

HCN OUTDOOR REC & TRAVEL SPECIAL ISSUE

WIRING THE WILD

Vol. 52 / March Special 2020
No. 3S • hcn.org

How the Park Service is selling out to telecom

EXECUTIVE DIRECTOR/PUBLISHER

Paul Larmer

EDITOR-IN-CHIEF

Brian Calvert

ART DIRECTOR

Cindy Wehling

DIGITAL EDITOR

Gretchen King

ASSOCIATE EDITORS

Tristan Ahtone, Emily Benson,
Paige Blankenbuehler, Maya L. Kapoor

PHOTO EDITOR

Roberto (Bear) Guerra

ASSOCIATE PHOTO EDITOR

Luna Anna Archey

ASSISTANT EDITORS

Jessica Kutz, Carl Segerstrom, Anna V. Smith

EDITOR AT LARGE

Betsy Marston

COPY EDITOR

Diane Sylvain

CONTRIBUTING EDITORS

Graham Brewer, Elena Saavedra Buckley,
Ruxandra Guidi, Michelle Nijhuis,
McKenna Stayner, Jonathan Thompson

CORRESPONDENTS

Leah Sottile, Sarah Tory

EDITORIAL FELLOWS

Nick Bowlin, Kalen Goodluck, Helen Santoro

DEVELOPMENT DIRECTOR

Laurie Milford

MAJOR GIFT ADVISER

Alyssa Pinkerton

DEVELOPMENT ASSOCIATES

Hannah Stevens, Carol Newman

DEVELOPMENT ASSISTANT

Terra Hegy

SENIOR MARKETER

JoAnn Kalenak

**EVENTS & BUSINESS PARTNER
COORDINATOR**

Laura Dixon

IT MANAGER

Alan Wells

DIRECTOR OF OPERATIONS

Erica Howard

ACCOUNTS ASSISTANT

Mary Zachman

CUSTOMER SERVICE MANAGER

Kathy Martinez

CUSTOMER SERVICE

Amanda Campbell, Karen Howe,
Mark Nydell, Tammy York

GRANT WRITER

Janet Reasoner

FOUNDER

Tom Bell

BOARD OF DIRECTORS

Brian Beitner (Colo.), John Belkin (Colo.),
Seth Cothrun (Calif.), Jay Dean (Calif.),
Bob Fulkerson (Nev.), Wayne Hare (Colo.),
Laura Helmuth (Md.), Samaria Jaffe (Calif.),
Nicole Lampe (Ore.), Marla Painter (N.M.),
Bryan Pollard (Ark.), Raynelle Rino (Calif.),
Estee Rivera Murdock (Colo.),
Rick Tallman (Colo.), Andy Wiessner (Colo.),
Florence Williams (D.C.)

DIRECTOR EMERITUS

Luis Torres (N.M.)



Racers with shovels prepare for their runs at the top of the racecourse for the World Championship Shovel Races at Angel Fire Ski Resort in New Mexico. **Minesh Bacrania / HCN**

Know the West.

High Country News is a nonprofit 501(c)3 independent media organization that covers the important issues and stories that define the Western U.S. Our mission is to inform and inspire people – through in-depth journalism – to act on behalf of the West's diverse natural and human communities. High Country News (ISSN/0191/5657) publishes regular issues monthly, 12 times a year, in addition to one "special issue" per quarter (in March, May, August and October), for a total of 16 issues per year, from 119 Grand Ave., Paonia, CO 81428. Periodicals, postage paid at Paonia, CO, and other post offices. POSTMASTER: Send address changes to High Country News, Box 1090, Paonia, CO 81428. All rights to publication of articles in this issue are reserved. See hcn.org for submission guidelines. Subscriptions to HCN are \$37 a year, \$47 for institutions: 800-905-1155, hcn.org. For editorial comments or questions, write High Country News, P.O. Box 1090, Paonia, CO 81428 or editor@hcn.org, or call 970-527-4898.





Chilling effects

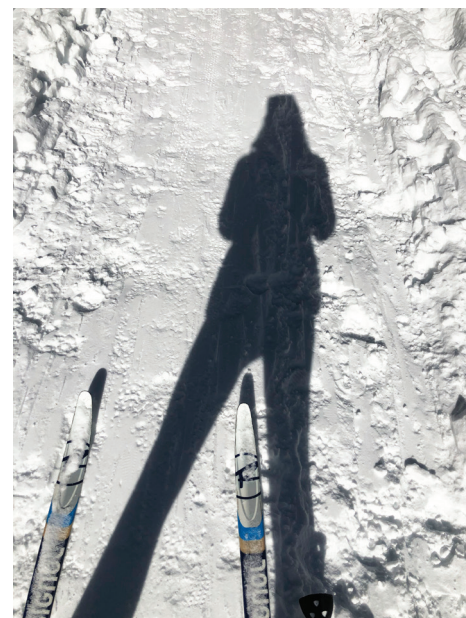
RECENTLY, I RENTED A PAIR of backcountry skis and skins, a shovel, beacon and a probe. As a kid in suburban Denver, with parents who weren't into skiing the way I wanted to be, I always felt like an outsider, pushing in. But now, from my home in Durango, Colorado, I'm regularly out "there," thanks to increasingly affordable technological advances that are opening the backcountry to more people — making the West's natural world more accessible. But as more of us push deeper into the backcountry, we disrupt these secluded spaces, both in small ways that we don't see and in bigger ways we don't yet fully understand. As tech infiltrates the backcountry, we have a responsibility to consider what that means.

This year's Outdoor Rec & Travel special issue asks who — and what — belong in the backcountry. In our cover story, Jimmy Tobias reports from Grand Teton National Park in Wyoming, where a massive project, pushed by the telecom industry and rubber-stamped by the National Park Service, will erect cellphone towers to link the park's most disconnected reaches. Tobias' investigation, drawn from internal Park Service documents, touches on an uncomfortable tension: The federal government seems more interested in creating broadband access where it's not wanted, often where the West's most privileged are fighting it, than in building infrastructure in communities where internet access is desperately needed.

In a package of three reported stories, Editorial Fellow Helen Santoro and writers Christine Peterson and Page Buono examine the unintended impacts of advanced technology on wildlife. Elsewhere in this issue, two essays ponder how technology determines access the natural world. Writer and ornithologist J. Drew Lanham tracks the history of York, the enslaved man who accompanied Meriwether Lewis and William Clark on their Westward expedition. Back then, York wandered West on white terms; now, Lanham makes his own journey "out West" and encounters York's ghost along the way. In her essay, Raksha Vasudevan escapes seasonal depression by snowshoeing, exploring the closed-off world of winter with her family.

Taken together, these stories challenge our values in an increasingly digitized West. And just as my trip up Wolf Creek did for me, I hope these stories will help you re-evaluate the significance of winter, a time of vulnerability for the West's wild, and non-wild, inhabitants. Technology disrupts our natural relationships to nature, and while it can render wilderness more accessible for some, it throws up barriers for others, making parts of the West all the more exclusive. It is a privilege to be in these places. Let us never forget that.

Paige Blankenbuehler, associate editor



PAIGE BLANKENBUEHLER / HCN



FEATURES

Wiring the Wild

How the Park Service is selling out to telecom

BY JIMMY TOBIAS

26

The Nouveau Negro York

An exclusionary wildness in a rapidly digitizing West

BY J. DREW LANHAM

36

Skiers out for an afternoon ski near Grand Teton National Park's Taggart Lake Trailhead in Wyoming. Parked cars stretch a half-mile down Teton Park Road from the trailhead parking lot, which gives visitors direct access to groomed cross-country ski trails along the park's interior road and easy access into the backcountry (*above*).

Ryan Dorgan / HCN

A skier checks her gear at Aspen Mountain in Colorado, where a new, less-polluting ski wax process is now in use (*right*). **Luna Anna Archey / HCN**

ON THE COVER

Artist's conception of cell towers reaching into the Teton Range. **Photo by Ryan Dorgan; photo illustration by Clay Rodery / HCN**

For skiers, a problem underfoot 7

Premium wax is contaminating alpine food webs.

BY RYAN WICHELNS



Competitor of conscience 8

To protect wildlife, a skier changed her ways.

BY CHRISTINE PETERSON

The wolverine in the room 10

Science shows that recreation threatens the critter. Snowmobilers disagree.

BY HELEN SANTORO

The last shovel racers 12

After four decades, a ski resort drops a beloved tradition.

BY ERIN BERGER
PHOTOS BY MINESH BACRANIA

Out of bounds 16

Scientists race to quantify winter recreation's impact on Canada lynx, but technology outpaces them.

BY PAGE BUONO

REFLECTION & REVIEW

43 Snow-blind

This year's Backcountry Film Festival aims for self-awareness, but doesn't stick the landing.

REVIEW BY NICK BOWLIN

44 The ethics of shed-hunting

A Utah conservationist weighs the hobby's popularity with its moral stakes.

OPINION BY ASHLEY KIJOWSKI

46 The alienation of winter

I long felt shut out of the season. Snowshoeing changed that.

ESSAY BY RAKSHA VASUDEVAN

48 Distant snow

Searching for winter in Palm Springs, California.

ESSAY BY LEATH TONINO

DEPARTMENTS

3 EDITOR'S NOTE

17 ON THE ROAD TO 50

18 DONORS

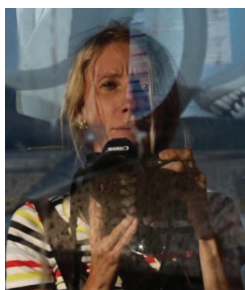
19 DEAR FRIENDS

50 HEARD AROUND THE WEST

52 #IAMTHEWEST

➔ Access to subscriber-only content:
hcn.org
hcne.ws/digi-523S
Follow us @highcountrynews

FEATURED CONTRIBUTORS



Ash Adams is a photojournalist and documentary photographer based in Anchorage, Alaska, whose work appears in national and international publications. When not working, she's usually running, skiing, climbing or backpacking.



Minesh Bacrania, previously an experimental nuclear physicist, is an editorial and documentary portrait photographer based in New Mexico.



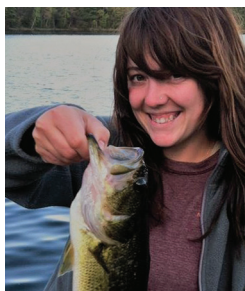
Erin Berger is a freelance writer and former *Outside* editor based in Santa Fe, New Mexico. She is learning to ski, slowly but surely.



Nick Bowlin covers public lands and rural resource use. He spends most winter weekends on his cross-country skis near Gunnison, Colorado, where he's an *HCN* fellow.



Page Buono is a freelance writer based out of Durango, Colorado. She received her MFA in nonfiction from the University of Arizona. @BuonoPage



Ashley Kijowski is a fledgling bowhunter and wildlife biologist based in Salt Lake City.



J. Drew Lanham, Ph.D., is a distinguished professor of wildlife ecology at Clemson University and the poet laureate of Edgefield, South Carolina. @1blackbirder



Christine Peterson has written about wildlife and the environment for the past decade from her home in Wyoming.



Helen Santoro is an *HCN* fellow based in Gunnison, Colorado, who covers science and wildlife. She enjoys backcountry skiing and, when she has the time, camping in the frigid winter temperatures. @helenwsantoro



Jimmy Tobias is a contributing writer at *The Guardian* and a contributor at *The Nation*. Since 2017, his accountability reporting has helped spur federal investigations into three different political appointees at the Interior Department. @JamesCTobias



Leath Tonino is a freelance writer and the author of a collection of essays, *The Animal One Thousand Miles Long*.



Raksha Vasudevan is an economist and writer based in Denver. Her work has appeared in *LitHub*, *The Los Angeles Review of Books*, *NYLON* and more. @RakshaVasudevan.



Ryan Wichelns is a Colorado-based freelance writer who prefers to let gravity do the work when he skis. @ryanclimbs



Snow falls at Aspen Mountain in Colorado, where a less-toxic ski wax process is now in use. **Luna Anna Archey / HCN**

For skiers, a problem underfoot

Premium wax is contaminating alpine food webs.

BY RYAN WICHELNS

WITH THEIR LEGS and toes kicking away at the snow underneath them and their arms leveraging their ski poles, Austin Caldwell's University of Colorado Boulder Nordic Team will lay it all on the line in tomorrow's race. As they reach for each millisecond, they'll face a gravitational force field bent on slowing them down, even as they concentrate on the muscle work needed to pass their opponents. They try not to worry about how well their skis are sliding.

That particular worry should be assuaged by Caldwell and the other coaches, who will test an array of waxes the day before the race in search of the perfect blend for the weather and snow conditions. "Ski wax can make or break a race," Caldwell said.

For Nordic skiers and high-level alpine racers, every fraction of a second counts, and the interface between ski and snow is a critical piece of gear. As skiers compete and coaches jockey for advantages, the focus on wax choice becomes borderline religious.

But this zeal has a blind spot. New research suggests that a lot of ski waxes — and especially the premium waxes used at the sport's highest

levels — are contaminating alpine food webs as they slough off around ski areas.

A November 2019 study, published in the American Chemical Society's *Environmental Science and Technology* journal, tested soil, earthworms and small rodents called bank voles living near a Nordic ski area in Norway, in search of perfluoroalkyl substances, or PFAS. Voles within the ski area had as much as six times the amount of PFAS in their livers as voles outside it, and the ski area's earthworms had similarly elevated numbers. That could mean bad news for predators, as PFAS levels generally accumulate higher up the food chain. According to the U.S. Environmental Protection Agency, PFOA and PFOS — just two types of chemical classes and both among the compounds found in the study's samples — have been linked to reproductive and developmental problems, liver and kidney issues, immune system effects and cancer.

The chemicals don't just accumulate on hillsides and in nearby wildlife, they also linger in the blood of ski technicians. A 2011 study showed that technicians waxing skis for high-level World Cup Nordic athletes had PFOA levels in their blood up

to 45 times higher than the general population.

These chemicals, which are also found in Teflon and other anti-stick coatings as well as firefighting foams, rely on a stable fluorine-carbon bond to repel other substances. The fluorine-rich waxes (often called "fluoro" or "high-fluoro" waxes) used at the higher levels of Nordic and alpine skiing make skis stick less to wet snow. They also slowly fall off ski bases and enter watersheds. The same stability that makes a pan easy to clean and skis glide faster means that PFAS take a very long time to break down in the environment.

With greater awareness of the impact of wax on ski techs and the environment, some companies and resorts are seeking alternatives. Aspen Mountain, which in the past has led ski industry activism on climate change and renewable energy, took a step away from waxes entirely by treating its rental fleet with ski manufacturer DPS' one-time Phantom Treatment. The treatment utilizes different chemical bonds that permanently adhere to ski bases and are less prone to leaching into the environment.

Other companies are looking at ways to make all waxes more environmentally friendly. While most waxes don't have PFAS, they are petroleum-based and leach out into the environment as they wear off skis. "It's a micropollution problem," said Peter Arlein, CEO of the plant-based wax company mountainFLOW. Individually, the impact is small, but with nearly 60 million people heading to the slopes annually, the problem gets bigger. "If they're each waxing their skis a couple times a year, that suddenly becomes millions of pounds of impact," he said. "It's not like you can see the chemicals in the snow behind you as you ski away."

With new research showing the harmful impacts of PFAS, high-fluoro waxes have been recently hit with a wave of regulations. Various skiing governing bodies, including local racing leagues and, in November, the International Ski Federation, have banned certain categories of fluoro ski waxes. Even the Environmental Protection Agency has been examining the waxes for violations of the Toxic Substances Control Act.

But back in the racing world, coaches like Caldwell think there's a long way to go. Without a good way to test for the PFAS in waxes, it's relatively simple to get away with using them, he said. And because there aren't effective standards of enforcement, many skiers aren't willing to use the safer, more environmentally friendly, but slower, waxes that could put them at a disadvantage. "People are hesitant to drop them," he said, simply because they don't want to be left behind. ☀

Competitor of conscience

To protect wildlife, a skier changed her ways.

BY CHRISTINE PETERSON

ON A PERFECT DAY, Rendezvous Peak, a nearly 11,000-foot wind-scoured limestone ridge in the Teton Range, offers spectacular backcountry skiing. Steep lines cut off the top as skiers slice through cliff bands called the Martini Shoots, drop into a sweeping bowl and flow into a canyon of ramps and gullies.

In places like this, Kim Havell has built her life. Once considered the nation's pre-eminent female ski mountaineer, Havell has skied on seven continents and made first ascents on four. She moved to Jackson, Wyoming, in 2012, partly to ski mountains like Rendezvous Peak.

But the top of the ridge is also home to one of the West's most unique bighorn sheep herds. The Teton herd has eked out a living here for thousands of years, nibbling dried wildflower tops and conserving calories while waiting for spring. Now, the ancient herd, down to about 100 sheep, is on the cusp of extinction.

And, according to biologists, today's elite backcountry skiers — by venturing deeper into the backcountry in growing numbers during the pivotal winter months — are one of the top threats now facing the herd.

When Havell first realized her sport's impact, she resolved to change the way she skied, avoiding the fragile herd even if that meant staying away from some of her favorite places. "We're trying to get into more and more remote zones with our gear and knowledge," Havell, 42, said from her home in Wilson, Wyoming. "We're pushing wildlife out of their habitat."

Lately, she's seized upon a mission bigger than herself: convincing the skeptical guides and skiers whose livelihood and passions revolve around skiing in the Tetons to do the same. But there's a problem: The skiing community has been slow to change its behavior, and time is running out to help the bighorn herd rebound.

RESEARCHERS ESTIMATE that about 1.5 million bighorns once roamed the Western U.S. and Canada. Then came market hunting,

habitat loss and disease, and now, only about 85,000 range in isolated groups around the West. One of those is the Teton herd. The sheep can see for miles, and any perceived danger sends them packing, burning precious calories in the process.

Biologists like Aly Courtemanch, with the Wyoming Game and Fish Department, have studied the intersection of backcountry skiing and bighorns for years. Courtemanch tracked the movement of ewes and 700 backcountry skiing trips and found that not only did sheep abandon areas disturbed by skiers, they rarely returned. "Winter recreation — where the snow enables people to go wherever they want — causes this unpredictability for an animal," Courtemanch said. "They don't know where you will pop up, so they avoid the area altogether."

Technological aids like Google Earth and Fat Maps, an app that lets users follow its contributors' backcountry routes, have enabled more skiers to push deeper and more easily into steep, rugged terrain. Some areas have been closed to winter recreation, however, and Jackson's backcountry skier community worries that its range is already shrinking. That makes even casual talk of further restrictions controversial.

Skiers are more aware of their potential impact, but that doesn't mean that they voluntarily avoid bighorn winter range outside of closure areas. Thomas Turiano, an author and skiing legend in northwest Wyoming, says he has seen sheep bolt while in the backcountry,

including on Rendezvous Peak. But he's reluctant to accept how big an impact that really has. "Sure, if we scare them away, they're burning energy. But is that the cause of their decline?" Turiano said.

Similarly, other prominent backcountry skiers have questioned their collective impact. Adam Fabrikant, a ski guide who is sometimes called the "Mayor of the Tetons" because of how much time he spends in the mountains, is one of them. He says he tries to change his plans if he sees sheep, but he also feels that skiers are being unfairly blamed.

