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Western Confluence

NATURAL RESOURCE SCIENCE AND MANAGEMENT IN THE WEST

OUTDOOR RECREATION

Tourism's Economic Role in Wyoming

The New Camper Culture

Warming Weather in the National Parks

Horn Hunters Sell Overseas

A publication of the William D. Ruckelshaus Institute at the University of Wyoming's Haub School of Environment and Natural Resources

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EDITOR'S NOTE

By Emilene Ostlind

Wandering down the spine of a ridge last summer in southern Wyoming's Sierra Madre, I stumbled across a 100-year-old mining camp: pits surrounded by heaps of broken rock, heavy rusted cable snaking through the underbrush, and the collapsed beams of a tram tower that once carried copper ore sixteen miles to the smelter in Riverside. At the turn of the century, 5,000 miners lived here at nearly 10,000 feet of elevation, working the Ferris-Haggerty Mine and adjacent claims. They harvested trees for lumber and fuel. By the end of 1908, the mines were done, the men moved on, the houses stood abandoned, and the forest started growing back.

Today, backpackers hike the nearby Continental Divide Trail. Families buzz past on high-tech ATVs. Cabins sprout near the highway. The scene is a microcosm for a greater trend on western lands, where a new generation extracts new value from the land. The ranks of outdoor enthusiasts are growing as populations expand, and more people work indoors and enjoy their leisure time outside. And technological advances—mountain bike suspension, packrafts, dune buggies, etc.—make it easier to play deep in the backcountry.

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Some communities in the West are finding ways to capitalize on recreation. Take Casper, Wyoming, Oil City of the Plains. Today the town's inhabitants may still work in the energy industry, but they also enjoy the town's blue-ribbon fishery, trails system, and clear skies (see "A New Kind of Energy," p 2). The result is economic diversification (see "Camper Culture," p 9) and in some cases, increasing numbers of stewards compelled by a personal connection to the outdoors.

And yet, there are trade-offs. More visitors mean more encroachment into wild country. Even quiet backcountry skiers can disturb wildlife (see "Terror in the Backcountry," p 21). As antler hunters descend on once-empty public lands in western Wyoming, they stress wintering mule deer and compete with hobbyist antler collectors (see "The Bone People," p 18).

This issue of *Western Confluence* examines outdoor tourism's influence on local economies and the management challenges it presents. We also touch on some solutions, new ideas for protecting favorite places while pursuing outdoor tourism (see "A New Conservation Model," p 35). The subject is huge, and our coverage is by no means comprehensive, but we hope to chip at its edges and provoke some new thinking.

Not far from the mining camp in the Sierra Madre, I passed a sheep wagon tucked into a stand of krumholz. Sheep bleated and nosed the mountain grass. Their shepherd sat horseback, resting his elbow on the saddle horn as he watched the flock. Even as the West changes, the ways of living off the land that Westerners have pursued for the last century are not going away. And tourism will raise some of the same questions as those other industries—how do we support the people who live here now while preserving the characteristics we love about these places for our children and grandchildren?

On the cover: Cross country skiers approach a bison near Old Faithful in Yellowstone National Park. Photo by Mark Gocke.

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A New Kind of Energy

A refinery town redefines itself as an outdoor playground

By Nina McConigley

A flash of red bobs in the North Platte River at the Casper, Wyoming, city limits. It dips under the water and emerges in a spray of white. Behind it, another flash of color, and where the water calms, two kayaks come to rest, floating gently toward downtown Casper. It's an unexpected sight in the Oil City of the Plains, adjacent to the old Standard Oil Refinery location.

Casper was built on extractive industries, mostly oil and gas. Oil prospectors drilled the first well just north of the town in 1888. By the next year, oil from the Salt Creek Field was flowing into Casper to be sold to the railroad. The refinery opened in 1895, making over one hundred barrels of lubricants a day. In 1922, Casper's Standard Refinery was the largest in the world by volume, producing 615,000 barrels of gasoline a month.

It took almost a century for the refinery's fate to change. By the 1980's, production slowed considerably. The last barrel of oil was refined in 1991, and the refinery shut down after seventy-seven years. The structure remained an eyesore until 2002, following a citizen lawsuit over pollution, when BP and the state of Wyoming signed a remedy agreement and began a cleanup. That led to a transformation.

The refinery site, still slowly recovering from contamination, is

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now the Platte River Commons, home to a golf course, wildlife viewing areas, and the Platte River Trails, a 10-mile complex along the North Platte, conserving riverside bird habitat, protecting the river corridor from future development, and providing a paved trail system for bikers, walkers, and joggers.

The Casper Whitewater Park, where those kayakers bob along, is part of the commons. It's a half-mile stretch of the North Platte River with four artificial rock structures that create turbulent water: a free, in-town playground for whitewater enthusiasts.

Casper, a town people usually pass through (the Oregon, Mormon, and California Trails all intersect it), is redefining itself as a place where you not only stop before moving on, but also stay and play. The refinery's transformation is just one of many ways Casper is branding itself as a healthy place to visit and live, a place with vast recreational opportunities. At the center of the state, Casper wants to be known not just as the oil city, but now as Wyocity (intended to rhyme with velocity), a town with a new pace and direction.

Many Wyomingites consider Casper's mall, the largest in the state, the main attraction the town has to offer. Some Casperites are working hard to change that image. Beyond where the old refinery stood, Casper has mountains, rivers, and reservoirs waiting for the outdoor enthusiast.

Shawn Houck, Marketing Adviser to the Casper Visitors Bureau says, "People didn't in the past have an opinion about why they wanted to come to Casper. We're answering that. We are excited to fill in the blank for people."

One answer: An extensive trail system, created by citizens, all around the city. "The development of our outdoor trails system has really made a big difference in how people can become more actively engaged, recreationally, here in Casper," says John Giantonio, Director of Sports and Events for the Casper Visitors Bureau. "Whether it's the trail system along the river and through the downtown area or the single track trails on Casper Mountain, Squaw Creek, or Muddy Mountain, this provides a great opportunity for people to hike, mountain bike, fat bike, snowshoe, or Nordic ski during the year."

Casper Mountain boasts Hogadon Ski Area's twenty-four ski and snowboard runs, as well as twenty-six miles of groomed Nordic trails (also a citizen-led effort), all just eight miles from downtown. A new Casper Mountain Biathlon Complex is under construction. Adjacent to the current trail system, the complex will have a biathlon shooting range big enough for thirty racers at a time, and will host sanctioned Nordic and Paralympic events.

Cathy Rosser, the Managing Director of the Casper Biathlon Club, calls Casper Mountain's trails, "a hidden gem, so we are building upon a great system." She ticks off the reasons Casper Mountain is an ideal place to

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have a biathlon training center: "It's a great training elevation. Casper Mountain has consistent early and late season snow. The road going up the mountain is good. And it's close to a freeway and an airport."

Trails on Casper Mountain and surrounding areas also attract mountain bikers and fatbikers, who ride on snow as well as dry trails. That scene has bred groups like Fat Fish Racing, an amateur race team that also organizes local competitions, and has built a community of mountain bikers in Casper.

Casper Mountain is also the site of the Casper Strong Adventure Race, which started in 2014. Racers undertake a seven- to twelve-hour solo adventure challenge. They start at the North Platte River, run twelve miles up 3,000 vertical feet to the top of Casper Mountain, compete in challenges such as archery, then mountain bike back down to the river, and finish by taking inner tubes through the Casper Whitewater Park. The race is growing in popularity, attracting contestants from around Wyoming and the country.

Nothing defines Casper's burgeoning outdoor recreation scene more than its river. The North Platte, the gem in Casper's crown, has some of the best fishing in the world. American Angler magazine named Casper's section of the North Platte River the "#1 Big Fish Destination in the World" in 2005, and the Wyoming Game and Fish Department designated it a Blue Ribbon Trout Stream for its high quality recreational fishery. The state, county, Bureau of Reclamation, and local fishing guides meticulously manage the river's trout habitat. The North Platte has roughly 4,000 brown, rainbow, and Snake River cutthroat trout per mile.

And it's not just the streams that lure outdoor enthusiasts. Casper's clear skies are another natural attraction. Early oil barons who hauled oil into Casper in horse-drawn wagons could have never imagined that visitors would flock to the town not for oil or cattle, but for something far more ephemeral, a total solar eclipse.

On August 21, 2017, Casper will be one of the best spots in the country to view a total solar eclipse, the first such event visible in the continental U.S. since 1979. Casper lies in the center of the eclipse's path, meaning people there will see the moon totally block out the sun almost directly overhead for two and a half minutes. The city, in partnership with the Wyoming Office of Tourism, is planning a four-day festival around the eclipse, and expects to attract 70,000 visitors, enough to more than double Casper's population. Hotel rooms and campsites are already hard to find. Dan McGlaun, who travels the world to view eclipses, says, "The eclipse excitement will be crazy. Everyone who lives in Salt Lake or Denver needs to come to Casper for this eclipse."

Val Thoermer/Shutterstock

Casper, like many rural western towns, is learning to embrace its own outdoor recreation opportunities for their economic value and to improve quality-of-life for its citizens.

"You see more people out on their bikes year round here," says Elliott Ramage, member of the Platte River Trails Board. "There are recreation events that appeal to outdoor lovers happening constantly and year round." Casper citizens themselves, alongside visitors, are taking advantage.

"We are not only an energy town," Giantonio of the visitors bureau says, "We are the central heartbeat for energy production, but we aren't just an energy town."

Nina McConigley *is a writer and assistant professor in the University of Wyoming Honors Program. Find more of her work at ninamcconigley.com.*

Patrick Fulton/Flickr

Evolving Wyoming TOURISM

Can a tourist-driven economy fill the gap as energy revenue falters?

By Samuel Western

Tucked between Ladies Golf Night and Bible Camp on the July 2015 events calendar for Hulett, Wyoming, is an event called Ham N Jam.

For the uninitiated, Ham N Jam is an obligatory diversion for bikers attending the annual Sturgis motorcycle rally in South Dakota. About 25,000 bikers from all over the nation roar into Hulett, a hamlet of 318 souls surrounded by rolling pasture and pine trees. The visitors work their way through thousands of free pork sandwiches rinsed down with countless cans of beer.

For a few days before and after, the town reverberates with growling Harleys. Local restaurants and merchants do a land office business. The event might be seen as another example of how far Wyoming's tourist trade has evolved since 1990, an era when the state was still hanging on to its vaguely spiritual "Find Yourself in Wyoming" theme.

Now Wyoming boasts dozens of events, few of which existed a generation ago: brew fests, Celtic fests, music fests, and Gold Rush Days. Each event gives the local economies a shot in the arm. Has Wyoming tourism changed, really? While offering diversity, such festivals are one-time events, akin to the local rodeo or county fair: the money rolls in until the Ferris wheel rolls away.

The financial dynamics aren't encouraging. The 2015 Ham N Jam brought in an estimated $21,582 in tax revenue to the town of Hulett, says local clerk and treasurer Melissa Bears, but public safety costs were $31,547. "The city of Cheyenne charged us $9,000 for the services of five police officers. In fact, if we don't get a Homeland Security grant, then Hulett will have lost over $9,000 on the Ham N Jam," she said.

Welcome to the uneven world of Wyoming tourism, which has historically faced an irregular evolution. It's seasonal (only about 11 percent of visitors come in winter), poorly distributed (54 percent of tourists bee-line for Yellowstone and don't touch the rest of the state), and lacks diversity (84 percent of visitors are white and 95 percent are Americans). It's also had its own form of boom and bust: bursts of creative ideas and legislative enthusiasm mixed with periods of doldrums as Wyoming struggled to find new narratives and themes to attract visitors.

