park Ranger, or even being a professional ski patroller. I want to show these kids that there is so much outdoors and that it can lead to a career."

Another huge hurdle to accessing the snow sports world is exposure. If you are not introduced to the sport through a school-sponsored program, your family, or even a friend's family, how do you know that skiing is available to you? Douglas does a great job of connecting people with mentors in the industry and has mentored others throughout his tenure on the slopes. In his early days of patrolling, he once worked with a young Black kid who was missing a leg. Seeing this kid on the slopes, Douglas stopped by and shared with him the story of Ralph Green, who was shot in the back as a teenager walking down a street in New York City. After losing his leg, Green started skiing the next year and quickly adopted the sport. Now, he is a 10-time U.S. Paralympics Alpine Skiing National Team member and four-time national champion.

Two to three weeks later, after recommending that this student and his parents research Ralph Green, the parents returned to Winter Park and sought out Douglas to tell him how inspired

they were by Ralph's story and how impactful it had been for their son, who was now motivated to ski and ultimately ski race. Again, it is important to identify yourself and see others like you if you are going to embark into new terrain like skiing. Not only did this youngster have a person of color sharing a story of another Black man dealing with physical challenges, he also was given a role model that took his skiing ability to the highest achievement our country has to offer, Olympic status.

## IMPROVING NATIONAL SKI PATROL'S DIVERSITY

It is important to identify the challenges and what limits diversity in the snow sports realm, but it is equally important to identify solutions. When asked about potential solutions, Echefu outlined several excellent suggestions for improving diversity within the NSP.

1. **Conduct a poll.** How many self-identified minority members does the organization have? We need to know where we are now in order to track any changes, plus minorities within the organization are a wealth of knowledge and a vital resource.
2. **Plan.** Everything starts with planning. Although diversity is mentioned in NSP's strategic plan, there need to be measurable metrics. Bringing experts into the planning conversation, including a diversity and inclusion professional, will help the organization improve its diversity.
3. **Open form conversations.** Echefu says, "We need to really start talking about this stuff as an organization, and it needs to be a two-way conversation where people feel comfortable expressing their opinions and concerns."

Echefu believes that the issue of diversity is one of the heart, saying, "I think that the solution really is a matter of the heart more than policy. Creating opportunities for candid conversation is probably the most difficult thing to do given the polarization of our world, but it will have the biggest effect."

It is important for the conversation of diversity to continue, as this is a cultural movement, not a moment, and we need to continue doing the work. It is easy to rely on ingrained biases and assume that people of color do not ski because of financial reasons, but it is time to think beyond this inaccurate assumption and confront our own unconscious biases. As an industry and members of an organization, it is important that we recognize that the outdoors are not equally accessible to all people, and there is a lot of work ahead in order to change this. As Isaac explains, "We need to commit to the work and make outdoor recreation a welcoming and inclusive environment."

Echefu eloquently reminds us of both the problem and the solution, stating, "If we all start listening and thinking with our hearts, we will begin to peel back and expose our unconscious bias and ultimately will be in a much better position as a country and globally." +



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# GEAR GUIDE 2020

## CARGO

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### YAKIMA CBX 18 PREMIUM RUGGED CARGO BOX

A rugged, trail-ready offering, the new CBX 18 raises the cargo box game. With an easy-grab lid handle and premium black chrome badging, it locks gear inside. A removable torque tool delivers all available space for gear. It has 18-cubic feet of interior space that carries multiple skis up to 211 centimeters.

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### YAKIMA FATCAT EVO 6 PREMIUM ROOFTOP SKI AND SNOWBOARD MOUNT

FatCat EVO 6 can carry six pairs of powder skis up to 136 millimeters at the tip or four snowboards. Mounts tool-free on virtually any roof rack, and the OverHang™ clamp makes reaching your gear easy. Locks keep your gear and mount secure.

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# MEN'S BOOTS

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## APEX MEN'S ANTERO

The perfect boots for patrollers! Proven over a decade with thousands of patrollers adopting the Apex's next gen tech. Ski hard in the full system or step out of the chassis to hike, sled, or kick back in warmth and comfort after a sweep.

**Last:** 101 millimeter  
**Flex:** 115-125-135 (adjustable flex)  
**Sizes:** 25-32  
**Weight Per Pair:** 5,500 grams

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## DALBELLO PANTERRA 130

The Panterra 130 ID GW ushered in a new era, maintaining the legendary fit and variable last features that the boot is known for in a slimmer, lighter, more attractive package.

**Last:** 100-102 millimeter  
**Flex:** 130  
**Sizes:** 24.5-30.5  
**Weight Per Pair:** 3,380 grams

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### NORDICA PROMACHINE 130

Built to get the most out of all conditions, the Promachine 130 delivers the performance of a Dobermann race boot in a more comfortable lightweight shell and liner. The newest addition to the machine family, it's the most modern low-volume boot Nordica has ever crafted.

**Last:** 98 millimeter

**Flex:** 130

**Sizes:** 24.5-30.5

**Weight Per Pair:** 3,740 grams



### SCARPA TX COMP

Scarpa's stiffest and most powerful telemark boot that packs all the features of Scarpa's Freeride series in an NTN compatible configuration, the TX Comp is the ultimate hard-changing freeheel boot for big lines and steep, committing terrain.

**Last:** 102 millimeter

**Flex:** 125 with 22-degree range of motion

**Sizes:** 22.5-30 (half sizes available)

**Weight Per Pair:** 3,420 grams (size 27)



### TECNICA MACH1 LV 130

When you're up before dawn to catch first chair and charge, you need a ski boot that's as committed as you are. Enter the Mach1 LV 130, Technica's high-performance model for skiers with low-volume feet.

**Last:** 98 millimeter

**Flex:** 130

**Sizes:** 24.5-30.5

**Weight Per Pair:** 3,990 grams (size 26.5)



### SCARPA MAESTRALE XT

Perfect for backcountry and resort adventures, the Maestrale XT is designed to provide hard-charging freeride performance on the steepest lines on the planet. It features a carbon-infused Grilamid® lower, Speedlock XT ski/walk mechanism, a two-buckle alpine cuff, and RECCO®-enabled power strap.

**Last:** 101 millimeter  
**Flex:** 130 with 56-degree range of motion  
**Sizes:** 24.5-32 (half sizes available)  
**Weight Per Pair:** 2,980 grams (size 27)



### SCARPA MAESTRALE RS

The Maestrale RS lives at the intersection of freeride performance and backcountry functionality thanks to an innovative, carbon-infused Grilamid® shell to add power and rigidity without adding weight, as well as a power strap featuring RECCO® technology and a Speedlock Plus ski/walk mechanism.

**Last:** 101 millimeter  
**Flex:** 125 with 60-degree range of motion  
**Sizes:** 24.5-32 (half sizes available)  
**Weight Per Pair:** 2,900 grams (size 27)



### SCARPA F1

The standard-setting benchmark for lightweight backcountry touring performance, the updated F1 features a responsive, laterally stiff design and incredible range of motion, as well as Intuition liner, integrated RECCO® reflector, and new tongue alignment for complete comfort.

**Last:** 102 millimeter  
**Flex:** 95 with 62-degree range of motion  
**Sizes:** 24.5-31 (men's); 21.5-27 (women's) (half sizes available)  
**Weight Per Pair:** 2,160 grams (size 27)





### TECNICA COCHISE 130 DYN GW

The ultimate one-quiver boot that makes no compromise on downhill performance, the Cochise 130 DYN with GripWalk® is a stiff, freeride boot designed for skiing hard, in and out of bounds. The go-to for modern skiers who want the performance of an alpine boot with the conveniences of a touring boot with tech inserts.

**Last:** 99 millimeter  
**Flex:** 130  
**Sizes:** 22.5-30.5  
**Weight Per Pair:** 4,070 grams (size 26.5)



### ROSSIGNOL ALLTRACK ELITE 130 LT GW

Chase untracked lines inbounds or out in the Alltrack Elite 130 LT. This no-compromise free-touring boot features tech fittings for alpine touring binding compatibility and a releasable cuff for a natural range of motion on the skin track or boot pack. The 98-millimeter last shell is engineered for minimal weight and maximum power transfer to ski on piste or off and everywhere in between. The pre-shaped, full custom liner includes Thinsulate™ insulation and a touring-specific design for enhanced mobility.

**Last:** 98 millimeter  
**Flex:** 130  
**Sizes:** 24.5-31.5  
**Weight Per Pair:** 3,320 grams



### LANGE XT3 130

Engineered to go up, built to ski down, the all-new XT3 130 is freeride the way it was meant to be. Featuring Lange's new Active Power V-Lock and Friction Free Hinge, the XT3 offers effortless mobility and range of motion on the way up. Then lock it down for the descent and unleash the rock-solid power and precision of Lange's innovative Dual Core construction. Purpose-built for the modern freeride skier, the XT3 is a new benchmark in free-touring performance because you have to get UP, to get DOWN.

**Last:** 100 millimeter  
**Flex:** 130  
**Sizes:** 24.5-29.5  
**Weight Per Pair:** 3,580 grams





### **NORDICA STRIDER ELITE 130**

The Strider Elite 130 DYN is nothing less than an all-mountain masterpiece. This premium boot establishes a new standard in freeride performance, and it does this while bringing an unparalleled ride to the hike category. Built around a precise 99-millimeter fit, it excels anywhere — and everywhere. It also has Dynafit inserts.

**Last: 100 millimeter**

**Flex: 130**

**Sizes: 22.5-31**

**Weight Per Pair: 3,580 grams**



### **DALBELLO LUPO PRO HD**

Built for the local, patroller, and die-hard big mountain skier, the Lupo Pro HD's shell is made with the same polyurethane as Dalbello's race boots, yet still comes in at 1,990 grams in ski mode and just 1,835 grams with the tongue removed for hiking.

**Last: 98 millimeter**

**Flex: 130**

**Sizes: 24.5-29.5**

**Weight Per Pair: 3,980 grams**



### **HEAD KORE 1**

The lightweight Kore 1 boot features a hike-ski mechanism and pin-binding inserts. However, unlike any other touring boot, the Kore 1 is the world's first to incorporate the revolutionary material graphene, which promotes powerfully responsive, delightfully damp turns.

**Last: 100 millimeter**

**Flex: 130**

**Sizes: 23-30.5**

**Weight Per Pair: 3,330 grams (size 26.5)**





### SCARPA TX PRO WOMEN'S

Go-anywhere NTN performance with a last, cuff, and liner designed specifically for a woman's foot, the TX Pro is Scarpa's stiffest women's-specific tele boot that holds its own on all-day tours, deep resort laps, and steep technical lines.

**Last:** 102 millimeter

**Flex:** 110 with 22-degree range of motion

**Sizes:** 22.5-27 (half sizes available)

**Weight Per Pair:** 3,170 grams (size 25)



### TECNICA MACH1 LV PRO W

Enter the Mach1 LV Pro W, a ski boot specifically designed for all-mountain rippers with low-volume feet. The boot feels surprisingly comfortable out of the box thanks to the anatomically shaped liner and shell. Merino wool and Celliant combine in the liner for increased warmth, while the C.A.S. system easily adjusts for a truly custom fit.

**Last:** 98 millimeter

**Flex:** 120

**Sizes:** 22.5-27.5

**Weight Per Pair:** 3,200 grams (size 24.5)



# WOMEN'S BOOTS



## APEX WOMEN'S ANTERO S

The perfect boots for patrollers! Proven over a decade with thousands of patrollers adopting the Apex's next gen tech. Ski hard in the full system or step out of the chassis to hike, sled, or kick back in warmth and comfort after a sweep.

**Last:** 101 millimeter  
**Flex:** 95-105-115  
(adjustable flex)  
**Sizes:** 23-27  
**Weight Per Pair:** 5,500 grams



## DALBELLO PANTERRA 105 W

The Panterra 105 W ID GW is geared toward advanced to expert female skiers seeking the best blend of versatility, performance, and fit for unlimited access to every part of the mountain.

**Last:** 99-101 millimeter  
**Flex:** 105  
**Sizes:** 22.5-27.5  
**Weight Per Pair:** 3,170 grams



## LANGE XT3 110W

Engineered to go up, built to ski down, the all-new XT3 110 W is freeride the way it was meant to be. Featuring Lange's new Active Power V-Lock and Friction Free Hinge, the XT3 offers effortless mobility and range of motion on the way up. Then lock it down for the descent and unleash the rock-solid power and precision of Lange's innovative Dual Core construction. Purpose-built for the modern freeride skier, the XT3 is a new benchmark in free-touring performance because you have to get UP, to get DOWN.

**Last:** 100 millimeter  
**Flex:** 110  
**Sizes:** 23.5-27.5  
**Weight Per Pair:** 3,412 grams





### HEAD KORE 2 W

Head is proud to introduce the brand-new Kore 2 W. The amazingly lightweight boot performs like no other due to its precise fit and unique blend of PU plastic and the revolutionary material graphene.

**Last:** 100 millimeter  
**Flex:** 110  
**Sizes:** 23-27.5  
**Weight Per Pair:** 3,232 grams (size 25.5)



### SCARPA GEA RS

Scarpa's stiffest, most powerful women's-specific alpine touring boot featuring freeride performance and backcountry functionality, the Gea RS features an innovative, carbon-infused Grilamid® shell to add power and rigidity without adding weight, as well as a power strap featuring RECCO® technology.

**Last:** 101 millimeter  
**Flex:** 120 with 60-degree range of motion  
**Sizes:** 22.5-27 (half sizes available)  
**Weight Per Pair:** 2,500 grams (size 25)



### TECNICA COCHISE 105 W DYN GW

The ultimate one-boot quiver for charging female skiers who want to get after it — inbounds and beyond — the Cochise 105 W DYN with GripWalk® is a high-performance, freeride ski boot with a walk mode and tech inserts.

**Last:** 99 millimeter  
**Flex:** 105  
**Sizes:** 22.5-27.5  
**Weight Per Pair:** 3,780 grams (size 27.5)



### ROSSIGNOL ALLTRACK ELITE 110 LT W GW

Chase untracked lines inbounds or out in the women's Alltrack Elite 100 LT. This no-compromise free-touring boot features Dynafit® certified inserts for compatibility with all alpine touring bindings and a pre-mounted GripWalk® sole for compatibility with GripWalk® specific alpine bindings. It has a releasable cuff for a natural range of motion on the skin track or boot pack and a 98-millimeter last for a precise fit. The Generative Design Grid shell is engineered for reduced weight and full power transmission on piste or off and everywhere in between. The pre-shaped, full custom liner includes Thinsulate™ insulation and a touring-specific design for enhanced mobility.

**Last:** 98 millimeter  
**Flex:** 110  
**Sizes:** 22.5-27.5  
**Weight Per Pair:** 3,320 grams





## SCOTT SUPERGUIDE FREETOURL

The all-new Superguide Freetour is the holy grail of backcountry skiing: a ski that's light and agile on the way up, with no compromises on those hard-earned lines on the way down. The new paulownia/beech core is lightweight yet stable. Combined with carbon/aramid fibers to stiffen the ski without adding weight, the Superguide Freetour boasts a hard-charging construction with a precise 3Dimension Touring Sidecut that's ready for those fast lines and steep descents.

**Dimensions:** 136-105-124 millimeters

**Turning Radius:** 24 meters

**Sizes:** 178, 185 centimeters

**Weight Per Pair:** 3,220 grams



## VÖLKL BLAZE 106

The emerging category of lighter weight, playful freeride skis ushers in a new era. Whether dropping in from the first chair or after a quick skin, skiers who don't like to follow the tracks will have a new best friend with the Blaze.

**Dimensions:** 146-106-128 millimeters

**Turning Radius:** 19 meters (186 centimeters)

**Sizes:** 165, 172, 179, 186 centimeters

**Weight Per Pair:** 3,544 grams (186 centimeters)



## VÖLKL KATANA 108

2020's returning champion, Völkl introduces the new Katana 108 in one of skiing's greatest-ever sequels. It takes Völkl's lighter-weight Titanal Frame construction and the versatility-enhancing 3D Radius sidecut technology and puts them to work in a new, 146-108-129-millimeter chassis to create the most versatile big mountain charger ski on the market.

**Dimensions:** 146-108-129 millimeters

**Turning Radius:** 19 meters (184 centimeters)

**Sizes:** 170, 177, 184, 191 centimeters

**Weight Per Pair:** 4,660 grams (184 centimeters)





## VÖLKL KENJA 88

The new Kenja 88 shines with an impressive carving-performance due to the three different radii in the sidecut. This special geometry is 100% adjusted to the tip and tail rocker construction. Depending on the rider's speed or edge angle, the effective edge becomes longer or shorter and the matching sidecut radius provides hold, maneuverability, or smooth operation.

**Dimensions:** 129-88-111 millimeters  
**Turning Radius:** 14 meters (163 centimeters)  
**Sizes:** 149, 156, 163, 170 centimeters  
**Weight Per Pair:** 3,460 grams (163 centimeters)

## VÖLKL BLAZE 94

The introduction of the Mantra marked the beginning of Völkl's powerful freeriding ski lines. For those who want to ride free without any restrictions but with the full control of a sportive off-piste ski, the new Blaze series even adds another dimension to the idea. The concept of the ski targets the intuitive freerider who appreciates a playful and at the same time agile and sportive maneuverability.

**Dimensions:** 134-94-116 millimeters  
**Turning Radius:** 17 meters (179 centimeters)  
**Sizes:** 165, 172, 179, 186 centimeters  
**Weight Per Pair:** 3,140 grams (179 centimeters)

## BLIZZARD COCHISE 106

All new for 2020-21, the Cochise 106 blends a new shape with a callout to its original feel. Whether the conditions are chalk, chunder, blower, or cement, they're able to ski hard, without making skiing hard.

**Dimensions:** 137.5-106-124.5 millimeters  
**Turning Radius:** 24 meters (185 centimeters)  
**Sizes:** 177, 185, 192 centimeters  
**Weight Per Pair:** 4,640 grams (185 centimeters)





## BLIZZARD BONAFIDE 97

Introducing the all-new Bonafide 97: made to attack the mountain with grace and precision. From crushing through crud, laying it down on hard pack, or navigating your way through untouched pow in the trees, they're the ultimate all-conditions daily driver for patrollers.

**Dimensions:** 136.5-97-118.5 millimeters (177 centimeters)

**Turning Radius:** 17 meters (177 centimeters)

**Sizes:** 165, 171, 177, 183, 189 centimeters

**Weight Per Pair:** 4,400 grams (177 centimeters)



## ROSSIGNOL BLACKOPS SENDER TI

Powder days, big lines, and spring ripping, the Blackops Sender Ti responds with a full-gas, send-it attitude in all conditions. It combines a balanced wood core and a race-developed layup for an energized ride that holds its course in all terrain and any speed. Tighten your boots and be ready to go all in, anywhere, anytime, and at any speed.

