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Is Hiking With Face Masks The New Normal?

People move to the Pacific Northwest to be near incredible natural beauty. But each year, wildfires and rising temperatures are making it harder to go outside.



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Late last August — a few days before a backpacking trip — my friend Ashley texted me in a group chat: “Wudan, do you have enough N95 masks for everyone on this Enchantments trip? Keeping an eye on the smoke forecast.”

Ashley had scored a coveted permit to camp in the Enchantments, an area in the east-central Cascades of Washington state. Studded with sparkling, high-elevation alpine lakes and rugged, foreboding granite peaks, it’s one of the most regulated regions for backpacking in Washington. The only way to get a permit to camp in the area in advance is through a lottery (you can also get permits the day of), and last year, 21,605 people entered in mid-February, vying to win one of the 3,027 spots.

She asked me if I had N95s — face mask respirators that filter out dust and airborne particles — because I frequently visit cities in Asia that have heavy pollution and I often order them in bulk. And while there hadn’t been much need to bring N95s on summer backpacking trips before, we were anticipating smoke and ash from wildfires that were ravaging the western United States.

I said I didn’t have any left, and our friend Jane piped in. “Any clue where to get these in town? The smoke is really getting to me today and imagine it will not be better going up Aasgard.” Aasgard Pass is a section of the Enchantments that gains about 2,200 feet in 0.8 miles — which means hikers need all the unadulterated, oxygenated air they can get. Most stores in Seattle were sold out. The closest Home Depot with N95s in stock was in Issaquah, a town about 20 minutes outside the city.

In the days leading up to our backpacking trip, ash was falling from the sky and the blood orange sun looked apocalyptic. It wasn’t always like this. I’ve lived in Seattle for about three years, but the smoke from wildfires has only been noticeable the last two summers. One of the major draws of moving here was the access to the outdoors: Drive a few hours in almost any direction and you’ll soon be in the tranquil mountains. And I’m not the only one who heard the siren call of the wild: One recent survey found that newcomers to Seattle — the majority of whom are millennials — cited access to the mountains as one of the reasons they moved here.

But climate change has already transformed the Pacific Northwest. Rising greenhouse gases and sea levels have already affected where the frontline coastal and indigenous communities in Washington can hunt and fish. In 2015 there was a drought, and for the past two summers, the sky has been choked with wildfire smoke.

Climate scientist Amy Snover directs the Climate Impacts Group at the University of Washington, a research group that studies how climate affects communities in the northwest and western US. Its research shows that the changes we have begun to see in recent years — drought, wildfires, and reduced snowpack — are only projected to get worse. Climate scientists expect warming temperatures to change winter precipitation

patterns, which can impact snow sports and revenue that ski resorts bring in. (One report said that climate change could possibly decrease revenue from skiing or other snow-based recreation by 70% every year.) And not only are climate models predicting that there will be warmer summers, said Kathie Dello, a climate scientist at the Oregon Climate Change Research Institute, summers might also become drier, making wildfires more likely and worsening the air quality.

The catch-22 is that outdoor enthusiasts also contribute to a warming climate. After all, we use our gasoline-guzzling, carbon-emitting cars to get outside in the first place, though that accounts for only a small fraction of total global emissions. But there's no denying that climate change affects how people spend their outdoor leisure time, from diminishing snow for skiers to hazardous climbing conditions. As I heard someone ask in a plant shop last year, "Do we go hiking with a face mask, or not go hiking at all? Because that's where we're at right now."



On any clear day in Seattle, you can get unobstructed views of all the mountain ranges in the state as you drive through town. Washington is home to the most glaciers of the lower 48 states, and so every year, droves of people flock here in the hopes of summiting the 14,111-foot-tall Mount Rainier, or Mount Baker, which looms close to the Canadian border.

Alpine guides who shepherd these mountain climbers along spend dozens of days every year on this terrain and are seeing the changes wrought from melting ice firsthand. When

Kel Rossiter, an Alpine guide in Seattle, was leading a party of two up Mount Baker last year, he passed a pile of snow. A hanging glacier on a nearby peak had been pushed off the cliff and had fallen onto the Coleman-Deming trail, the most popular route up Baker. “Thousands of people climb this route a year, and it was shotgunned with chunks of ice, some larger than houses,” said Rossiter. He also said that the most-traveled route up Mount Rainier is getting more difficult to climb over time as glaciers recede. “That route is constantly changing, and you have to find a new way around crevasses. But these days, these changes are happening quicker, which requires more route-finding to work your way around an increasingly fractured glacier,” he said.