Here's something that isn't erratic, however: In the last fifty years, thousands of businesses and advocates have molded Wyoming tourism into what the old west called "a going concern." The industry employs over 30,000 people and has gone from marginal to middle-of-the-road respectable in terms of an economic driver. By any metric, it's arrived.

The key question is: given faltering energy revenue, can Wyoming tourism keep up this forward momentum and fill that gap? It's a long shot. By almost every measure and by a large margin, energy has outflanked tourism in terms of economic importance. Yet don't count tourism out, either. It's charting new waters in terms of not only employment but revenue as well. Most importantly, there's evolution occurring at the community level. Like most ground-swell evolutions, this one has taken its time—over a generation—to gain traction. Nearly thirty years ago, the Wyoming legislature created a lodging tax. Collections from this tax, which permits cities and counties to fund and create their own tourism agenda, have gone through the roof in recent years. According to the Wyoming Department of Revenue, lodging tax collections jumped from $7.5 million in 2010 to $17.3 million in 2015. Today, all 23 Wyoming counties or cities within a county, have a lodging tax.

Tourism has had to fight for respect in Wyoming.

Even before Wyoming was a state, tourists came to the region for a singular destination: Yellowstone, or the "Infernal Regions," as writer Calvin C. Clawson called them. Despite jaw-dropping scenery, tourism in the Cowboy State lagged behind agriculture and minerals, at least in perception. During much of the twentieth century, received wisdom prevailed that resource economies—oil, gas, coal, ranching—were the primary sources of Wyoming revenue.

Work Projects Administration Poster Collection (Library of Congress)

Poster advertising Yellowstone National Park, created circa 1938 as part of the Federal Art Project, a New Deal program to support American artists and designers.

"The tourism economy in the state is better than it has ever been. We are seeing a record amount of visitors and with that comes a rise in revenue as well."

Chris Mickey, Wyoming Office of Tourism

Change came in fits and starts. Gene Bryan, a long-time Wyoming tourism advocate, and author of *A History of Wyoming Tourism Marketing: From Coloring Books to Twitter*, says Governor Cliff Hansen put tourism on a different footing in 1963 by hiring Frank Norris, an enthusiastic, drum-playing motel owner from Greybull. "Frank had more ideas about tourism in an hour than I had in my entire lifetime," said Bryan.

Norris and others began branding the state "Big Wyoming." They capitalized on the very assets that worried many who watched Wyoming's 1960 shaky economy: few people and lots and lots of space. When the *Wall Street Journal* ran an article in October 1963 titled "The Lonesome Land: Wyoming is Emptier and Its Economy Lags as People Move Away," Wyoming leaders despaired. Not Norris. According to then Wyoming Eagle columnist Larry Birleffi, Norris "barged into chief's office at the time, Governor Stan Hathaway, and beamed, 'This is great. This is exactly what people are looking for.'"

Bryan says Norris broadened the state image beyond cowboys, hunting, and Old Faithful. He and his team hired public relation firms. Winter was no longer the enemy. When Jackson Hole Mountain Resort opened in 1964, they pushed skiing, followed by snowmobiling in the state's national forests. Revenues began to climb. Between 1940 and 1974, tourist spending in Wyoming leapt more than eight fold from $40 million to $345 million.

Then came the 1973 energy boom. Mineral revenue outflanked tourism. Wyoming became known not so much for its natural beauty, but for rip-roaring oil towns and spectacular economic growth … and busts.

Tourism shouldered on, enduring years of bare bones advertising budgets, the resignation of the state's travel marketing agency, and potentially tourism-killing events like the 1988 Yellowstone fires. (Surprisingly, curiosity seekers in 1989 actually set new visitation records at the park.) The tone and tenor of Wyoming's attitude towards tourism changed, according to Lynn Birleffi, a retired state legislator, former head of the Wyoming Travel and Tourism Coalition, and Larry Birleffi's daughter, during the Governor Mike Sullivan administration.

"He began appointing professionals to important positions in tourism, not just those with political connections," she says. "Secondly, it was under the Sullivan administration we got the lodging tax."

During this era, Wyoming joined multi-state travel organizations and got serious about promoting international travel. The state formed a Wyoming Film Office to encourage film production in the state. Moviegoers needed to see Wyoming through Hollywood's eyes.

"Another important shift came under Governor Dave Fruedenthal," said Birleffi. "He worked with the legislature to greatly increase the tourism budget. We started a TV advertising campaign and generally became much more sophisticated."

The outside world took notice. A 2003 report by the stodgy Federal Reserve averred that tourism in the Tenth Federal Reserve District (Colorado, Kansas, Nebraska, Oklahoma, and Wyoming, plus some of New Mexico and Missouri) had been "overlooked." The report in particular cited tourism in Wyoming, Colorado, and New Mexico for its contribution to those states' economies.

Then the Internet arrived, revolutionizing how Wyoming presented itself to the world.

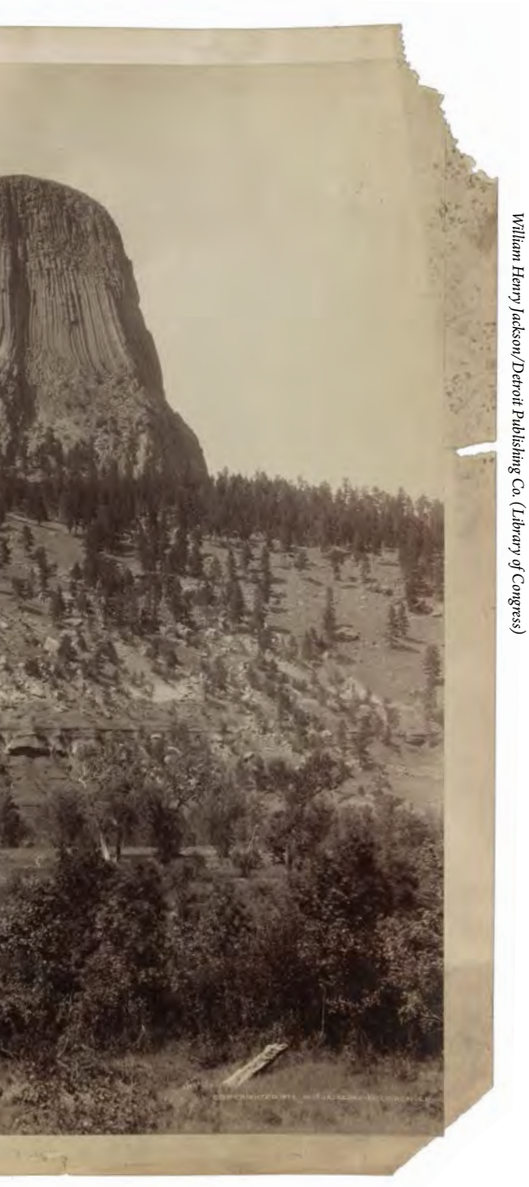
"When I came onboard, we were still marketing by zip code," said Diane Shober, head of the Wyoming Office of Tourism. "Now the digital age allows us to geotarget our audience and market accordingly," she says.

The political atmosphere has gotten more supportive. Whereas the Wyoming legislature appropriated only $268,000 to the Wyoming Travel Commission in 1963, lawmakers gave the Wyoming Office of Tourism $28.6 million for the 2015-16 biennium. WOT dedicated some of this funding to continue its assertive promotion. Over 90 percent of all Wyoming visitors used the web to research their trip.

"We also reach people on social media," says Chris Mickey of WOT. "Having a strong presence on platforms such as Facebook, Twitter, YouTube, and Instagram are extremely important to inspire people to want to make Wyoming their travel destination. Even on the advertising side, we now have more digital ads than ever before. Advertising on things such as Pandora or Sirus/XM were things that weren't even on our radar five years ago. As the times with the digital age progress forward I think everyone will shift more and more in that direction because that's where the consumers are."

Attractions on federal land continue to be the draw, with

Photo of Devil's Tower National Monument in Wyoming, taken by William Henry Jackson on commission to promote the railroads in 1892.



William Henry Jackson/Detroit Publishing Co. (Library of Congress)

Yellowstone and Grand Teton being the top magnets. A recent National Park Service report also shows that over 440,000 visitors to Devils Tower—right up the road from Hulett—spent $26,996,400 in communities near the monument in 2014. That spending supported 432 jobs in the area and had a cumulative benefit to the local economy of $33,693,900.

"The tourism economy in the state is better than it has ever been," says Mickey. "We are seeing a record amount of visitors and with that comes a rise in revenue as well."

"Record numbers," means 10.1 million domestic and international visitors spending $3.4 billion in 2014 or equivalent to $9.3 million dollars per day. That's nearly twice the money and a 43 percent increase in the number of tourists compared to the year 2000. Texas in particular likes us. The number of visitors to Wyoming from the Lone Star state has tripled in the last three years.

By contrast, energy employment September 2014 to September 2015 is down 18 percent. Annual mineral severances tax collections have dropped from nearly $2 billion in FY 2007-2008 to a projected $1.3 billion in FY 2017-2018.

While ten million tourists is an impressive number, let's put that in prospective. That's the same number of people who visit Seattle's Pike Place Market, an area just two by five city blocks, each year. Business Insider ranks Wyoming thirty-fifth in the nation for tourism popularity.

Wyoming's middle-of-the-road ranking is due, in part, to its lack of cities. It's a tough concept for the Wyoming-centric to swallow; most surveys shows that cities are the top tourists attractions. (For example, while the Grand Canyon, the big dog of the National Park Service in the western US, received 4.6 million paying customers last year, New York City took in 57 million.)

Lack of airports plays a role, especially when marketing travel packages to upscale and foreign travelers. "It's one thing to get visitors to a major gateway airport like Salt Lake City or Denver. It's another thing to get those visitors to come to Wyoming," said Shober. "Airports matter. That's why you see those folks in Teton County pay so much attention to their air service."

This means Wyoming may struggle in the future to compete in one of the biggest projected trends in tourism. As travel writer Rafat Ali wrote in *Skift*, a travel intelligence and marketing website, "The future of American tourism is surely written in Chinese. And Portuguese. And Spanish. And Hindi."

In June 2015, the US Commerce Department released an international travel forecast through the year 2020. According to USDC calculations, countries with the largest growth percentages of visitors to America are China (163 percent), Colombia (54 percent), India (42 percent), Mexico (37 percent), and Taiwan (33 percent). They predict these visitors will spend $250 billion in the US in 2020.

"Asians typically like cities and shopping. We're a little short on those amenities here," says Shober. Still, Shober thinks the estimate that only 5 percent of Wyoming's destination tourists are from outside the country "is dreadfully low. We have figures that suggest that in the months of September and October, 25 percent of Yellowstone and Grand Teton's visitors are international."

Brian Riley of Old Hand Consulting in Jackson agrees. He estimates that 500,000 Chinese alone visited Yellowstone and Grand Teton National Parks in 2015, up from 350,000 the previous year. The high-end Chinese visitor, he says, wants to experience nature. To encourage this, Riley has published a magazine, written in Chinese, called *Escape*.

Riley also agrees airports are important. "The average Chinese does not want to spend 20 hours on a bus getting to Yellowstone," he says. "They usually fly into Salt Lake City or, increasingly, Bozeman. In fact, that airport in Bozeman has been knocking it out of the park when it comes to attracting Chinese travelers."

That lack of cities and major airports means Wyoming must deal with a cumbersome "visitor distribution system," travel speak for how tourists reach their destination. Because visitors rely on motorized vehicles to get to Wyoming, the state must focus, by necessity, on what Shober calls the "bread and butter" of the tourist economy: the domestic traveller.

"We're no different, really, than any other region of the country that's not easy to reach. In New England, there's a cooperative organization called VisitNewEngland.com. There's another one based out of Georgia called Travel South USA. They're all about marketing to the domestic tourist," Shober says.