**Dimensions:** 138-106-128 millimeters

**Turning Radius:** 21 meters (187 centimeters)

**Sizes:** 180, 187, 194 centimeters

**Weight Per Pair:** 4,200 grams (187 centimeters)



## ROSSIGNOL BLACKOPS ESCAPER

Go beyond the groomed. When fresh tracks beckon, the Blackops Escaper delivers a blend of lightweight agility and damp downhill performance to set you free to explore and ride inbounds and out. Its light swingweight keeps it playful, and a lightweight core keeps your mind open to skin track and boot pack possibilities.

**Dimensions:** 128-94-118 millimeters

**Turning Radius:** 19 meters (178 centimeters)

**Sizes:** 156, 164, 172, 178, 186 centimeters

**Weight Per Pair:** 3,400 grams (172 centimeters)





## DYNASTAR M-FREE 108

On ode to freedom, to those who see the mountain differently, the M-Free 108 is designed to facilitate your creative expression in any terrain. It's poplar/PU Hybrid Core construction combines the pop and power of wood with the suppleness and dampening of PU to provide the ideal performance whether slashing between trees, stomping cliff drops, or straight-lining couloirs.

**Dimensions:** 138-108-128 millimeters  
**Turning Radius:** 18 meters (182 centimeters)  
**Sizes:** 172, 182, 192 centimeters  
**Weight Per Pair:** 4,400 grams (182 centimeters)

## DYNASTAR M-PRO 99

Built for adventure, the M-Pro 99 is Dynastar's most versatile freeride ski. Delivering on Dynastar's promise to create products with a "unique on-snow feel," the M-Pro 99's poplar/PU Hybrid Core and Rocketframe titanal reinforcement make this ski incredibly intuitive, offering precision and responsiveness as terrain changes, great flotation in soft snow, and reliable edge grip in all conditions.

**Dimensions:** 138-108-128 millimeters  
**Turning Radius:** 18 meters (170 centimeters)  
**Sizes:** 172, 182, 192 centimeters  
**Weight Per Pair:** 4,400 grams (182 centimeters)

## NORDICA ENFORCER 104 FREE

Day in and day out, the Enforcer 104 Free boosts your confidence. The Enforcer 104 Free pairs a balsa wood core with carbon and two sheets of metal to maximize stability and response. This also dampens vibrations for an especially smooth ride. For exceptional flotation in powder and easy steering through variable conditions, it features a high rise tip and tail rocker that's accessible and easy to ski — no matter the terrain or conditions.

**Dimensions:** 135-104-124 millimeters  
**Turning Radius:** 17.5 meters (179 centimeters)  
**Sizes:** 165, 172, 179, 186, 191 centimeters  
**Weight Per Pair:** Did not provide





## NORDICA SANTA ANA 104

Slightly narrower than the Santa Ana 110 Free, it's the perfect daily driver for those who love to free ski off-piste and play on the trail. This new addition to the legendary Santa Ana collection is already renowned for providing a smooth and playful attitude in a design that's accessible and easy to ski. While the Santa Ana 104 Free craves softer snow, it offers exceptional performance.

**Dimensions:** 134-104-123 millimeters  
**Turning Radius:** 16.5 meters (172 centimeters)  
**Sizes:** 158, 165, 172, 179 centimeters  
**Weight Per Pair:** Did not provide

## ICELANTIC NATURAL 101

The Natural 101 is a lightweight, snappy, and playful backcountry touring ski. Featuring 31 centimeters of tip rocker, 5 millimeters of camber underfoot, and a slightly rockered tail that allows the ski to pivot effortlessly but is still flat enough for utilitarian use. By utilizing Icelantic's Feather-Weight Core, the ski combines Icelantic's signature durability in an ultralight package, allowing you to be efficient on the way up and confident on the way down.

**Dimensions:** 132-101-117 millimeters  
**Turning Radius:** 21 meters (178 centimeters)  
**Sizes:** 171, 178, 185 centimeters  
**Weight Per Pair:** 3,266 grams (178 centimeters)

## ICELANTIC PIONEER 96

The Pioneer 96 is Icelantic's one-ski-quiver, with the versatility needed to excel in any condition the mountain has to offer. A rockered tip and tail combined with 5 millimeters of camber underfoot and the Poplar Power Core make this ski snappy, responsive, and stable at speed.

**Dimensions:** 131-96-118 millimeters  
**Turning Radius:** 17 meters (174 centimeters)  
**Sizes:** 166, 174, 182 centimeters  
**Weight Per Pair:** 3,583 grams (174 centimeters)





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## HEAD SUPERSHAPE E-TITAN (FLAT)

The all new e-Titan features the world's only electronic ski dampening system. EMC, or Energy Management System, reduces negative vibrations in the ski, delivering a smooth, stable feel with category-leading edge grip and responsiveness.

**Dimensions:** 133-84-115 millimeters  
**Turning Radius:** 15.7 meters (170 centimeters)  
**Sizes:** 156, 163, 170, 177, 184 centimeters  
**Weight Per Pair:** 3,446 grams (170 centimeters)

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## HEAD KORE 87

The all-new Kore 87 is the latest, and narrowest, addition to the award-winning Kore family. Building off the groundbreaking karuba wood, koroyd, graphene, and carbon construction, the Kore 87 excels in all conditions, but with a greater emphasis on harder snow or front side skiing.

**Dimensions:** 130-87-110 millimeters  
**Turning Radius:** 16 meters (180 centimeters)  
**Sizes:** 153, 162, 171, 180, 189 centimeters  
**Weight Per Pair:** 3,446 grams (180 centimeters)

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# WOMEN'S SKIS



## HEAD KORE 87 W

The all-new Kore 87 W is the latest, and narrowest, addition to the award-winning Kore family. Building off the groundbreaking karuba wood, koroyd, graphene, and carbon construction, the Kore 87 W excels in all conditions, but with a greater emphasis on harder snow or front side skiing.

**Dimensions:** 127-85-107 millimeters  
**Turning Radius:** 14.3 meters (171 centimeters)  
**Sizes:** 153, 162, 171 centimeters  
**Weight Per Pair:** 2,902 grams (171 centimeters)



## DYNASTAR M-PRO 99 W

Have fun exploring with confidence on Dynastar's most versatile freeride ski for women, the M-Pro 99 W. Featuring a poplar/PU Hybrid Core construction with Rocketframe titanal reinforcement, the M-Pro 99 is incredibly intuitive, offering precision and responsiveness as terrain changes, great flotation in soft snow, and reliable edge grip in all conditions.

**Dimensions:** 125-97-115 millimeters  
**Turning Radius:** 15 meters (162 centimeters)  
**Sizes:** 154, 162, 170 centimeters  
**Weight Per Pair:** 3,400 grams (162 centimeters)



## ROSSIGNOL BLACKOPS W RALLYBIRD TI

Step on it. The women's Blackops Rallybird Ti is a full gas, go-anywhere ski for skiers who share the first-to-last-chair attitude. Powder missions and resort shred sessions alike, it delivers a full edge arc and plenty of float to harness gravity's pull in all conditions. It fuses a lively wood core with vibration dampening tech to deliver a playful balance of energy and control that sets you free to ride at will.

**Dimensions:** 137-102-127 millimeters  
**Turning Radius:** 16 meters (171 centimeters)  
**Sizes:** 163, 171, 178 centimeters  
**Weight Per Pair:** 3,600 grams (171 centimeters)



## ICELANTIC MAIDEN LITE

NEW for the 2020-21 season, Icelantic is stoked to introduce the Maiden 101 Lite: an ultralight freeride tool that excels both touring as well as freeriding all over the mountain. Featuring Icelantic's Feather-Weight Core made of 100% Paulownia wood, the Maiden 101 Lite has all the characteristics of the top-selling Maiden 101 at a fraction of the weight.

**Dimensions:** 136-101-126 millimeters  
**Turning Radius:** 14.5 meters (162 centimeters)  
**Sizes:** 155, 162, 169 centimeters  
**Weight Per Pair:** 2,948 grams (162 centimeters)



## BLIZZARD BLACK PEARL 97

All new for 2020-21, the Black Pearl 97 is the versatile, fun, high-performance, all-terrain women's ski for patrollers. It carves groomers, charges through crud, and makes challenging snow conditions easy to ride. Truly the kind of ski that makes you feel stronger, ski better, and tackle every day with confidence.

**Dimensions:** 136.5-97-118.5 millimeters (165 centimeters)  
**Turning Radius:** 16 meters (171 centimeters)  
**Sizes:** 153, 159, 165, 171, 177 centimeters  
**Weight Per Pair:** 3,860 grams (171 centimeters)





### ROSSIGNOL X-IUM SKATING PREMIUM S2 MEDIUM

Podium-level performance. A World Cup race ski for elite-level athletes, the X-IUM Premium Skate S2 features a full-length carbon sheet and race-proven edge technologies. The result is an ultralight balanced ski that offers maximum power transmission, glide, and fluid acceleration. The S2 build features flex and camber optimized to excel in a wide range of snow conditions. The ski is compatible with the Turnamic® binding system for the most natural ski flex and snow feel.

**Dimensions:** 40-44-43-43 millimeters

**Turning Radius:** N/A

**Sizes:** 173, 178, 183, 188, 193 centimeters

**Weight Per Pair:** 540 grams (188 centimeters)

### LEKI PRC MAX

The PRC MAX is made of 100% pure carbon that is exceptionally strong and light. The Trigger Shark 2.0 system provides a close connection and quick release. Both the tip and basket can be changed to match trail conditions.

**Fixed Length:** 180 centimeters

**Weight:** 66 grams per meter

### ROSSIGNOL X-IUM CARBON PREMIUM SKATE COURSE

Experience World Cup control. Elite-level precision is all yours with the podium-proven X-IUM Carbon Premium Skate Course Ski Boots. Designed for competitive athletes, an integrated carbon chassis and full carbon cuff deliver an ultralight feel and responsive power delivery to every stride. The fit is designed to match the natural shape of the foot for world-class comfort and precise power transfer to the ski. An updated lace cover enhances weather resistance to keep feet warm and dry.

**Last:** Low Race (< 40.5)/Race (41.0-plus)

**Flex:** NNN compatible

**Sizes:** 38-46.5

**Weight Per Pair:** 1,680 grams (size 42)

### ROSSIGNOL RACE PRO SKATE PREMIUM

Step into World Cup performance. The Race Pro Skate Premium binding is designed for elite-level competitive athletes. Built on the Turnamic® Nordic system, the binding is compatible with all NNN® and Prolink® boot soles. The system features easy, tool-free fore and aft adjustability for customized performance based on snow conditions, while the secure turn-lock design offers confident retention for explosive racing. It is only compatible with the Turnamic® IFP plate.

**Din Range:** 35-52

**Brake Widths:** IFP/NNN Compatible

**Weight Per Pair:** 215 grams





## MARKER GRIFFON 13 ID

Skiing's most popular binding for many years, the Griffon is totally redesigned for 2020-21 with new toes and heels that offer several new features, including easier step-in and an anti-ice rail for scraping snow from your boots

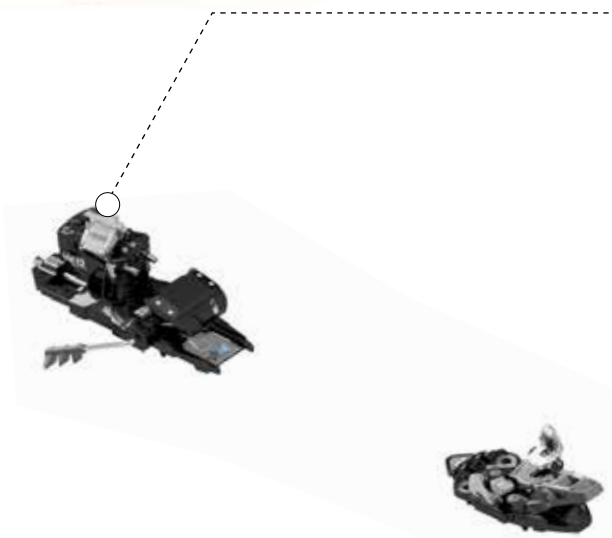
**Din Range:** 4-13  
**Brake Widths:** 90, 100, 110, 120 millimeters  
**Weight Per Pair:** 2,060 grams



## MARKER DUKE PT 16

For skiers looking for the ultimate versatility in their setup, with uncompromising big mountain performance plus the ability to take advantage of true Pin Tech climbing functionality, the Duke PT ushers in a new era.

**Din Range:** 6-16  
**Brake Widths:** 100 or 125 millimeters  
**Weight Per Pair:** 2,700 grams



## LOOK HM ROTATION 12 D105

The HM 12 is a lightweight, high-performance, free-touring binding. The frameless design weighs only 1,270 grams per pair, allows a more natural ski flex for enhanced downhill performance, and features a pivoting pin-tech toe piece for increased elasticity, offering skiers more confident retention and reduced prerelease.

**Din Range:** 5-12  
**Brake Widths:** 90, 105, 120 millimeters  
**Weight Per Pair:** 1,260 grams





### LOOK PIVOT 15 GW B115 FORZA 2.0

The all-mountain Pivot ski binding sets the standard for control and release for the world's most dedicated skiers. Now available in a 15 DIN rating, the binding's durable aluminum toe piece and unique "turntable" heel design offer expert freeskiers a responsive connection between boot and ski for instant power transmission and precise ski control. It features powerful shock absorption and travel with confident retention and release for aggressive skiing. The colorful Forza 2.0 edition keeps the creative energy of freeskiing front and center. It's compatible with all traditional alpine (ISO 5355) and GripWalk® boot soles.

**Din Range:** 6-15  
**Brake Widths:** 95, 115, 130 millimeters  
**Weight Per Pair:** 2,490 grams



### TYROLIA ATTACK2 14 AT

The Attack2 14 AT features premium downhill performance with the versatility of the new FR PRO2 AT toe.

**Din Range:** 4-14  
**Brake Widths:** 85, 95, 110, 130 millimeters  
**Weight Per Pair:** 1,930 grams (2,230 grams with brakes)



### 22 DESIGNS OUTLAW X

The Outlaw X is 22 Design's all-around NTN binding, with easy step-in and out, light weight, and a bombproof design. It's built the 22 Designs way with sweet flex, copious spring travel, rugged steel construction, and blazing uphill and downhill performance.

**Adjustable Release: (No DIN)**  
**Brake Widths:** 80, 95, 110, 125 millimeters  
**Weight Per Pair:** Large: 1,670 grams  
Small: 1,590 grams

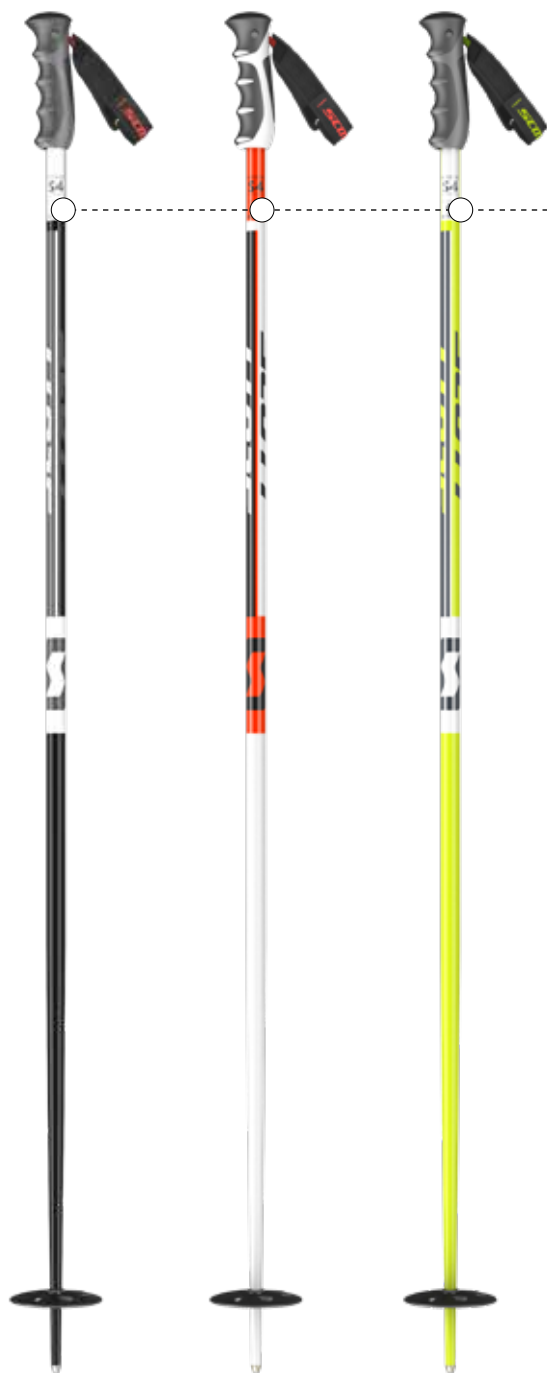


### 22 DESIGNS VICE

Incorporating features of the bombproof AxI but designed as a lift-serve 75-millimeter binding, the Vice provides three pivot positions to dial in to your skiing style and the snow you're on. If you liked the HammerHead, you'll love the Vice.

**Adjustable Release: (No DIN)**  
**Brake Widths:** (No Brakes)  
**Weight Per Pair:** Large: 1,430 grams  
Small: 1,360 grams





## SCOTT TEAM ISSUE SRS

The Team Issue SRS features the tried, tested, and true S4 aluminum shaft Scott's elite team of skiers believes in. The innovative Strap Release System (S.R.S.) releases the strap from the pole in sketchy situations to prevent injury.

**Lengths:** 44, 46, 48, 50, 52, 54, 56 inches

**Weight:** 242 grams

**Colors:** White, Black, Fluro Yellow



## SCOTT PROGUIDE SRS

The all new Proguide SRS has a robust, length-adjustable aluminum shaft and is equipped with safety straps and a comfortable long cork grip for sidehilling. The best for tough touring trips.

**Adjustable Length:** 110-140 centimeters

**Weight:** 253 grams





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## BLACK DIAMOND TRAVERSE PRO

The Traverse Pro poles feature a durable, all-aluminum construction, allowing for quick and secure length changes. The innovative SwitchRelease technology in the wrist strap and a lockable release add a measure of safety.