Both Fabrikant and Turiano say it's difficult to accept that skiers have an outsized impact — more than condos, highways and using helicopters to kill invasive mountain goats — on the bighorn herd. "It's hard for the general public to wrap their heads around (the fact that) a skier walking slower than molasses up the hill will be the thing that pushes them over the edge," Fabrikant said.

Still, Havell, a deeply respected figure in Jackson's skier community, hopes that she can convince more recreationists to compromise. She agrees that snow sports aren't solely responsible for the bighorns' problems, but she thinks humans can do more to control their impact, particularly when it comes to avoiding the sheep. To boost action within the community, she's partnered with Turiano and others to create a checklist for guides and skiers, advising them to stay away from the top of windswept peaks, avoid known sheep locations, scan for the animals and turn around or change your route if you spot one.

Many listen to these recommendations, but others oppose the idea of more restrictions. And while awareness may be increasing, some still hesitate to report bighorn sightings for fear of additional closures. Havell, too, worries about losing access to the mountains she loves. She craves deep powder and untouched slopes, but is willing to give them up if it means saving the herd.

"Some of these animal populations will disappear in front of us," she said, "and we had an opportunity to prevent it." ❄

"It's hard for the general public to wrap their heads around (the fact that) a skier walking slower than molasses up the hill will be the thing that pushes them over the edge."



A bighorn sheep in
the Greater Yellowstone
Ecosystem. **Josh Metten**



Jia Sung / HCN

REPORTAGE

The wolverine in the room

Science shows that recreation threatens the critter. Snowmobilers disagree.

BY HELEN SANTORO

JUST OUTSIDE the tiny town of McCall, Idaho, in the sprawling Payette National Forest, Sandra Mitchell drove her snowmobile across a snowy pass. With the loud whine of the machine's engine ripping through the chilly winter air, she rode between rows of fern, pine and spruce. Soon, the forest opened up to reveal West Mountain with its inviting slopes and sparse clusters of trees. Setting her sights on the summit, she held down the throttle and pointed the nose of her snowmobile upward, a fan of powdery snow spraying out behind her.

At the peak, Mitchell glided to a stop, turned off the engine and gazed out over the silent snow. "You get to see nature dressed in white," she said. "It's breathtaking."

That was just the first of many times that Mitchell rode up West Mountain. Today, around 27 years later, she is director of public lands for the Idaho State Snowmobile Association. In her many years of snowmobiling, she has seen a lot of wildlife: a male moose with a rack of antlers, wolf tracks in the snow. But neither she nor any of her snowmobiler friends has ever seen the animal whose tenuous status could lead to the closure of backcountry areas to recreationists like herself: the elusive wolverine.

Wolverines require a lot of land and snow in order to survive, making places like the Payette National Forest in west-central Idaho a perfect home. But this forest is also a hub for winter

sports, drawing backcountry enthusiasts from across the nation. In 2007, however, a team of Forest Service employees proposed closing approximately 15,000 acres — less than 1% of the entire forest — to snowmobilers, partly to protect the wolverine. When Mitchell heard this, she balked. "It was shocking when we saw the proposal," she said. The Idaho State Snowmobile Association claimed that it wasn't based on sound science. "We'll do what the science tells us," she said, "but once the land is closed, it's always closed. We need to work for other management options."

In 2010, Mitchell and her team joined forces with eight other groups, including the Idaho

Department of Fish and Game and the Sawtooth National Forest in central Idaho, in a collaborative effort to study how backcountry sports, including snowmobiles and backcountry skiing, impact wolverines.

But instead of generating a clear answer on how to balance recreation and wildlife, the science may have simply bolstered past convictions. The research — which was published in February 2019 and concluded that winter recreation displaces wolverines — has fueled an ongoing lawsuit regarding a proposed closure in the Sawtooth National Forest. "People are interpreting the research based on their own agendas," said Kimberly Heinemeyer, a lead scientist at the

Round River Conservation Studies, the ecological research and education nonprofit that spearheaded the study.

Now, snowmobilers like Mitchell are responding by suing the U.S. Forest Service, hoping to preserve one of their most cherished pastimes. Meanwhile, researchers worry that if the Forest Service doesn't take action soon to protect wolverine habitat, the animal may disappear from the Lower 48.

FOR IDAHOANS like Mitchell, snowmobiling is woven into the cultural fabric of the state. In 1971, a group of nine snowmobilers rode into the woods near Pine, Idaho, one weekend and returned with the idea for the Idaho State Snowmobile Association. Around 20 years later, Mitchell became an integral part of the community and has since helped welcome thousands of new members. Today, snowmobiling generates millions of dollars within the state of Idaho. During the 2015-2016 winter season, snowmobile owners spent close to \$200 million in lodging, food, equipment and more, and supported more than 4,000 retail and other jobs, according to a study by Boise State University.

Still, conservationists like the Idaho Conservation League's Brad Smith believe that snowmobilers need to be more conscious of where they ride when they enter areas where sensitive species, like wolverines, are known to roam.

Wolverines are solitary animals that live in remote, cold places like Idaho, Montana and Alaska. Males can weigh up to 40 pounds — stocky creatures, with long, coarse fur, sharp claws and spectacular strength. By nature, they have very low-density populations with home ranges of up to 600 square miles. They've been known to travel up to 15 miles a day in search of food, which explains their scientific name, *Gulo gulo*, from the Latin word for "glutton." Between February and May, in order to den and give birth,

female wolverines require deep snow, which keeps their offspring safe from predators and buffers them from frigid winter temperatures. After a long history of fur trapping — a practice that is now banned in most states, including Idaho — there are only an estimated 250 to 300 wolverines left in the Lower 48. Today, wolverines have been reported in 77% of Idaho's counties — most, if not all, of their in-state historic habitat — which includes snowy, mountainous areas where Mitchell and thousands of others snowmobile.

This interaction between winter recreationists and wolverines may harm the species, according to the study in the journal *Ecosphere*. Over the span of six winters, researchers investigated the responses of GPS-tagged wolverines in Idaho, Wyoming and Montana to snowmobilers and backcountry skiers. They found that wolverines avoided areas used by recreationists, with females being particularly sensitive to backcountry activity. Bit by bit, they were losing their habitat.

Reactions to the research have been mixed. Hilary Eisan, the policy director for the nonprofit Winter Wildlands Alliance, which represents backcountry skiers and outdoor recreation on public lands, argues that the study provides clear evidence that winter sports threaten wolverine habitat. Mitchell, on the other hand, claims the study only shows the need for more studies. "Overall, we were disappointed that there were not more conclusive results," she said. "Wolverines move all the time, so them changing their habitat due to snowmobiles is not necessarily conclusive."

However, the species may not have time to wait for more research. Climate change is already hurting wolverines by reducing spring snowpack and female denning areas, said Jeffrey Copeland, a former researcher for the U.S. Department of Agriculture and one of the study's authors. "I'm concerned if we don't pay

attention to it now, we could lose wolverines before we even really know them," he said.

It was this conflict that led to the current lawsuit in the district court of Idaho. Using an earlier published version of the study, the Fairfield Ranger District in the Sawtooth National Forest closed 72,447 acres of land — 17% of the Fairfield Ranger District and approximately 3% of the entire forest — to snowmobilers December 2018. The area was routinely used by snowmobilers, thus prompting the Idaho State Snowmobile Association to sue the Sawtooth and the Forest Service. The association argued that the decision "assumes that snowmobiling in these closed areas will have adverse environmental impacts without any solid scientific evidence." Oral arguments for the case are expected to begin as early as this spring.

To strengthen their case, snowmobilers asked Mike Schlegel, a retired wildlife research biologist for the Idaho Department of Fish and Game, to review the land closure proposal. Schlegel believes the Forest Service is being too conservative in its management plan and that there is no direct evidence that winter recreationists directly harm wolverines. Instead, he recommends mapping out female denning sites and educating snowmobilers to avoid those critical areas.

Mitchell and Heinemeyer, the lead author on the wolverine study, are also working with backcountry groups to create land-management recommendations that can be used by both the Forest Service and recreationists. The process, still in its early stages, aims to publish a proposal that mitigates any harm to wolverines. "I don't want the wolverine to be the cause of lawsuits and a bunch of fights over land use," said Heinemeyer.

But Mitchell fears there may be more disputes ahead. "I'm worried that other national forests will close to snowmobilers," she said. "We'll have to take it one forest at

a time." And given the changing winter landscape, such conflicts may become more frequent. With warmer winters, later snowfall and earlier spring rain, snowy areas for winter recreationists are shrinking, and there's a higher chance of disturbing wildlife.

With this in mind, conservationists worry about future protections for the wolverine, which is currently in the midst of another legal battle as to whether it will be listed under the Endangered Species Act. Last November, the U.S. Fish and Wildlife Service failed to meet its deadline for a listing decision. Subsequently, a group of nine conservation groups have threatened to sue the Trump administration.

Yet even scientists who have spent their careers studying the animal say the wolverine remains an enigma. This is echoed by backcountry enthusiasts like Mitchell, who has never seen a wolverine, and likely never will. "I would be thrilled to death to see one," Mitchell said. "What an amazing little critter."

When I asked if the new research on wolverines has changed how she interacts with the landscape while snowmobiling, she responded immediately, "It does. I definitely am more conscious of animals." Now, Mitchell says that she tries to stay away from areas where they may reside. "In the snowmobiling community, there is a great respect for wildlife," she said.

So far, though, that respect has not translated to action in the broader community of snowmobilers, and it is unlikely to be enough to protect the wolverine. Snowmobilers like Mitchell still plan to spend their winters trekking out to desolate places far away from marked trails, and, according to the science, this means riding through wolverine habitat.

For a species already under threat, this may be the breaking point. "The stakes are higher," Eisan said. "We can't just sit back and let it be a free-for-all." ❄️





The last shovel racers

After four decades, a ski resort drops
a beloved tradition.

BY ERIN BERGER PHOTOS BY MINESH BACRANIA



Racers with their shovels ride the lift to the top of the race course for the World Championship Shovel Races at Angel Fire Ski Resort in New Mexico (*left*). Justin Gonzales with two of his handpainted shovels at the top of the Angel Fire shovel race course (*above*).



Severino Gonzales in his race suit (above). Paloma Gonzales surveys the course (above right). Racer Paul Grandon during his practice run (below right). Paloma Gonzales dismounting at the race course finish (center).



ON A CHILLY February morning, Justin, Nadia, Paloma and Severino Gonzales mount their snow shovel blades and take turns hurtling down Exhibition Run at northeast New Mexico's Angel Fire Ski Resort. One by one they push off from the top of the run, handles between their legs, arms tense at their sides.

A good run lasts all of 15 seconds, ending when the racer collides spectacularly with a protective wall of inner tubes. The siblings have participated in the World Championship Shovel Races for years. The resort has announced that it's canceling the annual event, however, so this will

be their last shovel race.

The Gonzales siblings, who started shovel racing as kids, describe their sport as "extreme sledding." It's always been as accessible as sledding: The original shovel racers were '70s Angel Fire lift operators, who used their tools to slide down at day's end. Soon it became a contest, where people devised modified luge-like "shovels" that reached almost 80 mph. At its peak, "It was like IndyCar," Justin told me. That "Wild West" version of the sport even got a spot in the 1997 X Games and a short Warren Miller film. In 2005, however, the resort briefly cancelled it, spooked by the risks involved —

participants crashing and flipping vessels that could weigh up to 500 pounds. But it's been back in a safer form since 2010, restricted to plain old snow shovels.

Now, after four decades, the tradition is ending. In an official statement, the resort said it will no longer host the races, citing dwindling interest and the fact that the championship costs half of its winter event budget. It would rather spend more on "family-friendly" offerings like its Winter Carnival, a resort representative said. Shovel racing has always been a proudly local event — over 95% of participants live near Angel Fire. All kinds of people with varying phys-

ical abilities, ranging in age from 6 to 80, participate.

The Gonzaleses, like many other Moreno Valley residents, hate seeing their beloved annual tradition disappear. They grew up alongside the sport and the valley, and all but one of the siblings were part of the first graduating classes at Moreno Valley High School in the early 2000s. Back then, Angel Fire was considered a promising market for second-home owners who wanted a more affordable ski-resort alternative to Aspen or nearby Taos and Santa Fe. But that didn't pan out, and the village never grew past a thousand residents.

The Gonzaleses' father, who



A young racer tries out one of Justin Gonzales' shovels (left). The Gonzales Family (from right, Severino, Justin, Paloma, and Nadia), with friend Matt Munoz (left), after the shovel race (below).



worked as a ski instructor, participated in the first shovel races in the 1970s. Following family tradition, the siblings have spent their adult years dominating the World Championships. They may be scattered across the West — from Albuquerque to Dillon, Colorado, and Kings Beach, California — but shovel racing brings them back home every winter. Now, with the race in its final year, what's dying isn't just a novelty sport; it's one of the last remaining traditions that bring the community together.

And it's not just the Gonzales family that makes the annual trek home: "It's a tradition of the Valley, which doesn't really have

too many traditions," Justin said. "Especially one that they can call their own, and something that's so unique." As Angel Fire becomes better known for mountain biking than snow sports — given today's unpredictable winters — shovel racing remains a major draw for locals who may not even ski regularly. No expensive equipment or years of experience needed.

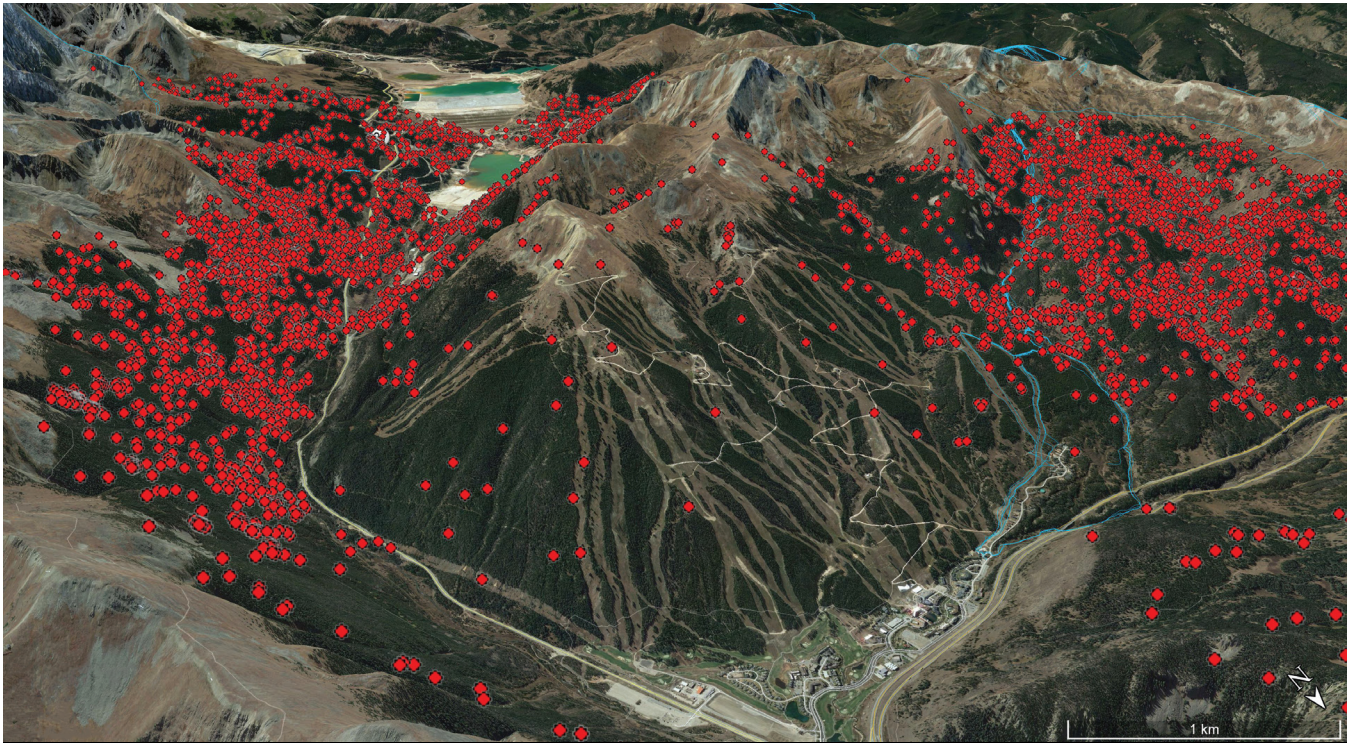
For the Gonzaleses, it's also an obsession. Justin — the family's shovel tech and racing perfectionist — has honed his wax technique and wears a speed suit and special pointed Adidas shoes similar to luge racers' gear. Every year, he chooses a new shovel at the local

hardware store. "There is a little bit of a calling," he said. He paints elaborate images on them — dragons, butterflies, Zia symbols. The humble snow shovel becomes a work of art that later hangs on Justin's wall, and another tool in an ever-growing collection. "It's kind of like golf clubs," he told me. "I have different shovels for different occasions."

The siblings spend just one day practicing on the course before getting two runs to record their official fastest times the next day. Nadia, who hopes to talk some Colorado ski hills into hosting, believes shovel racing will only get more competitive and popular if

other mountain towns embrace it. Wherever it goes, Angel Fire's shovel racers would happily travel to participate.

"I'm really surprised other mountains haven't done something like this. It doesn't take a lot of work to pull off, and it could become something really cool," Paloma told me. "That's what the shovel races did for Angel Fire for so long, was put it on the map as a really weird and interesting place." ❄️



Red dots highlight the movements of collared Canada lynx. Lynx appear to avoid busy ski areas like Copper Mountain in Colorado (shown here), while still using the surrounding Vail Pass Winter Recreation area to the west, which allows fee-based dispersed winter recreation. **Courtesy of Rocky Mountain Research Station / Google Earth**

Out of bounds

Scientists race to quantify winter recreation’s impact on Canada lynx, but technology outpaces them.

BY PAGE BUONO

NEARLY 20 YEARS AGO, Elizabeth Roberts woke early after a big snowstorm. She packed a thermos of green tea and caught the first chair at Vail Resort, a world-renowned ski area high in the Rocky Mountains of Colorado. The lift ascended to Blue Sky Basin at the southern end of the ski area. But rather than pursue powder runs, Roberts trekked beyond the resort’s boundary on backcountry skis, weaving in and out of the spruce and fir, in search of wildlife tracks.

For roughly a decade, Roberts’ study of wildlife near the resort continued. As technology for backcountry travel advanced and the number of recreationists increased, so too did the ratio of humans to wildlife — so much so that by 2010, Roberts couldn’t find any wildlife tracks. Instead, she found heavily compacted snow and the traces of skiers and snowboarders who had ventured beyond the ski area’s bounds.