Wyoming's ragged air service does provide a silver lining to local tourism in parts of the state: overnight tourists cross the state line via car, truck, RV, camper, or motorcycle. Small town merchants and gas stations far from the Tetons benefit with each passerby. Increases in lodging tax collections from FY2014-2015 in Big Horn, Sheridan, Johnson, Campbell, and Crook counties outstripped increases in Park and Teton County, some by a large margin. Even the flat counties, those in eastern Wyoming, show improvement. Travel spending in Platte County has doubled since 2000.

Eastern Wyoming might be the area in which tourism has made the most headway. Before the office of Wyoming State Parks, Historic Sites, and Trails opened mountain bike trails at Curt Gowdy State Park outside

Courtesy Lake County Discovery Museum Collection (circa 1940)

Cheyenne in 2006, "we had about 50,000 visitors," said Paul Gritten who manages the non-motorized trails program for State Parks and Cultural Resources. "Now our visitation exceeds 150,000," he says.

State Parks is applying roughly the same template to Glendo State Park north of Wheatland. They've added 45 miles of multi-use trails to diversify park use which, until recently, has concentrated on traditional uses like boating and fishing. "We're trying to add visitation to the shoulder seasons (fall and spring)," said Gritten. "But it's too early to tell how well it's working."

This domestic agenda finally seems to be making a difference to Wyoming's bottom line. While tourism contributes a puny portion of the state's GDP (roughly 4 percent for tourism, versus 37 percent for energy), that isn't necessarily the best metric of progress. When you look at another metric, sales tax—a 3 to 4 percent surcharge added to everything from gas and hotel rooms to cars and mining equipment—one can hear the whirling of David's sling as he winds up to take on Goliath.

Sales tax is a big deal in Wyoming. It's far and away the single largest source of revenue to the state general fund, currently about 35 percent of total collections. As mineral prices continue to tumble and Wyoming tourism maintains its climb, sales tax for the two industries, for the first time in the last ten years and possibly forever, switched places.

Earlier this summer sales tax collections from tourism surpassed collections from minerals. By autumn and the end of peak tourism season, mineral sales tax pulled ahead again, but even in November the two were surpisingly close: $45.9 million for minerals and $40.5 million for tourism.

It may be that Wyoming has crossed the revenue Rubicon and doesn't have to rely on one-off events to carry the day. WOT director Shober thinks so. "We're experiential," she says. "Wyoming tourism isn't so much based on destination and events as it is on ability to evoke a feeling or emotion. We're good at that."

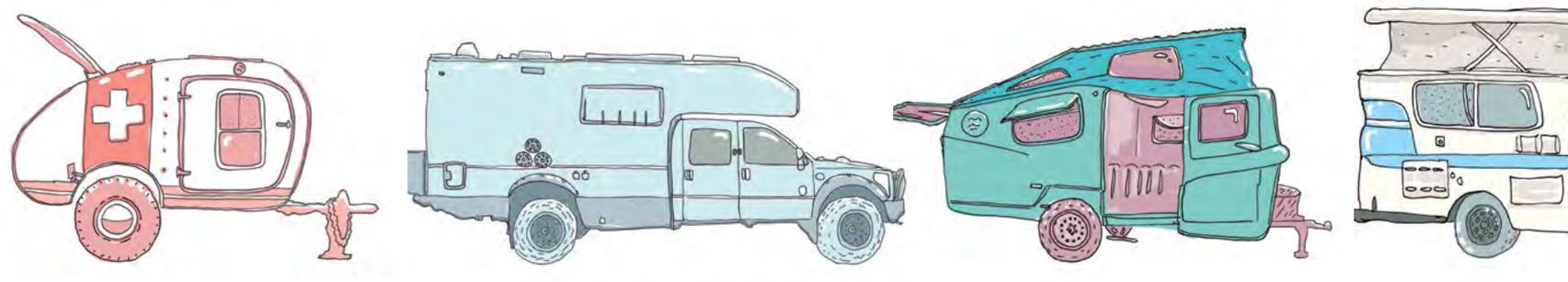
Minds pondering subjects far afield from tourism share Shober's reluctance to obsess over destinations.

In 1962, about the time Wyoming was fretting about bad national press coverage, the University of Chicago published a monograph titled *The Structure of Scientific Revolutions*. Author Thomas Kuhn offered novel explanations on the way ideas and movements gather steam and bear fruit, an apt metaphor for Wyoming's embrace of a tourism economy. True revolutions are rarely pretty, he reminds us. They are mostly evolutions that often fail and are, by their nature, irregular. New ideas often suffer rejection and it takes society a long time to grasp the importance of really big changes. Kuhn was, after all, the writer who invented the term "paradigm shift," a dynamic that sets the bar of meaningful change to heavenly high standards.

The absence of a paradigm shift, however, doesn't mean matters are standing still. In fact, Kuhn warns against setting specific goals for any idea or discovery that's gathered momentum. Evolution, he declares, has no goals. It usually starts from primitive beginnings and winds its way forward. Be realistic, he suggests, and consider "evolution-from-what-we-know." In other words: measure how far we've come instead of how far we have to go.

That's a fair metric of Wyoming tourism. It's evolved a long way from being just a showcase of the crown jewels in northwest Wyoming. Without big cities, maybe middle-of-the-road is all Wyoming evolution is bound to achieve. Take the bike trails at Curt Gowdy State Park. They've earned the coveted EPIC status for the International Mountain Bike Association. Riders come from all over the world to check this 19.2-mile ride off their bucket list. Go ahead. Use the Denver airport. Just buy your gas and beer in Cheyenne.

Samuel Western *is a writer based in Sheridan, Wyoming. He is author of* Pushed off the Mountain, Sold Down the River: Wyoming's Search for Its Soul. *His latest book, a novel, is called* Canyons.



CAMPER CULTURE

Small, hand-built, and rugged RVs bring a new demographic into the fold

Text by Emilene Ostlind
Drawings by Joe Walton

Mike Resch never expected to own a camper. He prided himself on his ability to live out of a backpack, and always thought RVs were "ridiculous on the road, ridiculous at campsites for the size. If you are going to the mountains, why not be outside?"

Then, last winter, with their second child on the way, he and his wife started looking for a bigger house in their hometown of Boulder, Colorado. Nothing was in their price range, but a neighbor had an aluminum-sided, twenty-foot JayCo camper trailer for sale.

"He was retired and OCD, so we knew it would be in perfect condition. It was a great price," Resch says. Plugged into water and electric next to their house, it serves as guest quarters. And over the summer they took it camping, too.

"Now we have a two-year-old and a three-month-old. We can still go camping and be outdoors," he says. "We've gone to remote places along the Arkansas River. We like to kayak. We have a big dog. It works fine with our pickup truck."

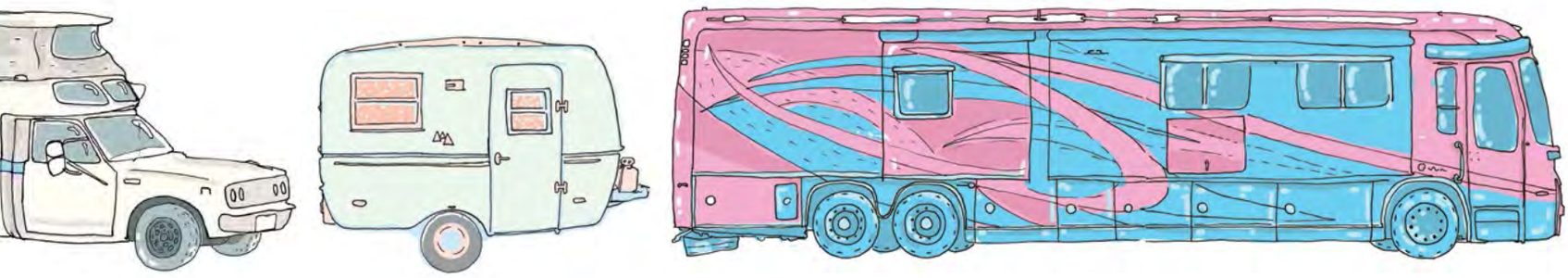
In the last fifteen years, U.S. camper sales spiked, crashed, and spiked again, reaching new all-time highs as gas prices tumbled. Now, with thousands of models to choose from and new innovations every season, even those who thought they'd never own an RV can find a camper to fit their style. Camper ownership is no longer just for families and retirees. The expanding demographic trends present business opportunities for everyone from sales people and campground owners, to mechanics and carpenters. Especially in the rural west, with airports few and far between but camping spots aplenty, campers and motorhomes are the face of summer tourism.

Tracy Powell

Oliver and his family with their 13-foot, 1978 Scamp, rescued on its way to the landfill and lovingly refurbished.

I don't own a camper, but as the years go by, more and more of my friends do. One drives a two-tone '84 Volkswagon Westfalia pop-top Vanagon complete with a little stove, sink, and fridge. Another moved here from Philadelphia in a squat '76 Toyota Chinook, white with a turquoise racing stripe and a bunk in the cab-over pop-up. Another, mother to nine- and eleven-year-old boys, admits her family's '98 Ford Coachman van makes the spring- or fall-break excursion to the mountain bike trails in Fruita and Moab that much easier, not to mention quick overnight trips to the nearby national forest.

Last summer, two of my friends towed their 13-foot, '78 Scamp up from Colorado behind their Subaru and parked it near a local climbing crag for an extended weekend. They'd acquired this egg-shaped contraption for free, diverting it from the landfill, and patched its fiberglass sides, scrubbed out the dirt and mold, replaced cabinet hinges, painted



cupboard doors, and sewed curtains and cushion covers.

Seven of us piled into its small quarters after rock climbing one evening, including two-year-old Oliver, who, between mouthfuls of raisins, reenacted the incident of the bear that raided his trashcan. His mom boiled hot dogs by light of headlamp. The Scamp has a tiny fridge and sink, a two-burner stove, a closet, and sleeping quarters for three. There's no toilet or shower, no TV or wifi. It doesn't compare to the massive RVs cruising summer interstates like migrating whales. At the same time, it's a world of luxury for a young family used to pitching a small backpacking tent next to the car for a night out of town.

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These friends are part of a growing cadre of resourceful, cash-strapped people who salvage or buy retro campers for little to nothing. Such small, lightweight trailers are just an entry point at one edge of a huge industry that's only growing. Carey Gabrielle is Sales Manager at Camping World of Longmont, a 65-acre RV dealership along I-25 on the Colorado Front Range.

"Usually if there is a new family, they get a popup. Then they graduate to a trailer. Eventually they upgrade to a fifth wheel. And then when the kids are gone, they get a motorhome," he says.

Camping World of Longmont, one franchise in a national chain with 116 stores, will sell 1,200 units this year, from tiny light-weight campers a small car can tow, up to the huge "diesel pusher," a giant motorhome fancier and better equipped than many houses. And this is just one store. RV America (*World's Largest Indoor RV Showroom!*) is ten miles up the interstate. In the opposite direction are Johnson RV, Century RV, Summit Adventures RV, Big John's RV Sales and Service, Discount RV Corner, and Windish RV Center, to name a few.

Some buy campers as a way to save money, be it on real estate like Mike Resch or as a means to avoid hotel rooms and restaurant dining. Indeed, the RV Industry Association cites one report that found traveling by RV can be 25 to 50 percent less expensive than driving a car and staying in hotels. Still, the costs of buying and caring for a camper can add up. At Camping World of Longmont, eighty percent of those 1,200 units will be financed, with an average monthly payment of about $300. Campgrounds with RV hookups typically cost $25 to $50 per night, less than a hotel but rarely free. Then there's gas, and motorhomes typically get only 8 to 10 miles per gallon, even less for the biggest ones. Another expense is storage.