Because hotter summers mean that glaciers will continue melting later in the season, some guides are starting their routes earlier in the year. But that poses other risks. “The glue that’s holding these volcanoes together is ice,” said Rossiter. “As that ice melts, there are more things coming down, which increases the hazards.”

Warmer days in the alpine could mean rain where there used to be snow and could thus lead to an increased avalanche risk. Although avalanches do happen year-round in the Northwest, rain can make the snowpack unstable. Sometimes guides won’t travel those routes if they deem the hike unsafe, or they take other routes that can be more grueling or circuitous. Sometimes, it means hiring more personnel to manage travel on glaciers, as some crevasses — deep cracks in the ice — are opening up weeks, if not months earlier, says Katherine Hollis, the conservation and advocacy director of The Mountaineers, a nonprofit outdoor organization that teaches skills and organizes trips for those passionate about the outdoors.

“We want to be flexible,” says Jason Martin, a guide at the American Alpine Institute. But he’s concerned that perhaps one day, the impacts of climate change on climbing mountains like Rainier and Baker will be too much to handle. “But how will we bob and weave the future of this industry?” And to what extent will and can we find ways around obstacles posed by climate change?



Growing up in Alpentel, a small town tucked near a ski resort in Washington, Solveig Waterfall, a 36-year-old alpine guide loved to ski. But over the years, she's noticed the seasons for ski areas have changed. Before, she recalled, most resorts opened around Thanksgiving and closed in early May (some people skied in their bikinis for Cinco de Mayo). But within the last decade or so, resorts at lower elevations, which tend to get less snow than their higher-elevation counterparts, have been opening in December and closing in early April. "The season is getting squeezed from both sides," she says.

Climate change is generally disappointing news to skiers, who usually associate winters with a powdery wonderland. "When it's gray and raining in the city and everybody's complaining, you're really excited because it means it's snowing in the mountains," says Snover. But because of rising temperatures, that might not be true anymore — at least not all the time.

Some ski resorts are taking measures to offset potential impacts of variable winter precipitation. Starting in 2017, Crystal Mountain Resort near Enumclaw, Washington, invested \$5 million in snowmakers for lower-elevation trails and were able to open the day after Thanksgiving using manufactured snow.

Even so, the resort doesn't see snowmaking as a permanent fix for climate change. "It's a Band-Aid," says Erica Kutz, the brand marketing coordinator at Crystal Mountain. The machines work best when it's cold and dry — which means wetter winters might limit the long-term effectiveness of that approach.

Holly Beale, a program manager at Microsoft who moved to Seattle in 2015 and likes to backcountry ski, has had to make do with these changing conditions too. She says that avalanche conditions this year have been so unstable, unreliable, and dangerous because of heavy snow followed by rain, that she's relegated herself to skiing in resorts, which tend to be more crowded. And instead of skiing around Washington, she's traveled to places with higher elevations, like Whistler, Canada.

Avalanche meteorologist Robert Hahn at the Northwest Avalanche Center is concerned that the future will bring less skiable terrain, which could force more skiers onto the same trails. As a result, there might be more human-caused avalanches.

Because snow will melt faster under warmer temperatures, trails that are usually covered in snow earlier in the hiking season might eventually suffer from soil or trail erosion. "It means mud and more wear and tear on those trails," says Hollis of The Mountaineers.

Activities such as whitewater rafting are also dependent on how much snow there is in the mountains. Already, rafting guides have seen the impacts during seasons with lower-than-average snowpacks, or seasons where the snow melts out rapidly.

Dustin Basalla, owner of the rafting company Alpine Adventures in Gold Bar, Washington, says that because the snow melts faster every year, the seasons for whitewater rafting are shorter. "We can only raft as long as there's snow," he said, since whitewater rafting can only be done on free-flowing and not dammed rivers. The 2015 drought caused one of the worst years for whitewater rafting, as the season for whitewater ended June 20 — shaving nearly two months off a typical season. For Basalla, this was a wake-up call.

To work around the shorter whitewater season, Basalla started bringing clients to the Suiattle River, which melts later in the season, and to the Skagit River, which is dammed and therefore reliably has water for rafting — although the rapids are gentler. He also started operating a mobile whitewater company, stuffing all the gear in a van and traveling around the state of Washington in search of rapids. With shrinking windows for whitewater rafting, Basalla thinks that companies will have to charge more for it in the future. "It's a rarity, a luxury," he says.