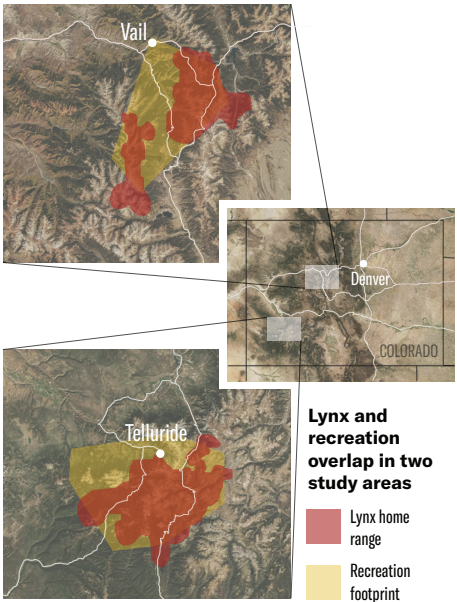
On a national scale, the number of people who ski outside the resort is projected to increase by as much as 106% by 2060. Those projections,

paired with what they were seeing on the ground, concerned wildlife managers. As the first winter-sports wildlife biologist on the White River National Forest, Roberts sought to understand the impacts of recreation on the threatened Canada lynx — wild cats best known for their bobbed tails and wispy, antennae-like ear hairs. And she was largely starting from scratch: A decade ago, there was no relevant research available to guide management decisions.

“We wanted to understand high-use winter recreation overlapping wildlife habitat,” Roberts said. “Colorado is very unique in the winter recreation world — our dispersed and developed recreation numbers are higher than anywhere.”

And so, in 2010, Roberts approached John Squires, research wildlife biologist at the Rocky Mountain Research Station (RMRS), and the pair launched a collaborative project led by RMRS in coordination with Colorado Parks and Wildlife and the University of Montana, along with the

(continued on page 40)



Source: Rocky Mountain Research Station

ON THE ROAD TO 50

An old colleague — and a new executive director

BY PAUL LARMER



New HCN Executive Director/Publisher Greg Hanscom, on a backpacking trip last summer with his family in Spider Meadow, North Cascades, Washington. Shown from left, Greg, daughters Lucia and Chloe, and wife Tara Thomas. **Courtesy of Greg Hanscom**

*I remember that hike
as one of my most satisfying,
made richer by Greg's
unique approach to the endeavor.*

Around 25 years ago, Greg Hanscom, then a 20-something-year-old *High Country News* assistant editor, asked me if I wanted to climb Mount Lamborn. Though the hike would be tough for me, using crutches on sketchy trails, I had always wanted to reach the top of the peak, which rises 11,300 feet behind HCN's home office in Paonia, Colorado. And so Greg, who grew up traipsing around Utah's Wasatch Mountains, picked me up at sunrise one bright June morning.

The first few miles were flat and deliciously cool. Following a gurgling creek, we spotted songbirds and skirted beaver ponds, smiling at the racy carvings shepherds had etched on aspen trunks. But as the trail grew increasingly rocky and steep, fatigue and doubts crept in: Maybe we should just turn back and call it a nice hike. Greg, who could have jogged up and down the mountain in a couple of hours, seemed to be enjoying himself, though, moving patiently at my pace, occasionally trotting ahead to scout the route. We swapped stories as the altitude rose, and before long, we were near the top.

That was when Greg, who was carrying our supplies, said, "Hmmm. We're out of water." Without hesitation, he found one of the few remaining snowdrifts underneath the spruce and plunged our water bottles into it, filling them with ice. On the strength of that precious slush, we scrambled up the final pitch to soak in the 100-mile view to Utah's La Sal Mountains. We made it back to the car by sundown. I remember that hike as one of my most satisfying, made richer by Greg's approach to the endeavor.

And that is just one reason I am pleased to announce that HCN's Board of Directors has hired Greg Hanscom to be our next executive director, starting this month. Greg's familiarity with HCN's work is deep; when I became director in 2002, I promoted him to editor-in-chief, a role he filled until 2006. During that time, he helped redesign the magazine and broadened our coverage of social and environmental issues. He also experimented with new story forms, including our first-ever science fiction feature.

But Greg has accomplished still more over the last 14 years. His work leading print and digital news organizations on both coasts — including *Grist* and *Crosscut* — has given him a nuanced view of the challenges facing nonprofit journalism today. Meanwhile, he has had the life-altering experience of raising a family with his wife, Tara.

HCN and the Western United States face steep challenges ahead, but I am confident that the board has hired a strong trail guide, one who is not afraid to forge boldly ahead, but also willing to take the time to listen to and encourage the rest of us. Look for a message from Greg in an upcoming issue of HCN. ✨

“Once again, I’ll say how much I appreciate all that HCN has accomplished since (our foundation) began its support. The growth in quality, training of young journalists and expansion of coverage have been amazing. We need your in-depth journalism more than ever. Thank you.”

— Connie Adler, Albuquerque, New Mexico

Thank you for supporting our hard-working journalists. Since 1971, reader contributions have made it possible for HCN to report on the Western U.S. Your donation directly funds nonprofit, independent journalism. Visit hcn.org/support to give.

INDEPENDENT MEDIA GUARDIAN (\$10,000 AND UP)
EMA Foundation | Albuquerque, NM
Gates Family Foundation | Denver, CO
Mark Rudd & Marla Painter | Albuquerque, NM

PHILANTHROPIST (\$2,500-\$4,999)
Rhode Island Foundation | Providence, RI

STEWARD (\$1,000-\$2,499)
Anonymous (2)
Gretchen Augustyn | Claremont, CA
B Bar Ranch | Emigrant, MT
The Bear & Tigger Remembrance Fund | Tenakee Springs, AK
Tim & Kathy Crawford | Bozeman, MT
Bill Cutler & Elisabeth Suter | Topeka, KS
John & Lydia Delventhal | Cornville, AZ
Eli Diamant | New York, NY
Jay & Kathy Finnell | Temecula, CA
David Foss | Boulder, CO
Garfield & Hecht | Aspen, CO
Amy & Chris Gullick | Clinton, WA
Brad Hall | Glen Ellen, CA
Richard W. Hughes | Santa Fe, NM
William Hyde & Dolores Tiongco | Grand Junction, CO
Rufus Leaking | Kanab, UT
Bonnie & John Morgan | Corvallis, MT
Stephanie & Ken Wallace | Helena, MT
Nicholas Wilson | Colorado Springs, CO

GUARANTOR (\$500-\$999)
Anonymous (4)
In memory of Lorie Lindsey | Paonia, CO
In memory of William H. Wing | Tucson, AZ
Prentice & Heidi Bloedel | Port Townsend, WA
Deb Cookingham | Silver City, NM
Robert A. Ewing | Burien, WA
Jonathan Gibson & Eliza Mabry | Shrewsbury, VT
Julian & Diane Holt | Sacramento, CA
Harvey Kelsey & Susan Cashman | Bayside, CA
Sarah Layer | Carson City, NV
Edwin Deane Leonard | Poughquag, NY
Sydney Macy | Boulder, CO
John & Maryann McGee | Cody, WY
Mike & Leah McGinnis | Vail, AZ
Jan Mulder & Greg Bedinger | Tucson, AZ
Jim Munoz | Helena, MT
Orton Family Foundation | Shelburne, VT
Donna & Bill Patterson | Grand Junction, CO
Margaret Piety | Indianapolis, IN
Nathaniel Stevens | Arlington, MA
Gerry & Vicki Wolfe | Rio Rico, AZ

BENEFACTOR (\$250-\$499)
Anonymous (5)
In memory of Nancy K. Putney | Fort Collins, CO
Cindy & Stuart Alt | Scottsdale, AZ
Denny Arter & Tim Martin | Salida, CO

David Atkins | Boulder, CO
George Booth & Christina Knutson | Boise, ID
Terry & Zoe Coddington | Berkeley, CA
Buz & Quincee Cotton | Steamboat Springs, CO
Harold P. Coyle Jr. | Ayer, MA
Lucy Del Giorgio | Tucson, AZ
Reed & Karen Dils | Buena Vista, CO
John Ellerbeck | Logan, UT
Dakers Gowans & Deborah Silver | Harrison, NY
Don Hagedorn | Columbia, SC
Bruce N. Herring | Grass Valley, CA
Suzanne & Richard Hildner | Whitefish, MT
Richard & Linda Howe | San Antonio, TX
Pamela Hyde | Green Valley, AZ
Darcy James | Boise, ID
Peg Kavookjian & David Nora | Westcliffe, CO
Michael Kenney & Anna Moscicki | Dubois, WY
Scott & Becky Lehmann | Storrs Mansfield, CT
Nels & Liz Leutwiler Foundation | Lake Bluff, IL
David Lytle & Anna Jolles | Corvallis, OR
Robert & Debra McGimsey | Eagle River, AK
James & Diana McWilliams | Los Angeles, CA
John & Betsy Messer | Dallas, OR
Robert T. Moline | St. Peter, MN
Richard Myer | Wilmington, DE
Rick & Susan Neff | Missoula, MT
Susan W. Newell & Dick Walton | Billings, MT
Richard Nolde | Littleton, CO
Karen Olson | Rapid City, SD
Duncan & Eva Patten | Bozeman, MT
Sara Ransford, The Arches Foundation | Aspen, CO
Tutti Skaar | Bozeman, MT
Richard Stohman & Christine Newman | Brooklyn, NY
John & Tamera Stone | Seattle, WA
Terrence Taylor & Susan Joseph-Taylor | Minden, NV
John & Linda Taylor Charitable Account | Burlingame, CA
Peter & Mary Sue Waser | Lafayette, IN
John Watson & Sharon Hall | Durango, CO
Western Colorado Community Foundation,
Chamberlin Charitable Giving Fund | Grand Junction, CO
J. Winans | Silver City, NM
Jay Withgott & Susan Masta | Portland, OR

SPONSOR (\$150-\$249)
Anonymous (7)
In memory of Andy Bamberg, Crested Butte CO | Moab, UT
In memory of Bill Calder, Corvallis OR | Corvallis, OR
In memory of Mrs. Chippy, mascot of the *Endurance* | Evergreen, CO
In memory of Patrick Quirk | Tempe, AZ
David Alberswerth & Cary Ridder | Washington, DC
Talitha Arnold | Santa Fe, NM
Michael Dunsdon | Aspen, CO
Charles French | Big Timber, MT
Robert Gamble | Orcas, WA
George Griset | Gustine, CA
Janice Hand & Rick Sanders | Bozeman, MT
Paul & Mary Holden Family Foundation | Providence, UT
Gerry & Chuck Jennings | Great Falls, MT

Nina Kaplan & G. Minot Clements | Charlottesville, VA
Kassen-Goelz Charitable Fund | Boulder, CO
John Kay | San Rafael, CA
Dianna Klineburger | Lynnwood, WA
Rob Lang & Bev Lynch | Salt Lake City, UT
Madelyn Leopold & Claude Kazanski | Madison, WI
Leonard Lloyd | Fremont, CA
Richard Logan & Nancy Howard | Curlew, WA
Don & Purnee McCourt | Golden, CO
Michael McCoy & Patricia McCoy | Imperial Beach, CA
Floyd & Barbara Miller | Portal, AZ
Tam & Barbara Moore | Medford, OR
David & Molly Niven | Golden, CO
Chuck Palmer | Boulder, CO
Marcia Politovich | Liberty Lake, WA
Gene & Polly Reetz | Denver, CO
Ringtail Rentals | Boulder, CO
Kristin Roberts | Washington, DC
Stanley & Susan Shepardson | Bend, OR
Sue Thompson, Autumn Ridge Fund | Nederland, CO
William & Suzanne Wuerthele | Denver, CO
Robert & Katy Zappala | Santa Barbara, CA

PATRON (\$75-\$149)
Anonymous (4)
In honor of William L. Berry Jr. | Carmichael, CA
In honor of Robby Ellis | Spokane, WA
In memory of Billie Stoker | Milford, UT
In memory of Ann Zwinger | Langley, WA
Liz Aicher | Los Alamos, NM
Rick Beauchem | Grand Junction, CO
Otis Calef | Santa Barbara, CA
Bill & Catherine Camp | Montgomery Creek, CA
Thomas E. Chandler | Delta, UT
Rhonda & Kevin Clyde | Moab, UT
Barbara Combs | Eugene, OR
Stephen Davenport | Albuquerque, NM
John DeLapp | Anchorage, AK
Michael DeMarco | Bloomsburg, PA
Bob & Char-Lu Dinger | Chico, CA
Hobey & Ruth Dixon | Alamosa, CO
Mike J. Dunbar | Medicine Bow, WY
Brian Erwin | Santa Rosa, CA
James Evans & Leslie Brown | Vashon, WA
Owen Fairbank | Port Townsend, WA
William Foisy | Red Lodge, MT
Andy & Amy Ford | Grand Junction, CO
Ann Ouellette-Galt | Salt Lake City, UT
Peter & Dael Goodman | Las Cruces, NM
Paul & Wendy Greeney | Milwaukee, WI
Robert & Pamela Guthrie | Estes Park, CO
Catherine Hall | Long Beach, CA
Christopher Hall | Ogden, UT
Tom Harrington | Worland, WY
Robert Hiester | Oak Creek, CO
Mary C. Hill | Boulder, CO
Greg Hilliard | Phoenix, AZ
Mary Hoagland | Denver, CO

Dear Friends

Too cool for school? Not true for HCN! Not only do we report the news, we've been taking the time to tell the next generation of journalists just how it's done.

In early February, Associate Editor Emily Benson contributed to a panel discussion, via remote video, in a graduate-level class at Western Colorado University on *High Country News'* approach to covering the climate crisis. Five days later, she gave another talk, in person this time, to University of Idaho undergraduates on science writing. She talked about her own path into journalism, what life is like at *HCN* (non-stop fun!), and how to translate technical scientific information for the general public. Around the same time, Assistant Editor Carl Segerstrom spoke to master's students, scientists and conservationists at the University of Montana about environmental journalism and the importance of building understanding and mutual trust between scientists and science journalists.

If you notice the magazine looking especially fine — even better than usual — that might be because we have a new photo editor! We're thrilled to welcome Roberto (Bear) Guerra to the staff. Bear, a longtime contributor to *HCN*, has 15 years' experience as a documentary and journalism photographer. He and his wife, Contributing Editor Ruxandra Guidi, are based in Tucson.

Meanwhile, at our headquarters in Paonia, Colorado, two of our very own have published new books. Art Director Cindy Wehling assisted in the production of *The North Fork in the '90s*, which features articles from *The Valley Chronicle*, the monthly newspaper formerly published by Cindy's husband, Don Olsen — stories about rock 'n' roll stars, forest fires and the quirky valley that *HCN* calls home. The other book comes from Executive Director Paul Larmer, who recently published a photo collection inspired by his extensive travels around the Western U.S.

And finally, a clarification: "The tangled web of the global oil market" (March 2020) failed to include sources. The data came from the U.S. Energy Information Administration, the International Energy Agency and Oil Change International. We regret the omission.

—Nick Bowlin, for the staff

John W. Hunt & Teresa Clyton | La Selva Beach, CA
J.L. Jensen Family | Holladay, UT
Fred Johnson | Teton, ID
Andrea Jones & Doug Busch | Cañon City, CO
Stephen & Alice Keil | Pagosa Springs, CO
Robert Kirkpatrick | Spokane, WA
Elizabeth Knight | Sandpoint, ID
M. A. Kruse | Bend, OR
Viki Lawrence | Louisville, CO
Nadene LeCheminant | Salem, OR
Jane & Rick Lewis | San Antonio, TX
William J. Matousek | Winner, SD
Cara McCarthy | Portland, OR
Candace McNulty | Prescott, AZ
Tom & Nancy Moran | Whitefish, MT
Virginia Mudd & Clifford Burke | San Jose, NM
Peter Murray & Mary Swanson | Emigrant, MT
Anne Nelson | Watkins, MN
Jim & Mare Payne | Cerro Gordo, IL
Sarah Pitts | Fort Collins, CO
Jack & Rachel Potter | Columbia Falls, MT
Don Shaff | Boise, ID
Jerry Smith | San Jose, CA
Mary Lou Soscia | Portland, OR
Gary Splittberger & Mary Garrow | Billings, MT
Tom Syverud | Ashland, WI
Robert Van Wetter | Lakewood, CO
Susan Webb & Donn Snoke | Grand Junction, CO
Stan & Elder Witt Wellborn | Washington, DC
John C. Wise | Ashland, OR

FRIEND (\$35-\$74)

Anonymous (16)
In memory of Richard Overman | Bend, OR
In memory of Barbara Thaman | Tucson, AZ
Linda Bell | Boise, ID
Nancy J. Bishop | The Dalles, OR
Dawn Zinser Church | Monterey, CA
Robert Clithero | Bigfork, MT
Elizabeth DeJarnatt | Pacifica, CA
David Doezeema | Santa Fe, NM
William & Nancy Evenson | Corvallis, OR
In honor of Margit Aarons | San Mateo, CA
Norman P & Jane Hanson | Craftsbury Common, VT
Jamie Hascall & Betsy Brown | Seattle, WA
Eric Johnson | Albuquerque, NM
Nancy Johnson | Arvada, CO
Kathy Jubitz & Steve Hawley | Hood River, OR
Daniel Karell | Seattle, WA
Lisa Kearsley | Flagstaff, AZ
Sean Kelly & Debbie Redmount | Basalt, CO
Robert Kelly | Salinas, CA
Mina C. Kidd | Westminster, CO
Barbara & Tobey King | Bellingham, WA
Eduardo Krasilovsky | Santa Fe, NM
Martha L. Kriske | Arvada, CO
John L. Krizek | Prescott, AZ
David Kruger | Tampa, FL

Dave Kwolek | Renton, WA
Evelyn Lamb | Salt Lake City, UT
Kimberly Langmaid & Peter Casabonne | Vail, CO
Julie Lechtanski | Fort Collins, CO
Teresa Lee | Aspen, CO
Tawnia Litwin | San Francisco, CA
Joe & Wendy Lowe | Loveland, CO
Joanne Magalis | Los Lunas, NM
Bill Martin | Quincy, CA
Howard B. McDaniel | San Diego, CA
John McNulty | Tulsa, OK
Janet Mizelle | Pine, CO
Gary Moeller & Mary Bedore | Tucson, AZ
Barbara & John Morrison | Evanston, IL
Gary Nakamura | Bainbridge Island, WA
Larry & Sharon Nall | Joseph, OR
Bob Neale & Louisa Morris | Corte Madera, CA
Kristin Nesse | Bellingham, WA
Jodi Nichols | Marysville, WA
Jo Overton | Philomath, OR
Lee Overton | Paonia, CO
Robert Petit | Eugene, OR
Relf L. Price | Los Alamos, NM
Susan Putnam | Aurora, CO
Denyse Racine | Bishop, CA
Rose V. Ramirez | Temecula, CA
Bob Randolph | Merced, CA
Curt Riffle | Los Altos, CA
Charles Rodkey | Deming, NM
Bryce Romig | Fraser, CO
Charles Rowland | Gig Harbor, WA
David Rummel | Denver, CO
Robert Schegel | Carmichael, CA
Patty Schille | Albuquerque, NM
Alan G. Schmidt | Silverthorne, CO
Anne F Scott | San Diego, CA
Mark Seaton | Mosca, CO
Christopher Seck | Crestone, CO
Patricia & Stan Senner | Missoula, MT
Tom & Diana Sheldon | Boulder, CO
Molly Shepherd | Missoula, MT
Harold Singer | South Lake Tahoe, CA
Robert Smythe | Corvallis, OR
Leslie Snively | Castle Rock, CO
C. & J. Stanley | Idaho Falls, ID
Bill & Kathleen Tembrock | Hotchkiss, CO
Ron Thompson | Pinetop, AZ
Mark & Bonnie Thompson | Custer, SD
Margie Tomenko | Carmichael, CA
Clark Trowell | Green Valley, CA
Ann & Ermanno Vanino | Piñon Hills, CA
Mike & Wendie Vermillion | Sisters, OR
Clifford & Liana Wallman | Midway, UT
Andrew Weiner | Albany, CA
Jane A. Wells | Redwood City, CA
Anne & Dennis Wentz | Bozeman, MT
Penington Wimbush | Dillon, CO

JOIN THE CELEBRATION

The West Illuminated: 50 Years of Unblinking Journalism

THE HIGH COUNTRY NEWS ANNIVERSARY GALA AND FUNDRAISER

June 12, 2020
Denver, Colorado

Visit hcn.org/gala for more information.