"Storage is typically $1 to $1.50 per linear foot per month. So if you have a 30-foot trailer, it would be about $30 to $45 to store," Gabrielle says. "If you have a big diesel pusher and you want to store it indoors, that could run $300 to $400 per month. That is only about 5 percent of customers who store their RVs indoors."

And repairs. Camping World of Longmont has a twenty-four-bay service garage, with so much business June through October that they limit repairs to units purchased from their stores.

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Camper sales have climbed slowly since the RV Industry Association started keeping numbers in 1980. Sales reached a peak in 2006, with just under 400,000 units available in the U.S. at $14.7 billion in value. Then Wall Street crashed, and the "expensive toy" industry took the hit hard. In 2009, the low point of the last decade, fewer than half as many units moved as had in 2006—only 165,700—and the retail value, at $5.2 billion, was just 35 percent of its peak. Since then, the numbers have climbed steeply back up. As of October 2015, not quite as many units had sold as in 2006, but the retail value is higher than ever at $15.4 billion.

RV owners are changing, too. "The demographic used to be 45 to 65 years old. Now it's more like 28 to 75," Gabrielle says. Campers are not just for sightseers. They're for athletes and adventure-hogs, families and single people, twenty-somethings (hashtagging #vanlife) and active retirees, and everyone in between.

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To meet this diversity among RV enthusiasts, small camper manufacturing companies are starting up in backyards and home garages throughout the mountain West and thriving thanks to overwhelming demand for their products.

The smallest, lightest, and easiest-to-make campers are teardrops, and clever models abound. Start with Hiker Trailers, a boxy, low-cost teardrop manufactured in Denver and Indianapolis ($2,895 and up). Or Moby1 Trailers, with a model towable by motorcycle, built in Springville, Utah ($6,500 and up). There's also Colorado Teardrops, available for sale or rent in Boulder, Colorado, since 2014 ($10,300 and up). Vintage Overland hand builds stamped-

Emilene Ostlind

Peter Pavlowich sits in the doorway of the tenth Casual Turtle Camper he's hand built in his driveway in Fort Collins, Colorado.

aluminum teardrops with rugged off-road tires in Grand Junction, Colorado ($10,500 and up). This list barely skims the surface.

To see one of these startups firsthand, I stopped by the Casual Turtle Campers "factory," actually a tiny garage in Fort Collins, Colorado, to talk to Peter Pavlowich. He was putting the last coat of stain on the tenth camper he's built since starting his business a year and a half ago. He studied woodworking in college and crafts these beauties one at a time in his driveway to the specs of each customer. The trailers are elegant and cozy, with wood siding and trim, and bead board and canvas interior details. Plenty of windows, no electricity or gas, lightweight. More sailboat cabin than RV.

"The roof design is maybe the most unique feature," he said, referring to its domed, turtle-shell shape. "I started with an arc fore to aft, then tried port to starboard, and this is a combination of those two arcs. … I spent a lot of time on the computer designing it and making my mistakes there before I built it. … I like the roof. It's good looking. It's practical. It's strong."

He keeps the trailers and truck bed campers simple for people who'll cook outside on a camp stove and don't want to mess with gas lines, drains, plumbing, and winterizing. Most of his customers find him on the tiny house blogs, and several of them have been single women looking for something simple, small, beautiful, and easy to take care of. He represents just one entrepreneur making a go off the camper craze.

The options to a prospective camper owner are endless. Some are hip, like the colorful Cricket Trailer, designed by a NASA engineer in Houston, Texas, and set up for days off the grid ($15,495 and up). Some are chic, such as the popup Mercedes Marco Polo, which looks like a minivan on the outside, but with a white Euro-style interior and marketing materials featuring pro chefs cooking gourmet meals on the beaches of Sweden ($73,900 and up). Others are rugged, like the Ford F-550 4x4 EarthRoamer, which comes in three lengths up to super stretch and includes turbo diesel power, interior wood finish, a motorcycle lift, and ability to carry 85 gallons of drinking water for an extended backcountry excursion ($280,000 and up). People convert school buses, fifteen-passenger vans, Hummers, semi-trucks, Army trucks, ambulances, and more into campers. Those without the skills to make a camper themselves can have about any vehicle lifted, ruggedized, and camperized by custom camper mechanics.

The unit Camping World will sell the most of this year is an aluminum-sided 30-foot JayCo trailer with five beds and a full kitchen and bathroom. A regular pickup can tow it, and it will house a family for a weekend trip.

I can't help but also ask Gabrielle for a tour of the fanciest camper on the Camping World lot. He leads me up the steps of the mind-boggling Entegra Cornerstone, and starts reciting its stats: 45 feet long, 50,000-plus pounds, 150-gallon fuel tank, turbocharged 600 horsepower engine, in-floor hot water heating, fireplace, washer and dryer, HDTV,

Emilene Ostlind

Carey Gabrielle, Sales Manager at Camping World of Longmont, gives a tour of the luxurious Entegra Cornerstone motorhome.

leather sofa, high-gloss porcelain tile, quartz countertops, walnut cabinetry handcrafted by Amish woodworkers in Indiana, and the list goes on. This is a two-person dwelling, a true luxury home on wheels. The price tag is $650,000, and Gabrielle expects to sell four of them this year, maybe even one to somebody who graduated from a tent to a little trailer decades before.

It's not possible to consider how outdoor recreation and tourism fits into the new West without touching on recreational vehicles. As the numbers at Camping World prove, all sorts of people want campers—not just retirees—and the price is worth it. Campers may be one of the best tools for getting the masses outdoors, or at least partly outdoors.

Mike Resch, the guy with the dog, kayaks, and two little kids, has been surprised by how much he likes his family's camper. He's even found staying in RV parks isn't that bad. Often, the other visitors are inside, enjoying their air conditioning and satellite TV, leaving the riverbank or scenic views to Resch and his family. He's also picked up a new unanticipated pastime: watching other RV owners back into or out of campsites.

"They don't have experience backing up trailers. They just have money. These things are huge, especially the fifth wheels," he describes. "You see people break things and run into things. It's entertaining."

Even those who think they don't want an RV probably do, maybe for reasons they haven't thought of yet.

***Emilene Ostlind** edits* Western Confluence *magazine. More of **Joe Walton**'s illustrations can be found at joedoodles.com.*

National Parks Respond to CLIMATE CHANGE

As ecosystems transform, parks adapt

Emily Baker and James Kardouni, seasonal glacier monitoring staff for Grand Teton National Park, surveying reference points on Middle Teton Glacier.

Brent Bankley (NPS)

By Kristen Pope

Strapping on crampons and readying their ice axes, the Jenny Lake Climbing Rangers prepare to embark on an important backcountry mission. But this time, they're not rescuing an injured climber. Instead, they're assisting Grand Teton National Park's scientific research team in a race to determine what's happening to the park's glaciers in the face of climate change.

Using GPS units mounted on poles, they take measurements to track the glaciers' movements. While the park boasts twelve named glaciers, this project focuses on the Middle Teton, Schoolroom, and Petersen glaciers, selected in part because they are relatively easy for researchers to access. On-ice measurements of others were nixed due to safety concerns, but the team is still collecting data on those via time-lapse cameras.

The park is still in the early stages of the glacier monitoring project, but project lead Kathryn Mellander, GIS specialist and hydrologist at Grand Teton National Park, notes recent studies documenting an overall loss of approximately 25 percent from 1967 to 2006. "There's no doubt that they are shrinking, and quickly," says Mellander.

These melting glaciers are just one of the many impacts climate change is already having on national parks. As time goes on these effects will increase and managers are racing not only to address the present-day impacts, but also to forecast future changes. They also face the daunting task of figuring out how to manage parks in the face of climate change in order to protect resources, provide visitor services, and meet the dynamic challenges to come.

"Climate change impacts all aspects of park management," says Nicholas Fisichelli, an ecologist with the National Park Service's Climate Change Response Program (CCRP).

Kathy Mellander (NPS)

Jenny Lake Rangers surveying the lower reaches of Schoolroom Glacier in 2014.

"That includes plants, animals, cultural resources, and historical sites and buildings. Climate change is altering weather and causing deterioration and loss of cultural resources in parks. [It's] impacting facilities, roads, and maintenance."

SHRINKING GLACIERS JUST ONE SIGN OF TROUBLE

While park visitors want to leave the park with memories and photos, scientists seek a different take-home from their park outings: data.

In 2014, the Grand Teton team collected 1,200 data points on the Schoolroom Glacier, and Mellander estimates they recorded about 400 data points on the Middle Teton Glacier in 2015. Every year or two, they re-measure the elevation points to see if a glacier is accumulating or losing ice. They chart the temperature, volume, and surface elevation of the glacier; map the terminal lower margins; and use several photo monitoring strategies, including aerial and satellite imagery as well as fixed photo monitoring points, to track changes.

The current glacier data collection project builds on a body of existing work monitoring these diminishing resources. Idaho State University master's student Hazel Reynolds compared aerial and satellite images of seven park glaciers taken between 1956 and 2010 and found they were retreating during that time period, while Jake Edmunds from the University of Wyoming, noted Teepe Glacier lost 60 percent of its area between 1967 and 2006. He also said summer temperatures were significantly higher during that time compared with an earlier period, 1911 to 1967. And that's bad news for glaciers and surrounding ecosystems.

Except for Teton Glacier, the park's twelve glaciers are all less than a square kilometer apiece, and they are particularly susceptible to the effects of a changing climate. But despite their small size, Teton glaciers have vital impacts on the surrounding ecosystem. "They do have some effect on stream temperatures and they do feed very interesting and rare terrestrial ecosystems, including alpine wetlands, and those exist only because of those glaciers right now," says Mellander.

As Grand Teton's glaciers are shrinking, other parks also face a variety of physical effects from climate change. Mount Rainier's glaciers are also receding, rising sea levels and intensifying storms eat away at Assateague Island National Seashore, and interior Alaska faces an array of challenges, including melting glaciers, degrading permafrost, the spread of woody vegetation to new areas, and shrinking boreal ponds and wetlands.

To find out exactly what is at risk, parks are completing climate change vulnerability assessments. One of these projects focused on pikas, a high-elevation "indicator species," an animal whose condition lets

Emily Baker (NPS)

Oliver Scofield and James Kardouni, seasonal staff, installing a high elevation temperature logger.

scientists know about the health of the surrounding environment. The Pikas in Peril project studied these creatures, which are the smallest member of the rabbit family, during a three-year endeavor that stretched across eight different NPS units. Their conclusion? Pikas are likely to disappear from several parks in the coming decades but have a good chance of survival in others, such as Grand Teton, where well connected expanses of high-elevation talus habitat will persist. Understanding which parks can provide refuge from climate change can help agencies like the NPS develop conservation strategies.

Another vulnerability assessment focused on Dall sheep, another high-alpine indicator species that specializes in finding food and safety along steep, rocky ledges. As climate change alters where plants can live and which species grow where, the sheep may have to follow the food to survive, changing their habitat and patterns. Extreme weather patterns, such as strong variability in snowfall and ice cover, may make it even more difficult for the sheep to find the habitat they need.

When visitors head to iconic national parks hoping to glimpse a Dall sheep on a cliff or spy a pika on a talus slope, they will likely be disappointed if they don't see these animals, which may not be as plentiful or as visible as they were in prior years. While certain animals may be hard to see, one creature will likely be even more plentiful in parks in the coming years: humans.

VISITORS FLOCK TO WARMER PARKS

In 2014, over 292 million people visited the national parks, up from 273 million in 2013. In 2015, Yellowstone National Park reported over three million visitors during the first eight months of the year, breaking previous records. The highest percentage of increase wasn't during the typically packed summer months—it was during the usually less crowded spring shoulder season. The park saw a 48 percent increase in April of 2015 alone, with 46,600 visitors compared to just 31,356 the previous April.

