

IS YOUR WAY OF LIFE ON SNOW IN PERIL

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LET'S TALK ABOUT CLIMATE CHANGE

By Karin Kirk

1932



T.J. HILEMAN, COURTESY OF GLACIER NATIONAL PARK ARCHIVES

2005



GREG PEDERSON, USGS

It's mid-February and it's raining. You hunker down behind your jacket collar and wonder if the zippers on your new pants really are waterproof after all. Sitting next to you on the soggy lift is your client, who just flew in for his annual week of powder skiing. And yet, it's raining. While you're good at making the best of nearly any situation, it's hard to celebrate in these conditions.

The inevitable question emerges. "Do you think this is climate change?" your client asks. You squint through the raindrops gathering on your goggle lenses and try to figure out how to respond. For a rare moment, you're stumped, unsure of what direction to take the conversation.

Climate change is a daunting topic. As a host for the mountain experience, you likely get questions all the time. But do you feel confident in expressing a well-reasoned response? What should you say? What if people argue with you? Should you bring it up at all or should you just stick to your standard fare of filling idle chairlift time with knock-knock jokes?

After the challenging winter of 2014-15 – with continuing drought throughout California and the Northwest, bitter cold in the central U.S., and record-setting snowstorms in New England – it's clear that climate change is relevant to all of us; we can no longer ignore it and hope for the best. Our livelihoods depend on snow, not to mention our psyches and self-identities. The snowsports industry needs persistent snowfall, reliable cold temperatures, and weather patterns that are consistent enough to plan around. All of those things are in jeopardy as climate patterns shift. As an instructor – and stakeholder in the snowsports industry – it's important to understand climate change and how

it may affect your job and passion for being on snow.

Furthermore, you are a teacher. You don't just teach students how to turn, stop, and land jumps, you take pride in helping guests gain a sense about the mountain environment. Climate is part of that conversation, and a basic understanding of how it's changing is a relevant element of your expertise. You can strive to be a steward of this topic, share information with your guests, and take part in a level-headed dialogue with colleagues and students. You can use your background as an educator to clear up misunderstandings and encourage engagement in this important and oft-misunderstood topic.

The good thing is, you don't need a science degree to be able to do this. In fact, you already have the most important tools for the job. So, let's roll up our sleeves and talk about climate change.

WHY IS CLIMATE CHANGE SO CONTROVERSIAL?

No doubt you already know that climate change is a controversial

Photos: Boulder Glacier at Montana's Glacier National Park

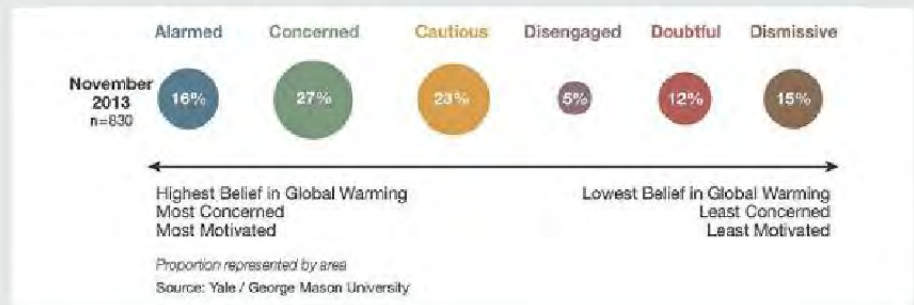
topic. Let's look at why that is. Climate communications specialist George Marshall describes climate change as "the perfect problem," as if it was perfectly designed to be misunderstood, ignored, and misrepresented. The science is complex, the effects are so dire that we prefer not to think about them, and the implications of humans altering the planet are unsettling and feather-ruffling. Avoiding the worst effects of climate change will require international cooperation the likes of which we've rarely seen. And yet those who seek solutions often run up against powerful political and economic forces intent on preserving the status quo. Phew. No wonder it's a touchy subject. There are many layers of psychological and cognitive cues that are telling our brains to reject this information.

Regardless of the impression you may get from the media (or your Uncle Lyle), most Americans do understand the situation. Nearly two-thirds of Americans agree that the climate is warming, 74% trust climate scientists, and a narrow but important majority understands that humans are the primary cause. Despite that, we are slow to find traction with solutions. Many people get the basic idea but are confused, hopeless, or unmotivated to learn more.

Meanwhile, the tangled politics around the issue prevent progress at the highest levels. So we are at a crossroads with public engagement: most people are on board with the science, but have yet to take meaningful strides toward addressing the problem.

KEY CONCEPTS IN CLIMATE CHANGE

Even though climate science is complex, it can be boiled down to a handful of simple, key concepts. After all, you can teach everything from switch riding or bump skiing, right? Those are complicated topics, but you can explain them well because you are able to dispense information in small, useful doses. If you'd like to kick start a productive conversation about climate change, you can use the list on page 52 as a starting point to solidify your own understanding. Once you've wrapped your head around this information, you can move onto other facets if you



WHAT DO PEOPLE REALLY THINK ABOUT CLIMATE CHANGE?