HCN
CELEBRATING 50 YEARS





16th Annual
GALA
fundraiser



SNOW BALL
MASQUE-FUR-AID

- Gourmet Dinner
- Ambassador Wolf Visit
- Unique Auction Items



Special Guest Speaker:
Rick McIntyre, Biologist

JOIN US
May 2, 2020
@ The Hilton - Fort Collins
Register at www.wolfsanctuary.net



WYOMING PUBLIC MEDIA

Western Podcasts
Download our Award-Winning Podcasts
HumaNature • The Modern West • Open Spaces

Wyoming Public Media is a statewide service of the UNIVERSITY of WYOMING



Listen on
 Apple Podcasts

GET IT ON
 Google Play

Yellowstone Wolf Tracker

The Wildlife Watching Experts



— YELLOWSTONE —
WOLF TRACKER

Single or multi-day tours in
Yellowstone National Park
led by local naturalists

Trip Advisor
AWARD OF EXCELLENCE

WolfTracker.com • (406) 223-6634



BE WILDER

SILVERBELLY



BY AWARD-WINNING AUTHOR
S.J. DAHLSTROM
A WILDER GOOD ADVENTURE

SILVERBELLY

A Wilder Good Adventure
For ages 9-12

Thirteen-year-old Wilder is learning to bow hunt when a run-in with a dangerous neighbor causes him to rethink his ideas about what a trophy buck is, and how he relates to the wild landscape around him.

Available wherever books are sold.
pauldrybooks.com



**LEARN. EXPLORE. GROW.
PROTECT.**

HAVE FUN DOING SERIOUS WORK.



Join the fight to protect
America's public
lands and waters for
future generations.

WWW.GREATOLDBROADS.ORG/JOIN-US



**IT'S TIME TO PLAN AN
ADVENTURE**
Let Travel Renew Your Spirit



Group birding by Dodie Logue

NATURALIST JOURNEYS
WORLDWIDE BIRDING & NATURE TRAVEL



www.naturalistjourneys.com
travel@naturalistjourneys.com
866.900.1146



**ORGANIC
ANCIENT
GRAINS**

Bluebird Grain Farms

FROM OUR PLOW TO YOUR PLATE
WHOLE GRAINS, FRESH MILLED FLOURS & DRY PRODUCT BLENDS

LOCATED IN THE METHOW VALLEY, WASHINGTON | 509.996.3526
BLUEBIRDBGRAINFARMS.COM

USDA ORGANIC



ZION
is our classroom

Take a closer look at the Greater Zion Landscape.

Deepen your Zion experience with one-to-three day courses in geology, archaeology, photography and more, or call to customize your own learning adventure.

Start exploring now at ZIONPARK.ORG

Visit online or call today!
435.772.3264

The Forever Project is the official nonprofit partner of Zion National Park

ZION NATL PARK FOREVER PROJECT



**ESCALANTE CANYONS
ART
FESTIVAL**
EVERETT RUESS DAYS

September 14-27, 2020

**PLEIN AIR COMPETITION • WORKSHOPS & DEMOS
ART SALES • SPEAKERS • ART FAIR • MUSIC • FILMS**

escalantecanyonsartfestival.org

Escalante, Utah is located in the heart of Grand Staircase-Escalante National Monument between Bryce Canyon and Capitol Reef National Parks.

DeLee Grant, Rocky Top (detail), 2020 Award of Artistic Excellence

GEORGE S. AND DOLORES DORÉ ECCLES FOUNDATION

LIFE UTAH ELEVATED

GLEN CANYON CONSERVANCY



**HOLIDAY
RIVER
EXPEDITIONS**

**DO YOU HAVE A PASSION?
WE HAVE A TRIP FOR THAT.**

Join Holiday River Expeditions for Interpretive Specialty Trips in HISTORY, GEOLOGY, STARGAZING & RIVER ADVOCACY.

BikeRaft.com • 800-624-6323
email Info.HolidayRiver@gmail.com

Trips ranging from 5 to 10 days on the Colorado Plateau.

ASA WRIGHT NATURE CENTRE TRINIDAD & TOBAGO

Travel is a gift that never goes out of season. Caligo Ventures specializes in nature travel to Trinidad and Tobago. Whether you want a relaxing lodge stay, a fully guided tour or an independent birding/wildlife venture, our two-island trips blend influences of the Caribbean and South America for two vacations in one! Check our many exciting tour possibilities at caligo.com or call us at 800-426-7781.



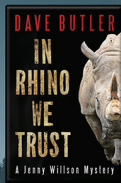
Photo: Green Honeycreeper by Peg Abbott; Clear-winged Butterfly & Land Crab, Raymond Mendez; Leatherback Turtle, Asa Wright Nature Centre.



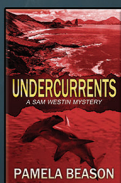
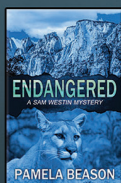
FREE RANGE WRITERS

AWARD-WINNING AUTHORS OF
ENVIRONMENTAL MYSTERIES

GREGORY ZEIGLER
The Susan Brand Mysteries



DAVE BUTLER
The Jenny Willson Mysteries

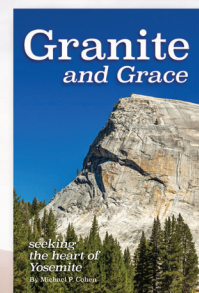


FREERANGEWriters.COM

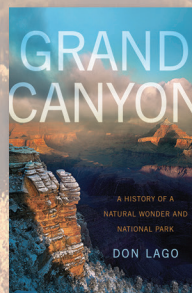
BOOKS FOR THE EXPLORER



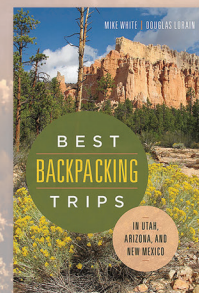
Profiles the natural and human history of one of the most beautiful landscapes in the world.



One man's lifelong encounter with the iconic granite peaks of Yosemite National Park.



A journey through the natural history and cultural significance of a natural wonder.



Backpacking adventures of a lifetime, from high mountain trips to some of the world's best canyon hikes.

 UNIVERSITY OF NEVADA PRESS

UNPRESS.NEVADA.EDU

WILDERNESS

HIKING - WORKSHOPS - HUNTING

WWW.DROPSTONEOUTFITTING.COM



The most comfortable wallet you'll ever own.



Rogue Front Pocket Wallet
in American Bison Leather. \$55

Back pocket wallets are poorly designed - they're bulky, uncomfortable and easy to have stolen. So at our little leather shop in Maine, we reimagined the wallet and what it could be.

We started with a new design that was slim, secure, and shaped for your front pocket. We put the finest American leathers in the hands of our craftsmen and women. And we ended up with a wallet you'll want to carry for a lifetime. Not everyone cares about well-made leather goods. But if you're the type of person who does, we're glad you found us.

Rogue Industries

rogue-industries.com | 800-786-1768

EXPLORE THE WEST

Want to see the lesser traveled Grand Canyon?
Joshua Tree under the stars?

Learn more about photographer Matt Harding's
personalized workshops and travel experiences at:
auburnartgallery.org/workshops



University of Idaho
McCall Field Campus

FIVE REASONS WHY PEOPLE CHOOSE OUR GRADUATE PROGRAM:

- Earn a Masters Degree in one year
- Gain experience teaching field science
- Find adventure exploring Idaho
- Develop professional skills in science communication
- Become a part of our professional network and alumni community

NOW ACCEPTING SCHOLARSHIP APPLICATIONS –
OPEN UNTIL FILLED
www.uidaho.edu/moss



The Mammoth Site Ice Age Explorers Program



- Will you be the one to discover the next mammoth?
- Search for Ice Age fossils from massive mammoths to micro-mammals.
- Contribute to diverse Ice Age research by The Mammoth Site.
- 4 Sessions — Space is Limited!

Reserve Your Spot Today!

- Week 1 - Arrive May 31 - Depart June 6, 2020 • Week 2 - Arrive June 7 - Depart June 13, 2020
- Week 3 - Arrive June 14 - Depart June 20, 2020 • Week 4 - Arrive June 21 - Depart June 27, 2020

Call 605-745-6017 or visit Mammothsite.org



We Dig Big!

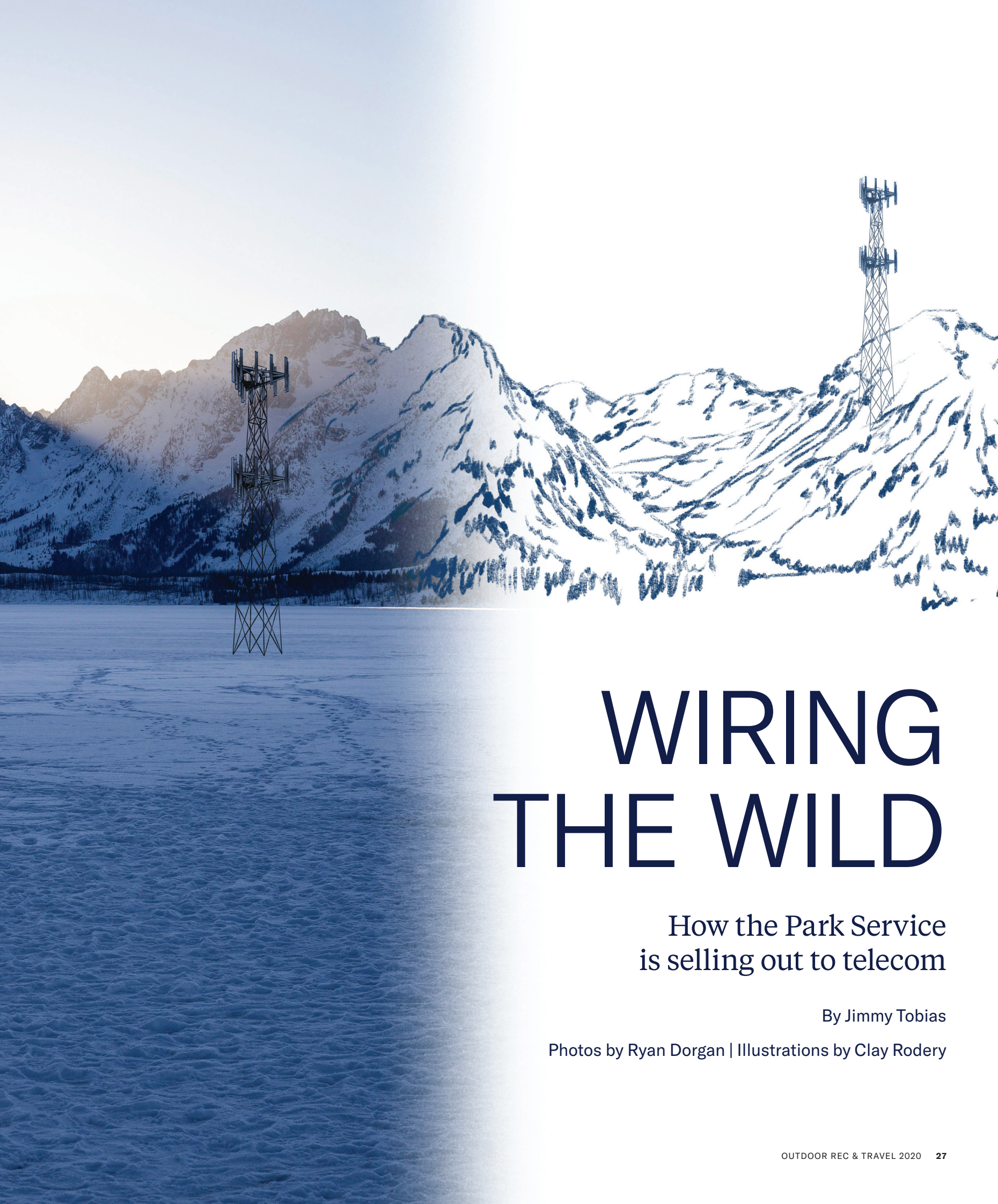
The Mammoth Site
1800 US 18 Bypass • Hot Springs, SD 57747

This institution is an equal opportunity provider and employer.





Artist's conception of cell towers reaching into Wyoming's Tetons.



WIRING THE WILD

How the Park Service
is selling out to telecom

By Jimmy Tobias

Photos by Ryan Dorgan | Illustrations by Clay Rodery



Grand Teton near Jackson, Wyoming.

LAST SEPTEMBER, Jim Stanford climbed onto a big flat raft, shoved off from shore, and paddled into the swift current of the Snake River in Wyoming's Grand Teton National Park. It was one of those early Western mornings when winter lets you know that it will soon arrive. Squat clouds sat in the sky. A crisp frost clung to the foliage. And six tourists shivered in their seats beside Stanford as his boat picked up speed.

The visitors had traveled across the country for this two-hour voyage into the heart of the park. Stanford, a grizzled 49-year-old river guide, was determined to dazzle them with the land's magic. As the boat turned a bend, a bull elk materialized out of the morning mist, its body slumped, its face submerged, its massive rack jutting above the current like the splintered mast of some sunken ship. It was dead.

Stanford's clients clamored to the boat's edge and pulled out their smartphones to snap photos of the scene before the river ushered them downstream. And from there, it was but a few more moments before one of the visitors had progressed from taking pictures to scrolling through his screen, struggling in vain with the park's very

spotty service. There were zero, one, two bars of coverage at best — not enough to send a text or upload a photo. The tourists had little choice but to experience the park in analog fashion.

An hour later, the float trip ended and Stanford's boat came to a stop near Grand Teton headquarters. The visitor who had been fiddling with his smartphone during the voyage now took the opportunity to share his thoughts about cell coverage at Grand Teton. "Service at this place sucks," he said. And then he explained his circumstances. "Even on vacation they

expect you to be accessible at all times,” the man lamented, speaking of his IT industry employer. “Some people expect the electronic handcuffs on you at all times.”

As it turns out, the National Park Service is paying close attention to such sentiments. In fact, it is presently pursuing a massive expansion of cellular and broadband facilities at Grand Teton National Park. Working in tandem with major telecom companies like AT&T and its agents, the agency is planning to permit the installation of more than 60 miles of fiber-optic cable, as well as at least nine new cell tower sites scattered throughout the park. The plan, which is awaiting a final permit, would blanket much of Grand Teton with new and stronger coverage. It is shaping up to be the largest single expansion of telecommunications infrastructure in national park history.

Some see these proposed cell towers and the better coverage they promise as a positive development that will assist search-and-rescue missions and improve access for an American public increasingly reliant on digital technologies. But others view the proposal as a serious threat. Stanford, the river guide, is among them. He relishes the remote corners of Grand Teton where his cellphone signal fades. He likes living close to “wild land” where Facebook, Twitter and Instagram hold little sway. There’s something comforting, he says, about places that haven’t been absorbed into the ever-expanding coverage maps of Verizon, AT&T and the other telecom conglomerates that control this country’s wireless waves.

“We need to unplug, and we need places we can unplug, and if not here, where?” says Stanford, who also serves as a councilman in the nearby city of Jackson.

There aren’t many places people can go these days to escape completely from the ubiquitous influence of social media, smartphones, Big Tech and telecom companies. The blank spots on

the coverage maps are constantly shrinking, though not equally, and not everywhere. In many cases, the expansion of broadband coverage is necessary; telecom providers too often underserve rural areas, tribal nations and Black and Latino communities, for instance. Their exclusion from reliable coverage has a negative impact on everything from local economies to public health.

The United States is struggling to remedy these inequities. At the same time, there are also spaces — national parks, wilderness areas and other public lands — that some believe should remain refuges from the digital world. Such places provide a final opportunity to preserve small pockets of smartphone-free open space in the United States — landscapes where you can still escape the electronic handcuffs. But they are beginning to disappear.

The telecom giants — AT&T, Verizon and more — are pushing to build out infrastructure on protected public lands across the country. These corporations hope to extend their reach into some of the most iconic and remote corners of the United States. And they have found a close collaborator in the federal government, which is working alongside industry operatives to open many national parks and other public lands to commercial wireless service. With a sprawling network of cell towers soon to be installed within its boundaries, Grand Teton National Park is a testing ground.

IN 1996, AMERICA’S media landscape experienced a seismic transformation. That year, President Bill Clinton signed the Telecommunications Act into law, putting an end to the New Deal-era legal regime that governed the country’s radio, TV and telephone providers. An enormous piece of legislation heavily influenced by corporate lobbyists, the new law helped spur industry consolidation and officially opened federal lands to cellphone towers and similar

projects. It actively encouraged the expansion of telecom infrastructure on public lands, requiring agencies like the National Park Service to consider applications from corporations that want to install wireless facilities on the federal domain. It was the beginning of an industry bonanza. Yet there were always meant to be some limitations.

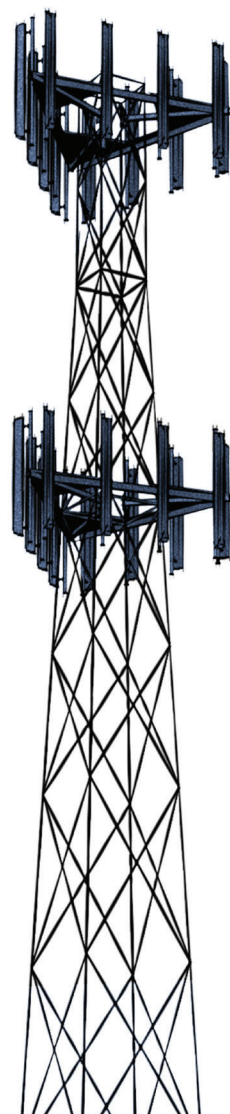
In a report published in 1995 by the House Commerce Committee, which played a central role in crafting the Telecommunications Act, Congress recognized that some federal lands, like parks and wild areas, should be off-limits to wireless infrastructure. The “use of the Washington Monument, Yellowstone National Park, or a pristine wildlife sanctuary, while perhaps prime sites for an antenna and other facilities, are not appropriate and use of them would be contrary to environmental, conservation and public safety laws,” the committee wrote.

Don Barger, who led the National Parks Conservation Association’s Southeast office for many years, relied on such arguments when he led a brief campaign to block the construction of cell towers in Great Smoky Mountains National Park in the mid-’90s.

“There was a proposal for three towers along the only road that runs through the middle of the Great Smoky Mountains National Park,” Barger told me recently. “I ... contacted my representatives and senators ... two of them sent a letter to the Interior Secretary, basically saying: ‘This is the stupidest idea we have ever heard.’”