With the Centennial of the National Park Service in 2016, park managers are working to learn how climate change will impact parks and visitation patterns.

Fisichelli and his colleagues studied parks with at least ten years of visitation data and an average of 8,000 or more annual visits. Exactly 340 NPS units met the team's criteria, ranging from parks below the equator in American Samoa and Guam to those high up in Alaska and beyond. "It covers a huge swath of the globe," says Fisichelli. "We wanted to see if and how visitation relates to climate specifically and the temperature across the [national park] system and at specific parks."

The researchers matched mean monthly air temperature with visitation data to see when people came to the parks. Not surprisingly, few people wanted to brave sub-freezing temperatures to experience the parks' natural wonders. They also stayed home when it was broiling hot. Visitor numbers plateaued when the average of daytime highs and overnight lows for a month reached between 70 and 75 degrees Fahrenheit. "People make decisions of where to go when planning their vacations based on the climate," says Fisichelli. "It intuitively makes sense."

Fisichelli projects that for 280 out of the 340 park units, visitation will follow temperature patterns and increase in coming years if current climate predictions hold true. "This shows the potential for more visitors and longer peak visitor use seasons," says Fisichelli. He found that a two- to four-week extension of the heavy visitor us" season may occur at many parks.

Northern parks, such as Acadia, Glacier, Yellowstone, and Rocky Mountain, are most likely to have the largest increases in visitor numbers, according to Fisichelli. Warmer units, such as Arches in Utah, could see more visitors flock to the area in spring and fall as peak summer months become less comfortable, essentially creating two heavy-use "shoulder seasons" with a less busy mid-summer period in between. Tropical and subtropical parks, such as those in Hawaii, aren't expected to see much change in visitation, as their moderate temperatures are fairly consistent throughout the year.

A longer and warmer peak season for many parks could cause difficulties with facility use, maintenance, and staffing, and some affected parks may need to add more potable water and air conditioning in buildings during the potentially longer and hotter summer season. Another option may be to shift activities, such as ranger-led hikes and even ranger maintenance duties, to cooler times of the day.

But it's not just the parks themselves that may see increased visitation. Gateway communities, those within sixty miles of parks, will likely benefit from more visitors staying longer. This could be an economic boon as visitors pack hotels, fuel vehicles, purchase last-minute supplies, and gobble burgers, beer, and ice cream cones—visitors spent over $14.6 billion in gateway communities in 2013 alone.

TURNING DATA INTO EDUCATION

Last summer, when the Grand Teton National Park research team made the trek out to the Middle Teton Glacier, a park interpreter joined the journey to gain first-hand knowledge of the science and research process to be able to share this information with visitors. Part of NPS's larger mission is to reach out to visitors and educate them about climate change and what it means for parks.

As part of that process, the NPS created a cross-disciplinary Climate Change Response Strategy in 2010. A team of NPS staff makes up the Climate Change Response Program (CCRP) that implements this strategy, which emphasizes four important pillars of addressing climate change in the parks: science, adaptation, greenhouse gas mitigation, and communication.

Kathy Mellander (NPS)

G. R. Fletcher (with pole) and Molly Tyson (belaying), both Jenny Lake Rangers, with Jeff Orlowski, CSU graduate student, surveying the top of Schoolroom Glacier in 2014.

"We're working to build climate literacy into all levels of our workforce and incorporate it into many aspects of communication from the topics discussed with a ranger on a trail to the manner in which we build and maintain facilities in parks," says Larry Perez, communications coordinator with NPS's Climate Change Response Program.

Perez points out that many parks strive to incorporate climate change messaging into all the interpretive programs they deliver. "That's not to say it's forty-five minutes about climate change, but when you walk through alpine meadows of Olympic National Park, the ranger who accompanies you might mention climate change influencing the timing of flowering."

Perez also notes that many visitors head to the parks repeatedly. "Visitors will have opportunities as they're exploring the park to engage with this topic and learn a little bit more," says Perez. "Visitors don't just come to a place once; they visit national parks throughout their lives and this provides an opportunity for visitors to engage in a continuum of learning … how they engage with landscapes, and how they can help shepherd through the change."

As parks change by the day, the National Park Service is striving to meet the challenges of a changing climate. While the CCRP focuses on bringing climate change issues to the forefront, parks also face budget realities that compound these challenges.

It may be difficult for the already-stressed system to accommodate all the necessary changes in the face of a backlog of major maintenance projects and other needs, and it's yet to be seen if the parks can keep up given their limited and declining budgets. "Parks aren't automatically going to get more funding because they get more visitors," says Fisichelli. "Budgets are always tight and this is going to be an additional strain."

If more visitors come for a longer period of time, "That could have some major implications for park management, thinking about staffing, how long you have to keep roads and buildings open, and how long you keep some seasonal staff on at a park," says Fisichelli. Some of these seasonal staff are the people who teach visitors about climate change.

While it is difficult to predict exactly what will happen in any given park at any given time with the dynamic nature of climate change, it's important for managers to adapt quickly to rapidly changing systems. "That's really a challenge for managers to steward resources under continuous change," says Fisichelli.

With this in mind, Fisichelli stresses that climate change is already impacting parks. "Visitor use and experience are both impacted by climate change, and there will likely be many other impacts and changes in the future," he says. "And climate change is ongoing. It's not just a 2050 or 2100 issue. It's a here and now issue."

Kristen Pope *is a freelance writer and editor who specializes in science and conservation topics and lives in Jackson, Wyoming. Find more of her work at kepope.com.*

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SOME LIKE IT COLD

How does a local ski hill prepare for an uncertain future?

By Maria Anderson

I'm a third-generation Bridger Bowl skier. My grandparents taught my dad to ski here, and I hope someday I'll teach my grandkids on these same slopes. There's even a run at Bridger named after my Grandpa Buck. But it's hard to say how this or any other ski area will be doing a few decades from now. Winter snowfall is sporadic, and the slopes have been melting earlier in the spring. Ski hills of all sizes, especially small ones, struggle to remain viable businesses and to keep their customers happy.

Which is why, at six thirty on a summer morning, as a pink moon hovers over the Bridger Mountains I stop for coffee in Bozeman, Montana, and then drive up the canyon. The mountains are dark, ominous-looking shadows in the haze of summer wildfires. This smoke is a sign of the big environmental changes on the minds of skiers like me, as well as of ski area managers. I'm headed to Bridger Bowl during its off season to meet with general manager Randy Elliott and to ask: how does a local ski hill, especially one so critical to Bozeman and the surrounding community, prepare for an uncertain future?

Since Bridger opened in 1955, Bozeman has been a skier's town. Students flock to Montana State University to ski here and at nearby Big Sky. A blue beacon on Bozeman's historic downtown Baxter Hotel lights up when Bridger reports more than two inches of fresh powder. When it flashes, some shops close their doors as their staff heads to the mountain. This morning five of the ten vehicles parked in the coffee shop lot sported the tiny round Bridger Bowl sticker I have on my own car.

Ski areas like Bridger bring more than just quality of life to the nearby communities. They also bring jobs and an economic injection to what are often small, rural towns. Tourism, including winter skiing, is Montana's second largest industry after agriculture. Over the 2013/14 winter, travelers brought about $735.3 million into the state's economy. Nearly 30 percent of them listed snowsports as their reason to vacation in Montana.

"This is a substantial economic driver," according to Dustin de Yong, Montana Office of Tourism and Business Development.

"Skiers generally stay longer and spend more on average than other visitors," says Daniel Iverson, a public information officer at the Montana Office of Tourism. Nationwide, snow-based recreation contributes about $67 billion per year to the economy and supports over 900,000 jobs.

To stay in business and keep serving their local towns powder days, jobs, and a steady flow of tourists, Bridger and hundreds of other ski areas like it across the country require two ingredients. They've got to have snow, and they've got to have skiers. Both are getting scarcer. The year 2014 was earth's warmest since 1880, according to two separate studies by NASA and National Oceanic and Atmospheric Administration (NOAA) scientists. Of the nineteen cities that have hosted the Winter Olympics, as few as half might be cold enough in 2050 to host them again. By 2100, that number shrinks to six.

Shrinking skier numbers are also

Courtesy Maria Anderson

The author (in purple) practicing for her first ski race.

a concern. According to the Kottke National End of Season Survey, four out of five people who try skiing quit. By 2020, skiers' visits will have dropped by almost one-third since 2008.

Those declines in customers mean it's harder for ski areas to stay in business. Of the 735 ski areas open throughout the U.S. in the 1980s, only 470 are still operating. Bill Jensen, former Vail Resorts exec and CEO of Intrawest, a developer and operator of destination resorts and a luxury adventure travel company, has predicted 150 of these resorts won't last long, and another 150 might close in the next decade.

In the face of these challenges, what's a ski area to do? Under the smoke-filled sky, I park my Subaru between a couple of well-used trucks in the parking lot and head upstairs to meet with Elliott. As I walk into his office, he turns off the radio he has strapped across his chest. He's a soft-spoken guy, and he greets me with a strong handshake. He's wearing a black Bridger Biathlon baseball cap. Elliott has agreed to explain to me how he thinks about this ski area's future and share his insights into what Bridger Bowl is doing to prepare for the future in the face of diminishing snowpack.

Despite seeing "winters becoming more mild," Elliott thinks long-term when it comes to improving Bridger—he's planning with the next fifty years in mind, "at least on some level."

Elliott is planting trees to replace those dying from pine beetles, and working on the trails so that they can keep them open with as little snow as possible. And he's made some innovative upgrades. "We put in a high-tech wood fire boiler for the shop that uses fuel from dead and dying trees on the slopes. All the trees are two hundred years old, near the end of their lives, so we've been planting new ones and using the dead ones for the boiler," says Elliott.

I also spoke to Doug Wales, Bridger Bowl's marketing director, on the phone last June. He emphasized Bridger's efforts to be smart about water, electricity, and other resources they use. Bridger recycles and composts. They offer a free bus system for employees and guests. Wales has also linked up with the Western Transportation Institute on a 1,200-participant transportation study to measure the carbon people burn to get to Bridger and look for ways to reduce it. Beyond these sustainability efforts, Bridger and other hills also use their voices to push for political action, especially leading up to the Paris Climate Talks.

"Ski areas all do have one thing in common, and that is snowfall and preserving winters," says Wales. "If we want to keep the viability of the industry going, having a strong lobbyist voice is important."

Some ski areas link up with groups like Protect Our Winters, an organization founded by pro snowboarder Jeremy Jones, or the National Ski Areas Association (NSAA), a trade association for ski area owners and operators. The NSAA's program, Sustainable Slopes, provides an overarching framework for ski areas on sustainability and enhanced environmental performance. These groups also lobby Congress to take climate change action.

"We do need to be vocal, and to say, hey, we are seeing some of the first impacts of climate change that are really noticeable in our industry," Wales says, "so therefore we need to see major changes throughout the world in terms of our practices."

But Bridger's position is somewhat unusual. Bridger had its third best season on record in 2014/2015, thanks to locals and a steady stream of out-of-state visitors, some of whom may have been diverted here from ski areas in California and elsewhere closed due to lack of snow. Because of Bozeman's growth and its high elevation, Bridger Bowl has a promising future.

Courtesy Maria Anderson

The author's grandpa, Buck Anderson, enjoying Bridger Bowl's deep snow. One of the ski area's runs is named for him.

Before leaving the hill that day, I walk to the place where, as a kid, a rope tow lurched me up the bunny hill. It was in this spot that I decided when I grew up I would live in Bozeman and New Zealand so it would be winter all the time. That hasn't happened, but I do teach skiing, and next winter I hope to instruct at Bridger, and to experience those steep chutes, fields of waist-deep powder, and the hill's community that my family has been a part of for over sixty years.

"We've got a good mountain, good elevation," Elliot says, so in the short term at least, places like Bridger may see a boost in visits from those people who still love to play in the snow, but can no longer find it closer to home at lower elevation areas.