**Adjustable Length:** 95-145 centimeters  
105-155 centimeters  
**Collapsed Length:** 95 centimeters  
105 centimeters  
**Weight Per Pair:** 556 grams (95-145 centimeters)

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## BLACK DIAMOND RAZOR CARBON PRO

Quick-hit dawn patrols, weeklong glacier expeditions, and everything in between — the Black Diamond Razor Carbon Pro ski poles are a go-to for any day skiing the backcountry. Combining the durability of an aluminum upper with the reduced swingweight of a carbon fiber lower.

**Adjustable Length:** 100-125 centimeters  
115-140 centimeters  
**Collapsed Length:** 92 centimeters  
105.5 centimeters  
**Weight Per Pair:** 524 grams  
(100-125 centimeters)

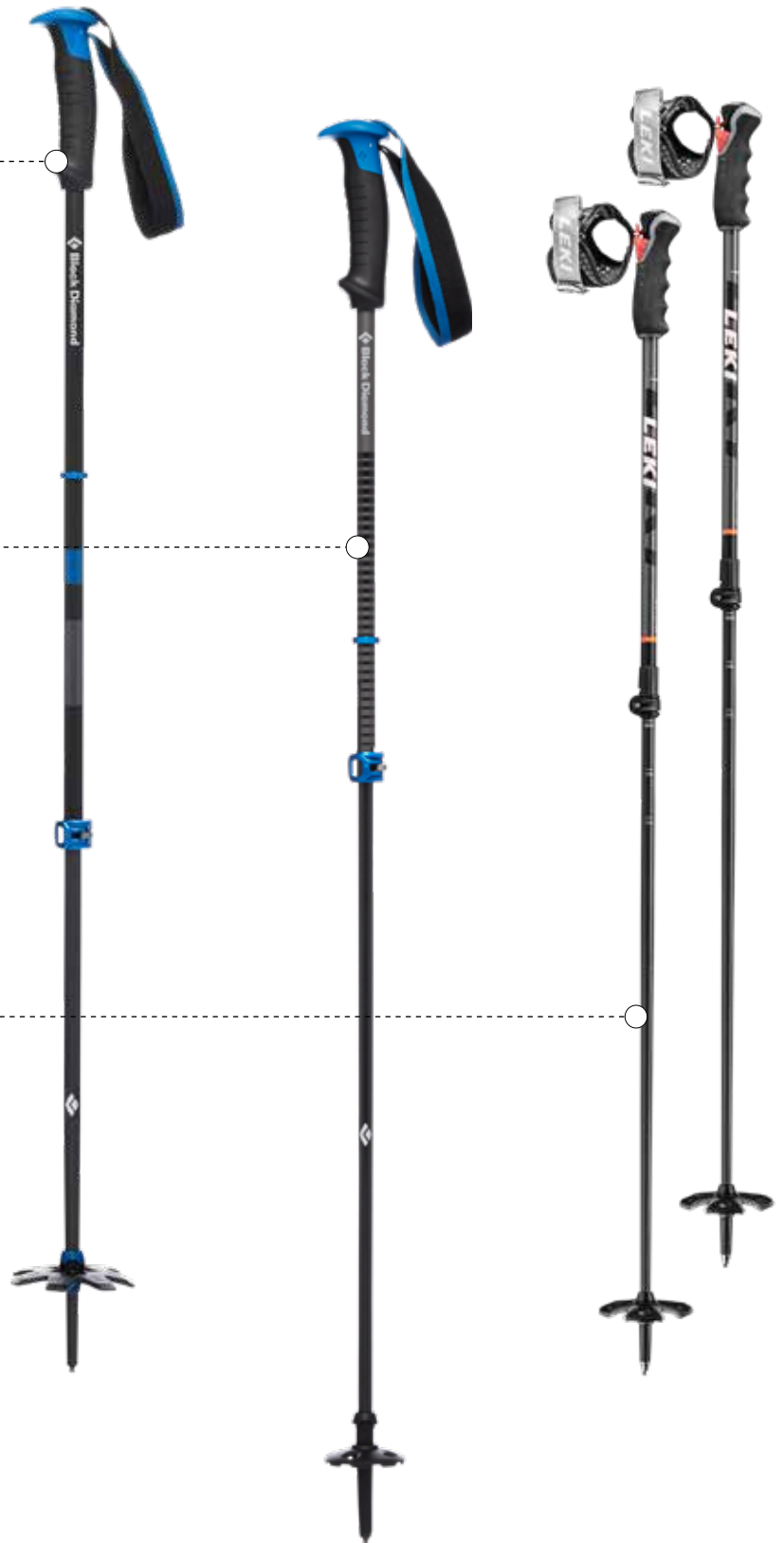
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## LEKI PEAK VARIO 3D

The Peak Vario 3D is a high-performance pole ready for all conditions. Lightweight carbon fiber lower matched with a high-strength aluminum upper for ideal strength-to-weight ratio. It features the NEW 3D ProG grip for greater confidence and security.

**Adjustable Length:** 110-140 centimeters  
**Weight Per Pair:** 570 grams

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# POLES & GLOVES



## LEKI DETECT S

The Detect S is a super sturdy, lightweight pole made of high-strength aluminum, perfect for sunbaked park laps and sidecountry stashes. Featuring the Trigger S ProG Grip and Frame Strap for precise control and feel. It comes with two interchangeable baskets.

**Lengths:** 110, 115, 120, 125, 130, 135 centimeters

**Weight Per Pair:** 498 grams

## LEKI DETECT XT S GLOVE

The Detect XT S glove is the perfect match for Leki Trigger 3D and Trigger S poles. The reinforced Dyneema loop in the glove creates a solid connection to the pole for unrivaled control, comfort, and security.

**Sizes:** 7-11





# POWDERFALL 2022

BY STEVEN BINNS  
PHOTOS BY CANDACE HORGAN



We've been planning and looking forward to Powderfall, but we have recently decided to postpone the event a year to April 2022 due to the uncertainty around the COVID-19 pandemic. All the things that are great about Breckenridge — sunshine, wide-open terrain, great snow, and a fun après scene — will still be there, and we are continuing to look forward to a great event. In April 2022, Powderfall will take place at the Beaver Run Resort & Conference Center in Breckenridge, Colorado.

Join more than 600 NSP members and industry professionals from all over the country for three days of learning, laughing, and camaraderie. The agenda will include technical sessions like Stop the Bleed, COVID-19 updates from national advisors and local Colorado patrol directors, and *Outdoor Emergency Care: A Patroller's Guide to Medical Care*, 6th ed. updates. It also includes ski and snowboard topics like avalanche 101 sessions, running toboggans, and search and rescue dog demonstrations.

Because of the postponement, the NSP office is also exploring some virtual Powderfall sessions this spring to scratch your Powderfall itch, provide some timely





education, connect you to other NSP members, and get you even more excited for next spring.

In April 2022, you can look forward to great meet-ups, dawn patrol hiking, and Professional Ski Instructors of America-American Association of Snowboard Instructors ski clinics — all opportunities to ski with members from all over the country. April is one of Colorado's snowiest months, which means there's a strong possibility of a bluebird powder day, and with an elevation of 12,988 feet above sea level and 2,908 acres of skiable terrain, you are sure to find some untracked snow!

This winter will be like no other we have experienced, and while postponing Powderfall was a difficult decision, it was the safest. Postponing Powderfall means that we can be certain we will have the end of year party we have come to expect, including nightly events and gatherings. After all, camaraderie is what patrolling is all about. We thank you for your understanding and look forward to seeing you in Breckenridge in 2022!

Watch your email and Member News for information about virtual events. Stay safe, and look for Powderfall dates and details in the spring 2021. 🍷



Participants enjoying offerings at Powderfall 2019.







# THE WRONG WAY

WHY SKI PATROLLERS SHOULD GET IN  
THE UPHILL GAME

BY DOUG MARTLAND AND SCOTT POWERS  
PHOTOS BY TIM PECK

*Uphilling at the resort.*

Just 20 years ago, finding uphillers at a ski resort in the United States was like finding Waldo in a *Where's Waldo?* book. Maybe they were there, but it was often extremely difficult to find them unless you knew what you were looking for and exactly where to look.

Uphillers are now everywhere at the resort. You have probably spotted them at the top of the lift stripping skins off the bottoms of their skis and boards, or on your run down the mountain as they travel in packs of two or three gliding uphill. Perhaps your mountain has an uphill policy, along with a designated uphill route or two.

Equipment evolutions and changes to ski resort access policies, as well as the ski community's fostering of an uphill culture, are some of the reasons why uphill is one of the fastest-growing segments of the ski industry. The secret is out on another one too — earning your turns is awesome. You should be paying attention to this growing user group while patrolling. You should also give it a shot this winter.

## WHAT IS UPHILLING?

Uphilling is ascending the slopes at the resort on alpine touring skis, telemark skis, or a splitboard by using specialized skins and bindings. The bindings allow uphillers to have a free heel as they ascend the mountain, while the skins are pieces of technical fabric attached to the bottom of the ski that prevent the uphiller from backsliding as they glide or “skin” uphill.

Many start uphill as the perfect bridge between downhill skiing or riding at the resort and touring in the backcountry. Without the objective hazards inherent in the backcountry environment, uphillers can hone their uphill technique and transitions in a safer, lower-consequence environment. If something goes wrong

or does not fit quite right, it is usually easy to descend to the lodge and fix it.

Of course, people uphill for a host of other reasons too. Some diehard backcountry skiers and riders uphill to get an earlier start to the ski season when manmade snow is the only game in town, or as an alternative when the tide is low in the backcountry. Many do it to score a few turns as part of a regular, low-stress, cold-weather aerobic workout. Among this latter group are athletes training to build the massive aerobic capacity needed for ski mountaineering races — “skimo” for short — a sport that is popular in Europe and quickly gaining adherents in the United States.

## WHY IT IS GAINING POPULARITY

The explosion of uphill in the United States is directly attributable to the revolution in backcountry equipment that has made it

*Early morning skinning at the resort.*



more accessible to the average skier or rider.

In the late 1990s, telemarking was the primary option for accessing the backcountry on skis. As Ben Merkin, a Burke Mountain Resort patroller and a veteran backcountry traveler, describes, since “that was the only way to get out, we all did it.” Merkin’s crowd aside, tele skiing has always been a niche sport, and if you couldn’t tele, uphill at the resort probably wasn’t an option.

Other gear was available, but that gear did not make uphill at the resort any more accessible to the average skier or rider. Splitboarding, for example, was still in its infancy 20 years ago and often a DIY project. The gear that did exist was rudimentary and putting the board back together at transitions was complicated, with Merkin recalling numerous episodes of splitboarders “losing the ‘pin’ that attached the binding to the board, leading to catastrophic failure.” Likewise, uphill-oriented alpine touring (AT for short) ski equipment was only carried by a few select importers. The boots were generally heavy and stiff, while the lighter bindings did not release well.

Since then, uphill-oriented gear has vastly improved. Splitboards are commercially available, with significant advances in the technology that facilitates the up-to-down transition while also being significantly lighter. Current AT boots now weigh much less thanks to lightweight materials like high-end thermoplastics and carbon fiber and allow a much greater range of motion on the ascent, all while performing exceptionally on the descent. Modern AT bindings are more reliable and available from a wide range of manufacturers — Dynafit, Fritschi, G3, Marker, Salomon, and Atomic, to name a few — at outdoor retailers across the country. Even tele gear, which for many was the original means of earning their turns, has seen dramatic improvements in binding quality and boot weight.

The equipment revolution has coincided with an explosion of interest in “earning your turns.” Whether drawn to the allure of shredding untouched powder on some remote couloir, looking for a less expensive alternative to crowded resorts, or just seeking a winter adventure equivalent to mountain sports like rock climbing and hiking, the number of skiers and riders earning their turns in the backcountry has

## EQUIPMENT TO GET GOING

Uphilling requires an alpine touring, telemark, or splitboard set up, compatible skins, and touring friendly boots. Here is some info to get you going.

### ALPINE TOURING

If you can downhill ski and want to get into uphill, AT gear (also known as *randonnée*) is for you. AT bindings allow users to toggle between a free heel for ascending and a locked heel for descending, while AT boots switch between ski and walk modes, flexing on the uphill and stiffening on the descent.

There are two types of AT bindings — pin and frame. Frame bindings look like alpine bindings and are connected on a frame that runs from the toe piece to the heel piece. Uphilling skiers unlock the heel and lift the frame of the binding as they go. To descend, just remove the skins and lock the entire frame back onto the ski. With features like brakes and adjustable release settings similar to alpine bindings, frame bindings put downhill performance and safety over uphill efficiency. They are a great choice for skiers who ski mostly at the resort but aspire to dabble in the backcountry and earn the occasional turn on a groomer.

Pin or “tech” bindings feature lightweight toe and heel pieces with metal pins that connect to ski boots with specialized tech inserts. Smaller and less substantial, these bindings weigh less and uphill more efficiently. They are primarily used by skiers earning their turns in the backcountry or those training for skimo racing at the resort.

### TELEMARK

Uphilling on tele gear is similar to uphill on AT gear. In both cases, the uphiller has a free heel to ascend the slope on skis with skins. The difference from AT skiing is that on the descent a tele skier’s heel remains free the entire time, never locking back down to a heel piece.

There are two main styles of tele boots — traditional duckbill boots and NTN (New Telemark Norm) boots. Bindings match the boot style. A “free pivot” binding offers the most natural stride and is a great way to improve uphill efficiency.

For regular alpine skiers looking to get into uphill, tele is probably not the best route. For starters, you will need to learn to tele ski. Once you get used to doing knee bends for every turn, imagine doing that after ascending several thousand feet. Additionally, modern tele gear is heavier than many AT tech setups, so you will also be moving more weight uphill with each stride. Also, if you plan to tele in the backcountry be aware that some bindings do not release, a risk in avalanche terrain.

### SPLITBOARD

Snowboarders uphill on splitboards. During the ascent, splitboards “split” in half vertically, forming two skis for skiing uphill. When it is time to descend, strip the skins from the bottom of the skis, reassemble the board, reset the bindings, and shred downhill.

Boarders can purchase a commercial splitboard or make one themselves. DIY boards are a good option if you are handy. However, unlike a commercial splitboard, the outside edge of each side of a DIY splitboard lacks a metal edge, a problem if you uphill regularly on hardpack. Commercial splitboards have more robust connection systems and perform better on the descent.

Although regular snowboarding boots are perfect for uphill, you’ll need splitboard-specific bindings, which slide on a set of pucks with rails during the ascent. On the descent, these rails spin and lock into place, adding the majority of the short axis stability to the board. Some advanced riders prefer split-tech bindings. These setups require the user to wear ski boots designed for backcountry skiing, offer enhanced rigidity and improved edge control, and are lighter than soft boots.

Ski poles are essential for uphill travel. Most splitboarders use collapsible poles, stowing them inside their pack for the descent. To speed up transitions, however, it is also a good idea to get used to riding with the poles in your back hand.





Enjoying a quiet skin.

grown significantly. As a result, manufacturers now have a ready, profitable market for their wares, as well as a reason to continually upgrade their gear.

New Hampshire skier and rider Tim Peck is among this latter group. One of the few uphillers we know who has uphillled on a splitboard, tele skis, and AT gear, Peck loves skiing. Since he can't get to his favorite backcountry stashes every day, on many winter mornings you'll find him leading the uphill dawn patrol. A regular over the last decade at Southern New Hampshire's Crotched Mountain Ski Resort and Central Massachusetts' Wachusett

Mountain, Peck typically arrives at the mountain early, uphilll until the lifts begin to spin, and then heads off to work. "It's like having the mountain to myself," he says. Almost to himself anyway — Peck is amazed at how many more skiers and riders are uphilll at the resort these days, both before and during operating hours. He describes it as a significant change from when he started uphilll more than a decade ago, when, he says, fellow skiers "looked at me like I was crazy."

Recognizing these dual trends, resorts have been reconsidering their long-standing policies prohibiting uphilll and are welcoming them with open arms. Many resorts now offer some form of uphill access during operating hours for a free or low-priced ticket. Others offer uphill access on designated routes during non-operating hours, giving uphillers like Peck a lower-risk means of getting in a few turns before or after work. Resorts are also catering to the "earn your turns" crowd by opening "sidecountry" terrain accessed primarily through human-powered locomotion.

All told, the uphill culture in the United States is blossoming. If 2020 is any indication, when many adopted uphilll to earn a few turns after resorts shut down due to the coronavirus pandemic, the sport is likely to continue to see explosive growth in the near term.

## THE RELEVANCE TO PATROLLING

Patrollers should pay attention to uphillers. This includes monitoring the uphill route and interacting with them. (Peck, for example, appreciates the thumbs up he often gets from patrollers that ski by as he's cruising uphill.) It also means training for and being



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Skinning on couidoroy.

prepared to aid an injured uphiller. That might be run-of-the-mill if it is on your resort's designated uphill route, but keep in mind that the sidecountry is a big draw for the uphill and backcountry-oriented crowd. Spend some time considering how uphill might place new demands on your patrol's search and rescue capabilities.

We should also be cognizant of the advantages of patrolling on uphill-oriented gear. For example, AT boots are so much easier to walk in than traditional ski boots, something you might appreciate as you move about at your next wreck. Similarly, having a setup that facilitates sidecountry travel will enhance your ability to comfortably ascend and descend in that terrain. Of course, if it is a slow day on the mountain, you'll be in a great position to sneak in an uphill workout of your own.

If you are among the patrollers that has caught the uphill or backcountry bug, you should be aware of the several opportunities to transition your patrolling into the backcountry. The Mount Washington Volunteer Ski Patrol, the Tahoe Backcountry Ski Patrol, and the Cascade Backcountry Ski Patrol are among NSP-affiliated patrols supporting first aid and search and rescue efforts in backcountry destinations across the country.

## GET OUT THERE

So, there you have it — an explanation of why so many people are heading in the “wrong direction” at the resort. Pay attention to this growing user-base this winter and, if you have the opportunity, consider trying it yourself. +

## FIVE UPHILLING ESSENTIALS


1. **Skin wax:** Improves skin glide and reduces water absorption.
2. **Small repair kit:** Just in case something like a binding or boot buckle breaks.
3. **Ski crampons:** Some resort uphill routes are steep!
4. **Extra layers:** Once you stop moving, it gets cold fast.
5. **A bright light:** Remaining visible is essential for uphill during non-operating hours.

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# Ready to RECRUIT?

NSP CREATES RECRUITING RESOURCES FOR PATROLS

BY BECKETT STOKES,  
NSP MARKETING AND COMMUNICATIONS DIRECTOR

Emphasizing camaraderie can help with recruitment. Photo by Dave Engle.