You're probably familiar with the polarized viewpoints on climate change. High-pitched extremes, particularly from the climate-change-is-not-manmade camp, can dampen one's desire to get involved with the topic. But take comfort in knowing those extremes may represent the loudest voices, but not necessarily the most common ones. Public opinion on climate change is nuanced and a lot more interesting than the simple pro or con viewpoints.

According to studies by the Yale/George Mason University Project on Climate Change Communication, people's outlooks fall into six distinct categories, called "Global Warming's Six Americas." On either end of the spectrum lie those who are most committed to their viewpoints. In the middle are those who are uncertain what to think, are confused, doubtful, fearful, or otherwise unengaged in the topic.

The people in the middle make up 40% of Americans. It's here that you'll find people who are open to conversation and who benefit most from information from trusted sources and peers. In essence, these are the "swing voters" of climate change.

THE SPECIAL CASE OF CLIMATE DENIERS

Given the fervor of their discourse, you might think that vehement opposition to the very idea of climate change comes from a large segment of our population. In fact, only 15% of Americans are "dismissive" of climate change research. But while their numbers are small, their commitment is solid. Public opinion research shows that this group is unlikely to change their minds, regardless of the type of information they receive. That's because their viewpoint of this issue is closely wedded to their personal, cultural, and political worldview. These are deeply-held beliefs and they are not going to change. If you're not in their camp, your best bet is to back away from the subject. "Hey, you've got some sweet skis there! How do you like that rocker profile?"

Where do you think you line up on the "Six Americas" spectrum? Take the short quiz and find out your profile at <http://uw.kqed.org/climatesurvey/index-kqed.php>

Learn more about Americans' viewpoints on climate change at the Yale Project on Climate Change Communication at <http://environment.yale.edu/climate-communication/>

How does the public opinion in your state or county stack up on various climate, energy, and policy topics? Visit an interactive map from the Yale Project on Climate Change Communication at <http://environment.yale.edu/poe/v2014/>.

TO LEARN MORE

There are some fantastic resources out there that are designed to communicate climate information to the general public. Check these out yourself and also use them for referrals.

Skeptical Science – This popular site has clear explanations and excellent graphics, and covers the common questions and misunderstandings about climate science. There is even a smartphone app for quick chairlift fact-checking! <http://www.skepticalscience.com/>

NOAA and NASA – Both of these sites have "climate portals" that are designed to create engaging gateways to tons of climate information and interactive graphics, straight from top-notch sources: <https://www.climate.gov/> and <http://climate.nasa.gov/>

—Karin Kirk

#SNOWPROS

CLIMATE CHANGE IS INTRIGUING BECAUSE IT'S A PROBLEM CAUSED BY THE ACTIONS OF THE COLLECTIVE. SO IT CAN BE SOLVED BY THE ACTIONS OF THE COLLECTIVE TOO.

This June 2014 image from NASA shows the retreat of the San Quintín Glacier in Chile. For comparative images from 1994 and 2002, go to <http://earthobservatory.nasa.gov/IOTD/view.php?id=2319>

want. Here are key climate change concepts:

There is overwhelming scientific consensus: humans are causing climate change. Robust research points out that the vast majority of climate scientists, 97%, agree that humans are influencing climate. That's a truly impressive majority, and it's also a useful communications tactic. The power of the consensus helps bring others on board. If 97% of your clinicians and trainers told you that you drop your inside hand, do you still figure that your inside hand is just fine? Probably not.

Burning fossil fuels creates an imbalance in the atmosphere. When oil, gas, and coal are burned, CO₂ goes into the atmosphere and stays there for several decades. This CO₂ blocks heat from leaving the Earth. Think of it as an extra down sweater under your snowsports uniform. Every day. While some insulation is a good thing, added insulation makes everything warmer. It's as simple as that.

The economic and human effects are profound. Maybe

Skiers in the Northwest, like Alyssa Davis, are having to make the best of scant-snow conditions.



not everyone is motivated to save polar bears, but climate change is affecting the whole globe and all of its occupants. Floods, crop failures, water shortages, and spread of diseases are but a few examples. Of course, the diminishing snowpack is a huge concern to us snow pros. By now, just about everyone can recount some examples of a changing climate and how it affects them.

The worst effects can still be avoided. It's not uncommon to feel helpless, but this is a solvable challenge. In some ways, it's a very simple problem and just about everyone knows exactly what the solution is: burn less fossil fuels.

Solutions are at hand. There are plenty of reasons for optimism. Renewable energy is scaling up quickly, particularly in developing nations. Governments are starting to coalesce around agreements to limit emissions of heat-trapping gases. The economics of solving the problem are doable and would spur additional societal benefits.