"Montana's winter recreation economy has weathered the impacts of a changing climate well," says Meg O'Leary Director of the Montana Department of Commerce and former Director of Sales and Marketing at Big Sky Resort.

Meanwhile, carbon emissions, unpredictable winters, and diminishing snowpack are "a global problem and I think the solution is something that has to be at a fundamental level of society," says Wales.

Ski areas can only hope that other industries—including those with less of a stake in powder days—follow their example to reduce waste, find alternative energy sources, and cut away carbon emissions, whether it's for marketing or for any other reason.

"We [ski areas] are not even a drop in the bucket when it comes to impact," he adds. "To shift all this attention towards the ski industry itself and say you've got to correct this problem—that's naïve. We represent the canary in the coalmine."

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Share your comments on any story at westernconfluence.org or by emailing editor@westernconfluence.org.

The Bone People

The booming business of antler hunting on public lands

By Nicole Korfanta

Andy Hart thinks of antler hunting as a process of manufacturing luck. Anyone can happen upon a single elk antler in the backcountry, but amassing a whole pile of freshly shed brown antlers takes something more. Hart, a biologist by training and stay-at-home dad from Laramie, will track an elk herd for days, months, years on end, learning their habits. In April and May, Hart heads out before the kids wake up to start his search for sheds in the dark and cold, hiking more than twenty miles most weeks. He says his single-minded obsession for finding antlers is proof he's crazy but his wife says it keeps him sane.

"It's adventure. It's a non-lethal trophy. Non-hunters are really sympathetic once they know you're not selling bear paws," says Hart.

Every spring, big game bucks shed their racks, no longer needed to impress females. Racks, horns, bones, sheds—they are all names for what are technically antlers. Unlike true horns that grow continuously, antlers are grown and dropped annually, at great energetic cost to the animal. For a surprisingly large number of people like Hart, finding those shed antlers is a devotion. Many shed hunters are attuned naturalists who know the backcountry like their backyard. They know when big game numbers are down or if snow keeps animals penned up on winter ranges later than normal. "You develop a gut feel about it. It's about observing everything. It's about the search image for the antlers and for the place."

Courtesy Andy Hart

Andy Hart's son, Gilbert, with a rare find—a matched set of elk antlers in close proximity. "As they lay" photos like this one circulate on Facebook and other social media.

But shed hunters who are far more mercenary about the pursuit are also part of the population – and their ranks are growing fast.

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The men and women who hunt for sheds in the remote corners of Wyoming are part of a global marketplace. An antler plucked from a wind-blown spot outside of Pinedale may end up in a cup of tea in Pyongyang, Korea. Only a small percentage of the very biggest and prettiest antlers are used in the craft industry to make everything from knife handles to chandeliers that fetch upwards of $7,000. A slightly larger portion of the antler supply goes to pet chews. Rapid growth in that market has recently driven up antler prices (PetSmart sells a chunk of elk antler for $33) to a higher-than-average $12 per pound. But the majority of the West's antlers go overseas.

Don Hoard, owner of D and A Antler Buyers in Star Valley, Wyoming, says most of his antlers wind up in Korea and China. "Last year we bought over 200,000 pounds of antler. About 80 percent of that gets exported. The exports are the drivers of this business."

Once delivered to the Asian market, shed antlers are typically ground to powder and made into pills. Dr. Subhuti Dharmananda, Director of the Institute for Traditional Medicine in Portland, Oregon, says antler powder, or Lu Jiao, is an ingredient used to promote blood circulation, reduce swellings, and "tonify the kidney" in traditional Chinese medicine. Dried antler is distinct from antler in velvet collected from farmed animals, which is an even bigger

market share. Velvet antler is used in Chinese medicine to treat impotence and other maladies. In the U.S., professional athletes use velvet antler as a steroid alternative and supposed performance-enhancing mouthspray.

The reliance on global customers exposes the antler market to global forces. The 2014 dockworkers' strike in California left bundles of antlers stranded on the West Coast. When China's stock market caved in August 2015, the antler distribution took another hit. "We're sitting on so much antler right now because of the Chinese market," says Hoard.

Those stacks of antlers come from a mix of recreational shed hunters and others who are more profit-driven. Hoard describes one western Wyoming shed hunter who has sold three horse trailer loads of antlers to D and A. Even at a lower price of $10 per pound, three 7,000-pound loads would net the seller over $200,000. There's real money changing hands in small western towns.

The monetization of antlers makes some recreational antler hunters uncomfortable. Hoard, a horn hunter in his own right, balks at the commodification of antlers, even as he buys them en masse from semi-professional shed hunters. "I have pictures of my daughter, two years old, carrying sheds around out there. It's turned it into this money grubbing deal."

Andy Hart also has mixed feelings about selling his antlers. The 50 to 100 antlers he picks up each year require their own outbuilding, so he sells some to Hoard. He makes enough money to pay for gas in the tank to go exploring. "I didn't want to sell at first … I still feel half dirty for selling them."

Long-time shed hunters like Hart will continue to pick up antlers no matter the demand or price. He shows off a photo of ten antlers—five matched pairs from the same bull elk, meticulously tracked year after year. Those aren't for sale, but "sometimes

> An antler plucked from a wind-blown spot outside of Pinedale may end up in a cup of tea in Pyongyang, Korea.

I've sold whoppin' big antlers that I thought were ugly." Antler value is as much in the eye of the beholder as it is in the market.

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Antler hunting used to be a solitary endeavor or, at most, a family activity. But in the last decade, it's become something else. Increasingly, the biggest challenge for many long-time shed hunters is not finding antlers, but getting away from the crowds. Shed hunting is catching on.

Hart says the face of antler hunting is changing too. Now he sees a lot of college kids. "These twenty-year-old guys who in between class, can hike circles around me. It's just gotten more popular."

The boom in antler hunting spun out of a combination of factors. The higher price of antlers tempted new antler hunters into the field. Social media has revived and reinvented the storytelling tradition of shed hunting, with posts of glorious racks circulating faster than viral cat videos. When Utah imposed a season on antler collecting, more shed hunters crossed into western Wyoming to get their fix, increasing antler hunting pressure there.

Public lands in Wyoming were buzzing with hikers, snow machines, and ATV's in the winter months. Biologists worried about impacts to winter-stressed wildlife at a time when mule deer were in decline throughout much of the West. "We were seeing quite a few people running around, really pushing the deer, in some cases running them with dogs, or running them until their antlers fell off," says John Lund, Pinedale Region Wildlife Supervisor for the Wyoming Game and Fish Department. Those were extreme cases but the sheer volume of even well-behaved shed hunters was having an impact.

Mule deer winter ranges are geographically limited so "any amount of disturbance and stress on them can be pretty significant," says Lund. "What we don't want is those deer getting displaced off of those winter ranges."

In 2009, the Wyoming State Legislature responded by granting the Wyoming Game and Fish Commission authority to create a season for antler hunting in western Wyoming. The Game and Fish department now enforces a January 1 through May 1 ban "for the purpose of minimizing the harassment or disturbance of big game populations on public lands west of the Continental Divide …" Even looking for antlers during the seasonal closure is illegal, a tricky thing to enforce.

Has the state's experiment with an antler season in western Wyoming been successful? It depends on whom you ask.

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Courtesy Dan Hoard

Workers at an Idaho warehouse sort the most expensive brown antlers from less valuable Number 2 antlers that have a bit of fading and cracking. White, "chalk" antlers are less valuable.

Courtesy Dan Hoard

Antlers in an Idaho warehouse await shipping. Many will end up in Korea and China.

Midnight on the evening of opening day is like New Year's Eve in the wide open spaces of western Wyoming. Trucks and ATVs line up along public land boundaries, lighting up snow and sagebrush. At 12:01 a.m., shed hunters dash into the night to snag antlers they've been glassing for days.

On May 1 of this year, five individuals were swept downstream after their boat capsized in the icy Gros Ventre River during a midnight race to find sheds on the Bridger-Teton National Forest. The boaters were rescued but a packhorse drowned in the fray.

Not surprisingly, many shed hunters don't favor the seasonal restrictions. Other winter uses of public lands are not similarly banned so some shed hunters feel singled out. Lund says if there isn't a full winter closure for an area, people can still hunt coyotes and rabbits, hike, and drive into winter ranges.

In addition to creating a frantic opening day, the winter closure sends a wave of would-be antler hunters further east in the state where there is currently no seasonal restriction. And horn hunters from southwest Wyoming head south into Colorado during March and April, says Kim Olson, game warden from Baggs, Wyoming.

Seasonal restrictions also create ideal conditions for poachers who don't compete with a growing cadre of skilled antler hunters if they pick up antlers early and illegally. In just 2015, the Wyoming Game and Fish Department issued citations or warnings to fourteen individuals caught collecting sheds out of season in western Wyoming. Fines averaged $300 and one person lost hunting privileges for two years.

For non-hunters or out-of-state hunters who might not draw a tag, loss of hunting privileges is less of a consequence, especially when the financial gains can be so great.

Olson says enforcement is a constant challenge. "The shed antler hunting is really hard to enforce because when you have an area as big as mine, it's hard to be in the right place at the right time. I spend a lot of time in March and April patrolling, setting up cameras, and doing whatever I can to catch poachers."

After six years of regulated shed hunting in western Wyoming, and mostly thanks to some mild winters and good precipitation in between, mule deer populations are doing better. "Overall, I think there's quite a bit of support for [the antler season] and we do feel like it has been working," says Lund.

Still, the seasonal regulations continue to polarize recreationists in Wyoming. A petition is circulating among antler hunters to repeal the antler season. At the same time, other horn hunters are petitioning Wyoming legislators to expand the season to more of Wyoming.

The pro-regulation contingent seems to be pulling ahead. Some lawmakers are proposing that the Wyoming Game and Fish Commission should be authorized to set a limited season for antler hunting statewide. In a regulation-averse state like Wyoming, the interest in seasonal restrictions speaks to just how big shed hunting and its associated impacts have become.

As long as there is demand for brown antlers, shed hunting will continue in the West. Add to that the many other increasingly popular winter recreation activities that take place on public lands, and it's clear that conflicts with wildlife aren't over. But at least the seasonal restriction forces the tidal wave of antler hunters to crash after most wildlife has departed for summer range, protecting animals on winter range as it is meant to.

Nicole Korfanta *directs the University of Wyoming Ruckelshaus Institute of Environment and Natural Resources, publisher of this magazine, and is* Western Confluence*'s Associate Editor.*

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Terror in the Backcountry

When wildlife comes face to face with winter sports enthusiasts

Brian Rome/Shutterstock

By Kristen Pope

Imagine you're out for a pleasant winter stroll and just about to bite into your turkey and cheese on rye when suddenly you see the mask-clad horror movie character Jason bearing down on you, machete in hand.

This is how Grant Harris, chief of biological sciences for the Fish and Wildlife Service's Southwest Region, describes what it's like for moose when snowmobiles approach them in their winter habitat. Harris is just one of many researchers who study how winter outdoor recreation affects wildlife when forage is scarce and animals are most vulnerable.

The number of people participating in backcountry snowsports is growing fast. By some counts, recent winters have found 3.3 million cross-country skiers, 4 million snowshoers, and 5 million skiers and snowboarders in the US backcountry. Snowmobiling is also booming, with participation increasing 67 percent from 1982 to 2009 and over 223,000 miles of designated snowmobile trails.

To learn more about how the thriving winter recreation scene affects animals, biologists use GPS collars, aerial mapping, route analysis, and other tools and methods. They are trying to understand how everything from snow compaction, to high-speed snowmobile traffic, to quiet skiers changes the way wildlife uses winter habitat. Their findings don't always line up with what might be expected.