As the days begin to shorten and the morning air gets crisp, the thoughts of the patrol director turn to the empty patrol slots she needs to fill. It is that time of year again — time to seek out the newest members of your patrol. While this fall is different from past falls, you can still turn to NSP for recruitment resources and know-how.

## FINDING PROSPECTIVE PATROLLERS IN A PANDEMIC

There are many ways to seek out prospective patrollers. First, you need to be clear about your needs, what kinds of people you would like to recruit, and where you can find them. Because of this year's COVID-19 pandemic, you might find them in front of their computers thinking wistfully about winter and getting outside. Consider your own patrol's or area's website and make sure it is up to date and that the listed contact is the correct person and ready to answer questions.

You can also keep an eye on NSP's social media posts on Facebook and Instagram; sharing these on either personal accounts or your patrol's or area's accounts is an easy way to reach interested skiers and snowboarders. You can also use hashtags like **#firstonlastoff**, **#kneedeepinwork**, **#youfallwehaul**, and **#skipatrollife**.

## KNOW AND TALK UP THE BENEFITS OF PATROLLING AND NSP MEMBERSHIP

As a patroller, you get to do hard but meaningful work outside, on skis or a board. You get to work with awesome people. Make sure when you are recruiting that you keep the many benefits of being a patroller front and center. Key benefits include:

- Gold standard training through NSP's Outdoor Emergency Care and Outdoor First Care programs, with access to additional transportation and backcountry training. This year's new sixth edition of *Outdoor Emergency Care: A Patroller's Guide to Medical Care* makes that training more current and accessible.
- Being part of an NSP family, one that includes your patrol and more than 30,000 members around the country and the world.
- Outstanding discounts on gear through NSP's pro deals program — what you save on one purchase could pay for your membership!
- Exclusive access to the NSP Online Store, where you can find items sourced specifically to serve the needs and interests of NSP members, from patrol jackets to avalanche beacons to ski socks, all at substantial discounts off retail cost.

## LEARN FROM OTHER PATROLS' SUCCESS

On the "Recruiting Resources" page of the NSP website, along with many other resources you will find a case study from Mt. Spokane in Washington. Through advanced planning and focus on their available resources, this patrol was able to recruit 37 candidates to join their OEC class and expand their patrol enough to adapt to a large

terrain expansion.

Your region and division peers are also good resources. Find out what is working for them and even how you might work together.

## TEN TIPS FOR SUCCESSFUL RECRUITMENT OF PATROLLERS

1. Check out the recruitment resources available in the NSP Online Store. From the "NSP Specific" menu, select "NSP Recruitment."
2. Visit the recruitment tab on NSP's member homepage. After you sign in, click the "Member Homepage" tile, then look for the "Recruiting" tab under the red menu bar. You can also find this page from the Member Resources drop-down menu.
3. On this Recruiting page, peruse the toolkit, read the Mt. Spokane case study, order customizable recruitment posters, purchase customizable swag/giveaway items from Specialty Incentives (<https://nationalskipatrol.mybrightsites.com>), purchase preprinted recruitment cards, and customize recruitment posters.
4. Review information on the Recruiting tab about how to obtain permission to use any NSP logos on customized products.
5. Notify your division director (<https://nsp.serves.org/division-directors/>). They may be able to help by sharing your job listings on the division's website, newsletter, or other communications.
6. Encourage your current patrollers to reach out to their networks — family, friends, kids' schools, church groups, other volunteer organizations, etc.
7. Consider offering additional "perks" to your patrollers — provide travel reimbursement for courses and training, participate in an international patroller exchange through NSP's Exchange Visitor Program (<https://nsp.serves.org/exchange-visitor-program/>) once travel opens up again, encourage them to sign up for Spot supplemental insurance (a great benefit offered to NSP members), or set up your own supplemental insurance opportunity for your patrollers.
8. Know and be able to clearly explain the benefits of NSP membership: quality of training, ongoing educational opportunities, camaraderie, sense of community, service to others, three issues of *Ski Patrol Magazine* per year, monthly e-newsletters on industry updates and news, and participate in the leading organization of ski patrolling in the world.
9. Participate in NSP's ongoing partnerships — Wasatch Backcountry Rescue, SheJumps Wild Skills Junior Ski Patrol, Share Winter, International Commission for Alpine Rescue, Fédération Internationale des Patrouilles de Ski, High Fives Foundation, and others (<https://nsp.serves.org/collaborate/>).
10. Create and support a young adult patroller program to encourage and inspire the next generation of patrollers (<https://nsp.serves.org/young-adult-patroller-program/>). +

# NSP ALUMNI PROGRAM HITS MILESTONE

OFFERING AN ACTIVE NSP LIFE FOR MANY MEMBERS!

BY TIM VIAL, NSP NATIONAL ALUMNI ADVISOR

**W**e've hit a milestone, and we want to celebrate it, as NSP alumni membership just topped 5,000 for the first time in history! Our alumni provide a wealth of experience, talent, and knowledge. They provide a vast resource of needed skills and expertise to supplement the efforts of the "active" membership. With the coronavirus pandemic, many have found new ways to remain active by assisting their former patrols, regions, or divisions or taking on renewed activity as mountain hosts or bike hosts.

There are many reasons to go "inactive" besides retirement: family responsibilities, relocating to a new part of the country, job responsibilities, education options, health issues, concern for COVID-19, and more. Likewise, the pandemic may cause many patrols, as well as alumni, to reassess and reconnect, finding involvement opportunities for active alumni, including patrol or community service events and expanding mountain host and bike host programs across the NSP.

Let's explore the active side of alumni membership.

## **Rosemary and David Flynn, Eastern Division**

Notes David, "Spouse Rosemary and I chose to become alumni after mounting injuries made it the most sensible way to continue to serve the NSP. We still ski often with the patrol that trained us and maintain many ongoing friendships.

"We're from the Eastern Division, which has 6,158 patrollers and 1,577 alumni, about a four-to-one ratio [similar nationwide, with our 5,000 alumni]. The fact that alumni aren't scheduled on the hill can be an advantage in performing other duties that require time away from work and family. We still assist our local ski patrols by offering our assistance in the



David and Rosemary Flynn

training of candidates, retraining of regular patrollers, and fundraising.

"We're into fundraising; when the patrol needs added volunteers for a fundraiser, we attend. My wife's company donates \$10 for every volunteer hour each of us spends helping the patrol as part of the company's charitable outreach, and we make sure that money goes to the patrol that trained us. Our overall contribution averages about \$1,000 a year, which is dedicated to patroller training and trips."

The Flynn's contribute to Outdoor Emergency Care training, both candidate training and the annual refresher. "We added an 8-10-week OEC practice dinner; people like the symposium style atmosphere." For more on their story, see the new NSP Alumni website page, "Celebrate our Alumni," and read the article on page 36 of this issue.

## **Jim Swirczynski, Pacific Northwest Division**

An NSP member since 1989, Jim has served as patrol director and in a dozen patrol and division positions. He received National Appointment Number 8612, as well as the Outstanding Nordic Patroller Award (Oregon Region, Pacific Northwest Division, and National), a Silver Merit Star, Yellow Merit Star, and Gold Merit Star. He added lifetime NSP membership in 2011. His expertise keeps the patrol's generator and electrical systems humming for radios and the cabin.

Says Jim, "As an NSP alumni, I appreciate still having access to most of the pro deals and the NSP Online Store. I'm pretty sure that the money that I've saved has more than paid for my lifetime membership. The *Ski Patrol Magazine* and Pacific Northwestern Division *Northwester* and Alumni newsletters help keep me up to date with what's going on with many of the people and patrols that I am friends with and have continued to stay in contact with over the years. I'm happy that I chose to stay



Jim Swirczynski above Crater Lake.





"Doc" Jim Margolis

in touch with my many ski patrol friends by becoming an alumni with my patrol and with the NSP."

#### Dr. Jim Margolis, Far West Division

Not content to be an active alumni with Tahoe's Homewood Ski Patrol and serving as the Far West Division's Alumni advisor, "Doc" Jim was one of the founders of the newest NSP bike patrol, with members acting as trail ambassadors and first-aiders along the 32-mile American River Parkway multi-use trail in Sacramento, California. He heads up Outdoor First Care training for the new bike patrol (see page 25).

Over 50 bike patrollers were trained, as the patrol pioneered online trail training and OFC delivery and physically distanced hands-on training in the face of the COVID-19 pandemic. Since the ARBP debuted in July, its members have been credited with saving a life by administering CPR on the trail, provided first aid to injured park users, repaired flat tires, guided parkway users back to their cars, and removed safety hazards along the parkway. Doc Jim exhibits the highest energy and dedication to the new bike patrol.



NSP patrollers work the Sea Otter Classic.

As we head into another ski season, if you are a patrol representative or region or division director, please keep the Alumni Program and our active alumni in mind. Suggestions include:

- Establish an Alumni advisor for your individual patrol to take the lead on building alumni support, activities for alumni in the patrol (how about an "Alumni Celebration Ski Day?"), and options for alumni who wish to remain active with their old patrol.
- Advise current patrollers of "life after active patrolling" as an active NSP alumni.
- Encourage patrol leadership to retain, and involve, your patrol's alumni and those "contemplating going inactive."
- Share your patrol's alumni advisor's contact information with your region and division alumni advisor so individual patrols receive ongoing alumni updates and tools!

If you are already an NSP alumni, what are your ideas? With your help, additional value and enthusiasm can be added to a well-established alumni program. Let those leaders at the patrol, region, or

division level know of your interest.

Don't overlook alumni perks such as ski pass discounts and access to the NSP Online Store and NSP pro deals. Also, consider joining in our third annual "Alumni Celebration Week" at Whitefish Mountain Resort in Montana, Feb. 28-March 6, 2021.

Finally, alumni and families are invited to volunteer at the annual Sea Otter Bike Classic to be held April 15-18, 2021, for first aid and course marshal work. Held at Laguna Seca Raceway and Fort Ord National Monument, next door to Monterey Bay, California, volunteers receive free camping, a full event pass, lunch, event T-shirt, and their patrol receives a financial donation. Make it an end-of-ski-season vacation to sunny Monterey Bay. For more information on these two events, see the NSP website Alumni page.

To the many thousands of NSP alumni, we welcome your continuing involvement in your local patrol, region, or division. Please share your comments with NSP National Alumni Advisor Tim Viall at [tviall@msn.com](mailto:tviall@msn.com) or (209) 969-3875. Thanks! +



# FUNDRAISING FOR NSP AND YOUR PATROL – THINGS TO KNOW!

BY STEPHANIE ZAVISLAN, NSP ACCOUNTANT

## GIVING TUESDAY

### GIVING TUESDAY IS DECEMBER 1 — RAISE MONEY FOR YOUR PATROL AND NSP!

Giving Tuesday is “a global day of giving fueled by the power of social media and collaboration” that takes place this year on Tuesday, Dec. 1. Many nonprofits take advantage of the day to encourage financial donations from supporters.

National Ski Patrol will be encouraging Facebook Fundraising Campaigns on that day and offering prizes to successful fundraisers and randomly selected members who participate.

Giving Tuesday receives national promotion and attention, so it is a great opportunity to raise NSP’s visibility as a nonprofit and to raise money for local patrols along with the national organization. Facebook may offer to match the first \$7 million in donations given on Giving Tuesday. If they do a similar match this year, we will be eligible.

Anyone who wants to promote giving to NSP and a local patrol can participate. Members and supporters can learn how to participate and set up a Facebook fundraiser through NSP’s Facebook page and forthcoming member emails.

Giving Tuesday is Dec. 1, 2020. NSP’s campaign and competition for prizes will begin Friday, Nov. 20, about two weeks before Giving Tuesday.

All donations to this campaign will be split 50/50 between the identified local patrol and the national organization. So, if Jane from ABC Patrol raises \$1,600 in a Facebook fundraiser, ABC Patrol will receive \$800. If Jane’s friend makes a donation of \$100 via NSP’s online donation page and references ABC Patrol during the campaign period, ABC Patrol will receive \$50. If a fundraiser does not identify a specific patrol, all donations from that fundraiser will go to NSP.

Individuals who create a Facebook Fundraiser Campaign that receives donations will be eligible to win prizes — three for the highest fundraising totals and two randomly selected from all the fundraisers.

NSP will also promote the campaign via our Facebook and Instagram pages, which have tens of thousands of followers.

### PLANNING A FUNDRAISER FOR YOUR PATROL?

Please refer to the NSP Fundraising Guidelines sheet on NSP’s website (under Forms and Documents) to help you plan and execute a successful fundraiser.

Keep in mind things like sales tax licenses and sales tax remittance for merchandise sales, liquor licenses for beer sales, special event liability insurance, tax exemption certificates for nonprofit status, and raffle/gaming licenses. Additionally, do not forget to acknowledge supporters and provide proper tax documentation for charitable giving!

Patrols have fundraisers every season, and entire communities get involved in supporting NSP and patrols for their critical contribution to outdoor recreation. Each state has specific fundraising guidelines. Please follow best practices and comply with all local, state, and federal guidelines regarding legal fundraising and use of donated monies. When patrols accept donations digitally, via PayPal or other credit payment systems, each patrol can choose which system meets its specific needs.

For more information, visit our website at Member Resources/Forms and Documents/Finance/Fundraising Guidelines (08/2019). You may also email [finance@nsp.org](mailto:finance@nsp.org) with fundraising questions. +



Denise de Vines

### PATROLLER AUTHORS BOOK HIGHLIGHTING NSP’S CRUCIAL WORK

Intermountain Division patroller Denise de Vines has authored a 48-page illustrated children’s book called *Danger! Avalanche Warning* about a family ski vacation that results in avalanche rescue by the local ski patrol. The book nurtures a grassroots interest in the NSP Young Adult Program, as well as promoting participation in snow sports.

The book is available for sale in the NSP Online Store. A portion of the proceeds will help support NSP’s Young Adult Program. +





# KEEPING CURRENT WITH TEACHING STYLES

MOVING TO EVIDENCE-BASED PRACTICE

BY DOUG GINLEY, FORMER NSP NATIONAL INSTRUCTOR DEVELOPMENT PROGRAM DIRECTOR



Preparation for toboggan training. Photo by Andre Gonsalves.

*“There is nothing permanent except change.”*  
— Heraclitus

As instructors our goal is always to “get the message across” to our students. A second goal is to provide a learning situation that promotes not only learning, but retention of either knowledge or skills at desired performance levels. To meet these goals, it becomes paramount to determine how best to engage our students. How has this been done in the past? How will we change to do better in the future?

In the past, as an NSP instructor you have undoubtedly been exposed to the learning styles concept. In the National Ski Patrol, instructors focus on auditory (hearing), visual (seeing), and kinesthetic (feeling or doing) learning. As an NSP instructor you have perhaps enjoyed the idea of learning styles, done a “Learning Styles Survey,” and used the concept to help with your teaching. Hopefully when you used learning styles to develop your lesson, the resulting lesson effectively engaged all the students and helped you to “get the message across.” What we understand now, from a significant body of knowledge, is that it is not enough to simply engage our students. We must also structure learning in such a way as to achieve our performance goals.

For the NSP, learning styles have provided a framework for instructional design, and as such, the concept has helped us as

teachers provide what is important for the students.

For our students, we want:

- Engagement
- Learning and Retention
- Focus on the student, not the instructor
- Effective lesson design.

Just as with Heraclitus’ quote, things in the education world have changed. Does knowing a person’s learning style(s) really lead to more effective lesson design and thus better learning? What will lead to the maximum amount of learning and retention? There is a considerable amount of knowledge, known as evidence-based practice, that provides an answer to these questions. Used for over 50 years in the medical profession, evidence-based practice has migrated to the social sciences, specifically to learning. Evidence-based practice focuses on what works to reach our learning goals and helps us adjust lessons based on observed results.

In the last 10-plus years, education researchers have taken a hard look at what best promotes learning and retention and are finding

that designing lessons based on learning styles does not correlate well with effective learning (Clark, 2010; Pashler, et al., 2008). Further evidence shows that learning style surveys do not necessarily provide accurate results (Coffield, 2012).

How does this research fit when there are thousands of anecdotal examples that say learning styles work? Perhaps what is really needed is to improve the idea of learning styles by using a different approach. This is where evidence-based practice comes in.

Rather than throw away the concept of learning styles, we use it as a base to start improving our understanding of new concepts that are driving education today. Our ability to learn is based on how our brains work. The essence of learning in the brain is the formation of new neural pathways (OECD/CERI 2008). New neural pathways are formed when the brain receives information, or data, using our senses (for learning usually hearing, seeing, and feeling). How do we, as teachers, help students to form these new neural pathways?

*What neuroscience casts light on is how the brain acquires, stores and uses information, and what intrinsic and extrinsic factors can limit us from optimizing this process. By understanding more about how humans learn, educators and organizational learning and development professionals can tap the learning capacities of the brain that will drive the learning results toward which they strive. (Vorhauser-Smith, S. 2011)*

To understand learning in terms of neural pathways, here is a simple example. If I were to ask you to name all the months of the year, would this be difficult? Probably not, but if I asked you to name all the months of the year alphabetically, this might prove more difficult. This is because from a young age we have been taught to think of the months of the year chronologically, not alphabetically. Learning the months through hearing them recited, seeing them on a calendar, and living them in order (the three senses for learning) have developed neural pathways that allow us to remember the months in chronological order.

*Researchers have found that we as instructors or teachers can best affect the development of new neural pathways by creating enriched environments. (Friederichs, A. 2020).*

Evidence-based practice helps create an enriched learning environment by focusing on four dimensions:

- **A Focus on Meaning:** meaningful learning, growth in performance, creating processes/products that make a difference in the world, embedding meaning in the context and artifacts of the environment.
- **Support for Each Person:** align each person with their talents — what they like doing and what they do best, create a safe environment for taking risks, create alignment to the values and interests of individuals, create opportunities for professional or personal growth, provide specific feedback.
- **Structure for Each Person:** clear performance criteria, scope, schedule, challenge, and resources.
- **Collaboration that Adds Value:** supporting others, using effective practices such as assessment and compelling goals.

Enriched environments for adult learners include, but are not



It's important to engage your students. Photo by Scott Brockmeier.

limited to, the following:

- **Distractions are minimized:** Minimize any factors that might distract the students' attention, such as a crowded location, the noise of a radio, the ring of a cellphone, and so on. Take into consideration those distractions that relate to physical comfort.
- **Learning builds on prior knowledge:** Whenever possible, help students find a way to associate new information with something they have already learned or experienced.
- **Learning is immediately useful:** Adult learners have a naturally high motivation to learn and want activities to relate to what they currently need.
- **Learning is built up one layer at a time:** Neural pathways are best formed by beginning with something known, then adding to it layer by layer. This means teaching the basics before getting into more specific or difficult knowledge or skills.
- **Learning is based on evidence of learning:** Lesson design is meant to increase comprehension, retention, meaning, etc., by taking into account student experience and the factually based evidence on what works to teach your specific subject.
- **Material is presented using all three sensory modalities (hearing, seeing, and feeling):** Using a combination of these senses helps develop neural pathways.
- **Material is presented by tailoring the teaching technique to fit the subject:** Some subjects need to be taught using specific sensory modalities. For example, there needs to be a "hands-on" (feeling) component to teaching toboggan handling.