Eventually, Barger prevailed: The proposal was withdrawn.

But political, economic and social circumstances are very different these days. In recent decades, the U.S. has witnessed the rise and consolidation of enormous media conglomerates like AT&T, Verizon and, just last year, a proposed \$26 billion merger between Sprint and T-Mobile. At the same time, smartphones and social media companies have





Jim Stanford prepares for a ski down Snow King Mountain in Jackson, Wyoming. Stanford began working in Grand Teton National Park in 1993 as a shuttle driver for a scenic raft tour company before taking the oars as a Snake River boatman in 1994.

revolutionized digital communications and created insatiable consumer demand for high-speed wireless coverage. Mobile data traffic has been on a rocket-fueled ascent. We increasingly depend on Big Tech and the telecom companies, using their devices and data for banking, shopping, navigation, transportation, work, socializing, even sex. And so, there is an ongoing bipartisan push to expand broadband coverage into the corners of the nation where politicians and corporations alike perceive a higher demand, including many protected public lands.

The Trump administration, in concert with telecom lobbyists, has made the installation of new cellular and broadband infrastructure a priority. Among other things, President Donald Trump's Federal Communications Commission has limited the authority of local governments to stop such development. The administration is also working to "streamline" environmental reviews and speed up the permitting process that lets companies build telecom facilities on federal land. A 2018 Interior Department report stated the government's objectives explicitly: "By making it easier for private industry to co-locate or build out new broadband infrastructure on public lands, the (Department of the Interior) can play a strong role in increasing connectivity throughout the United States."

The impact of such policies is already apparent in many national parks. In Yosemite, agency officials have quietly sanctioned six new cell towers in recent years. In Sequoia, Verizon recently received permission to erect a 138-foot cell tower designed to look like a tree. At Mount Rainier, the big telecom providers are pushing for the construction of a wireless antenna atop a popular visitor center. At the Grand Canyon, the Park Service is proposing to permit as many as five new telecommunication towers along the canyon's rim. And in Yellowstone, proposed infrastructure improvements would

“multiply the park’s wireless capacity by 38 times,” according to the *Bozeman Daily Chronicle*.

But no park better illustrates this trend than Grand Teton, where agency officials want to build a string of cell towers that will run most of the length of the 45-mile-long park. The proposed facilities will be confined to developed areas like Jenny Lake, Colter Bay and Flagg Ranch, but maps of the project show that broadband coverage will spill into significant swaths of the park’s backcountry, including some of the most remote corners of the continental United States. If the plan comes to fruition, Stanford’s clients will no longer have to struggle so hard to send emails or upload Instagram photos during voyages down the Snake River.

THE AFTERNOON FOLLOWING his dawn float trip, I sat at an outdoor cafe near Grand Teton headquarters with Stanford, sipping coffee and soaking in some scarce sunshine, as he expressed his disdain for the park’s massive cell tower expansion. He admitted that he may come off as antiquated, but he harbors a deep unease about the ever-spreading influence of mobile technologies and their psychological, social and environmental impacts. In fact, he’s angry about it, and at times his big blue eyes narrowed into daggers as we talked.

“We are tethered to this technology 24/7,” he said. “Even while floating a wild and scenic river in a national park, one of the most majestic pieces of river you can float anywhere in the world, people are still tethered to their phones.”

“That is the trend. That is where we are going as a society,” he said. “And the Park Service wants to enable that.”

A steady drip of studies and reports in recent years offer some context for Stanford’s concerns. One 2017 study warned that prolonged cellphone use can alter the curvature of our spines. And a 2019 survey by Common Sense Media, an advocacy group

“Even while floating a wild and scenic river in a national park, one of the most majestic pieces of river you can float anywhere in the world, people are still tethered to their phones.”



A T-Mobile cellular tower just outside Grand Teton National Park’s boundary, near the Jackson Hole Airport. The cell tower is one of two currently providing service to the park. A proposed infrastructure upgrade would add nine more.

that promotes safe technology use for children, found that 45% of parents and 39% of teens feel addicted to their mobile devices. The survey also found that one out of every three teens and one in four parents are having their sleep regularly interrupted by notifications from mobile devices. Indeed, 29% of teens actually sleep with their phones. Another study has concluded that teenagers who spend five or more hours a day using digital technologies are 71% more likely to suffer from at least one risk factor for suicide.

On the environmental front, telecom infrastructure can prove deadly for wildlife. In a 2014 letter, for instance, the Interior Department’s own Office of Environmental Policy and

Compliance cited studies showing that as many as 6.8 million birds may die every year in North America due to collisions with cell towers. The letter also referenced the harmful impact of radiation on birds nesting near cell tower sites: “Study results have documented nets and site abandonment, plumage deterioration, locomotion problems, reduced survivorship and death,” it reported.

A slew of prominent Silicon Valley insiders, meanwhile, have come forward to blow the whistle on Big Tech’s inventions. In a book published in 2018, for instance, the internet pioneer Jaron Lanier denounced the pernicious political and psychological influence of major social media platforms, which he describes as “behavior

modification empires” that intentionally addict, manipulate and spy on their users, all while spreading political misinformation, stoking economic insecurity, destroying local journalism, and providing our personal data to unseen third-parties. Lanier advises his readers to delete all social media accounts immediately.

Millennials, too, are chafing at the digital bonds of Big Tech and the telecom giants. In her new book, *How to Do Nothing: Resisting the Attention Economy*, Jenny Odell encourages people to fight “the invasive logic of commercial social media and its financial incentive to keep us in a profitable state of anxiety, envy and distraction.” Odell sees non-commercial public spaces like parks and gardens as havens from the “permanent state of frenzy” that constant connection incites.

Harvard scholar Shoshana

Zuboff’s new book has a name for the economic system that has fueled the rise of smartphones, social media and tech behemoths: “surveillance capitalism,” which she describes as a “new economic order that claims human experience as free raw material for hidden commercial practices of extraction, prediction and sales.” With their dazzling digital services and profit-seeking snooping, Google, Facebook, Verizon and more draw us ever-deeper into their ecosystem of intrusive corporate surveillance, threatening our right to self-determination, privacy and “sanctuary,” she writes. And the emergence of 5G wireless, wearable devices, and the so-called “internet of things,” she argues, could soon allow these companies to create a world of nonstop behavioral monitoring, conditioning and control — “a world of no escape.”

But right now it’s a world

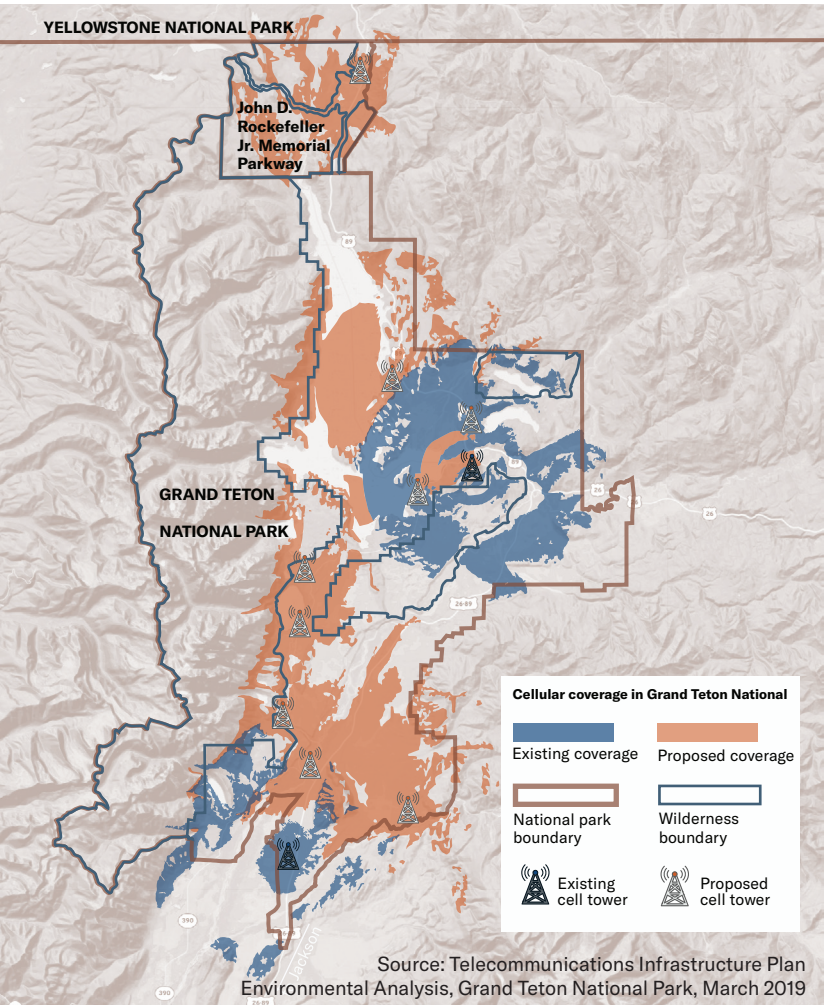
of no escape for some, and not for others: The telecom industry’s business model means that many low-income rural and tribal communities are completely shut out of adequate cellular and broadband coverage even as more populous places enjoy an abundance of service. In Indian Country, 63% of households on tribal land lack high-speed services, says Kevin Allis, the CEO of the National Congress of American Indians. “And even more painful is the fact that 60% of Bureau of Indian Education schools lack access to adequate digital broadband.”

The FCC estimates that at least 21 million Americans do not have broadband service. The vast majority live in rural communities, which often lack reliable cellular coverage, according to Lindsay Stern, a policy fellow at the advocacy group Public Knowledge. “Major carriers have a bottom line, and if they don’t get a

return on investment, they often will not deploy in certain areas — and that is legal. They can decide where they want to deploy,” she says. “But broadband is an essential service of the 21st century, just like phones were an essential service of the 20th century. We need to treat broadband as an essential communications service, because that is the reality.” Currently, the FCC does not do this.

Still, even as policymakers and advocates labor to close the digital divide in rural and tribal communities, the federal government and telecom interests are committing their resources to new infrastructure in high-profile landscapes where very few people live full-time.

Some critics believe that industry and government don’t have their priorities straight — that their approach to broadband development is uneven and unfair. At the same time, some say that we



The Teton Range as seen from the Grand Room at Grand Teton National Park headquarters.

should limit the telecom industry's expansionary ambitions, especially on protected landscapes. Stanford, for example — a child of suburban New York who followed a friend to Wyoming in his early 20s and soon found a job working in outdoor recreation — says places like Grand Teton are easily degraded.

"So many people think of this area as so wild, they think there is so much wilderness and everything," he told me. "Well, I walked the Teton Crest in the moonlight, nearly 20 years ago now, and what quickly becomes apparent is you can see the lights encroaching on either side — the lights of civilization — and you realize what a thin, fragile, precious strip Grand Teton National Park really is."

Undeveloped landscapes "are besieged on all fronts," he added later. Why "compromise" what remains with towers and cables and the seductive lure of smart devices?



THE AFTERNOON after Stanford's float trip, I visited national park headquarters in Moose, Wyoming, a tiny town with front-row views of the Teton Range. We could see its formidable peaks, which first stabbed the sky almost 10 million years ago, right outside the corner conference room where I met Denise Germann, an agency spokesperson dressed in classic Park Service garb. Rusty Mizelle, a tall reed of a man who coordinated the Grand Teton cell tower plan, soon joined us. Together, in the shadow of the mountains, they explained their agency's rationale for letting the telecom companies set up shop on protected public lands.

It all started back in 2013, when the Park Service convened a meeting with AT&T, Verizon and other telecom interests that wanted to lay fiber-optic cable and build cell towers in Grand Teton. During the meeting, the telecom companies pulled out a coverage map that showed "a big spot, a big chunk, in northwest Wyoming, where there was nothing."

"They came to us and said, 'Well, we're interested in filling our map,'" Mizelle recounted. The Park Service had its own priorities: "One is our day-to-day mission-critical business," including search and rescue operations, Germann said. "The other is recruitment and retention of employees," she added. The third "is just visitor experience and visitor expectations. More and more people are looking for this sort of access."

With new cell towers, it will be easier to manage the park and hire employees, and it will be easier to satisfy the 3 to 4 million people who visit the park each year.

And so the Park Service and Big Telecom teamed up. AT&T and the other telecom companies appointed as their agent a New Jersey-based infrastructure firm called Diamond Communications, which builds cell towers around the nation. Together, the Park Service and Diamond scouted locations and crafted a plan that calls for a

slew of 80-foot monopole towers, a sprawling fiber-optic network and more. The Park Service then initiated an environmental and cultural analysis of the project, as required by law. It also consulted with numerous tribal nations, including the Eastern Shoshone Tribe, whose homeland includes all of Grand Teton National Park.

In a recent interview, Joshua Mann, the director of the Eastern Shoshone's historic preservation office, put the cell tower project and the park itself in proper context. "We had several bands of the Eastern Shoshone Tribe that hunted there and also camped there," he tells me. The Eastern Shoshone and others, he says, "were pretty much driven from those lands as soon as the park boundaries were established." Whatever the controversies swirling around federal lands today, many of these lands have their origin in violent dispossession, a fact that legacy conservation organizations have largely failed to grapple with. As for the specifics of Grand Teton's telecom plan, Mann says the Eastern Shoshone are not opposed, though the tribe is concerned that new infrastructure could impact cultural resources, including prayer circles and historic campsites located near the project zone. If cell tower construction proceeds, Mann said, the Eastern Shoshone will safeguard their interests.

Mizelle and his team ultimately completed their environmental and cultural analysis of the cell tower project in August 2019 and issued a "finding of no significant impact." The report concludes that the new cell towers and fiber-optic cables will not negatively affect natural or cultural resources in Grand Teton. Telecom companies are now awaiting a final permit from the Interior Department, expected this year.

During our meeting, Germann pulled out maps of the project and laid them on the conference room table. In pastel colors of blue and green splashed over the park's topography, the maps showed that new cell coverage will not

just inundate developed areas in Grant Teton, but will also spill into significant portions of the park's backcountry, including remote areas that are managed as federal wilderness. Germann acknowledged that some spillover will happen but insists "the intent of the entire plan is not to have cell coverage in the backcountry."

Documents produced during the agency's environmental analysis show, though, that the Park Service could have prevented some cell coverage from spilling into the Grand Teton's backcountry but decided not to. In an appendix contained in its own environmental analysis, the agency explains that "although the technology exists to limit the spillover of cell phone frequency into backcountry and wilderness areas, the NPS determined the potential increase in overall coverage of cellular service is acceptable in these areas."

Asked about this discrepancy, Mizelle said any spillover that occurs in the backcountry will likely be unreliable and weak. "We don't think people will be able to stream Netflix while walking up into Cascade Canyon because of what we are providing," he said. "And frankly, if people choose to do that, that is human behavior. It is not the radio waves' fault."

The Park Service says that all of this — the years of planning, the infrastructure build out, the backcountry spillover — is ultimately about meeting the needs of visitors and employees. It is what people want. Germann herself believes it should proceed, both for personal and professional reasons. She lives in the park and says she has very spotty service at her home. "Sometimes I have to go to the corner of the room to find it, and sometimes I have to go outside to find it," she said. Germann is a public affairs officer whose job involves keeping visitors aware of road closures and winter storms and other unforeseen events, so the bad cell service impacts her job performance in a real way. "I don't have the coverage to be as



Lucie Lafranchise and Jack Ellis, visiting from New England, climb a wall of snow before heading out for an afternoon ski near Grand Teton National Park's Taggart Lake Trailhead. Parked cars stretch a half-mile down Teton Park Road from the trailhead parking lot, which gives visitors direct access to groomed cross-country ski trails along the park's interior road and easy access into the backcountry.

responsive as I could be," she added, noting that other park employees have similar frustrations.

The Park Service, though, has not provided any official survey or dataset that supports its belief that a substantial number of visitors desire more coverage. Germann acknowledged that the agency's evidence is still mostly anecdotal.

THE MORNING AFTER my meeting with Germann, Stanford and I struggled to find a parking spot

near Jenny Lake, one of Grand Teton's most popular tourist attractions. Even on a Friday in September, during the so-called "off season," the parking areas were glutted with vehicles. The campgrounds around the lake were also packed. Commercial jets loaded with incoming tourists occasionally descended overhead on their way to Jackson Hole airport — the only major airport in the country that sits inside a national park, as Stanford ruefully reminded me on

multiple occasions. On this particular morning, Grand Teton felt a little bit like Disney World — full lots, big crowds, minimal vacancies and a \$35 entrance fee.

Eventually, we decided to ditch Jenny Lake and head north to quieter country. Farther up the road, we turned into a pull-off that looks out on the Teton Range. It was a lesson in contrasts: To our right was the less developed portion of the park — few trails, few campgrounds, few visitors, just the

rugged northern half of the Teton front, where one can find solitude, open land and the occasional grizzly bear. Much of it is de facto wilderness. Back to our left, on the other hand, the Jenny Lake complex was exceptionally busy. Stanford, citing a favorite nature writer, called the latter area "a sacrifice zone."

Together, these two areas of Grand Teton reflect the Park Service's dual mission. In each national park, the agency is required to "conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations." The mission requires the park to both conserve and entertain, to provide protection and access — two mandates that often clash.

For Stanford, the ultimate question is whether all of Grand Teton will become a "sacrifice zone," its only purpose to cater to visitors, or whether some portion of the park will remain as wild as possible. This question is at the heart of his cell tower angst. "It is one thing to have (cell coverage) concentrated in these sacrifice zones and these developed areas," he told me, "but it is another to have it just beamed everywhere."

There are some, though, who want to make our parks more commercial, more developed, more like Disney World, and they have the ear of President Donald Trump's Interior Department.

In 2019, news broke that the Interior Department is mulling a proposal to supercharge the Park Service's drift toward commercialization. The proposal, which was crafted by an Interior Department advisory committee whose members include corporate concessionaires like Delaware North, Aramark and the National Parks Hospitality Association, calls for more private management of Park Service campgrounds nationwide. The plan's proponents want

the agency to raise camping fees, end some discounts for senior citizens, increase WiFi connectivity, and even allow food trucks and Amazon deliveries at certain park campgrounds. They want more contracts, more profits, more industrial tourism. Conservation groups have denounced the plan as an effort to effectively privatize national park facilities.

At the same time, the Trump administration is working closely with telecom interests to facilitate cell tower construction on federal land. In 2017, Trump's FCC convened a working group that included representatives from telecom companies, infrastructure developers and key federal agencies, including the Interior Department. This working group published a report in January 2018 that calls on federal agencies to speed up permitting for telecom infrastructure on public land and exempt some broadband projects from environmental review under the National Environmental Policy Act, among many other proposals.

Consistent with the Telecommunications Act, the group wrote, "applications to place communications facilities should be approved unless they are determined, on the basis of all relevant evidence, to be in direct and complete conflict with an agency's mission." In sum: The group recommended that federal land managers should green-light a lot more telecom projects, and do so lickety-split.

Jonathan Adelstein, a telecom industry advocate, served as the working group's co-chair. He is the leader of the Wireless Infrastructure Association, which represents companies like Diamond Communications and spent more than \$1.5 million lobbying in Washington, D.C., over the last two years.