Harris's team came up with one surprising finding after they captured Alaskan moose, fitted them with GPS collars, and mapped nearby snowmobile trails through aerial photography and GIS technology. They tracked snowmobile use and snow depth, and analyzed how moose reacted to the machines. When snowmobiles stayed on trails, they found moose could habituate to the machines and avoid them.

"Imagine it's winter, you're walking in the forest, and you hear a snowmobile coming," Harris explained. "Half a minute later, you see Jason riding it, approaching you. You jump off the trail, hear him leaving and think, 'Wow, that was really scary.' But he left, you're all right, and you get on with your life."

In contrast, Harris's team found snowmobiling off-trail was much more frightening to wildlife, especially when snowmobiles covered a large area for a long duration. Further, they report non-motorized recreation in winter (like cross-country skiing or snowshoeing) can disturb moose even more than motorized recreation.

"Now, imagine the same scenario where you're walking a trail, round a corner, and Jason is standing in front of you with a machete," Harris said. "You'd be totally freaked out. You'd run off the trail and probably not stop. You don't know where he came from, if he's following you, or where he'll pop up next. Much more terrifying."

Harris's research about moose, snowmobilers, and skiers in Alaska is just one of many studies looking at how winter recreation impacts wildlife. Wildlife biologist Eric Gese wanted to know how the trails packed into the snow by snowmobiles affect wildlife behavior. He analyzed coyote movements at Togwotee Pass, a popular snowmobiling spot in Wyoming, and found that as snow depth increased, scavenging coyotes preferred snowmobile tracks over open snow. "Even though they could, as the crow flies, travel a much shorter distance but go through six feet of powdered snow, the coyotes will elect to stay on the snowmobile trail even if it's two or three times the distance to travel," to reach a wolf-killed carcass or other food source, Gese said.

In a similar project, ecologists John Whiteman and Steven Buskirk studied how an animal's "footload"—the animal's weight to foot surface area ratio—determined how often it would select a snow-compacted trail versus travel across open snow.

Not surprisingly, they found animals with higher footloads were more likely to follow snowmobile or snowshoe trails and would follow them for longer. For example, American martens, red foxes, and coyotes preferred to walk on compacted snow, whereas snowshoe hares didn't mind crossing open snow. There was one twist in their findings: Though weasels have low footloads, they still preferred the hard-packed trails.

Not all wintering wildlife take advantage of tracks in the snow. Biologist Alyson Courtemanch used GPS technology to track both bighorn sheep and backcountry skiers in high-elevation winter habitat in the Tetons. She found that sheep dodged winter backcountry recreation routes even in areas that contained high-quality habitat. The sheep were very sensitive to even occasional use, and showed signs of disturbance whenever skiers were in sight. They also avoided ski and snowboard tracks even when no humans were present and the tracks overlapped some of the best habitat around. Fear of skiers meant the sheep didn't use up to 30 percent of the high-quality habitat available.

If sheep find backcountry skiers in the Tetons scary, consider how Norwegian reindeer must feel about snow-kiters, people who ski or snowboard across the taiga, propelled by huge, wind-filled kites at speeds of over 60 miles per hour. When researchers observed reindeer reactions to skiers versus snow-kiters, they unsurprisingly found the snow-kites to be significantly more disturbing.

When the animals were frightened and trying to get away from a snow-kiter or skier, they stopped grazing. The animals typically couldn't compensate for lost grazing time, leading to both undernourishment and overgrazing in areas without disturbances. Touring snow-kiters can travel over 60 miles in a day and cover a huge area of the reindeer's range.

Also in Scandinavia, researcher Wiebke Neumann examined how even slow-moving, quiet skiers can disturb wildlife. She and her team fitted nine moose with GPS collars in northern Sweden to see how they'd react as cross-country skiers silently approached the animals. They found the slow-moving moose sped up for an hour after they were disturbed, enough to double their energy use. They also moved farther than normal for three hours following a skier encounter, and many times they would leave the area altogether. In this study, the moose showed no evidence of becoming accustomed to skiers. The reindeer study above also found that a ski trail saturated with skiers could create a barrier the reindeer wouldn't cross, inhibiting their access to certain areas.

With all these impacts in mind, what is a wildlife-loving winter recreationist to do? Harris says staying on established trails helps lessen the disturbance. "If you knew Jason was only on one trail, you'd probably avoid that trail," he said. "Anything that's predictable in space and time will lessen impact and anything unpredictable in space and time will increase impact." Still, he says, it's important for people to get out in the winter. "The last thing I would want is to discourage people from using the outdoors."

RESOURCES

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Courtesy Jon Bowler

The Green River winds past irrigated fields in Utah's Uintah Basin.

The Forgotten River

A UW graduate student sees expedition potential in a neglected corner of the West

By Emilene Ostlind

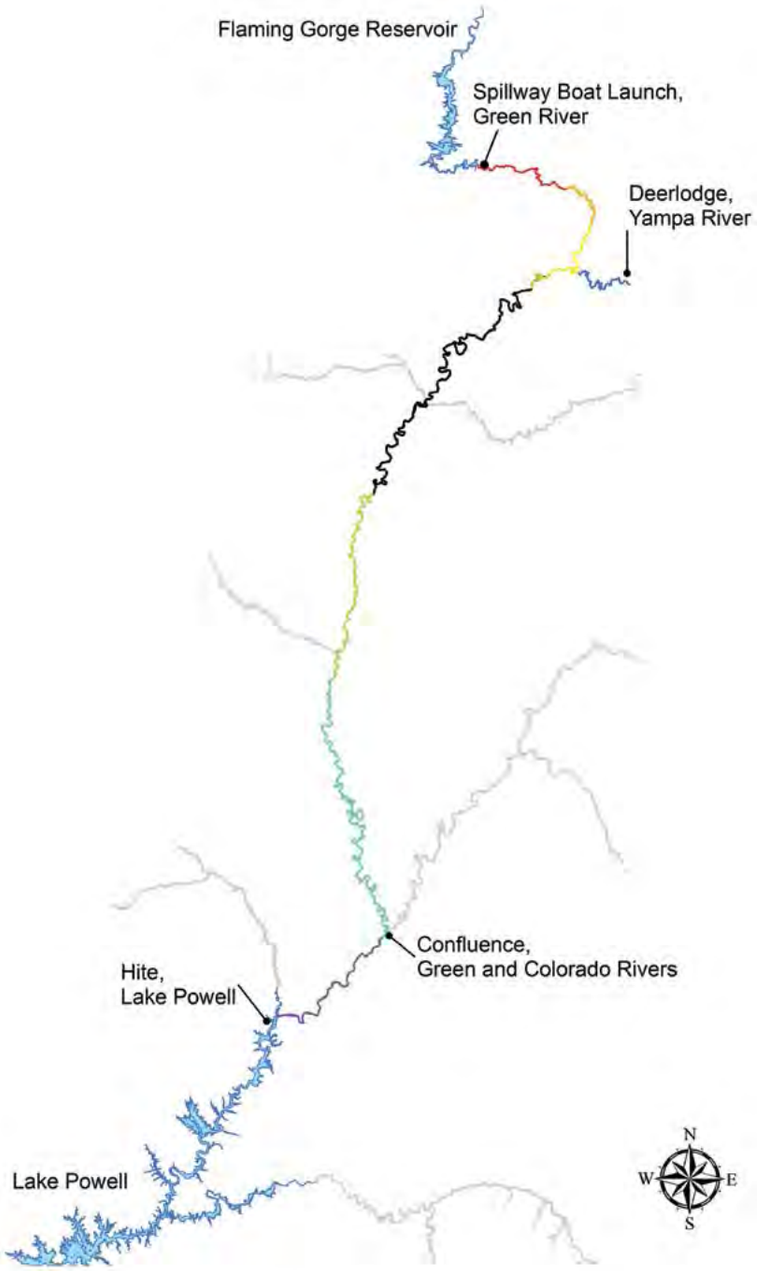
On May 31, 2015, a half dozen brightly colored rafts slipped past the Split Mountain take out at the bottom of Gates of Lodore on Utah's Green River and drifted downstream toward the Uinta Basin. Jon Bowler, a University of Wyoming graduate student in planning, water resources, and environment and natural resources, captained the flotilla. He aimed to float this little-known stretch of river and fill in what he referred to as "the hole in the map." Early writings and river maps mentioned the stretch, but later editions of those same maps deleted the reference. Today, while river-runner reference materials abound for the up- and downstream sections of the Green, very little information is available about floating in this section. Bowler had become obsessed with the unmapped and undescribed Uinta Basin. Would it be overrun with mosquitos? Bereft of campsites? Pummeled by wind? Guarded by angry landowners? He didn't know what to expect.

Courtesy Jon Bowler

UW grad student Jon Bowler collected data during a 30-day raft expedition on the Green River.

On board were other graduate students, a trained research team, and a film crew from Rig to Flip, a river advocacy group. This was one segment of a 30-day research expedition Bowler had organized to gather data for his thesis project assessing recreation management on the Green River from Flaming Gorge Dam to Lake Powell. His goal was to compare how several different agencies—the US Forest Service, the US Fish and Wildlife Service, three Bureau of Land Management Offices, and two National Park Service units—managed the river, and to look for ways to make it easier for boaters to float from one administrative unit into the next and link up the whole 456-mile-long trip.

"This is our Grand Canyon experience in the Upper Basin," he



Green River ABC
Browns Park Wildlife Refuge
Gates of Lodore
Uinta Basin
Desolation and Gray Canyons
Labyrinth and Stillwater Canyons
Cataract Canyon
Yampa River
Other Basin Rivers
Reservoirs

0 10 20 40 60 80 Miles

said, comparing the journey to the highly coveted 280-mile run from Glen Canyon Dam to Lake Mead downstream. (Glen Canyon Dam marks the boundary between the Upper and Lower Basins of the Colorado River watershed, of which the Green is a major tributary.)

Over the following days, the crew slowly made its way down the wide, flat, greenish-brown river. Center-pivot-irrigated fields abutted the banks amidst yellow badlands, and private land made camping tricky. Bowler and his team explored potential public campsites and roads at the river's edge, marking them on GPS units. He kept an eye out for the usual boating infrastructure—information signs, pit toilets, boat ramps, etc.—that he'd mapped on other sections of the river, but found almost none.

Lower down, the trip started to change. Sprinklers gave way to pump jacks and tanks for the oil and gas fields. The crew found campsites aplenty on the BLM land. They saw pictographs left on the rocks by ancient people, and drifted under clouds of swallows nesting in the overhanging cliffs. This area seemed at once protected and vulnerable.

"Utah is looking for a land trade," Bowler said, about the state's ambition to take state control of federal lands. "The lower Uinta Basin is in limbo."

Bowler had spent the summer before scouting other sections of the river and interviewing recreational boaters about their experiences. From that, he was able to describe some of the river characteristics rafters require, such as boating information signs at the river, user-friendly access points to launch and take out from, ample camping sites, manageable rapids or flat water, and a sense of wildness. He found the Uinta Basin, especially its lower section, met those requirements.

"It's not stunning, but it's comparable to the first forty or fifty miles of Labyrinth Canyon," he said, referencing a popular stretch of the Green downstream. "You have solitude, wild horses, gorgeous low bluffs. … These days, with the difficulty of getting permits for some rivers, this is an invaluable resource."