Here are just a few evidence-based training methods you can use in your training (Dalto, J. 2019):

- Analyze your learners before training to determine things like level of prior knowledge, etc.
- Design training to match learners' prior/existing knowledge.
- Create learning objectives.
- Reduce training content to the absolute minimum to teach learning objectives and cut out all additional materials.
- Do training in small pieces. Sequence them in a logical order.
- Tell stories.
- Use visuals to illustrate your training point.
- Provide demonstrations and then give workers opportunities to practice.
- Provide helpful feedback based on that practice.





- Use examples.
- Have learners reflect on what they are learning during and after training.
- Give tests, even tests with no stakes or low stakes.
- Use spaced learning/spaced practice.
- Give training that includes opportunities for the learners to retrieve stored information from training.

## CONCLUSION

Starting with the concept of learning styles that we have used in the past, we can now understand that a better strategy for intelligent lesson design is to consider how the sensory modalities of hearing, seeing, and feeling may be used to create neural pathways. We know that new neural pathways form as learning happens. To enhance neural pathway development, we want to create enriched learning environments through the use of evidence-based practice. Enriched learning environments build on prior knowledge, use multiple sensory modalities, minimize distractions, build knowledge or skills layer by layer, are immediately useful, and have lessons designed to fit the subject. Much of what NSP instructors currently do and are taught in the Instructor Development course already leverages off these enriched environment concepts. Evidence-based practice is a successful means of engaging students so they learn and retain information.

The National Instructor Development Committee is working hard

to bring the NSP the best and most effective teaching techniques and methods.

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## TRUEBLEND FLIPCORE



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LIVE THE MOMENT



# BACKCOUNTRY WATER DISINFECTION

## ADVANTAGES AND DISADVANTAGES OF SEVERAL METHODS

STORY AND PHOTOS BY MYRON ALLEN, NSP NATIONAL MOUNTAIN TRAVEL AND RESCUE PROGRAM DIRECTOR

Safe travel in the mountains requires water. You need several liters per day to stay hydrated, and it must be pathogen-free to avoid gastrointestinal misery. This article reviews common methods for water disinfection in the remote backcountry. None is perfect, and most mountaineers' arsenals include several methods.

This article distinguishes disinfection, which refers to the removal of pathogens, from purification, which also includes removal of harmful chemicals such as toxic metals and dissolved organic contaminants. Water purification, in this broader sense, requires processes that are typically unavailable to backcountry travelers. In the backcountry, avoiding chemical toxins means avoiding chemically polluted water sources. This article focuses on backcountry water disinfection.

### THE CULPRITS

The pathogens of concern fall into three categories: parasites and protozoa, bacteria, and viruses. Table 1 lists prominent examples in each category, together with the range of diameters associated with each category. Notice that the diameters of parasites, protozoa, and bacteria are measured in microns (10<sup>-6</sup> meters), while virus diameters are measured in nanometers (10<sup>-9</sup> meters). This size difference has significant implications for disinfection, as discussed below.

**TABLE 1. CATEGORIES OF PATHOGENS IN DRINKING WATER**

Category	Examples	Diameter Range
Parasites and Protozoa	Amoebas Giardia lamblia Cryptosporidium parvum	1-20 microns
Bacteria	Escherichia coli Salmonella Campylobacter jejuni Shigella	0.1-10 microns
Viruses	Enterovirus Norovirus Hepatitis A Rotavirus	20-40 nanometers



Figure 1: You can't always know what is upstream.

### WE HAVE MET THE ENEMY, AND THEY ARE US

The main source of these pathogens in backcountry (and urban) water supplies is fecal waste. Evidence suggests that most instances of gastrointestinal illnesses acquired in the backcountry come from the hands of party members. For this reason, the single most important method for ensuring safe backcountry water supplies is to maintain good sanitation. The following protocols are critical:

- Bury human waste at least 60 meters away from surface-water sources.
- Wash hands thoroughly and immediately after each use of the toilet and before handling food or drinking water.

Even with pristine sanitation, it is still prudent to treat water from backcountry sources. Of special concern are sources downstream of human or animal use. Humans, elk, moose, marmots, beavers, bears, and other critters poop in our wetlands, streams, and lakes, even high above timberline. While most springs, recent snowmelt, and glacial melt in areas remote from human activity are much less risky than more commonly visited streams and lakes, you seldom have complete knowledge of what is upstream (see Figure 1).

### DISINFECTION METHODS

Practical disinfection methods for backcountry travelers fall into four categories: boiling, ultraviolet light, microfilters, and chemicals. Each method has advantages and disadvantages, and sometimes it makes sense to combine methods.

#### BOILING

This is the oldest and most effective way to kill pathogens in a water supply. According to the World Health Organization, bringing water to a rolling boil suffices to inactivate pathogens, so there is no need to keep the water boiling for several minutes. Boiling for one minute provides a reasonable margin of safety to allow for the lower boiling points that prevail at high altitude.

In fact, temperatures significantly below boiling can disinfect water, given enough time. This is the principle behind pasteurization. However, backcountry users seldom carry the instruments needed to maintain the precise sub-boiling temperatures required. You need no instruments to tell when water is boiling.

The main advantages of boiling are that it kills all common pathogens and uses equipment normally carried on extended trips. The





disadvantages include the need to carry enough fuel, especially in subfreezing weather, and the fact that boiling water on the trail requires stopping for a while.

## ULTRAVIOLET RADIATION

For the past two decades, backcountry travelers have had access to lightweight, battery-powered devices that disinfect water using ultraviolet radiation. These devices work by emitting ultraviolet light at wavelengths that break down DNA, making it impossible for microbes to reproduce.

This method has the advantages of being effective against all pathogens and easy to use during short breaks while traveling. It also imparts no taste. The method also has some disadvantages. The devices require batteries, which can run down. A more subtle problem, discussed below, arises with turbid water supplies, in which suspended solids — even at levels not easily detected by the unaided eye — can shield pathogens from the disinfecting radiation.

## MICROFILTERS

There are many brands and sizes of microfilters designed for backcountry use. These devices work by pumping or trickling water through permeable materials whose pore sizes (0.1-0.3 microns) are small enough to block the passage of pathogens. Common microfilter materials include ceramics, fiberglass, and activated carbon. Some filters require pumping, some rely on gravity, and some rely on squeezing or sucking.

Microfilters are effective at removing bacteria and protozoa. Most do not remove viruses, which are much smaller (see Table 1). However, some microfilters incorporate hollow-fiber membranes or materials that adsorb viruses. The main drawback with these virus-removing technologies is their lifespan. Membranes clog, and, more insidiously, adsorbent surfaces can become saturated and ineffective without giving any indication to the user.

Microfilters tend to be bulky, and they require scrupulous care in the field. Turbid water and freezing temperatures pose special challenges.

## CHEMICALS

The most common chemical disinfectants use chlorine or iodine, both of which are effective at killing bacteria and viruses. They are among the most convenient, lightweight options for backcountry users. Chlorine is available in tablet form or as household bleach. Iodine is available in tablet form or as crystals. Disinfection is easy on the trail: add the appropriate amount of chemical, then wait until enough contact time has elapsed — typically around half an hour.

Chlorine and iodine have some disadvantages. Both are effective against viruses, bacteria, and giardia but not against cryptosporidium. Both impart a taste to the water. It is possible to mitigate the taste by adding a pinch of vitamin C to each liter of treated water, after sufficient contact time has passed. Chlorine is safe for long-term use at the concentrations required for water disinfection. However, the World Health Organization does not recommend iodine disinfection as a long-term method or for people with thyroid disorders. The Wilderness Medical Society recommends limiting the use of iodine disinfection to periods no longer than a month.

Chlorine dioxide, distinct from elemental chlorine, is arguably the most effective chemical disinfectant for backcountry use. It is lightweight and easy to use on the trail, coming in tablet form or as



Figure 2: Rock “flour” below a glacier.

a two-part liquid formulation. Chlorine dioxide imparts little taste to water, and it kills protozoa, parasites, bacteria, and viruses. A significant disadvantage is the four-hour contact time required for reliable disinfection.

Table 2 summarizes the advantages and disadvantages of these water disinfection methods.

**TABLE 2: SUMMARY OF WATER DISINFECTION METHODS**

Method	Advantages	Disadvantages
Boiling	<ul style="list-style-type: none"> <li>— Kills all common pathogens</li> <li>— Requires only fire and a pot</li> </ul>	<ul style="list-style-type: none"> <li>— Consumes fuel</li> <li>— Requires time in one place</li> </ul>
Ultraviolet Light	<ul style="list-style-type: none"> <li>— Is easy to use on the trail</li> <li>— Kills all common pathogens</li> <li>— Imparts no taste</li> </ul>	<ul style="list-style-type: none"> <li>— Requires batteries</li> <li>— Loses effectiveness in turbid water</li> </ul>
Microfilter	Imparts no taste	<ul style="list-style-type: none"> <li>— Freezing can crack the filter</li> <li>— Filters tend to clog</li> <li>— Does not remove viruses</li> <li>— Some filters are bulky</li> </ul>
Microfilter with Membrane or Adsorbent	Removes all common pathogens	<ul style="list-style-type: none"> <li>— Cartridges need replacing</li> <li>— Filters tend to clog</li> </ul>
Chlorine or Iodine	<ul style="list-style-type: none"> <li>— Is easy to use on the trail</li> <li>— Adds little weight</li> <li>— Taste can be mitigated</li> </ul>	<ul style="list-style-type: none"> <li>— Does not kill all parasites</li> <li>— Imparts a taste</li> </ul>
Chlorine Dioxide	<ul style="list-style-type: none"> <li>— Is easy to use on the trail</li> <li>— Adds little weight</li> <li>— Imparts only slight taste</li> </ul>	Requires long contact time

## ADDITIONAL CONSIDERATIONS

Backcountry and mountaineering users should be aware of four additional considerations for drinking-water safety: freezing temperatures, cold water, turbidity, and sanitary handling.

As anyone who has camped in deep winter or alpine conditions knows, freezing temperatures amplify the logistical challenges of backcountry water supply. For one thing, melting ice (or snow), even without raising its temperature above 0 C (32 F), requires a lot of energy — roughly as much as you need to raise the same volume of water by 80 C (144 F). A less obvious problem arises with ceramic filters, which can crack if water freezes in them. The cracks can be invisible, but they increase the effective pore size and destroy the filter's ability to remove pathogens. For this reason, it is critical to dry ceramic water filters after use. Some people sleep with their filters in the winter, but this tactic is insufficient when daytime temperatures remain below freezing.

Cold (liquid) water poses a more easily managed challenge. Cold temperatures cause chemical reactions to progress more slowly, so if you use chlorine, iodine, or chlorine dioxide you may need to wait twice as long for the disinfectant to do its work. In addition, with iodine crystals the amount of iodine in solution decreases with water temperature. As a result, disinfecting water at 5 C (41 F) requires twice as much solution as at 20 C (68 F).

Turbidity refers to water's loss of transparency when it contains suspended solids. In backcountry settings, turbidity is often attributable to suspended organic matter, but in drainages below glaciers it also includes rock flour (see Figure 2). Turbidity causes three problems. First, the suspended solids clog filters. For this reason, it is necessary to clean ceramic filters after every few uses and even more often in some environments. Second, suspended organic matter increases the chemical demand for chlorine and iodine, so chemical disinfection requires more disinfectant. The experimental data needed to quantify this requirement is still sparse. Third, turbidity absorbs ultraviolet light, reducing the effectiveness of this method. Unfortunately, our unaided eyes cannot reliably assess turbidity in the field, so in practice there is always some uncertainty when we use ultraviolet light to disinfect water in the backcountry.

Finally, sanitary water handling is essential for safe drinking water. It makes no sense to disinfect water if members of your party reinfest it with dirty hands. A useful protocol for organized backcountry groups includes three elements:

- 1. Planning:** Before the trip, brief all participants on the expected practices for human waste disposal, appropriate methods of hand sanitation, anticipated water sources, and drinking-water safety. In an NSP Mountain Travel and Rescue course, this briefing can be part of the course syllabus, but don't trust your students to read it. Review the expectations explicitly.
- 2. Individual water supplies:** Require each person to collect, disinfect, carry, manage, and consume his or her own drinking water during the trip. Make sure each participant carries at least one effective disinfection method.
- 3. Group water supply:** In camp, establish a group water supply (see Figure 3), using as few trips to the water source as possible. All party members must understand that this water is to be collected and dispensed using sanitary practices and boiled, typically as part of the cooking process, before people can consume it.



Figure 3: Establishing a group water supply.

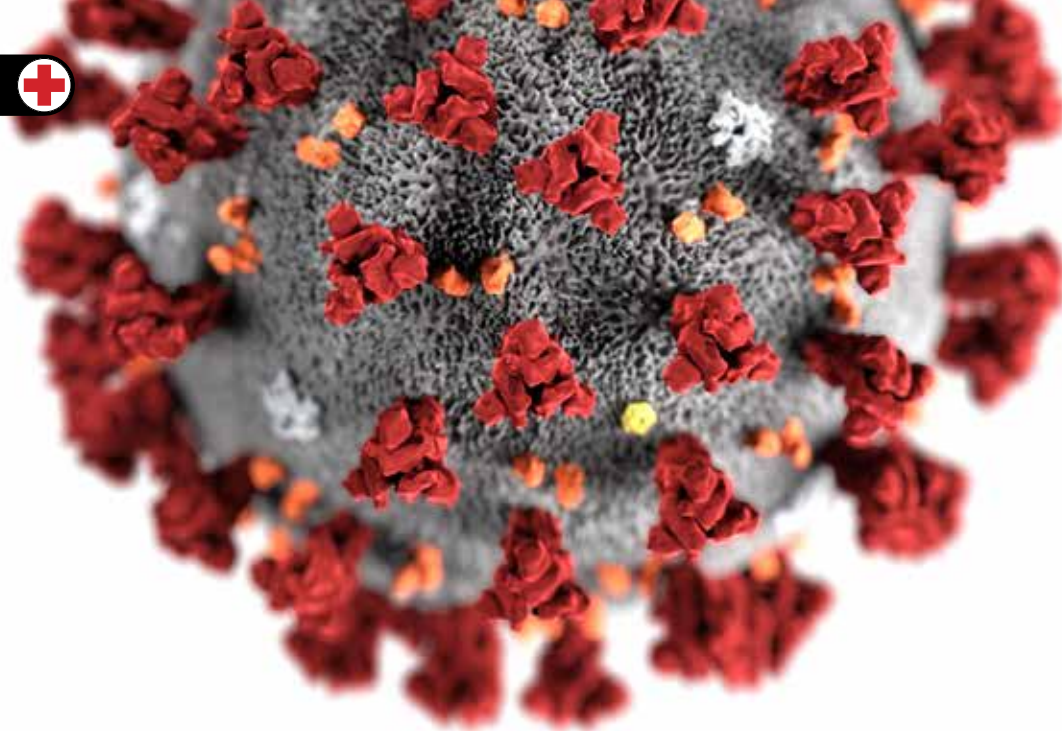
This protocol allows participants to replenish their own water supplies as opportunities arise on the trail. It also helps minimize adverse effects on water bodies near camp, which tend to be an area of concentrated human impact and therefore increase chances for the spread of pathogens.

With a little pre-trip preparation and some common-sense protocols, your party can stay hydrated and happy in the backcountry while avoiding waterborne illnesses.

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# The COVID-19 Pandemic **and You**

## PROTECTING YOURSELF FROM INFECTION

BY CHUCK ALLEN, NSP NATIONAL MEDICAL ADVISOR

### Introduction

China alerted the world in December 2019 of an infectious coronavirus outbreak, and we witnessed vacant streets and airports with the country shut down. The Centers for Disease Control and Prevention press release of Jan. 21, 2020, confirmed the first U.S. case of COVID-19 in the state of Washington. Next, the skiing world was affected on March 14 when the governor of Colorado signed an executive order to close all ski areas in the state. Governor Andrew Cuomo released the executive order “New York on Pause” on March 22, 2020, as the country watched in horror as this new disease turned deadly in New York City.

Our nation has faced many challenges in the past. The response by first responders, medical personnel, and the scientific community has been outstanding. Many voices and opinions have been heard, with new information becoming available at an alarming rate for those trying to keep up. The race for a vaccine has been amazing and appears close to fruition. Sydney Harris once said, “History repeats itself, but in such a cunning disguise that we never detect the

resemblance until the damage is done.” Let’s review history and understand why we use body substance isolation (BSI) and how our new challenges may affect our direction.

### Previous Pandemics

The plague caused by the bacterium *Yersinia pestis* led to three pandemic outbreaks. The first was the “Plague of Justinian” in the sixth century, with half of the world’s population falling to the disease. The Black Death struck Europe in 1347, claiming up to 200 million lives over four years. This plague saw the first use of quarantine, though they still had no scientific understanding of contagious pathogens and how they spread. The Great Plague of 1665 saw the first use of isolation, with infected individuals forcibly shut into their homes and red crosses painted the door.

Smallpox was endemic in Europe for centuries, but when it arrived in North America it devastated the indigenous population. This became the first virus epidemic that ended with the development of a vaccine, which happened

around 1800. Cholera struck England in the early 1800s. Dr. John Snow investigated hospital and morgue records to produce a geographic chart of outbreaks, identifying a city water pump to be the source. Public health research had found its beginning.

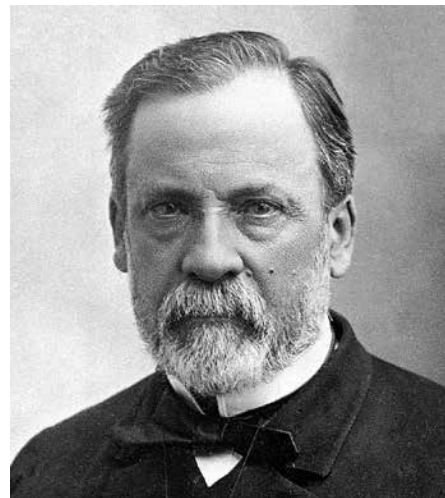
The Spanish flu pandemic of 1918-19 claimed 50 million lives, infecting over 500 million people, or one-third of the world’s population. Many countries revamped their health ministries, and the precursor to the World Health Organization was created in response to the Spanish flu pandemic. In World War I, more U.S. soldiers died secondary to the flu than from the war; it is felt by many that the flu contributed to an earlier ending of the war. Schools and places of amusement were closed; ordinances of “no-spitting” and use of handkerchiefs to cover the mouth were created. Since 2016, the H1N1 influenza virus has spread by respiratory droplets and by contact on surfaces and is one of the seasonal diseases we experience today. There was resistance to mask use like we see today, but there was high compliance in 1918.