"We made our report and it is up to the FCC, and White House and other agencies to implement (our recommendations). I feel there is a good faith effort to do so," he says, citing Grand Teton's telecom plan as an example of the government's eagerness to build more wireless

infrastructure on federal land.

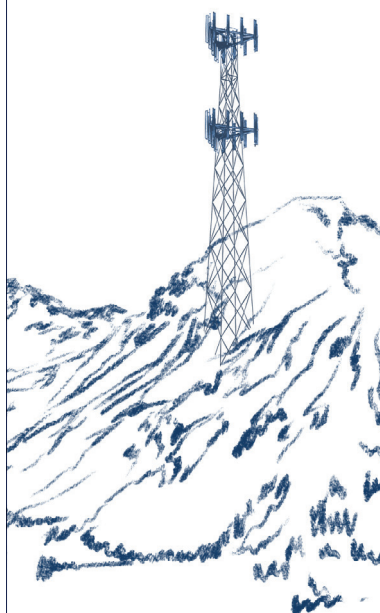
In response to those who oppose more cell towers at national parks, Adelstein offers this retort: "Why should a handful of naysayers have the right to dictate for everyone when they can connect to wireless broadband or connect to emergency services?"

Critics of cell tower development in parks, for their part, see the influence of corporations and concessionaires on federal policy as the ultimate source of the problem.

"The commercial interests are winning, the lobbying groups are winning, so these are the kinds of things that are happening all the time now," said Joan Anzelmo, a retired Park Service official. She lives near Grand Teton National Park and rejects its cell tower plan. She believes the agency's environmental review of the cell tower project was inadequate. "I was disappointed that Grand Teton did an environmental analysis and not an environmental impact statement," she said. "This is a major project with lots of physical impacts" on the park, but under the Trump administration there is an overwhelming pressure to "say yes to everything."

Jeff Ruch, a staffer at Public Employees for Environmental Responsibility, an advocacy group that has criticized cell tower development in parks, agrees. "It's almost as if the Park Service has become a subsidiary of AT&T," he told me. His organization believes that the agency, in its haste to fulfill the desires of broadband providers, has violated federal laws and policies that govern telecom infrastructure on public land. Last year, PEER asked the Interior Department's Inspector General to investigate the matter. The office launched a probe and, in July 2019, issued a report. It wasn't pretty. Investigators found that the Park Service did not maintain an accurate inventory of cell towers on parklands. The agency had also failed in some cases to collect the correct amount of fees for telecom right-of-way permits, while in other

"Why should a handful of naysayers have the right to dictate for everyone when they can connect to wireless broadband or connect to emergency services?"



cases, it couldn't provide evidence that it adequately conducted environment reviews for telecom projects.

"The root of the problem is a Park Service embrace of cellular coverage without any critical analysis, outsourcing its resource protection role to the telecom industry," said PEER's executive director, Tim Whitehouse, in a statement last year. "In short, the (Inspector General) found that the Park Service is illegally subsidizing the telecom industry to the detriment of the parks."

BACK IN TETON last September, I sat with Stanford as he described one of his favorite places on the planet. With the ancient, weathered face of the mountain range in front of us, he pulled out a map, and pointed to an area near the park's northern boundary where the landscape dips into a burned-out basin before rising again to meet the Yellowstone plateau. This particular hunk of land, he said, is some of the "wildest country left" on earth.

Stanford describes Teton as the sort of place that "stirs up things deep inside of you, and you have to rely on that, and it is fundamentally human." It is a "tonic for our souls."

And yet, according to coverage maps, much of this untrammelled landscape will be blanketed with new cell and broadband service should the agency's telecom plan come to fruition. "I see the tentacles of these technologies spreading," Stanford told me, "and that is why I have been kind of rebelling against it."

"There is so little left," he said. "There is so little truly wild country left." ☀

This coverage was supported by the Society of Environmental Journalists' Fund for Environmental Journalism and by contributors to the High Country News Enterprise Journalism Fund.

The Nouveau Negro York

An exclusionary wildness
in a rapidly digitizing West

By J. Drew Lanham

MY SENSE OF WILD-BEING FORMED when I was a kid, steeped in the sanitized, sensationalized history of the “American West.” Hypnotized by 1970s fat-backed analog color television and three channels, I saw a West made of covered wagons, bucking broncos, dusty cattle drives, Indigenous people on painted ponies killing brown bison and white cowboys killing everything they could.

The Technicolor truth of guns, bullets, locomotives and whiteness conquering bows, arrows and “primitive” people with darker skin and feathers in their hair was a constant. Back then, being the Black backwoods Carolina kid who thought he’d be a Montana cowboy one day and a Cheyenne “dog soldier” the next, I didn’t question the homogenized portrayals. I just felt pulled towards wide prairie and Big Sky — to be “out there” in the wild of it all, somehow.

My early virtual reality arrived via rabbit-eared antennae fine-tuning a Western world filtered through John Wayne. Setting my own color aside and teleporting through fantasy into those mythologies, I learned and mis-learned through horizontal hold and pages I could physically turn.

With the American Bicentennial celebrating 200 years and me 11, I found York, an enslaved black man who was a member of the Corps of Discovery, the 1803 Jeffersonian expedition that sent Capt. Meriwether Lewis, Lt. William Clark, a team of free white men — and

York — to secure the land theft known as the Louisiana Purchase. No more than Clark’s livestock by law, York was nearly invisible among the legions of intrepid white “heroes” in the books I read. Was I included in any ideas of what the West was? Being Black, I found it hard to be the intrepid white explorer — and enslaved Negro wasn’t a role I was willing to play.

York didn’t have a choice. Compelled by conditions, he walked, rode, paddled, portaged, hunted, fished, foraged, nursed, fought, suffered, shivered, sweated, bled, cried, bargained, mediated, danced and sang at the behest of others. I suspect that, in some moments away from the oppressive eyes of ownership, he may have fallen in love with snow-capped peaks or a curlew’s wavering call. Here, beyond what he’d ever experienced, was some measure of freedom.

I learned very little about this Black West-going man. But Alex Haley’s *Roots* — the book-turned-epic-TV series that infused a Technicolor Afro-pride in millions — gave me a desire to know more about my own history. York began to haunt me in my West-ing dreams.

Hollywood and its writers implied that the Wild West was out of reach for me — unless some more intrepid white person showed me the way. This made York a critical figure in my yearning: a Black man exploring the wild who became a role-modeling speed bump in

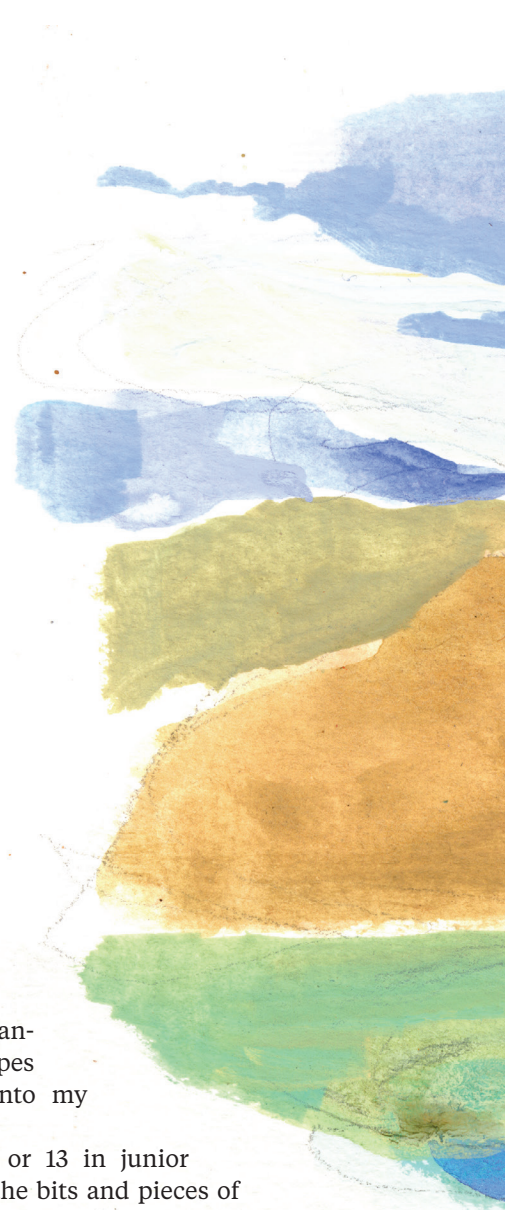
the rapid-transit stereotypes transmitted into my head.

I was 12 or 13 in junior high, and in the bits and pieces of buried treasure that surfaced around the dinner table, I learned that my parents had gone West to Oregon in the ’50s. With limited opportunities for furthering their teacher training in the South, they headed northwest, unable to stop safely for food or rest until somewhere in outer Missouri, where segregation thinned out.

Was it a coincidence that Missouri had been a gateway for them to elude Jim Crow, just as it had been a portal for York into other possibilities? They never said much about all that space in between the Show Me State and Eugene, only that they knew without maps where to go — or not. In Oregon, they said, things weren’t perfect, but life got easier. Here was a stake I could drive into my own ground! There was real West in my blood — a familial Oregon Trail.

And soon, beckoned by histories and haunts, I would follow these stories to find a West of my own.

BIRDS DRAW ME beyond limited possibilities. The idea of flying to far-off places morphed from inspiration for child’s play into a hobby, then a full-fledged profession — an





Jia Sung / HCN

obsession with wings and feathers. Before I ever went westward, birds in books introduced me to Cave Creek Canyon in Arizona, the Bitterroot Mountains of Idaho and Montana, and the Northwest's Olympic Peninsula. I feened for scissor-tailed flycatchers, white-headed woodpeckers and wandering tattlers. Horace Greeley's old call to "go West" was weak in comparison to the beckoning of water ouzels or the Townsend's solitaire's siren song.

The lure of the far side of the Mississippi River grew with shifts in how I learned about birds. In the early '90s, I exchanged my clunky birdsong cassette tapes for compact discs. In less than a decade, we zoomed from the mechanical uncertainty of ribbon running reel-to-reel to CDs with sounds precisely encoded in zeroes and ones. By 1995, I was flying over tallgrass and up the craggy crests of the Tetons down to arid Great Basin salt pans, out to the restless Pacific by moving a computer mouse

a few inches. Field guides went from paper pages to digital screens. It was a magic Netscape carpet ride fueled by the screech-wailing of a dial-up modem. The bird pictures sang (once they buffered).

At the beginning of all this rapid informational expansion from analog to digital, I struck out for Colorado in September of '92. A bird conservation meeting in Estes Park was the expedition's rationale, its bonus the chance to live a dream. After landing in Denver, I drove up through pitch-black canyons, guided by a rental car company's paper map under starlit skies brighter than I'd ever seen before. When I arrived, breathless at high altitude, a bull elk begging for love in the cold moonlight shivered

me beyond the thin air's chill.

I woke the next morning in a world glittering gold with quaking aspen. Armed with an almost state-of-the-art point-and-shoot phone-less camera and binoculars, I set out like some nouveau liberated Negro York to make the land mine.

Up there on Longs Peak, buzzed on a Rocky Mountain high and severed from umbilical landlines, it felt like the top of the world. I lived John Denver's anthem, shifting the lyrics on the fly to fit me: *I was born in the autumn of my 27th year, coming home to a place I'd never been before. I left yesterday behind me, you might say I was born again, you might say I found a key to every door ...*

camouflage of the ptarmigan or through which to filter the dazzling electric cerulean of mountain bluebirds.

There was no angst over how many friends would envy my posts, no vibrating breaking news notifications to update world events. I didn't miss what I was missing. It was just me and the birds in all that wildness.

In that moment, I was more like York than I could've ever imagined. But unlike York, I was free — no bonds to anyone or anything in the moment. If wild were a hue, this was it; if freedom were a mood, I oozed it. In those moments back then I could almost forget I was any color at all. Almost. I hope York forgot sometimes, too.

"Intrepid" by the World Wide Web.

I do lots of heavy lifting, remembering ancestral legacies alongside the current technology, which, like a musket, will soon be outmoded — replaced by something better. The data I hunt are served up on a silver platter — a 2018 laptop, which is already antiquated. I only have to go to my relict touchscreen to go anywhere past, present or perhaps future to be fed with more information than I could ever digest. We're informed instantaneously in gigafloods of data. Maps read themselves to us, and we trust their generic-voiced directives. We trust search engines to take us where we want to go and love friends all over the world who we'll never shake hands with or hug.

From my Southern genesis, to my wandering beyond home to find what lay on the horizon where the sun sets, technology has led the way, as it did in some ways for York. But just as the cotton gin was good for American industry then and horrific for the Black people tied to it, what lies in front of us today are different sorts of "ginning" machines with the potential to process good, but also produce bad along the way.

IF WILDERNESS IS AT THE HEART of our conservation culture, then technology is the inner angst that stresses it to infarction. That algorithm defines the diametrically opposed split-persona of the American psyche. Progress versus preservation; we're addicted to upgrading, strung out on 5G. But then many of us desire disconnection from First World problems — which streaming service bill to pay by cash app, or whether our Instagram posts will get seen if the signal drops. Then wildness becomes bothersome. We want nature on our terms. We want the instantaneous ability to glide like a golden eagle over the entirety of the Western landscape, cruising over mesas, descending to shoot through canyons by drone and Go-Pro. Some of us can think better with our thumbs than we can with our brains. We live through memes and the thumbs-up-like, heart-love emoji approvals of others. We gain contact with millions as we lose touch with ourselves.

We're pining for the opportunity to be connected so we can show how disconnected we are. We crave megapixels as much as we crave a trout's rise to the fly or the first look at some wild mountain meadow that we feel we're the first to see. We want to share it with the world so they'll like it a million times, but not trample it with their unworthy boots on the ground, so we can have it selfishly for ourselves. The hashtag is the new "claim your high ground" flag: #keepitwild #keepout



Jia Sung / HCN

I was gleefully alone with no concept of connectedness to consider, status to update or Twitter feed to feed.

I saw Clark's nutcrackers, the bold black-and-gray corvids named after York's "owner". They came close, asking for handouts — maybe trying to identify me as carefully I labeled them. My list swelled. I wasn't far enough west to see Lewis' woodpecker, though. I wonder now if anyone ever thought of naming a bird after York? Seems like some intrepid icterid might've merited consideration.

A three-decade retrospective of my expedition says everything about our rapid-transit technological transformation. I could only absorb that cold, wild reality through my own senses. I couldn't take pictures with a smartphone because they didn't exist. I couldn't post my feelings on social media or upload sightings to eBird. There was an acceptable delayed gratification between the shutter click and sharing. There was no digital distraction to rip fascination away from the cryptic

TODAY, IT FEELS like centuries have passed instead of a few decades from the three-channel days of my youth. We deal in terabytes and deep fakes. The internet brims with people of color doing extraordinary things. Black people gone West were as rare as hen's teeth in my boyhood books. Now, a few touchpad taps yield gold mines of information about Black cowboys, Black fur trappers, Black "Buffalo" soldiers — and the injustices done to Black people who didn't cease to be called "niggers" just because they went West.

Even York is digitally liberated from the flattened world where I found him. He's alive online. Google "York Corps of Discovery" now and it takes less than a half-second for him to appear thousands of times. There are books and speculation, plaques and a bronze-cast, broad-nosed statue in Louisville, Kentucky. He looks toward someplace far away, holding a musket in one hand and a brace of dead birds in the other. He's fully human and heroic. Posthumously, he's Sgt. York, certified

York was in the vanguard of a burgeoning world of technological advance, material demand and callousness that kept him subjugated even as the Corps of Discovery he served laid a clear path for more subjugation of more people of color. And although Sacagawea, a young Shoshone woman, made the push to the Pacific possible, the First Nations would suffer in the wake of the mission. “New and improved” things were instrumental in dividing, conquering and devastating those who wouldn’t assimilate and taking by force and deception what wasn’t given away. Steel rails, steam engines and repeating rifles would follow the Corps within a few decades to make good the manifest.

A select few shouldn’t own the idea of “wild” exclusive of others. Mix in more than one board member of color so that tokenism is less of an issue. Those same chosen few shouldn’t seek to own the backcountry, outfitted in privilege and shutting the door behind them, excluding others who would spoil a serenity only a few, with disposable time and income, can afford. Leisure is a benefit many have been priced out of. A single demographic shouldn’t own the technological high ground at the expense of the dispossessed and oppressed. If I have high-speed broadband, you should, too. Don’t fence me in while you wander unfettered on my back forty. Is it OK that you don’t want your viewshed spoiled while those living on the land are hand-to-mouth with tin-can-and-string technology? We can’t think ethically about “saving” nature without considering culture.

When technology makes discrimination more efficient and obfuscates the blame by leaving it in the cold hands of faceless, nameless processes, then there’s reason to rethink it. Increasingly (and horrifically for many of us) we must ask if there’s a reason that so much of the emerging technology is geared without differences in mind — or, worse, designed with them negatively in mind. Should being profiled by megapixels from miles away be a concern? That artificial intelligence is implemented with implicit biases driven by white as the baseline is worrisome. Many of us are being tracked by unseen hunters, and color makes the targeting easier. And it’s only a matter of time before some overly zealous wilderness hiking majority person feels “threatened” by the presence of some minority person like me and calls to Make America Wild Again.

American stories of land disconnection and misappropriation read like bad algorithms of misanthropy. “Wildness” was “created” without colored people in any kind of positive

When technology makes discrimination more efficient and obfuscates the blame by leaving it in the cold hands of faceless, nameless processes, then there’s reason to rethink it.

mindset. Was this land really made for you and me?

Right now, conservation seems stuck in the sameness it was born into and reluctant to push past it. It’s still an overwhelmingly white endeavor catering to privileged wants, with occasional talk about including “others.” As the demography colors, there’s an expectation that the “new” people will listen to the old messages of “go fearlessly alone” or “follow this old path, because we know best.” Such assumptions give short shrift to past transgressions and the current state of stagnation. For whatever good or bad technology brings, simple ethical consideration must prevail around it.

York was bound to a horrific institution from which even the hinterlands of wildness couldn’t free him. That I admire and feel a kinship to him is a complex internal conflict. Living at the behest of others while making one’s own way but remaining mindful of all that surrounds you, beautiful and horrific, is an exhausting emotional haul. It’s heroic, yet shameful and maddening. I feel like I’m honoring York in some way when I go West toting my own tech, compelled to do what he couldn’t do.

EVERY BIT OF WILD is important, from urban pocket parks to sprawling landscapes that swallow us whole in the unknown. Every wild thing — winged, clawed, fanged or finned — can connect us to our better being. Birds, beasts, fish and people all share the same air, same water, same soil. It was always connected in ways that didn’t require a single scroll or emoji smile. The key is to not ruin it with progress. In my status updates as the “New York,” I can’t wander in wildness without the bigger picture of culture and conservation in mind.

Our stories are yet unfolding. Over 200 years later, York is finally fully an Intrepid man. After being a critical cog in the expedition’s success, he returned east to neither fame, fortune or freedom. Clark denied all of it. My hero’s fate beyond crushing disrespect is widely debated. I can’t let such a sad legacy stand. My plan is to follow York’s path one day, visit the southwestern Montana river islands named for him.