Anglers are also feeling the squeeze. Warmer ambient temperatures mean warmer water temperatures, which translates to poor fishing conditions. The ideal temperature to fish salmon and steelhead trout — two species well known in the Pacific Northwest — is

when the water is in the 40s to 60s. “If you get above 60, you’re getting water temperatures where the fish will be deprived of oxygen,” says Dave McCoy, the owner of Emerald Water Anglers in Seattle. “Any additional exertion the fish endure by being pursued by anglers exhaust them to a point of nonrecovery” — even if you practice catch and release. In recent years, he has had to stop fishing in rivers earlier than he would have liked because melting snow and heavy rains caused flooding, effectively washing out all the spawning salmon.

When I asked McCoy about the future of fishing in a climate-changed Pacific Northwest, he said, “I’ve seen the writing on the wall. I see it every day. But I’ve started to shift our customers to carp and warm-water fishes that will survive climate change, if it were to land heavy on us in the next 10 to 15 years.”



Before I moved to Seattle, I was told that it rains here for eight months and then you have four glorious months of sunshine and perfectly temperate weather.

I don’t feel like I’ve been brought here on a false promise. The Pacific Northwest is still maddeningly charming. From my apartment atop a hill, I can walk five minutes east and get a sweeping view of the Cascades, or stop at the closest intersection and glance at the

Olympic Mountains. On a clear day, I get a breathtaking view of Mount Rainier when I bike to my climbing gym.

I frequently think about a term coined by fisheries biologist Daniel Pauly — “shifting baselines syndrome.” Pauly realized that fisheries were in decline, and for every generation of scientists who would bear witness to each step of that change, their observations would be their “normal,” the baseline that they would measure all subsequent changes against in their lifetimes.

As more people continue to move to Seattle, their version of what “normal” looks like will be different from those who have lived here longer. People have already normalized the wildfire smoke — they joke that there are now five seasons: winter, spring, summer, smoke, and fall.

Barry Devenney, an avid skier who works in advertising, calls the changes in our altered environment “global weirding.” This February, when Seattle had its snowiest February on record, accumulating more than six inches on two separate days in the course of a week, Devenney strapped on his skis at his doorstep in West Seattle. He skied through Schmitz Park, down to Alki Beach, and out to the water’s edge and did laps along the beach. “I never fail to play with skis when there’s enough snow to do it,” he told me. “But I’ve never had a snowpack that lasted for three days, and I’ve never skied along the waves on the beach at sea level. You gotta take it when you can.”

Learning to change outdoor plans quickly is becoming more and more common for folks who schedule their hikes well in advance, as Rachel Edelman, 32, has learned from her own backpacking excursions. She moved to Seattle five years ago from Boulder, Colorado. “I was really looking forward to moving to the Pacific Northwest and living somewhere that had a wetter climate,” she says. “Colorado is just fires, fires, fires, everywhere all summer. I got really tired of that.”

Moving to Seattle hasn’t been a total reprieve. When the smoke was particularly bad the last two summers, Edelman limited the amount of bike commuting she did to work. And as an avid hiker and backpacker, she’s had to reroute backpacking trips because of wildfires. Three seasons ago, she and a friend had planned an overnight trip near the Columbia River Gorge in June. When they called the ranger station to get an update on trail conditions, the ranger told them that the air quality was really bad down there. Edelman and her friend chose a different trail further north, where it was torrentially rainy instead.

Maybe hiking with N95s is the new normal for us. Maybe in the future we’ll be skiing more on manufactured snow. Maybe people are more likely to climb mountains on exposed rock as glaciers recede. We need to be realistic, and we need to be prepared to

adapt. We also need to realize that what we perceive to be normal today might change in five or ten years.

In meditation, there's this idea that while you can't change what happens to you, you can change how you react to it. This mindset allowed me to cope with the long, dark, gray winters and the shorter days in early fall.

And reporting this story made me realize how stark some of the changes to come may be, and how important it is to take steps to reduce our own carbon footprint so we might be able to intentionally shape the world we want to live in. The reality is that as long as we are living, breathing, and using the world's resources, we are also contributing to changes in our climate. But each of us can take individual actions that reduce our carbon footprint. Beale, and most people I know who enjoy getting outside, commutes by bike during the workweek, and we use cars — and carpool — when we do go to the mountains. I've chosen to not have children. Beale is also vegan.

As for our Enchantments trip last year, we got supremely lucky. Winds swept the smoke away and we were treated to four days of bluebird skies. When I made it to the top of Aasgard Pass and mountain goats wandered around me in search of food, I recall looking down at the inviting, aquamarine waters of Colchuck Lake — one that's fed by melting snow. I noticed that the water levels were way lower than they were earlier in the same season. Could I possibly imagine a world where something so stunning could be gone? I could not. To me, natural gems like the Enchantments are worth saving — and worth fighting for. ●

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