## History

In the early 1800s, after having surgery the patient had about a 50% chance of making a full recovery. Surgeons simply rolled up their sleeves and wore the same coat, performing one surgery after another with no scientific awareness of contagious pathogens. Louis Pasteur published his Germ Theory in 1864, and Robert Koch effectively proved that microorganisms cause disease in 1882. Joseph Lister in 1867 published a paper, "Antiseptic Principle of the Practice of Surgery," which suggested using a 5% carbolic acid solution to spray instruments and wounds and that surgeons

wash their hands before and after the operations with this solution. Dr. Gustav Neuber developed a process to sterilize instruments and was one of the first to require gowns and caps in 1883.

Death rates after surgery began to plummet, but the topical solutions used caused a skin irritation to many in the operating room. Dr. William Halstead is credited with having Goodyear create a pair of gloves for his future wife, a nurse named Caroline Hampton, in 1889 to protect her skin. The use of gloves by surgeons and the awareness of their prevention of infection became more widely accepted with the turn of the century.



Louis Pasteur

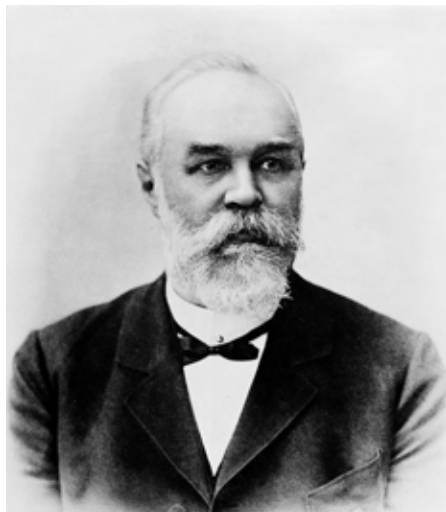
Emergency hospital during the 1918 Spanish flu pandemic at Camp Funston, Kansas.  
Photo c/o Otis Historical Archives, National Museum of Health and Medicine.







“There is still much to be learned and little definitively known, leaving room for wide debate.”



Carl Flügge

Carl Flügge in 1897 demonstrated that ordinary conversation could spread bacteria droplets from the nose and mouth, substantiating the need for an effective face mask to protect the patient while in surgery. There was not widespread use of the surgical mask until the late 1920s. Aseptic surgical techniques including a surgical scrub, rubber gloves, and capping and gowning with surgical drapes was not in widespread use until the late 1950s.

Surgical protective gear was aimed at reducing the risk of infection for the patient. There was little or no concern of risk to the surgical staff from the patient. The CDC introduced “Universal Precautions” in 1985 in response to the HIV epidemic in 1981 and changed to the use of “Standard Precautions” in 1996. BSI was introduced in 1987. *Outdoor Emergency Care: A Patroller’s Guide to Medical Care*, 6th ed., covers this nicely in the section “Protecting Yourself from Disease” in Chapter 3, “Rescue Basics.” The surgical mask or a face covering is designed to protect others from your respiratory emissions infecting them.

The first modern respirators were developed in the early 1900s to protect miners from hazardous dust and soldiers from chemical warfare agents. Healthcare first saw their use in the 1990s in response to drug-resistant tuberculosis and the SARS outbreak in 2003. Respirators

are designed to protect the user from airborne particles most often described as those less than 5 microns in size, also called respiratory nuclei. Respiratory droplets are referred to as greater than 5 microns. The smaller particles can remain suspended and “hang” in air much longer, requiring additional protection. The most commonly known respirator is the N95 mask. The PAPR (powered air purifying respirator) has also been referenced frequently during our current pandemic.

### COVID-19

The COVID-19 disease is caused by the SARS-CoV-2 virus first identified in December 2019 in Wuhan, China. There are four other coronaviruses that are widely spread and usually cause symptoms known to us as the “common cold.” The SARS-CoV-2 virus is most similar to the SARS epidemic of 2003, now renamed SARS-CoV-1. The common symptoms are cough, fever, shortness of breath, and fatigue, but it can present with loss of taste and smell, muscle aches, nausea, diarrhea, sore throat, headache, loss of appetite, abdominal pain, chest pain, nasal congestion, and altered mental status.

There has been an incredible amount of information and research produced in such a short time with the technology and media sources available. There is still much to be learned and little

definitively known, leaving room for wide debate. Unfortunately, there is also nonscientific false information from the press and government officials that has spread, confusing the situation. SARS-CoV-2 appears to be transmitted by respiratory droplets; however, the virus is present in blood, stool, and urine. There have been some controlled studies showing live virus particles in the air for hours and on surfaces for hours to days. Transmission via asymptomatic carriers has also been described. Detecting the presence of a virus is much different from proving that it can cause infection where it is found. There is still a lot unknown about SARS-CoV-2.

On July 9, 2020, in a scientific brief from the World Health Organization, and in a separate press conference given by Dr. Anthony Fauci, the reported current evidence suggests that transmission of SARS-CoV-2 occurs primarily between people through direct, indirect, or close contact with infected people through infected secretions such as saliva and respiratory secretions, or through respiratory droplets expelled when an infected person coughs, sneezes, talks, or sings. Airborne transmission of the virus can occur in healthcare settings where specific medical procedures, called aerosol generating procedures, generate very small droplets called aerosols. Some outbreak reports related to indoor crowded spaces have suggested the possibility



Masking up for COVID-19 symptoms. Photo by Sergeant Sebastian Nemec.

“By wearing a face mask, one does not prevent themselves from contracting the illness, but rather prevents infected asymptomatic individuals from spreading the disease to others.”

of aerosol transmission combined with droplet transmission. A person can shed the virus two days prior to symptoms (only 1-2 days after exposure) and may be contagious for 10 days after they develop symptoms or have a positive test. Also, direct contact with surfaces that have the virus on them can transmit the disease.

The recommendations to “flatten the curve” include hand hygiene, social distancing (more than 6 feet apart), avoidance of crowds, and the wearing of face masks by everyone in public. By wearing a face mask, one does not prevent themselves from contracting the illness, but rather prevents infected asymptomatic individuals from spreading the disease to others. Use of eye protection is not as frequently emphasized but is associated with a decreased risk of transmission in both the community and healthcare setting. These are proven to reduce transmission of the virus.

### Types of Precautions for Infection Control

**Standard precautions** — Perform hand hygiene before and after every patient contact. Use gloves, gown, and eye protection. Practice safe disposal or cleaning of instruments, rescue tools, and linen as guided by your local protocols. Cough etiquette: patients and visitors should cover their nose or mouth when coughing, promptly dispose of used tissues, and practice hand hygiene after contact with respiratory secretions.

**Droplet precautions** — In addition to standard precautions, wear a mask when within 3 feet of the patient and mask the patient.

**Airborne precautions** — In addition to standard precautions, use HEPA filters, mask the patient, and use a certified respirator (N95) when entering a patient room or during an aerosolizing procedure.

### The Future of Ski and Bike Patrolling

It is confusing, but essential, to understand the roles of various agencies when



Full PPE for a COVID-19 patient. Photo By Sergeant 1st Class Matthew Keeler.

we enter a crisis or disaster situation such as the COVID-19 pandemic. The National Ski Patrol and the National Ski Areas Association signed a joint statement of understanding in 2016 that assigns the roles of each agency. The NSP provides the standard of training: this might compare to graduating from a program that prepares you for a vocation by testing your proficiency and providing a certification. The ski/bike area management provides the local policies and procedures with supervision and control of the patrol they are affiliated with. This is the standard of care.

The NSP formed a task force that met weekly for a few months to discuss our role and training recommendations. The NSP Medical Committee, OEC Committee, and Refresher Committee have provided input, and the task force published a document of talking points with frequently asked questions to guide local patrols in their discussions with area management on how they might approach the 2020/2021 seasons. Many bike areas, along with a few summer ski areas, have tackled these concerns in a more rapid response, and we will learn from their experience.

We encourage all patrollers to be engaged

in these discussions with their patrol leaders, as well as section, region, and division leaders and their local area management to provide the guidelines and protocols that serve them best. There are over 650 patrols with a wide variety of area/patrol sizes, along with local, region, national, or even international consumers. This does not even cover the state, county, and local requirements or positive tests of COVID-19 in their area.

I recognize the desire for a “one size fits all” flow chart of how to handle this virus, but this cannot be created. Mentioned above are a variety of voices, politics, beliefs, and opinions. I truly believe that each voice intends to do the right thing, but we as individuals have such varied perspectives. Please be involved. I have learned that one perspective voiced leads to another comment and another and eventually changes to a voice that we all agree upon.

Thank you for what you all do; it does matter, and please stay involved. Years from now we will all stand in reflection of how we approached this crisis. We may have our tail between our legs on some decisions but will gather together on how we overcame the challenges we faced. +





# Addressing the “Riskski” BUSINESS OF SKI PATROLLING

THE NEW NSP OUTDOOR RISK MANAGEMENT (ORM) PROGRAM

BY MARK PETROZZI, NSP NATIONAL OUTDOOR RISK MANAGEMENT PROGRAM DIRECTOR



Marking an accident scene. Photo by Dave Engle.

Ski patrollers are often thrust into the front lines of dealing with a variety of risks while serving the skiers and riders at their home ski areas. Patrollers, whether paid or volunteer, are uniquely positioned (due to the nature of patrol activities) and often asked by area management to perform certain duties that fall under the umbrella of risk management. Until now, an educational program addressing risk management has not been available to the general membership of the NSP (a bit of a disconnect), but that is changing with the development of the new Outdoor Risk Management Program (ORM).

## THAT WAS THEN, THIS IS NOW

Then: Ski patrol duties and activities have changed dramatically since I began patrolling in 1978. Back then, the “hot” car was the Pontiac Trans Am, the first

“Garfield” comic appeared in a U.S. newspaper, there was no such thing as a cellphone, the snowboard hadn’t been invented, and patrollers were pulling tickets for jumping. I skied on 205-centimeter “straight” skis and spent virtually my entire patrol day “patrolling” (skiing), responding to injuries (the most common were lower leg fractures), and various on-snow training (medical and sled work). There was minimal paperwork and just the occasional rope or random piece of bamboo to set. Approximately 90% of our tasks were focused on “post-loss” activities, e.g., first aid/medical response and transportation of the patient, with maybe 10% of our day focused on preventative (“pre-loss”) measures.

Now: Fast forward to 2020 and Pontiac no longer exists, “Garfield” is still

rocking, even 5-year-olds have cellphones, snowboarders make up 40% of skier visits, and virtually every ski area has at least one terrain park. These days, I ski on 174-centimeter “shaped” mid-fat skis and spend virtually my entire day inspecting, installing, and maintaining pads, fences, rope lines, hazard markings, signs, and interacting with guests, along with responding to the occasional injury that requires more time to complete the forms than treat the patient and in certain cases requires me to perform a full post-incident investigation. Now, 90% of our tasks are focused on “pre-loss” activities, e.g., risk management-related functions, and only 10% of our day is dedicated to “post-loss” activities.

So, why is that? For two reasons primarily, the first being that the rate of skiing



Young patrolers marking a boundary rope. Photo by Candace Horgan.

injuries has dropped by over 50% in the last 3.5 decades, and the second, that *Sunday v. Stratton Mountain* happened (the first million-plus dollar verdict against the ski industry). There has been a decided shift from reaction (to injuries) to proaction (injury prevention); from a risk-tolerant to a risk-averse view of the sport (by the skiing public) and operations (by ski area management). So, what to do, what to do?

The National Ski Patrol is in the process of creating a new program, ORM, to address this paradigm shift in patrolling. ORM seeks to complement the existing Outdoor Emergency Care and Outdoor Emergency Transportation programs, from the standpoint of providing educational content that addresses this (often) integral component of many patrolers' daily responsibilities. Patrolers are often asked by ski area management to perform risk management functions without formal training or education. This program will provide background knowledge and practical tools for patrolers to more effectively execute those duties.

The new ORM Program will address topics starting with the (very good) question, "What is risk management?" The answer is it is the practice of identifying potential risks (exposures to harm) in advance, analyzing them, and taking precautionary steps to reduce or eliminate the risk. The ORM Program will

take the patroller from this starting point through the relationship between the NSP and its membership (patrollers) and the National Ski Areas Association and its membership (ski area operators), general risk management and legal concepts and topics, skier legislation, industry standards, generally accepted practices and principles, risk identification and mitigation activities, and personal risk management.

The ORM training and educational content will adhere to the precepts outlined in the Joint Statement of Understanding (JSOU) between the NSAA and the NSP. Much of the program's content will come directly from existing NSAA programs, which have been developing these types of resources for decades and which are already in use at many resorts. In addition to utilizing NSAA's resources in much of the program's subject matter areas, NSP will create original content to address certain subject matter areas within the program. As an example, general risk management and legal concepts, such as inherent risk, assumption of risk, the difference between "safe" and "reasonably safe," etc., in other words, a patroller's "Risk Management 101," will be included. Risk management in common application typically separates activities into two basic arenas: pre-loss and post-loss. The ORM Program will address both. Pre-loss activities address topics such as training and

education, identification and assessment of exposures, and the development and implementation of plans, policies, guidelines, and procedures and related documentation. Post-loss activities typically include emergency/medical response and post-incident investigation and related documentation.

As it is also essential that patrolers have a working understanding of what other on-mountain departments do and how they function, the ORM Program will also provide a general overview of departments such as ski/ride school, terrain park operations, lift operations, lift maintenance, snowmaking, and grooming. This knowledge base will help patrolers work more effectively with these other departments when performing pre- and post-loss risk management activities they may be assigned. Patrolers will be better able to identify what is important and therefore what needs to be addressed, obtained, and often memorialized.

The intent of the ORM Program is to help reconnect on the "disconnect" that was mentioned at the beginning of this article, with the end result being patrolers that are better educated and trained in those areas relating to pre- and post-loss risk management, which ultimately benefits patrolers, the ski areas, and the skiers and riders we all serve. +





# Requesting External Resources

## WORKING WITH OTHER PROVIDERS

BY DICK WOOLF,  
NSP NATIONAL TELECOMMUNICATIONS ADVISOR

In the course of normal operations, ski patrols (and bike patrols) typically arrange for the transportation of ill or injured patients from the first aid room to further care. In summer or winter, patients may be transported by friends or family. More serious cases may require an ambulance, or even a helicopter. The coordination of ambulance or helicopter transfer is typically preplanned. The location of and road access to the aid room is known. The landing zone coordinates have been previously set in the helicopter's navigation system. These prearranged details all contribute to the smooth transfer of the patient for further care.

What happens when the operation isn't "normal," however? What happens when the patient is found after an extensive off-trail or off-area search? What is the plan if the ski patrol is asked to assist in locating and aiding an injured snowmobiler on a forest trail not near any road? What is the plan if a mountain biker decides to go exploring and tumbles off a sharp drop-off away from the marked trails?

These and a thousand other possible scenarios illustrate the need for a cooperative working relationship with other public safety providers and agencies serving the patrol's location.

In order to get help to the patient, you need to know where they are. The patient may be lost. Both Apple and Android smartphones can display the GPS coordinates of where a phone is presently located. Make sure you have the instructions available for both types of devices; they are downloadable from the internet. Instruct the patient accordingly. The patrol can then pinpoint the location by entering the patient's coordinates in Google Earth.

If the patient dialed 911 for help, the 911 center will route the request for assistance based upon the patient's location and in accordance with their existing protocol. If the 911 center doesn't know your patrol is operating, or if they assume because it's not winter you're not available, 911 won't notify you to assist. It is very important that you maintain a good relationship with 911 center management and that you keep them informed of your operational schedule and availability. It is also important that you have a dedicated phone number that rings directly to your patrol dispatch, shift leader, aid room, etc., and that it is immediately answered during all operating hours. 911 will use this number to transfer calls for help to you if the patient is in your defined operating area. They may also call to request your assistance in a multi-agency response.



Mobilizing resources is an important component of accident response.  
Photo by Berkshire East Ski Patrol.

Your patrollers may need to call 911 to request transport of an injured patient from a location other than your aid room. This may involve coordinating with police, fire, emergency medical services, or other first responders who have specialized equipment for off-trail rescue. It is important to have complete, up-to-date maps of your operating area that include snowmobile or hiking trails, where these trails intersect roads, potential landing zones, and similar details.

Patrol leadership should meet with these other first responders to plan for joint operations and clarify details such as radio frequencies and procedures, inventory of each agency's specialized equipment and availability, and how to contact these other groups when assistance is needed.

Advance planning for a multi-agency response will go a long way toward ensuring that a special rescue is handled promptly and professionally.

Questions and comments on this topic may be directed to [telecom@nspserver.org](mailto:telecom@nspserver.org). +





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# POWDERFALL

## Possibilities



A woman's toboggan clinic at Powderfall 2019.

### NETWORKING AND CLINICS HIGHLIGHT OPTIONS

BY TANYA THOMAS, NSP NATIONAL  
WOMEN'S PROGRAM ADVISOR  
PHOTOS BY CANDACE HORGAN



Tanya Thomas (R) and Lauren Vaerewyck-Wroblewski (L) readying to hit the slopes at Powderfall in 2019.



A group enjoying the Women's Program breakfast at Powderfall 2019.

Will it even happen this year? That is the question everyone has been asking about Powderfall. We can only hope that mountain efforts everywhere to help slow/prevent the spread of the coronavirus will be successful and the ski season will happen, but recently NSP leadership made the difficult decision to postpone Powderfall to April 2022 at Breckenridge Resort in Colorado.

The Women's Program will offer some great opportunities for networking and improving patrol and ski skills at Powderfall. There will be the always popular Professional Ski Instructors of America-American Association of Snowboard Instructors women's-only groups, as well as co-ed groups. We are also hosting women's-only toboggan instruction from progressive — starting easy and working up to some tougher terrain — to steep and deep and/or bumps. We have also partnered with the Outdoor Emergency Transportation Program to offer a women's toboggan course led by women OET division supervisors, and we will again offer the "Special Considerations for Training Women," where instructors will share techniques to encourage women and other smaller-build patrollers to finesse the toboggan for confident handling.