I watch birds east and west, occasionally submit them to eBird, and I hear about police shooting unarmed black people without regard to geography. In a single scroll I can list a western tanager and get breaking news to understand that in this new age, much hasn’t changed.

If nothing else, my connectedness keeps me in touch with who I am, forever Black and wishing for the wild. 🌻



A Canada lynx at the Turquoise Lake study area in the White River National Forest, just west of Leadville, Colorado. The lynx was newly collared as part of the Rocky Mountain Research Station's Northern Rockies Lynx study.
Steven Sunday / Courtesy of Rocky Mountain Research Station

(continued from page 16)

10th Mountain Division Hut Association, Vail and Copper Mountain ski resorts and others. Together, scientists studied how Canada lynx near Vail Pass and in the San Juan Mountains responded to pressure from diverse recreation.

The results of their study, published in June 2018, provided rare insight into ways winter recreationists and lynx use the landscape in both complementary and competing ways. But just as scientists began to understand the threshold of pressure that lynx could withstand, recreation technology changed and crowds grew, complicating many of the original questions researchers asked.

TO UNDERSTAND how recreation influenced lynx behavior, Roberts and Squires and their team of researchers “collared” both subjects. The research team trekked deep into areas where lynx habitat abuts recreation hot spots. They set live traps, checking them every 24 hours, and, when the team captured a lynx, a veterinarian helped them slip a leather GPS collar onto it. Meanwhile, at gateway areas to the backcountry, scientists asked groups of skiers or snowmobilers to voluntarily carry a small GPS unit for the day and to drop it off before they headed home.

The research team followed the movement of 18 lynx and over 2,000 unique recreation

tracks from backcountry skiers and snowmobilers. The study quantified nearly 35,000 miles of human movement. “These are some of the largest depictions of how recreationists move through landscapes ever documented,” Squires said.

The extensive data confirmed what many managers had assumed: Although there are opportunities for coexistence, research suggests there is a sensitive balance to strike when it comes to managing interactions. “Winter recreationists and lynx can occupy the same slope,” Squires said. “The two users could be compatible, but we need to be thoughtful about how they’re managed. And there is an upper threshold.”

This upper threshold is the crux of the research findings. When researchers talk about the threshold, they’re talking about a critical tipping point — when lynx go from being able to live alongside ever-growing numbers of skiers and snowmobilers to not being able to do so.

According to Lucretia Olson of the RMRS research team, the pressure is most evident inside developed ski area boundaries, where activity is constant and corresponds to a clear reduction in lynx use. But outside ski resort bounds, defining the threshold is trickier because, fortunately, backcountry recreationists haven’t yet reached it. Instead, the data suggest

that under the right management, lynx, skiers and snowmobilers are relatively compatible because of their distinct “habitat” preferences: Winter recreationists tend to prefer more open or gladed habitat, while Canada lynx tuck into the deep, dark forests preferred by their primary food source, snowshoe hares.

Where preferences are distinct, managers see an opportunity to support both recreationists and lynx. But where they overlap or activity increases, managers see us inching toward that tipping point where lynx will no longer inhabit an area. “If you change road density or canopy cover, you could change the mix of how lynx and recreationists use the landscape,” Squires said. “If you thin forests and turn them into glades, then recreationists are going to be more likely to snowmobile it and ski it, and that could impact lynx movements.”

MIDWAY THROUGH THE STUDY, the research team tromped through the woods near Lizard Head Pass, outside Telluride in southwest Colorado, checking traps for lynx. Deep in the spruce-fir, they came across what looked like a miniature snowmobile track whipping in and out between dense trees.

Jake Ivan, a 40-something wildlife researcher with Colorado’s wildlife agency, stopped and tried to process what he was seeing. He turned to Eric Newkirk, a wiry longtime lynx tech. “What the hell made that?” he recalled asking. Newkirk told him it was a snowbike, which still meant nothing to Ivan. Back at the bunkhouse, he Googled it.

Snowbikes — converted motocross bikes with a snowmobile-like track and a ski, rather than wheels — debuted at the 2017 Winter X-Games in Aspen, Colorado. The technology has since gained popularity. Not to be confused with human-powered “fat bikes,” snowbikes are perfect for steep slopes, deep snow and nimble movement through tight spaces — precisely the habitat critically important to lynx.

“I still marvel at the seemingly endless ways people come up with to locomote over the snow,” Ivan said.

Just as the scientists were wrapping their heads around winter rec’s impacts on wildlife, technology had outpaced them, sending new hordes of recreationists deeper into previously difficult to reach slices of habitat.

“If we don’t find the balance, lynx will be pushed out of their home ranges,” Roberts said. “And as development, roads, and other factors also impact their habitat, they won’t have anywhere else to go.” ❄️

Notice to our advertisers:

You can place classified ads with our online classified system. Visit hcn.org/classifieds. March 11 is the deadline to place your print ad in the April 2020 issue. Email laurad@hcn.org for help or information.

Advertising Policy: We accept advertising because it helps pay the costs of publishing a high-quality, full-color magazine, where topics are well-researched and reported in an in-depth manner. The percentage of the magazine's income that is derived from advertising is modest, and the number of advertising pages will not exceed one-third of our printed pages annually.

Business Opportunities

Conservationist? Irrigable land?

Stellar seed-saving NGO is available to serious partner. Package must include financial support. Details: <http://seeds.ojaidigital.net>.

Employment

Western Water Project Manager

The National Wildlife Federation is hiring New Mexico-based position focused on riparian corridors, watershed health. Learn more and apply online: <https://www.nwf.org/about-us/careers>.

Finance/Com — Mountain Studies Institute (MSI) is hiring four-plus positions: Finance Director; Communication/Engagement Manager; Development/Engagement Director; Americorps volunteer www.mountainstudies.org/careers.

Media Director — Love working with the media? Shine a spotlight on passionate, bold activists fighting for wild lands, endangered species, wild rivers and protecting the climate. 505-988-9126. Apply@wildearth-guardians.org <https://wildearth-guardians.org/about-us/careers/>.

Seasonal Trail Crew Leaders

Lead the nation's premier volunteer-based trail crew programs on the spectacular Pacific Crest National Scenic Trail. This is a great career-building opportunity for rising professionals. Coordinate and oversee projects on the ground along the PCT. Spend time outdoors and on the trail. Three positions available. See our website for details. traichart@pcta.org <https://www.pcta.org/about-us/jobs/>. 916-285-1848.

Grant Writer — "This thriving citizens organization exemplifies the ideal of public involvement in public processes." —*Billings Gazette*. Help protect Montana's water quality, family farms and ranches, and unique quality of life. Work hard, meet good people, make the world a better place! Competitive salary, insurance, pension, generous vacation time and sabbatical. For info, visit <https://northernplains.org>.



Development and Advocacy

Director — Provide stewardship and protection for the Great Burn wildlands along the Montana-Idaho stateline. This position is based in Missoula, Mont., where a river runs through it, mountains surround it, a craft brewery sits on every corner, and you can enjoy your backyard public lands during all four seasons. <http://www.greatburn.org/employment.html>.

Stewardship Specialist — San Isabel Land Protection Trust seeks an experienced person to manage its 133 conservation easements in south-central Colorado. linda@sanisabel.org.

Dean — W.A. Franke College of Forestry and Conservation. Apply <http://bit.ly/2548umjobs>. AA/EEO/ADA/Veterans Preference Employer.

Campaign Representative —

Sierra Club's Beyond Dirty Fuels Campaign is hiring an experienced campaigner to lead our work challenging the oil and fracked-gas industry on the Gulf Coast. slafontant@nonprofitthr.com. www.sierraclub.org/careers.



Seasonal San Juan Rangers —

Seeking experienced crew members to patrol Colorado's most iconic mountain wilderness. wildsjnf@gmail.com. <https://sjma.org>.

Merchandise

Western Native Seed — Specializing in native seeds and seed mixes for Western states. 719-942-3935. www.westernnativeseed.com.

Lunatec HydrationSprayBottle

Clean off, cool off and drink. Multiple spray patterns. Better than you can imagine. Try it. www.lunatecgear.com.

Professional Services

Expert Land Steward — Available now for site conservator, property manager. View résumé at <http://skills.ojaidigital.net>.

Lisa Mackey Photography —

Fine Art Giclée Printing. Photo papers, fine art papers, canvas. Widths up to 44 inches. Art printing by an artist. 970-247-3004. www.lisamackeyphoto.com.



Publications & Books

Chuck Burr's Culturequake.com

Change will happen when we see a new way of living. Thinking to save the world.

Real Estate For Rent

Sitka, Alaska, float house —

Vacation rental located in calm protected waters eight miles from Sitka, Alaska, via boat with opportunities to fish and view wildlife. Skiff rental also available. email jim@annahootz.com or call 907-738-0996.

Coming to Tucson? —

Popular vacation house, furnished, two-bed, one-bath, yard, dog-friendly. Lee: cloler@cox.net. 520-791-9246.

Real Estate for Sale

Prime commercial opportunity,

Nogales. Three active lower spaces and upper floor with potential. 520-245-9000. sally@tubac.com.

Electric Mountain, Paonia,

Colo. — Only two lots left in Electric Mountain Recreational Subdivision. Spectacular vistas. Visit and dine at the reopened Electric Mountain Lodge, Thursday-Sunday. Contact: ira@yatesconservation.com.

For sale : South Austin, Texas,

ranch next to Wildflower Center

Seeking LMP/family to share one of two complexes, ranching, hunting and recreation as allowed on a city of Austin-held 385-acre water quality conservation easement. Tranquil, yet in town. You'll get it when you experience it. Qualified buyers only; \$3.5 million. It's about the land and location. Contact: Ira@Yatesconservation.com.

Ojo Caliente commercial ven-

ture — Outstanding location near the world-famous Ojo Caliente Mineral Spring Resort, N.M. Classic adobe mercantile complete with living quarters, separate six-unit B&B, metal building and spacious grounds. 505-470-2892, wimettre@newmexico.com, wimettrealty.com.

Everland Mountain Retreat — 300 acres with mountaintop lodge. Nonprofit relocating. www.everlandmountainretreat.com.

Tours & Travel

Copper Canyon, Mexico — Camping, hiking, backpacking, R2R2R, Tarahumara Easter, Mushroom Festival, www.coppercanyontrails.org.

Canyonlands Field Institute Colorado Plateau natural and human history field seminars. Lodge, river, hiking options. Small groups, guest experts. cfmoab.org. 800-860-5262.

Universities & Schools

Educators: Help your students unravel the complex issues facing the American West with the HCNU Classroom Program. FREE print and/or digital access. Learn more at hcn.org/edu.

Instructors: Get *High Country News* for FREE in your classroom! Help your students unravel the complex issues of the American West with this tremendous resource, which includes:

- A copy of the magazine for each student in the class as well as for the instructor.
- An email to the instructor the week of publication, including a link to the PDF copy of the magazine for planning purposes.
- Access to our librarian for curated *HCN* stories on specific fields of study and topics.
- Full access to our website, including our rich archive of 45-plus years of *High Country News*. Sign up at hcn.org/edu.



CONVERGING PERSPECTIVES
Sustainable Solutions for a Changing Climate and Growing Population

UNIVERSITY OF DENVER
STURM COLLEGE OF LAW

APRIL 17, 2020
WWW.DUWATERLAWREVIEW.COM

7 general CLE credits & 1 ethics credit pending approval
Questions: Wendy Kerner, wkerner21@law.du.edu
or Rachael Jaffe, rjaffe21@law.du.edu

Know the West.

We're celebrating our 50th anniversary with a bigger and better magazine. Our design and delivery schedule have changed, but you can expect to see the same in-depth, thought-provoking journalism that has always been *HCN*'s hallmark. Get involved by visiting us at:

www.hcn.org/50-years

Aspens illuminated in a talus field in Colorado. Paul Larmer / High Country News

High
Country
News

Snow-blind

This year's Backcountry Film Festival aims for self-awareness, but doesn't stick the landing.

BY NICK BOWLIN

IN THE 2019 ski film *Peak Obsession*, Cody Townsend, a laid-back, sun-bleached professional skier, gazes out from the top of Alaska's Pontoon Peak. "This is why I do this," he says. "This is magical." The camera cuts to a retreating drone shot, showing snow-capped peaks under bluebird skies stretching to the horizon. All this, combined with dramatic footage of his descent, is what ski filmmaking has traditionally offered: the pleasures of the slopes, the thrill of adventure and supreme physical prowess.

But there's a growing awareness about skiing's ethical issues — the greenhouse gas emissions from road trips and transcontinental flights to far-off resorts, and the enormous mountainside developments that these resorts spawn. Then there's the class-related issues — the chalets and pricey gear, the cost-prohibitive lift tickets from corporate resort owners. The fact is, snow sports can't help being part of the world they so often appear to be an escape from.

And so the winter-sport filmmaking industry, which has long reflected and created winter-sport culture, finds itself in tension: struggling to balance social consciousness with the apolitical pleasures of traditional ski movies. As the uneven showing at the 2020 Backcountry Film Festival, now in its 15th year, demonstrates, getting the message right isn't everything. You still need to make good movies.

Peak Obsession is one of the least political films here, focused on Townsend's quest to climb up

and ski down every entry in the book *The Fifty Classic Ski Descents of North America*. The mountains are there, the descents epic, but no other justification for the project is given — or needed, in this case. Joined by renowned big-mountain snowboarder Jeremy Jones, Townsend is an affable companion, and the opening scene, where dangerous conditions force him to turn back near the top of Pontoon Peak, adds some welcome narrative tension. Both Jones and Townsend are spectacular to watch, and artful splicing of wide-angle drone shots and helmet camera footage give a sense of the supremely technical skiing. The directors take care to introduce characters and provide a story arc and some humor. It's a classic ski film: enjoyable to watch but offering little beyond style and fun.

Another festival entry, *Endless Winter*, tries to combine the pleasures of *Peak Obsession* with concern about the climate crisis, but comes up short. The film follows Nikolai Schirmer, a Norwegian professional skier torn between his desire for powder and the obligation to reduce his enormous carbon footprint — three times his country's average. Globetrotting ski trips will do that.

Schirmer attempts to cut back on his plane travel, which is admirable, I guess, but his predicament doesn't exactly induce sympathy. The film contains some lovely skiing, notably a nighttime descent through powdery Norwegian glades by headlamp. In a voiceover, Schirmer gives a rapid-fire list of the ecological crises he hopes the planet can avoid. Meant as amusing, it comes off as dutiful. The climate consideration feels forced, the bare minimum gesture now required in the winter sport world.

The climate crisis impacts all people, in all landscapes, but its toll on the frozen places in our world is especially devastating for all who love and live in alpine regions. This is most explicit in *Climate Change in the Kennels*, which considers the working sled dogs of Denali National Park. For decades, these teams have supplied remote access trips and research stations, but climate change is making them obsolete. Mushers describe bare tundra and open gravel much of the year, replacing permafrost. We get a sense of the power and beauty of sled dogs at work, but climate change's irreversible impact on Denali and its ecosystems is not given the emotional heft it deserves. Still, it's a sobering entry.

The winter recreation industry cannot fix the climate alone. Issues of inclusion, though, are within its control. Gender imbalance is the subject of *A Climb for Equality*, which follows mountaineer Caroline Gleich, who explains that women make up a small percentage of those who summit the world's tallest peaks. You want to root for Gleich; she tears her ACL while

training, and her recovery adds some pathos to the story. But the fact that she's summiting Mount Everest detracts from the film's appeal. Trashed by hordes of international climbers, many of them entirely dependent on exploited Sherpa laborers, the world's tallest mountain has itself become a symbol of inequality. Yet no awareness of this irony penetrates the film. Another film, *KHUTRAO*, gives an implicit rebuke to this omission. It follows Isaac Huenchunao, a ski guide in the Chilean Andes, who fears that outside investment and development may change the mountains his Indigenous Mapuche community calls home. This is welcome diversity in a largely white sport, so it's shame that this film is much too short and clumsily put together, with scant character development.

Broadly speaking, the films fall into one of two unsatisfying categories: socially unconscious tales of extreme ski feats, or politically attuned films where the art has slipped. The fix for the latter — make better art — is easy to prescribe, but harder to execute. As for the former, exemplified by *Peak Obsession*, it need not disappear entirely, but I can't help but question its substance. Physical excellence has worth, no doubt, and I prefer Townsend's jovial hedonism to tacked-on social consciousness. But while enjoyable, it offers little that ski film audiences haven't seen before. Maybe next time, Townsend should leave the cameras at home, and ski like no one is watching. And invite me along. ❄️

Broadly speaking, the films fall into one of two unsatisfying categories: socially unconscious tales of extreme ski feats, or politically attuned films where the art has slipped.

The ethics of shed-hunting

A Utah conservationist weighs the hobby's popularity with its moral stakes.

BY ASHLEY KIJOWSKI

JUST SHY OF SEVEN YEARS AGO, I moved from the Midwest to Utah to work for the state as an aquatics biologist. On my first winter hike, I slumped over with fatigue as more experienced people hiked past me. Nevertheless, I soon fell in love with the mountains and, eventually, I discovered big-game hunting. Though I had fished in my childhood, I'd never gone hunting, and I was dazzled by the inspirational stories I heard from my new friends and colleagues.

Finally, I bought a bow. I scouted every weekend I could, and in late August, I called in a spike elk that my hunting partner shot in a big marshy meadow near Kamas, Utah. The animal's meat filled our freezer and will feed us for the next nine months.

Lately, however, I've been pummeled time after time with a kind of hunting question that I'd never heard before: "Are you going shed hunting this year?"

Elk and deer prefer to avoid human disturbances — things like roads, energy development, bicyclists, hikers and snowmobiles. During the winter, the animals' fat reserves decrease drastically, and human intrusion — even when the humans don't know that wildlife are around — means that the animals react and burn extra calories that they might not be able to afford to lose, decreasing their chances of survival. This is especially true for pregnant cows and does: One disturbance can often mean the difference between life and death.

Shed hunting — the gathering of shed antlers in the wild, often to sell — sounds innocuous. But as a hunter and a biologist, I've seen

the impacts of its burgeoning popularity, and I'm increasingly disturbed by the trend.

FOR THOUSANDS OF YEARS, humans have used shed antlers as raw materials for tools. But recently, shed hunting has morphed into a commercial enterprise. These days, a collector can get around \$18 per pound for a modest shed, compared to just over a \$1.50 in 1974. From 2009 to 2018, the price of shed antlers at the annual U.S. Fish and Wildlife Boy Scout Elk Auction rose steadily at an average rate of 8%.

YouTube channels, Instagram pages, Twitter feeds and Facebook groups are dedicated to the selling, buying and promotion of shed hunting as a sport and moneymaking business. Antlers are transformed into dog chews, chandeliers, curtain holders, mantel décor, knife handles, table legs, coat hangers, lampstand bases, jewelry — and even toilet paper holders.

And prices can vary wildly: On eBay, a chandelier made of elk, moose, caribou and deer antlers was selling for nearly \$10,000. Inflation alone cannot account for the current price of antlers, while the phenomenon of the pricey DIY chandelier variety seems to be confined to a niche market willing to pay top dollar for such creations.

The increasing popularity of shed hunting means that more people are on the landscape during the winter and early spring — a time that is often unforgiving for deer and elk. Seven Western states have passed laws that close shed hunting in certain wildlife areas to try to decrease the stress deer and elk experience on their winter ranges.