More public engagement is needed. Some people are more comfortable making personal contributions, such as carpooling or eating less meat. Others prefer to leverage their skills as an organizer or communicator to encourage action on a community level. Along with that, civic engagement in public policy is essential. Given the global nature of the problem, progress requires large-scale policy efforts. We can all take part in voicing support for solutions.

WAYS TO TAKE PART IN THE CONVERSATION

Effective climate communication is nuanced, but here's where you have a distinct advantage. As a snowsports instructor you are already an outgoing, articulate communicator. You know how to explain things. You have a sense for people. And you share values and a love of winter with your guests. You are already in a powerful position to have a meaningful conversation about climate change. Here are some specific suggestions, drawn from the lively field of climate communication.

Start with worldview. By now you are adept at sussing out someone's tastes and personality while on that first lift ride. Use those same instincts to see if they may be interested in talking

about climate. People's cultural and political views are very well aligned with their position on climate change, and you can probably figure this out well before you wander headlong into a conversation.

Don't be pushy or preachy. It's understandable if someone might not want to dwell on the topic of the dwindling snowpack if they just spent thousands of dollars on a vacation, only to find their favorite mountain playground reduced to a thin ribbon of manmade snow. So don't beat people over the head. Also, nothing is a bigger turnoff than someone else's self-congratulatory prose about their own world-saving efforts. Don't toot your own horn, stay guest-centered.


Do not argue. When was the last time getting into a fight helped you open *your* mind and consider a new viewpoint? If you get pushback, you're probably not going to be successful with this topic. Resist the temptation to be right, and move along to another subject.

Aim to improve understanding and to promote dialogue. Many people have questions about climate change, many are not sure what to believe, and some haven't even really given it much thought. As a trusted source of information and a relatable person, you can have a helpful educational impact.

Keep your expectations modest. Think of how you build a lesson with a series of gradual steps that eventually build to ownership. Similarly, imagine nudging people along in their understanding and motivation (see the sidebar about the "Six Americas" progression on page 51). If someone is uninvolved, perhaps they can come to realize this is an important topic. For the person who is curious, you can add some insight about what more they can do. Invite a two-way dialogue to see what insights your guests have to offer.

Point to solutions. Climate change is intriguing because it's a problem caused by the actions of the collective. So it can be solved by the actions of the collective too. Solutions can be at the personal level, on a community scale, or focused on public policy efforts.

Talk about what your resort is doing to address climate change. Educate yourself on the ski area's renewables and efficiency projects, along with shuttle/carpool or anti-idling initiatives. Find out if your resort is one of the 34 ski areas in the NSAA Climate Challenge (see sidebar). Climate Challengers are inventorying their carbon emissions, setting a target for reduction, and taking steps annually to meet their targets. Sharing this solution-oriented approach from the ski area can be a means to illustrate some of the many ways that people and organizations can take action to curb greenhouse gas emissions.

As skiers and riders, our commitment to the snowy alpine environment runs deep. Climate change may be one of the biggest challenges we'll face, and we're all in it together. As mountain professionals, athletes, and educators, we already know how to chip away at goals that are larger than ourselves. Collectively, we can do our part to keep the skies just as we like them – full of fluffy powder snow. 

2015 NSAA CLIMATE CHALLENGERS

- ▶ Alpine Meadows (CA)
- ▶ Alta Ski Area (UT)
- ▶ Arapahoe Basin (CO)
- ▶ Aspen Highlands (CO)
- ▶ Aspen Mountain (CO)
- ▶ Beaver Valley Ski Club (Canada)
- ▶ Boreal Mountain Resort (CA)
- ▶ Buttermilk (CO)
- ▶ Canyons (UT)
- ▶ Copper Mountain (CO)
- ▶ Crystal Mountain (MI)
- ▶ Deer Valley Resort (UT)
- ▶ Giants Ridge (MN)
- ▶ Gorgoza Park (UT)
- ▶ Grand Targhee Resort (WY)
- ▶ Hunter Mountain ((NY)
- ▶ Jackson Hole Mountain Resort (WY)
- ▶ June Mountain (CA)
- ▶ Killington Resort (VT)
- ▶ Las Vegas Ski & Snowboard (NV)
- ▶ Mammoth (CA)
- ▶ Mt. Bachelor (OR)
- ▶ Mt. Hood Meadows Ski Resort (OR)
- ▶ Park City (UT)
- ▶ Pico Mountain (VT)
- ▶ Snowbird (UT)
- ▶ Snowmass (CO)
- ▶ Soda Springs (CA)
- ▶ Squaw Valley (CA)
- ▶ Steamboat (CO)
- ▶ Stratton (VT)
- ▶ Sugarbush Resort (VT)
- ▶ Taos Ski Valley (NM)
- ▶ Telluride Ski & Golf Resort (CO)

Source: National Ski Areas Association

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