New opportunities for women-only courses will likely include a women's intro to avalanche (non-credit) and intro to backcountry. We also hope to have ski meetups where you can just ski with some other rad lady patrollers in attendance.

Other than planning for Powderfall, the Women's Program has been busy planning events from local patrol to division programs. We now have women's programs in all divisions but two. Check out our tab on the National Ski Patrol website (<https://nspserver.org/womens-program/>) or our Facebook page (<https://www.facebook.com/nspnwp/>) for contact information. We should have a Women's Program logoed T-shirt and a Women's Program pin available in the NSP Online Store as well.

See you out there! +

## Bill Black

It is with great sadness that we announce Bill Black's recent passing. Bill dealt with Parkinson's disease for some time, always keeping his spirits up and always the gentleman skier. For those of us that knew Bill, it was the honor of a lifetime.

Bill began skiing in 1953 with the American Youth Hostels, Inc. In February 1957, while skiing at Porcupine Mountain in the Upper Peninsula of Michigan with a National Ski Patroller, we came upon a young girl lying on the ground with a severe lower leg injury. The patroller asked him to assist him in applying a splint that he carried in his pack. Bill was very disturbed by the event and wanted to help and make things even better.

He took an American Red Cross Advanced First Aid course during that summer with the intention of becoming a ski patroller, doing everything he could to help and to improve the handling of injured skiers. In the winter of 1957-58, he took the necessary training at Wilmot Mountain and passed the required National Ski Patrol test and started patrolling.

The following summer, Bill took the American Red Cross instructor training course so that he could teach the winter refresher courses for the Wilmot Ski Patrol. He continued to be an American Red Cross First Aid instructor for about 20 years.

Ed Morrison, the Central Division director, recognized Bill's potential and encouraged him to become more active in training for the patrol. During the next five years, Bill visited ski clubs in the Chicago area to talk about ski safety, how the ski patrol functions, and how they, the skiing public, can help the patrol do a better job of providing our services to them. He also recruited new patrollers. At that time, there were not many ski areas that had patrols, and the public was not all that familiar with the services we performed.

During a film screening in 1962, Warren Miller called Bill to the stage and presented him with his National Appointment Number 2580. During that time, he served as assistant patrol director of Wilmot



Bill Black

Mountain, was assistant region director, was patrol director of the American Youth Hostel Ski Patrol, formed and trained the Allouette Ski Club Ski Patrol, and trained the first members of the Pines Ski Patrol near Gary, Indiana.

In 1964, Bill was appointed as the first national first aid advisor for the National Ski Patrol, a job he kept through 1969. During those five years, he worked with the division first aid advisors to set up and run first aid training seminars throughout the country. He traveled to California; Salt Lake City; Lansing, Michigan; and Andover, Massachusetts. The NSP National Medical Committee eventually came on board and were a great help in providing quality training materials.

In 1964, Bill rewrote the first aid portion of the *National Ski Patrol Training Manual*. In 1965, he directed the filming of a first aid training movie for the patrol that demonstrated eight different injuries and the proper manner in which they should be treated. Titled *That's Why We Are Here*, the National Safety Council gave the movie an Outstanding Award citation.

After the severe, crippling snowstorm of 1967, Bill assisted in the creation of a program whereby the snowmobile companies would provide the patrol with snowmobiles to use to provide emergency services to the general public if another immobilizing snowstorm occurred.

In 1971, Bill was awarded a Yellow Merit Star, and in 1986, he received the Outstanding Ski Patroller of the Year award. In 1994, Bill treated a bad head injury accident to an 11-year-old girl who was not breathing and was unresponsive. He provided treatment and called for the rescue squad, which in turn called for helicopter evacuation. Thankfully, she recovered. Bill was awarded the Purple Merit Star for this.

The Wilmot Ski Patrol received the Outstanding National Patrol Award in 1966 and again in 1986. Bill's efforts and contributions to ski patrol in no small way helped Wilmot receive these recognitions.

Bill retired from active patrolling in 2002 and became an Alumni member. Bill enjoyed 45 years of wonderful camaraderie and personal satisfaction, knowing that he helped many, many people

**John Wiley**  
*Wilmot Mountain Ski Patrol, Wisconsin*

## Lynn Dillard

Lynn Painter Dillard, of Whispering Pines, North Carolina, passed away on Jan. 21, 2020. She is survived by her husband, David Page Dillard, two children, and three grandchildren.

Lynn was born in Pennsylvania and was raised in Douglaston, New York, on Long Island. She graduated from Chatham Hall School and the University of North Carolina at Greensboro, where she met her husband.

She was an expert snow skier, an EMT, and an instructor of Outdoor Emergency Care in the National Ski Patrol. She patrolled for over 30 years and was patrol leader for the Seven Devils and Sugar Mountain ski patrols in Boone, North Carolina. She and her husband helped to start the Southern Division of the National Ski Patrol.

Mrs. Dillard loved to use her skills to assist others in the patrol room and on the hill. Besides her skills on the ski slope, she was an expert horsewoman and had an instrument-rated pilot's license, flying planes of various sizes all over the U.S.

She will be missed.

**David Page Dillard**  
*Past Southern Division Director*

## Merle K. Eldridge

Merle "Knobby" Eldridge, an alumnus of the Swain Ski Patrol in Swain, New York, died March 28, 2020, at his home in Brockport, New York, of a heart attack at the age of 84.

Knobby joined the Swain Ski Patrol in 1979 and patrolled for 35 years, serving with distinction as a patrol director, Outdoor Emergency Care and Outdoor Emergency Transportation instructor, Senior OEC examiner, and Western New York Region OEC Program administrator. He became a Senior patroller in 1987, received National Appointment Number 7221 in 1990, and was given the National Ski Patrol Distinguished Service Award in 2001 for his dedicated service to the skiing public and significant leadership to the ski patrol. He also received the 2011 David Hanning Commendation Award for his cumulative career contributions to Swain.



Knobby's most significant ski patrol contribution was in leadership, including his work as an instructor, his service as a patrol director, and his ability to organize people to get any job done, no matter how complex or far-flung it was. Knobby was also a strong supporter of the Young Adult Program in its early days when it was known as the Junior Patroller Program, and his two sons participated as juniors when Knobby served as the Western New York Region Junior Program advisor.

Knobby was known as a vigorous advocate for the welfare of the patrollers who worked under his leadership and was particularly proud of their accomplishments and of the many region, division, and national awards that they earned. He believed that his facilitation of the achievement of other patrollers was his greatest achievement. The quality of emergency care given to the skiing public at Swain reflects the significant contributions that he made to leading, training, and refreshing patrollers.

Knobby was an avid outdoorsman who enjoyed hunting, fishing, golf, tennis, and skiing. He worked in film and emulsion technology at Eastman Kodak for over 30 years. After retiring, he founded M. Eldridge & Son general contractors, which renovated post offices in Western New York, hiring former Kodak employees who had been downsized when Kodak went bankrupt. Knobby continued working in his company right up until the time of his death.

Knobby was predeceased by his son, Micah; his daughters-in-law, Brenda and Audrey; and his brothers, Richard, Churchill, David, and Ervin. He is survived by his wife of 60 years, Jeanne; his son, Luke; his grandchildren, Dillon and Makayla; his brothers, Adelbert and Earl (Cora) Eldridge; and many nieces and nephews.

As a patroller for 35 years, Knobby contributed every day until his retirement. His accomplishments set an example for patrollers to follow, and he served as an inspirational role model for candidates and seasoned patrollers alike. Knobby was a faithful friend to his fellow patrollers, and his outgoing personality, strong leadership, hearty laugh, and generous manner will be missed by all who knew him.

Nicholas Schiavetti  
*Swain Ski Patrol Alumnus, New York*

## Dr. James F. Feuerstein

Jim Feuerstein, an active member of the Swain Ski Patrol in Swain, New York, passed away unexpectedly on Sunday, May 3, 2020, of a heart attack at the age of 66.

Jim joined the Swain Ski Patrol in 1988. During his tenure in the patrol, he was an active Outdoor Emergency Care instructor, received a Yellow Merit Star in 2015 for leading and teaching OEC, Eastern Division Patroller Achievement Award in 2015, and the 2020 David Hanning Commendation Award for long-term dedicated service to the Swain Ski Patrol.

Jim's most significant ski patrol contribution was his willingness to help anyone, anywhere, at any time. His demeanor with patients was always calm, cool, and collected ... a true professional and a role model for us all. Behind the scenes, he was always ready to help, including keeping track of duty hours for the patrol, teaching OEC candidate classes, or just helping however he could.

Jim's other passions included riding his recumbent bicycle (typically over 3,000 miles a year), as well as sailing, kayaking, and windsurfing on Conesus Lake. As a member of the Geneseo United Methodist Church, he sang in the choir, directed the brass ensemble and youth band, and played trumpet during services. His music extended to several years playing with the Honeoye Falls Community Band. He was also a longtime Geneseo Community Players crew member, flying set pieces for shows. A dedicated Scouter, beginning with his boys' time in Boy Scouts, he continued working to keep the local Scouting program strong. Jim thoroughly enjoyed his time announcing swim meets as the "Voice of the Geneseo Pool."

Jim earned his bachelor's in communication sciences and disorders and a master's in audiology from SUNY Geneseo and his Ph.D. in audiology from SUNY Buffalo. Jim began his career as an audiologist and mobile unit coordinator at the Rochester Hearing and Speech Center. He began his teaching career at SUNY Geneseo, continued at Nazareth College, and retired as faculty emeritus. "Dr. F," as he was called, furthered his teaching as an adjunct instructor at Syracuse University. Following his retirement from teaching, Jim became the board chair for the Rochester Hearing and Speech Center. Jim's passion for his profession extended to his active membership in the New York

State Speech-Language-Hearing Association.

Jim was predeceased by his parents, Arthur and Geraldine Feuerstein; sister, Susan (Richard) Wickey; and stepfather-in-law, Robert Taylor. He is survived by his loving wife, Bethany L. Feuerstein; son, Chris (Amy), of Salt Lake City; son, Brian (Rachel), of Oak Ridge, Tennessee; son, Dan (Alli Baggiano) of Pittsburgh; granddaughter, Nora; sister, Sally (Lewis) Cutler; mother-in-law, Shirley Taylor; sisters-in-law, Deborah (Fred) Johnson, Lynette (Peter) Reeb, and Michelle (Earl) Harris; and several nieces and nephews.

As a patroller for 32 years, Jim was always smiling. Whenever he spoke on the radio, he sounded like a pilot addressing his passengers. He was so comfortable, reassuring, and confident in the job. His presence and dedication to helping others will be missed by all who knew him.

Keith Miller  
*Swain Ski Patrol, New York*

## Deann Jenkins

Deann Sikkema Jenkins, of Cadillac, Michigan, passed away unexpectedly on May 29, 2020, at Munson Cadillac Hospital. She was 63.

Deann was born Aug. 10, 1956, in Clare, Michigan, to Andrew John and Marjean (Winchell) Sikkema, who survive her. She grew up in Midland and Farwell in Michigan, graduating from Farwell High School in 1974 as class valedictorian. Continuing her education at Central Michigan University, she earned a bachelor's in mathematics education in 1979 and a master's in educational administration in 1994. On Aug. 18, 1979, she married her husband, John Jenkins, who survives her.

Her career began at Marshall Green Middle School teaching mathematics and algebra and coaching girls' basketball and softball. She became active in the Michigan Council of Teachers of Mathematics, eventually serving as recording secretary. Due to her work in curriculum development, NASA selected her to attend the NEWMAS



James Feuerstein



Deann Jenkins

Program (NASA Education with Math and Science Teachers) at the Goddard Space Flight Center and presented her with an Honors Teacher Award.

Deann was named to Who's Who Among American Teachers by her former students in 1990. In 1994, she became assistant principal at Pinconning High School. She also continued her work in curriculum development, working with the Regional Mathematics and Science Center at Saginaw Valley State University. In 2001, she moved to the Cadillac area, where she was employed as principal of Mesick Consolidated Schools. She retired in 2010.

An avid and unwavering fan of her beloved Detroit Lions, Deann also enjoyed cooking, boating, gardening, spending time with family, and sewing. It was her love of skiing that blossomed in the Cadillac area. To spend more time with John and avoid being a "patrol widow," she joined the Caberfae Peaks Ski Patrol (CPSP) in 1984. Deann was named outstanding candidate by Section WM3 of the Western Michigan Region in 1985, achieved Senior status by 1988, and was named Section Outstanding Patroller in 1989. In addition to serving as an instructor for Outdoor Emergency Care, CPR, and Instructor Development, she was an instructor trainer in OEC. Deann was elected CPSP patrol representative in 1999 and named Outstanding Patrol Representative for the Western Michigan Region in 2003 and 2005. She was awarded her National Appointment Number 10178 in 2005 and earned two Yellow Merit Stars over the course of her career.

Because of her leadership, the Caberfae Peaks Ski Patrol was designated the NSP National Outstanding Small Alpine Patrol in 2006, an accomplishment of which she was justifiably proud. The after-effects of cancer treatment eventually caused her to retire from the patrol in 2016. In recognition of her distinguished patrol career, Caberfae Peaks included her in its inaugural Ski Patrol Hall of Fame. Her dedication and commitment to the National Ski Patrol reflected in her enduring service; if Deann felt she could help or contribute in some way, whether it was educational or administrative, she did so with enthusiasm and excellence.

Deann's passion for volunteering and helping others was evident in her selfless

giving of her time. She further served as an American Red Cross CPR and First Aid instructor, a member of the Red Cross first aid team at community events, a volunteer at her local hospital, as well as a volunteer crew member with Bay Sail in Bay City, Michigan, on the schooner Appledore IV.

**Mary Sherwood**  
*Caberfae Peaks Ski Patrol, Michigan*

## Jeff Kirschman

Jeff Kirschman, a patroller of 22 years at Whiteface Mountain, New York, recently lost his five-month battle with cancer on Oct. 2, 2019, at 65-years-young. Though his life was cut short, his influence on us all lives on and will be passed on for generations.

Jeff was born on June 25, 1954, and grew up in Burnt Hills, New York. He started skiing at Gore Mountain in 1970 with his whole family. They had season passes at Gore for many years. Jeff graduated with a Bachelor of Science from Syracuse University College of Environmental Science and Forestry, which is run in partnership with the State University of New York. He owned and operated Our Place Pub in Saratoga, New York.

An accomplished string bass player, Jeff had enjoyed playing in the Burnt Hills High School jazz band, and this love of jazz music helped create a laid-back ambience in the pub. He soon welcomed daughter Sarah into the world, who later in life would bless him with two grandsons, Jeremiah and Isaiah.

Jeff moved to the Adirondacks in 1989 and landed in Lake Placid. He began by bartending at Jimmy's 21 and The Laughing Loon. Soon, he would transition to his true calling of being a licensed Adirondack guide. This passion for fly fishing was soon shared with his soulmate of 37 years, Rachel Finn. The two of them spent many joyous years guiding together out of The Hungry Trout in their hometown of Wilmington, New York. For several years, they also guided week-long fly-fishing float trips in the Bristol Bay region of Alaska.

Fishing was not the only passion shared. Jeff introduced Rachel to downhill skiing. They enjoyed this sport recreationally and professionally. Jeff joined the Whiteface Ski Patrol in 1997, and Rachel was a ski instructor.

Jeff also guided upland bird hunting, which brought a series of wonderful dogs into his life, setters Tippet and Bella, who passed, and currently Mister, Nikki, and Riff. Their



Jeff Kirschman

love and companionship were great comfort to him during his difficult illness.

Jeff pursued his passions and created an incredible life rich in love, kindness, compas-

sion, and friendship. His legacy is that his passion lives on and will be passed on and will bring joy.

As a patroller, he always had a kind word and a helping hand. He had a positive influence in all his endeavors: patrolling, guiding, barkeep, and as a cherished member of the community. The patrollers of Whiteface wish Jeff Godspeed on his final sweep; you will not be forgotten.

**Joe Rine**  
*Whiteface Ski Patrol, New York*

## John R. Kowal Sr.

It is with great sadness that the Catamount Ski Patrol announces the passing of one of our most experienced and devoted patrollers. John R. Kowal Sr., of Hudson, New York, passed away on Jan. 20, 2020, at the age of 95. John was an NSP member for over 32 years. His life was one of service, commitment, and dedication to his family and his community.

John served in the U.S. Army Air Corps during World War II and was honorably discharged in 1946. He was an EMT instructor and life member and captain of his hometown volunteer fire department/rescue squad for 50 years. During his tenure as a squad volunteer, he faithfully averaged over 250 calls per year. When John joined the Catamount Ski Patrol, he became an Outdoor Emergency Care and CPR instructor and remained active well into his late 80s.

John's emergency medical services background and personality made him a great instructor. He could always be counted on to use his skills teaching OEC classes and assisting and leading annual refreshers. Whether he was teaching a seasoned patroller or acting as a mentor to a new patrol candidate, he would always present topics in an understanding, engaging, and interesting manner. In fact, with his teaching proficiency and the introduction of oxygen administration to patrolling, his



nickname on the hill was the “O2 professor.” Whether he was on the mountain or in the first aid room, his knowledge and relevant skills were always welcome and often necessary. The NSP instructor ranks and the Catamount Ski Patrol have lost a valuable asset who will be greatly missed.

John is survived by three sons and three grandchildren. He was predeceased by his wife, Doris, and son, James.

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**Fred M. Harder**  
*Former Catamount Ski Patrol Director,  
 New York*

## Jimmie R. Nunn

On March 10, 2020, eight days short of his 93rd birthday, one of the NSP's most steadfast and long-serving members, Jimmie Ray Nunn, of Flagstaff, Arizona, passed away at a retirement home in Phoenix. Never one to blow his own horn, he was an active presence in ski patrol history for 75 years, beginning as a junior patroller in 1944 and rising through the ranks to the second highest position, first assistant national director. Jimmie was a mainstay of the 1960 Olympic Ski Patrol, a protagonist of that patrol for many decades, founder of the Arizona Ski Museum, and, in his working life, a top Arizona architect. My husband Al and I met Jimmie at an International Ski Patrol gathering in Wengen, Switzerland, in 1975 and again the following year in Val d'Isère, France, when he brought along Jerry Nunn, his new bride. We have remained friends ever since.

Born March 18, 1927, in Sweetwater, Texas, Jimmie moved with his parents to Flagstaff in 1934. He started skiing the same year, two years before the first rope tow opened. A star high school basketball player, ski team whiz, and junior patroller, he enlisted in the U.S. Navy during World War II. After his return, Jimmie earned a bachelor's from Arizona State College while simultaneously patrolling and racing. He patrolled for a year at Durango in Colorado while in grad school, receiving his master's in architectural engineering from the Colorado University College of Architecture and Planning in Boulder in 1952. The same year, he returned to Phoenix and started the Phoenix Ski Patrol.