But according to the Colorado Parks and

Wildlife Commission, trespassing onto these sanctuary areas and private lands is increasing — driven, in part, by the popularity of chic antler products. In 2017, Utah wildlife managers closed public lands to shed hunting until April, so that deer and elk could conserve their energy given that year's heavy snows. During the first two weeks of that closure, 16 people were cited for violating it. "In some of these cases, the person stated they knew the shed antler gathering season was closed but they couldn't resist the temptation," said Mitch Lane, a conservation officer with the Utah Division of Wildlife Resources.

Lane's observation echoes what some of my friends have said: Shed hunting is a fun way to make money, and they don't plan to stop.

LAST MARCH, I made a choice: I turned down invitations to go shed hunting, but I went outdoors anyway.

I spent a weekend camping in the Uinta Mountains. The pine- and aspen-covered mountains were so cold that I saw my breath during peak daylight hours. The snow was so deep that I sank into it, buried just like the grasses and shrubs around me. I thought of the deer and elk foraging here, in crucial winter habitat.

I observed birds and built a campfire, but I did not scour the snowy landscape for sheds. When I got home, a colleague asked me if I had looked for antlers. Proudly, I said, "No," satisfied that it was the right thing.

As a hunter, I feel that giving deer and elk their space during this crucial time is the least I can do. ❁

On eBay, a chandelier made of elk, moose, caribou and deer antlers was selling for nearly \$10,000.



An antler hunter packs out his day's find on national forest lands near Jackson, Wyoming.
Mark Gocke

The alienation of winter

I long felt shut out of the season. Snowshoeing changed that.

BY RAKSHA VASUDEVAN

BEFORE I EVER EXPERIENCED WINTER, I wanted to love it. As a child in India, I watched *Home Alone* repeatedly, entranced by the images of the season: people sledding, gifts under a tree, crackling fireplaces. Just the idea of snow — something I'd never seen — was wondrous.

When I turned 10, we moved to Canada, and I finally got to experience winter. Unfortunately, it wasn't quite what I'd imagined. Snow was beautiful, yes, but painful to touch, even using the cheap gloves we'd bought at Walmart. Our electric fireplace stopped working after the first couple of winters, and we couldn't afford to get it fixed.

On weekends and holidays, my friends disappeared for skiing or snowboarding lessons. I didn't bother asking my parents if I could do the same: I knew there was no money for the lessons, let alone the ski passes, skis, goggles or any of the other items I'd need for the slopes.

So I ended up staying inside most winters, watching TV, sinking into the couch and into a dull depression. This type of alienated winter — “hibernation,” I think — is unfortunately common for immigrants in North America. Our families generally earn less, making it harder for us to afford the lessons, passes and equipment required for most winter sports. And in a season that can be particularly challenging for those affected by depression, people of color — who are the majority of America's immigrants — are also less likely to access appropriate mental health care.

Over time, I grew to resent winter, the white landscape making me, in my brown skin, feel more out of place than I did in any other season.

But one year, I experienced the healing effect of wintertime in the mountains. Unexpectedly, snowshoeing — then and now — has

helped me to not only survive this time of year, but also to learn to value its quiet grandeur.

ONE BRIGHT FEBRUARY morning when I was 14, my father and I set off for Kananaskis Country, in the foothills of the Rocky Mountains, two hours from Calgary. Our rented snowshoes were in the backseat. His colleagues, who had organized the outing, were waiting for us at the start of the 9-mile Pocaterra Trail. We struggled with the unfamiliar gear, and they helped us then and throughout the day, every time we stumbled or when my new Camelbak started leaking. We must have slowed them down, but they didn't seem to mind. I remember one woman, who kept closing her eyes and tilting her face to the sun, her chest rising as she swallowed the white-cold air. The same air turned my nose beet-red and fogged up my glasses. I tugged my hat lower over my frizzy hair, wishing I could disappear.

My father picked up the motions quickly, drawing on athletic instincts from playing cricket in India. But I could barely lift my leaden legs to put one snowshoe in front of the other. Within minutes, I was wheezing from the altitude and exertion. About an hour into the trail, the others traversed the side of a hill, extending their arms to maintain their balance on the slope. I followed their example but fell, tumbling onto the hard-packed snow. Slowly, my legs now damp, I struggled to my feet. By the time I maneuvered across the slope, no humans were in sight. There was, however, a very large, very dark moose.

We stared at each other, his breath rising in great, steamy huffs. Mine remained trapped in my throat. After some seconds, he looked away, dipping antlers as large as swan wings towards the few blades of grass poking through the

snow. He chewed on the frozen grass in a leisurely way, his neck and flank bulging sleekly with muscle. He could have pulverized me.

Yet I was not scared. A kind of dreamy peace settled over me, as if I'd slipped into a trance, lulled by the sounds of his chewing and the contrast between his dark powerful body and the still white slopes.

Eventually, he raised his head to look at me again, a long look that I took to be full of meaning. Then he trotted off, disappearing into the pine trees. I don't know how long I'd been standing there when I saw my father and his friends coming back, faces creased with worry. I didn't tell them about the moose. I didn't want to worry





them, and I wanted to keep the moment for myself, like a dream that would dissolve as soon as I tried to grasp at it.

IN THE FALL OF 2016, just as I turned 29, I got a job in Colorado. As the leaves fell and the days shortened, the familiar dread swelled in my chest, heavy and gray as the winter sky. I felt both lethargic and anxious, trapped in the city, a man-made landscape of squat buildings, neon shop signs and slick walkways. Why leave the house? Soon, I was back in the winter routine I knew best: on the couch every night for hours, watching characters on TV exercise, socialize and live in ways that felt impossible for me.

Luckily, the season, as much as I hated it, was not a monolith. There were reprieves: warm mornings when I stood outside, watching the frost melt, savoring the sun on my face. How long had it been since I felt alive — since I remembered that the world around me was alive?

Maybe, I thought, snowshoeing could help me regain that feeling, even when the skies turned steely once more.

Unfortunately, I still lacked a car or enough local friends to easily hitch a ride into the mountains. But Google led me to the Colorado Mountain Club. Soon, I'd arranged a ride to a snowshoeing trip.

Equipped with old-fashioned wooden snowshoes and gaiters borrowed from a colleague, I joined a group of about a dozen people to snowshoe the Lost Lake trail, an hour and a half west of Denver. The sky was powder-blue, and our group, who ranged in age from their 20s to their 70s, chatted easily, stopping often to sharing their trail mix and Gatorade and to wait for slower members.

I was the only foreigner and woman of color, but I did not feel conspicuous. Unlike ski slopes, which require significantly greater financial resources, snowshoeing seemed more equitable: Whether your snowshoes cost \$100 or \$20 didn't really matter. It didn't require lessons or even much practice to master. For once, not being "from here" and not growing up wealthy did not feel like major disadvantages.

Ascending to the top, I marveled at how deep the snow was, how it shimmered on tree branches. And the silence — there seemed a special quality to it: snow muffling sound, animals alive but unmoving, deep in hibernation. I could hear myself breathe; I never heard that in the city, never even thought to listen.

At the top was Lost Lake, huge and pale blue. Surrounded by alpine peaks and spruce groves, it would be beautiful in any season. But now, in deep winter, we could step onto its frozen surface. Underneath the thick sheet of ice, water and fish moved silently. Another world beneath this one: It seemed like a miracle.

Now, I snowshoe regularly in wintertime. Sometimes, I'm reluctant to go, especially when the sky has been gray for days and the urge to stay in bed and block out the world becomes overwhelming. Sometimes, even when I do go, the slow, hard trek in the bleak cold feels absurd. But every time, there's something that feels wondrous, even if briefly, something that's only possible in that season, at that moment: sunlight streaming butter-yellow through snow-covered woods, a bird darting out of a tree, breaking the stillness.

Last time, I even saw moose tracks. ❄️

*Over time, I grew to resent winter,
the white landscape making me,
in my brown skin, feel more out of place
than I did in any other season.*



Jia Sung / HCN

DISTANT SNOW

Searching for winter in
Palm Springs, California.

BY LEATH TONINO

WINTER — COLD, SNOWY and blindingly white — has always been my season, my native home. Born just shy of the Canadian border on Dec. 25, I traded a cozy womb for a markedly less cozy hospital bed and never looked back. My childhood was devoted to sledding, my adolescence to climbing frozen backcountry waterfalls. Heck, when I graduated from college, my first job was to wield a shovel at the South Pole.

Your average sane person deems lumbar-busting labor in 70-below-zero temps undesirable, a major bummer — but I am not your average sane person. I am me, the Christmas Baby, and shoveling Antarctica's drifts only reinforced my allegiance to all things shivery and severe. Winter, I realized at the bottom of the planet, is my *modus operandi*, my way of

being. It's a kind of crystallized joy sparkling inside my heart.

Odd, then, that a handful of years post-Pole, fresh off a two-week ski tour (numb toes, brittle tent, wonderful stuff), I pointed my car toward Palm Springs, California, intending to reside in that baking, sandblasted desert metropolis for a spell. Driving into the Coachella Valley — into a sprawling expanse of thirsty brown dirt unlike anything I'd ever encountered — I heard a voice snickering in my ear: Welcome to your new digs, Christmas Baby. You are so totally screwed.

Access to a rent-free writing hideout — a deceased relative's empty condo — lured me to SoCal. I knew my passion for vast frosty silences and frigid storms was going to make it a tough go, but pretending otherwise, I set myself a sched-

ule: long morning sessions at the laptop, long afternoon strolls through the weirdness of the place. Traversing a litter-strewn lot flanking I-10, I crouched to observe a creeping tarantula. (*You're not winter!*) Exploring BLM lands behind the Vons supermarket, I stumbled on pink and purple flowers in full bloom. (*You're not winter either!*)

The Sonoran Desert is fascinating, intricate and alluring, and Palm Springs has certain charms too, among them tacos, birdwatching and tacos. But still. By late January, there was no denying that I missed my snowy winters. Instead of blizzards, there was a parched arroyo abutting a waterpark clogged with shrieking (presumably urinating) kids. Instead of crystalized joy there was, ugh, air-conditioning.

Author Rebecca Solnit has written of “geographically contingent identities,” which is a fancy way of saying that we are required to become different versions of ourselves in different environments. Palm Springs threw an existential challenge on the table, a challenge that promptly leapt from the table and whipped my butt: Who are you without your beloved season, without snowshoes strapped to your boots and rime coating your mustache? Turns out I was a sad dude, a pathetic, sniveling, self-pitying Christmas Baby, not yet sure a different version of me even existed.

Defeated, depressed, I stepped outside one bright February morning, cup of coffee in hand, dread of another day's topaz swimming pools in mind, and gazed up at the San Jacinto Mountains. A vertiginous wall of cliffs and dust that soars from the bars and boutiques of downtown Palm Springs, the loftiest crags of the range appeared to have received. ...

C'mon, that's impossible.

A blessing, a blanketing?

Holyfreakin' snow!

Consulting my computer, I learned that the Cactus to Clouds Trail (C2C) ascends 10,600 vertical feet over roughly 16 miles — from the floor of the Coachella Valley to the tip of San Jacinto Peak, just about the largest topographical relief in the Lower 48. And where there is relief, ah, there is relief. Alexander von Humboldt articulated his theory of altitudinal zonation in 1802: The higher you go, the colder it gets, i.e. distinct ecozones emerge. Above Palm Springs, for Christmas Babies willing to suffer and slog and sweat, a floating island of winter awaits.

This image intrigues me, the image of a winter that doesn't come knocking on your door but rather beckons from yonder horizon, demanding a pilgrimage of sorts. Experts claim

*Palm Springs
threw an
existential
challenge on
the table, a
challenge that
promptly leapt
from the table
and whipped
my butt: Who
are you without
your beloved
season, without
snowshoes
strapped to your
boots and rime
coating your
mustache?*

the season is disappearing from the overcooked, climate-deranged West, and while that's true, it's not instantaneous. Disappearance requires time. For the moment, the cold and snow and white remain with us, though they are indeed acting shifty, retreating to alpine redoubts, the protected heights.

In this dynamic, this movement, I see the potential for a novel style of recreation: winter as destination, winter as goal. I see bicyclists pedaling across sizzling blacktop, panniers loaded with crampons and balaclavas, corniced ridges flashing in the distance. I see snowboarders trading baggy pants for spandex shorts, knit beanies for sunbonnets. I see journeys that creatively link polar opposites and, in doing so, enrich our appreciation, drawing us from entitlement to a can't-take-it-for-granted attitude.

The C2C is burly — a switchbacking agony, a hyperarid StairMaster. I launched my initial attempt two hours before dawn, which proved to be foolishly late (the sun, the smackdown). A second try likewise fizzled, as did a third. But then, finally, in early March, I succeeded: reached the crusty snow banks between huge ponderosa pines, danced a goofy jig, half-vomited from exhaustion. I'd done it, made the connection, located winter amid SoCal's heat. I'd even derived a perverse pleasure from the effort. The bilious price of reunion was well worth paying.

Of course, I couldn't loaf up there forever, and soon commenced the descent, retracing my hard-earned steps. At some point during that interminable hike, I was struck by the uniqueness of my position: winter sharp against the spine, bleak burning valley yawning beyond the toes. It was an exciting contrast, an enlivening tension — not “either/or” but “and/both.” It was, perhaps, a vision of the future that has already arrived.

Palm Springs and I were obviously destined for a fling, not a committed relationship. The writing project that brought me there complete, I decided paying rent wasn't the worst thing ever and escaped to Northern climes. I took with me an important lesson, though: You can remove the Christmas Baby from the sparkly crystals, but you can't remove the sparkly crystals from the Christmas Baby. Low to high, near to far, wherever they lead, he will follow, desert furnace be damned.

Who are you without your beloved season? Apparently I am a guy who searches, who pursues, who quests — a guy who refuses “without” and calls his refusal sport, entertainment, fun. A modus operandi. A way of being. ❁

Heard Around the West

Tips and photos of Western oddities are appreciated and often shared in this column.
Write betsym@hcn.org or tag photos #heardaroundthewest on Instagram.

BY BETSY MARSTON

CALIFORNIA

Did you know that coyotes and badgers sometimes buddy up to hunt ground squirrels? It's not uncommon, writes Matt Dolkas for California's Peninsula Open Space Trust, yet no one had ever recorded the partnership in action in the San Francisco Bay area until one of the group's 50 remote-sensor cameras did so. In the short video, a coyote stands in front of the entrance to a culvert, obviously impatient — jumping up and down and stamping its feet as if to urge whoever it's waiting for to just get moving already. When a badger finally trundles up, the coyote flicks its tail and leads the way through the culvert — the ungainly badger waddling behind him. Dolkas said the Trust placed cameras across the Santa Cruz Mountains to better understand how wildlife moves around. But seeing the teamwork in action was surprising, he said; it's the first time it's been documented in that region. "It's a real treat when we get videos like this," Dolkas said, "ones that show some personality and remind us of the relationships between these wild animals, and how playful they can be." (See hcne.ws/coyote-badger.)

COLORADO

Every winter, it seems, Colorado Parks and Wildlife needs to remind people that deer are wild animals and should not be invited home for dinner. It's illegal to offer wildlife hors d'oeuvres, including carrots, apples and sliced bananas. But that's what a woman in Evergreen liked to do, setting a table with platters of goodies and then opening sliding glass doors "for wildlife entry," as



Sienna Gonzales / HCN

the *Denver Post* put it. The woman, who named each deer, also liked to chitchat with them; we can only imagine what the dinner conversation was like. In another egregious example of Coloradans treating wildlife as pets, a homeowner in Bailey trained deer to hurry to his backyard for food whenever he went outside. "It's selfish and unethical to feed big game," said wildlife manager Mark Lamb. "If what you want is a pet or to connect with an animal, choose a domestic breed that has evolved to live with people." Both homeowners were charged, but penalties seem mild: a \$100 fine for each time deer were lured in and fed.

CALIFORNIA

Joshua Tree National Park, in the Mojave Desert of southeastern California, features some wonderfully

goofy-looking trees that sport clusters of leaves shaped like needles and shaggy bark reminiscent of a Dr. Seuss drawing. The explorer John Charles Frémont clearly disdained them, describing them in 1844 as "the most repulsive ... in the animal kingdom." But ecologist Juniper Harrower, who recently finished her Ph.D. at the University of California, Santa Cruz, finds Joshua trees to be fascinating individuals with distinct personalities, reports *Atlas Obscura*. Tourism to the park has skyrocketed during the last few years, yet Harrower noticed that some visitors, like people everywhere, simply wandered around, heads down, glued to their cell phones. That gave her an idea: Meet people where they were by creating "HeyJTree," a "dating site" that will introduce you to 16 particularly

quirky and easily accessible Joshua trees — trees like Shorty, Jerome and Eleanor. "I thought: This is a way I can engage with phone culture," Harrower said. "All this stuff is really heavy, so here's a way that we can be playful with it but still have some important conversations."

These days, conversations about Joshua trees aren't very happy. The trees are pollinated only by yucca moths, but the climate crisis is affecting both the trees and the moths they co-evolved with. "It's getting too hot and too dry. The trees are often flanked by grasses that can go up in flames during wildfires, and the trees struggle to successfully spring back after burns." In some areas, Harrower added, trees are starting to lose their limbs and collapse. Through her ersatz dating sites, Harrower hopes that visitors will begin to appreciate the trees' struggle in a warming world while also getting a sense of the science the park does. And she really hopes that people can learn about "the value in our natural world outside of just, 'Extract all the resources you can get from it and then make as much money to buy a bunch a stuff that's going to destroy the environment and us.'"

COLORADO

A Twitter account for the San Miguel Sheriff's Office in western Colorado posted a puzzling alert about a roadblock: "Large boulder the size of a small boulder is completely blocking east-bound lane Highway 145 ..." *Time* reported that the sheriff's office admitted later, "We (wish) we had deliberately used humor ... but it was a mistake." ☀

We put hemp to work.

Industrial hemp workwear that's broken
in and ready to roll from day one.

Our full line of abrasion resistant yet breathable industrial
hemp Workwear is suited for any season and any chore.
We added work-specific pockets and reinforcements for
maximum utility and durability on the job. As a crop, hemp
requires little to no irrigation.



Rocky Schifani gathers tree-ring data after a record avalanche season left an unprecedented number of downed trees in its wake, Independence Pass, Colorado. FOREST WOODWARD © 2020 Patagonia, Inc.

patagonia®

patagonia.com/workwear
(800) 638-6464

HCN

119 Grand Avenue
PO Box 1090
Paonia, CO 81428

#IAM THE WEST

ANNA AND KRISTY BERINGTON
Iditarod dog mushers
Wasilla, Alaska

I was once asked to use the five senses to describe being in Iditarod, and it's really hard to describe. You're tired, you're cold, you haven't showered in a long time. But when you push that all aside, and you try to describe that feeling, it's magic. It's all this hard work that has come to that moment out on the trail. It's quiet and peaceful, and the view up front of you is not just your beautiful dog team, but it's everything around you. Everything around you is what got you to that spot. -Kristy

Do you know a Westerner with a great story?
Let us know on social.

Follow us [f](#) [@](#) [t](#) @highcountrynews #iamthewest | [hcn.org](#)