Jimmie juggled an outstanding career in architecture with his devotion to the NSP. His association with up-and-coming Arizona architect Ralph Haver, in 1952, was the prelude to unprecedented architectural

success. No one who knew this unassuming, gentlemanly ski patroller would have dreamt that he was part of a modernist movement that transformed post-war housing. Teamed with Haver, he was the calming presence whose expertise facilitated the boom in affordable homes for returning veterans. Jimmie designed residences, government buildings, and corporate headquarters, among them the eye-catching Revlon Building. He also drew up plans for four in-state ski areas, including the Agassiz Lodge and the first chairlift at his home area, Arizona Snow Bowl. In 1986, Jimmie Ray Nunn was named a Fellow of the American Institute of Architects, an honor bestowed on only the top 3% of his profession.

If possible, Jimmie's professional status paled alongside his commitment to patrolling. I never heard him boast about a single one of his accomplishments. Jimmie occupied successively every position on the NSP ladder, from patrol leader to section chief to region director to Far West Division director to first assistant national director, which he held under Harry Pollard. His proudest moment may have come when, as part of a six-man ski patrol honor guard, he escorted gold medal-winner Andrea Mead Lawrence as she skied the torch down the women's slalom course to light the flame at the 1960 Winter Olympics at Squaw Valley, California.

Serving on the 90-member, all-volunteer Olympic Ski Patrol was a highlight of Jimmie's life. In 1959, NSP National Director William P. Judd hand-picked a vanguard of 48 ski patrollers, all holding National Appointments (Jimmie's was Number 1599), to patrol at the North American Championships, a dress rehearsal for the Olympics. Covering these two events, Jimmie and his cronies patrolled the downhill, slalom, and jump venues, pulled sleds, controlled avalanches, and honed enduring friendships with patrollers from all over the country. After a 5-foot snowfall blanketed Squaw Valley on the eve of the 1960 Games, the U.S. Marines were called in to boot-pack the racecourse. When they flagged and fell by the wayside, the Olympic Ski Patrol took over — a feat recorded in *Life Magazine*. For its performance at the Winter Games, Minnie Dole honored the 1960 OSP as Outstanding Ski Patrol of the year.

As Jimmie rose in ski patrol ranks, he became active on the national level. Elected Far West Division director in 1973, he tended to operate behind the scenes, letting others enjoy the limelight. In 1974, he sat on the

Operations and Executive committees and served as first assistant national director. Re-appointed to the Executive Committee in September 1976 under sixth NSP National Director Charles Haskins, Jimmie headed the NSAA Relationships Committee. After writing the annual report for the Alumni Program (1981 and 1982), he contemplated proposing a major overhaul to incoming NSP National Chair Ronald Ricketts: appointing an Alumni advisor for each division to collaborate on “patrol assistance, retiree recognition, and an Alumni news bulletin” (still admirable if unrealized aims).

The Olympic aura permeated Jimmie's life. In 1976, he married Jerry Colburn, the first woman forest ranger and avalanche expert in the country, whom he had met on the Olympic squad. Together, they spearheaded a dozen OSP reunions over the decades, from 1963-2009. It was the Nunn's leadership and hospitality that guaranteed the group's survival as a cohesive unit until most had passed away.

Admittedly, both Jimmie and Jerry were pack rats. A sideline of Jimmie's architectural talent was reconfiguring a barn on his Flagstaff property to showcase the collections amassed during their dual ski careers. The resultant Arizona Ski Museum housed some 500 pairs of skis, vintage ski outfits, patrol parkas, colorful posters, group and celebrity ski photos, a chairlift, and memorabilia dating back to 1894. Jimmie and Jerry hosted innumerable events in the barn, several OSP reunions, and fundraising fashion shows for local charities.

Jimmie was a founding member and long-time director of the International Skiing History Association from its inception in 1991. He received the NSP Service Recognition Award in 1982, the NSP Distinguished Service Award in 2001, and the Far West Ski Association's Snowsports Builder Award in 2016.

As bighearted as the endless Western sky, with an enormous capacity for friendship, Jimmie embodied the finest qualities of leadership, civility, sportsmanship, and evenhandedness. For 75 years, he gave the National Ski Patrol his self-abnegating best. Trustworthy as Old Faithful, he set an example of rectitude and altruism for our time. Farewell, old friend. Those fortunate enough to have known you will miss you fiercely.

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**Gretchen Rous Besser, Ph.D.**  
*NSP National Historian, 1978-2010*

## Charles Reisinger

You either knew him as Charlie or Chuck. He patrolled with the Hidden Valley Ski Patrol (recently renamed the National Winter Activity Center Ski Patrol) for his entire patrolling career. If you were a patroller or a patroller candidate in New Jersey over the last 24 years, you probably met him. He had a loud voice, contagious laugh, and incredibly expressive facial expressions. He had the art of eyebrow-raising and eye-rolling down to a science.

He may have trained you in Outdoor Emergency Care, Outdoor Emergency Transportation, or both. Maybe you sat near him at a New Jersey Region Spring Awards Dinner, as he never missed them. He called himself “an equal-opportunity offender” and he might have busted your socks, which was a sure sign that he liked you.

Charlie filled his life with things he loved to do and people he loved to do those things with. In high school, he spent every spare minute in metal shop. He became a welder, running his own business for over 45 years working as a gas pipeline welder, an ironworker, and a crane operator “on the side.” One of his more recent side jobs was working for Bay Crane with both of his sons for two years.

Another of his passions was motorcycles. Charlie would often show up at a ski patrol function in full leathers with a huge grin on his face. His sons joined him in this passion as soon as they were old enough, and they spent lots of time riding together. An annual family tradition was attending a dual sport ride at Michaux State Forest in Carlisle, Pennsylvania.

Yet another of Charlie's passions was scuba diving. He enjoyed wreck diving off the New York and New Jersey coasts, along with diving trips to the Bahamas. The best treasure he ever found was Barbara “Bobbi” Voswinkel, whom he met while working as an assistant

dive instructor at William Patterson University in 1980. They married in 1985, and their shared love of laughter and skiing were just two of the many reasons their marriage was so successful.



Charles Reisinger

Charlie began skiing after he graduated from high school, driving his Rambler to Craigmeur after work to get in some runs with his cousin. Over time, he and Bobbi began to bring their boys skiing at Hidden Valley. A random fall brought patroller Don Brady down Highland Swing, asking if Bobbi and Drew were all right. They were fine, but Don and Charlie started chatting, the family was invited to join the BBQ at the top of the mountain, and the rest, as they say, is history.

Charlie officially became a member of the Hidden Valley Ski Patrol on Jan. 1, 1996, and within two years earned his Senior. He was the epitome of a dedicated patroller. He didn't just give one shift a week to the patrol, he gave it his all. He jumped into the instructor program with both feet, becoming an OEC and OET instructor, as well as a lift evacuation instructor. For 10 years, he was the instructor of record of the patrol's OEC class. He also became a Senior OEC trainer/evaluator and OEC instructor trainer.

Until recently, he served as the Saturday morning mountain leader. He also helped at the Hidden Valley Ski Patrol's main fundraiser, the annual ski swap, from 1996 on.

A year after he joined ski patrol, Bobbi became a patroller, and both sons became patrollers as soon as they were old enough. The four Reisingers were fixtures at every patrol event. Bobbi was the OEC IT for all 10 of the OEC courses that Charlie ran, and the boys were patients. They even incorporated patrolling into their holiday traditions. Often, they would spend Christmas morning opening the mountain instead of presents and enjoying Bobbi's homemade waffles in the patrol shack.

In 2003, he received Hidden Valley Ski Patrol's Patroller of the Year Award. In 2006, he received National Appointment Number 10332. In spring 2019, he received the New Jersey Region Patroller of the Year award. The last and most poignant award was the NSP's Distinguished Service Award, which he received at home on Nov. 19, 2019, surrounded by his family, patrol and region leaders, and many patrollers.

Charlie's life was nonstop, Chuck-full (pun intended) of everything he loved. He found joy in everything. We will all miss him more than words can say but wouldn't have missed a moment for the world!

Joni Porter  
OEC classmate

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## James Reneau

On Thursday, July 21, 2019, the Canaan Valley Ski Patrol lost one of its beloved patrollers when James Reneau passed away after a brief illness. Jim was the first of three Reneau family members to join the Canaan Valley Ski Patrol. He was later joined by his brother, Paul, and his son, Jeremy. Prior to joining the patrol, he spent several years on the Canaan Valley Resort's courtesy patrol. Jim went on to become a member of the volunteer patrol staff and then a member of the paid patrol staff at Canaan Valley Resort.

Jim served Canaan Valley Resort, the Canaan Valley Ski Patrol, and the skiing public for 12 years. During that time, he assisted with the patrol's Outdoor Emergency Care program as both an instructor and evaluator, the lift evacuation program, and was a skills evaluator. Jim was a teacher and mentor to many of our patrollers.

Jim was a lifelong educator. He began his teaching career as a science teacher in the Taylor County School System and served in this capacity for three years. He changed his focus when he helped establish and run the outdoor education program for the school system. This was one of Jim's true passions. He led the outdoor education program for 10 years before changing direction, entering the administration of education. Jim remained in education administration for the next 20 years before retiring to spend more time with his family and ski patrolling at Canaan Valley Resort.

Jim enrolled in the Outdoor Emergency Care program in July 2006 and began patrolling in January 2007. As a patroller, he is remembered as a leader, teacher, mentor, and above all a friend to all. In discussions involving patrolling, ski skills, lift evacuation, patient care, teaching and mentoring, and patrol management, Jim provided well-thought suggestions and insights. While talking with Jim, you would immediately understand his ability to teach and to mentor, his values, and his passions. Jim was a quiet individual, so when he did speak up, he was listened to.

Jim was involved for several years, at the patrol level, with the Gathering of Mountain Eagles (Wounded Warriors) and the Special Olympics West Virginia. In 2017, after almost 12 years of patrol association, Jim retired from the Canaan Valley Ski Patrol to spend more time with his grandchildren.

Jim had an easy manner when he interacted with the patrol members, ski school staff,

other resort staff, and the skiing public. He was looked up to by members of the patrol for his insight in both patrol general and patrol administrative processes. Even though Jim had retired from patrolling, he spent a considerable amount of time at the resort with family. Jim had an easy-going manner, and it seemed as though everyone he talked to was his friend. It is often said of many people that they leave a large pair of shoes to fill. In Jim's case, this is quite true. Jim will be missed by family and friends alike.

**Bryant Hall**

*Canaan Valley Ski Patrol, West Virginia*

## James Roberts

It is a very sad time for us at Cataloochee. On Oct. 23, 2019, James Richard "Rick" Roberts III, age 72, passed away in his Johns Creek, Georgia, home.

Rick grew up in Atlanta, attended Southwest High School, graduated from the Georgia Institute of Technology in 1970, and later received his master's in divinity from Asbury Theological Seminary.

Rick was an Eagle Scout and very active in the Georgia Tech community. He was, however, most proud of his work in International Missions and his three grandchildren.

Rick was preceded in death by his wife, Joyce Calhoun Roberts, and is survived by his son, Richard; daughter-in-law, Lindsay; and three grandchildren, Kathryn Grace, Luke Thomas, and Noah James.

Rick became a member of the National Ski Patrol in 1971. He was a Senior patroller and received his National Appointment Number 6138 in 1984. Rick served the Cataloochee Ski Patrol in almost every leadership position, including patrol representative, assistant patrol representative, team lead, training officer, and Outdoor Emergency Transportation instructor. Rick filled many roles, including acting as manager of the patrol SWAP Shop, facilitator and manager



James Roberts

of the patrol's accountability software, and architect, designer, and facilitator of the patrol room remodel. Rick designed the original Cat

Patrol Patch (Rust, Blue, and Gold in color) and posed for a Cat Patrol picture cuddling a baby Bengal tiger.

Rick served as the Dixie Region Proficiency advisor, OET examiner, and OET instructor trainer. He also served the Southern Division as assistant division director, region director, section chief, and, most recently, as the Alumni and Elections supervisor. At the national level, he served on several committees over the years, including the Ski and Toboggan Training, Alumni, and Election committees.

Rick's wife, Joyce, passed away when their son, Richard, was five years old. Rick and Richard raised each other. Rick attended Georgia Tech and received a degree in industrial management. His start in the ski industry came as the general manager at the then-new resort of Sapphire Valley. He then owned and managed his own high-end construction company in the Atlanta area.

He later decided to follow his calling to the ministry. After graduating from Asbury Theological Seminary, Rick began working with various organizations and finally with The Mission Society and churches in the U.S. to establish and grow international missions at the church level. He also worked with churches abroad in Ukraine, Kenya, and Brazil to help equip leaders within local churches to better serve the community and their specific needs (clean water, poverty, etc.).

Rick was well known for his "brief" phone calls. At one point a few years back, my wife texted me "1 hr. 47 min.!" My immediate reply was, "What is Rick calling about?" When you were engaged in conversation with Rick, you were well-engaged and for an extended time period. Rick loved Cataloochee and his patrol family. In conversations with many patrollers since Rick's passing, I realize that he was very in tune with the trials in many of our lives and offered counseling and prayers. Not only was he present for us in our time of need, he continued to follow up after time had passed and others had moved on.

Thank you, Rick, for your influence on our lives and our patrol. You were a great friend to so many and had a true and honest heart. You are missed. Although gone, you will never be forgotten. Rest in peace, our friend.

**Wayne Morgan**

*Cataloochee Ski Patrol, Tennessee*

## Bob Skaggs

Samuel Robert “Bob” Skaggs passed away on Feb. 20, 2020, after a long and beautiful life, surrounded by his family. He leaves behind a legacy of family and friends who were inspired by his passion for the mountains, skiing, ski patrol, and community service.

Bob was able to enjoy his last day of skiing this past December. It was a beautiful, bluebird day at Ski Santa Fe with his lifelong skiing partner and wife, Barbara, who is a fellow patroller, and his daughter, Kathy, also a fellow patroller.

Bob started his ski patrol service in 1968 at Sandia Peak Ski Patrol in Albuquerque, New Mexico. He was inspired to spend more time with Barbara, with whom he had five children and who was a Senior patroller at the time.

Bob and Barbara settled in Los Alamos, New Mexico, after graduate school, and they joined the Pajarito Mountain Ski Patrol in 1971.

Bob was a force of nature as a patroller. After becoming a Senior patroller, he continued on to become an American Red Cross first aid and CPR instructor, a toboggan trainer, and a judge for Senior testing. He took the Circle M and Circle A courses early in his patrol career and eventually became a Mountaineering and Avalanche instructor, providing instruction and support for countless NSP programs over the years.

Bob also co-authored the first three editions of the *National Mountaineering Manual* (1978) with Barbara and several other patrollers from the Rocky Mountain Division and Far West Division (including Hans and Peg Martin).

Bob was the communications officer for the Pajarito Mountain Ski Patrol for 16 years. He loved amateur radio and communications, and he shared his wisdom and experience with the *National Patroller Newsletter* on communications.

Bob took his role as a leader to heart and served as a mentor to the newer ski patrollers. He and Barbara were integral to the Pajarito Junior Ski Patrol Program. They were also very proud that all of their five children also became patrollers!

After retiring from active patrol, Bob dedicated his time to recording the history of the Pajarito Mountain Ski Patrol and

some of the Rocky Mountain Division’s history, including annual days open, first snowfalls, patroller rosters, and patrol directors. He was a huge help in organizing the 50th, 65th, and 75th anniversary celebrations for Pajarito Mountain.

Bob supported the NSP his entire adult life. He rarely missed a division meeting. He attended many Patroller Education Conferences, including the National Ski Patrol 75th Anniversary Celebration held at Winter Park Resort and Ski Cooper in Colorado. He proudly wore the NSP logo wherever he went.

In addition to his incredible service to the Pajarito Mountain Ski Patrol, he was also an athlete in the Transplant Games of America and the World Transplant Games. In 1996, Bob received the lifesaving gift of a kidney transplant. Being forever grateful for his “second birth,” he represented New Mexico and the United States both nationally and internationally for over 24 years. He won over 76 medals overall!

Bob holds a special place in the hearts of the Pajarito Mountain Ski Patrol and the Los Alamos community. He always had a grin on his face and a story to tell, and there was nothing he loved more than a good day on a snowy mountain.

Thank you, Bob Skaggs, for your service and your inspiration!

### Pajarito Mountain Ski Patrol



Bob Skaggs



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# WRITE A CAPTION FOR THIS PHOTO

Send *Ski Patrol Magazine* your captions for the photo to the right. Scribe of the winning caption will receive a \$25 gift certificate to the NSP Online Store and recognition in the next issue. Send entries to [editor@nsp.org](mailto:editor@nsp.org), or mail them to 133 S. Van Gordon St., Suite 100, Lakewood, CO 80228. Only NSP members are eligible. Remember *SPM* if you have a humorous photo for next issue's caption contest. Send it in high resolution (at least 225 dpi) to [edi-  
tor@nsp.org](mailto:editor@nsp.org).



Congrats to our winner, Debby Riehl of the Summit at Snoqualmie Central Ski Patrol, and thanks to everyone for their submissions. Thanks to Daryl Whitcher, of the Dodge Ridge National Ski Patrol in California, for the photo.

## WINNER

"Why it's best not to annoy the snowmaking crew."

— Debby Riehl, Summit at Snoqualmie Central Ski Patrol, Washington

## HONORABLE MENTIONS

"We're gonna need a bigger shovel."

— Mark Dobrowolski, Big Snow American Dream Ski Patrol, New Jersey

"I told you that beer in the fridge belonged to the groomers and not to touch it."

— Mark Drizing, Camelback Ski Patrol, Pennsylvania

"It's the YAP's turn to shovel."

— Ben Swenson, Copper Mountain Ski Patrol, Colorado

"Yes, Bill, your 'Snow Dance' worked again."

— Franklin Saylor, Lassen Volcanic Ski Patrol, California



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\*EPA-estimated highway fuel economy for 2021 Subaru Crosstrek Sport and Crosstrek Limited models. Actual mileage may vary. <sup>†</sup>MSRP excludes destination and delivery charges, tax, title, and registration fees. Retailer sets actual price. Certain equipment may be required in specific states, which can modify your MSRP. See your retailer for details. 2021 Subaru Crosstrek Sport shown has an MSRP of \$28,095. Vehicle shown with accessory equipment.