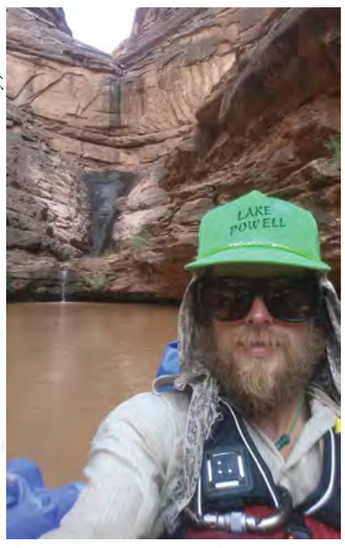
At the end of the Uinta Basin, the party—with crew members leaving and joining at various points along the way—reentered known territory, continuing through Desolation Canyon and on down to eventually reach the Colorado River and Lake Powell at the end of the 30-day journey. Bowler, a most passionate river rat, squeezed in another eight days on southern Utah's San Juan River before heading back to the university with his maps, GPS units, photos, and notes.

Now he's putting the finishing touches on his master's thesis, which will include a description of the techniques he used to assess recreational potential along the river, and his results and management recommendations. He's promised to share it with the new river manager in Dinosaur National Monument, just upstream of the Uinta Basin, who is particularly interested in Bowler's surveys of river runners. The monument's current river plan was written in 1979, years before Bowler was born. "Pack rafts break the regulations," Bowler said. "They have new trends to consider." He hopes his data will help the monument refine its management approaches.

More importantly, though, Bowler sees the "river community" as his main audience. This winter, he plans to compile his Uinta Basin maps along with writings from the old timers who floated that section in the 70s and 80s, and make the information freely available. He doesn't care about selling a guidebook. Rather, he feels the river needs appreciation from boaters.

"This section has a potential to be a special place. It is deserving and capable," Bowler said. "I'm confused that you don't see boaters down there." He'd like to see it overrun with families and groups of friends, reveling in the purling eddies, furrowed hills, and desert sunlight. "My dream would be for the BLM to have to put restrictions for use there."

Courtesy Jon Bowler



Captain Bowler on the Green River in summer 2015.

Only YOU Can Prevent Zebra Mussels

Sloganeering in the Age of Invasive Species

By Nathan C. Martin

Everybody knows the catchphrase *Only YOU Can Prevent Forest Fires*. Lots of folks who spend time in the backcountry understand they should *Leave No Trace*. These messages—disseminated for decades by government and nonprofit organizations—have penetrated the minds of campers, hunters, anglers, and others who play outdoors. They are mental notes that remind us of how we should conduct ourselves in the wild.

In recent decades, a new threat as insidious as wildfire has encroached upon the West: invasive species. Non-native plants and animals unnaturally introduced into new habitats can overwhelm native flora and fauna, upending established ecosystems and threatening biodiversity. And managers divert millions of dollars to hacking down Russian olive trees, spraying for nonnative beetles, or pouring poison into creeks to wipe out ravenous new fish species.

Outdoor enthusiasts are among the guiltiest perpetrators of spreading invasive species. Seed pods stuck to hikers' clothes, mussels attached to the hulls of boats, and insects stowed away in firewood are just a few of the ways even people who desire to *Leave No Trace* move invasive species from place to place.

So, land management agencies are once again turning to sloganeering.

"We struggled with what was going to resonate with people," said Erika Edmiston, the director of Teton County Weed and Pest in Wyoming. "Early on, there were a lot of 'Wanted' signs, a lot of negative connotations—*Kill the Weeds, War on Weeds*, things like that—and it just felt like that negative messaging doesn't get people interested in what you're talking about."

> "More often than not we hear [from boaters], 'I don't want it to be my boat that messes it up for everybody else. I don't want to be the one who ruins my lake.'"
>
> *Beth Bear*
> *Wyoming Game and Fish Aquatic Invasive Species Coordinator*

After ten years of searching in vain for language that would engage hikers, cyclists, and others who unwittingly distribute invasive seeds, Teton County Weed and Pest unveiled a new campaign slogan: *Play Clean Go*.

Originally developed by the Minnesota Department of Natural Resources and backed in Wyoming by a $50,000 grant from the governor's office, the *Play Clean Go* campaign includes handing out brushes to hikers and mountain bikers for cleaning invasive plant seeds off their equipment as they move from one recreation area to the next. Each tool is emblazoned with the *Play Clean Go* maxim. Edmiston is confident in the slogan's potential effectiveness, going so far as to join a committee to make *Play Clean Go* a national organization—the *Leave No Trace* of invasive species awareness.

Other examples of invasive species distributed by outdoor recreators are quagga and zebra mussels, which attach to boat hulls and rapidly colonize any waterway they encounter. They have infested the Great Lakes region and over recent years have moved steadily west. To keep them out of Wyoming, the Game and Fish Department has implemented its own three-word, action-oriented motto.

Vitalii Hulai/Shutterstock

Drain Clean Dry adorns all manner of media—from stickers and billboards to tweets and e-blasts—and Game and Fish officials reiterate it to boaters at check stations. Wyoming Game and Fish Aquatic Invasive Species Coordinator Beth Bear is optimistic that individuals are beginning to understand what's at stake and the part they can play for good or ill.

"More often than not," she said, "we hear [from boaters], 'I don't want it to be my boat that messes it up for everybody else. I don't want to be the one who ruins my lake.'"

Bear said surveys show more than 90 percent of Wyoming boaters are aware of the mussel problem and know what they can do to help stop its spread. Her agency has collaborated with those in neighboring states to ensure all boaters in the Rocky Mountain West receive the same clear, simple instructions—if everyone remembers to *Drain Clean Dry*, Wyoming will remain mussel-free, she hopes.

Slogans like these help distribute the work of environmental stewardship to the people who enjoy the outdoors. The millions of campers who abide Smokey Bear's mantra have preemptively snuffed out more forest fires than any agency could ever fight. Whether slogans like *Play Clean Go* and *Drain Clean Dry* turn out to be as successful will depend on how well they resonate.

***Nathan C. Martin** is a freelance writer from Wyoming.*

Boat-Shaped Bugseed

Sand Hills off-roaders co-exist with rare plant

By Stephanie Paige Ogburn

The North Sand Hills rise out of Northern Colorado's high plains like a scene from a science fiction movie. Hundreds of acres of sand and dunes sprawl, unexpectedly, in a land better known for high sagebrush plains and snow-capped mountain ranges.

"Really, North Sand Hills is a smaller version of Great Sand Dunes National Park," said Scott Jones. Jones is an attorney and off-roading enthusiast who represents the Colorado Off-Highway Vehicle Coalition.

Other than size, though, there's an important difference between the park and the dunes outside of Walden, Colorado. Unlike the protected Great Sand Dunes, where vehicles are limited to existing roads, you can take your dune buggy on these hills.

"In the Rocky Mountains there's only a handful of areas where you can put a motor vehicle on sand dunes or anything like sand dunes," said Jones.

In a world where federal and state regulators have pushed off-roaders to stay on trails as a way to protect habitat, the ability to ride on open sand and just "poke around and see what's out there" is unique, Jones added. Riders can crisscross the dunes and find unique challenges, successfully making a climb one day but returning the next to find a new challenge as the sand shifts.

"It's like going to the beach. It's just fun to go out and play in the sand."

Plus, the views from the dunes, out towards nearby mountains, are spectacular, said Jones.

That explains why, on a busy holiday weekend, as many as 5,000 off-road enthusiasts pour into the 1,400-acre area managed by the Bureau of Land Management. Jones says the area draws recreationists from Wyoming and all over Colorado, sometimes even further afield.

But while the North Sand Hills are probably best known for their wide-open recreation opportunities, they also harbor a lesser-known attraction. Parts of the dunes are home to the rarest plant in the state of Colorado.

It looks "kind of like a tumbleweed," said botanist David Anderson, director and chief scientist of the Colorado Natural Heritage Program at Colorado State University, which tracks the status of rare plants statewide. The plant is called boat-shaped bugseed, *Corispermum navicula,* and it was only discovered in 1996.

"It looks like a green Q-tip that has leaves," added BLM Colorado state botanist Carol Dawson. "It's not gorgeous, let me put it that way."

Despite the plant's failure on the charisma front, Dawson said she thought it was "pretty damn interesting" to learn the rarest plant in the state had evolved to live on these sand dunes. Another, common bugseed also grows on the dunes, and botanists think at some point in the not-too distant past the rare, boat-shaped bugseed diverged from that species.

Anderson, of the Colorado Natural Heritage Program, agreed. Sand dune complexes in other parts of the West are also known for hosting species that don't occur anywhere else. Plants often develop to specialize in unique or strange soils, and if you look at the North Sand Hills, a very isolated patch of poor soil, "it's not terribly surprising that you have a new species evolving on them," said Anderson.

Once the plant was discovered, and surveys in recent years confirmed it was probably only found in the North Sand Hills, the BLM needed to protect it. The agency's first stab at a plan, in 2011, proposed setting aside 92 acres of the 1,400-acre sand hill complex as an Area of Critical Environmental Concern. Within that boundary the agency could customize its management strategy to protect the plant.

In the meantime, off-roaders continued to flock to the sand hills, enjoying the dunes like they always had. Each year, as the sport grew in popularity nationwide, so did the number of riders at the Sand Hills, said David Boyd, a public relations specialist for the BLM Colorado's Northwest Region.

"There was a lot more people in the area in general, and a lot more people recreating with off-highway vehicles."

After the original proposal, botanists conducted field surveys to determine just where the plant was found. They found it covered more of the sand hills than they thought. So the agency expanded the critical area to 486 acres, said Boyd.

The new BLM plan, finalized in July 2015, requires off-roaders to stay on designated routes when traveling through this nearly five hundred-acre swath of protected land, which mostly consists of more vegetated parts of the dunes where the boat-shaped bugseed grows. Within this area, buck-and-pole fencing helps keep riders on existing routes and out of key habitat. The area is also closed to livestock grazing, oil and gas exploration, and other types of ground disturbance.

Scott Jones says from his perspectives, the changes have been pretty easy to live with.

"They've done a good job of fencing off the boat-shaped bugseed areas. So I don't think it's really changed significantly the riding experience," said Jones.

His organization also works actively on the Stay the Trail campaign, which educates riders on trail etiquette like staying on designated trails and following travel restrictions.

"And kind of making it cool to do the right thing," said Jones. "If you do the wrong thing you are risking trails and riding areas and people are really starting to understand that."

That type of peer-to-peer mentoring seems to be working, at least so far. According to botanist Dawson, the boat-shaped bugseed population is holding steady. So the agency seems to be balancing a careful win-win, preserving both the good fun of motoring up the only ridable sand dunes in Colorado along with protecting the state's rarest plant. But the botanist also issued a warning.

"We're not going to lose this plant," Dawson said.

"So if I go out there and find people are breaking down the fences, yeah, we are going to have to do something different."

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Share your comments on any story at westernconfluence.org or by emailing editor@westernconfluence.org.

Photos by David Anderson, Colorado State University

The North Sand Hills, a dune complex outside Walden, Colorado, are home to the state's rarest plant, the boat-shaped bugseed.

Horsing Around

Big time equine fun in little western towns

Text by Celeste Havener, Carly Fraysier, and Emilene Ostlind

Drawings by Joel Ostlind

Horse and human stories have been intertwined in the West for centuries, and while only a few people work with horses today, that deep connection lives on through horse-centered contests, races, and celebrations scattered throughout little western towns. Here are a few fun, small-town events, sampling the range of equine entertainment.

DUBOIS FRIDAY NIGHT RODEO

Clarence Allison Memorial Area, Dubois, Wyoming

Rodeos are the most obvious horse-centric entertainment in this region, and you'll find one in almost any town over three hundred people. But it's not every little town that hosts one each Friday night. Dubois' weekly event offers the stalwarts of rodeo—bull riding, barrel racing, and saddle bronc riding—alongside more unusual events. Take stick horse racing for kids or the Ribbon Race, where teams of three compete to pull a ribbon off a feisty calf's tail. About five hundred people come out for the rodeo each week.

HECHT CREEK RANCH CATTLE DRIVE

Centennial Valley, Wyoming

Well-worn boots and halters grace the spacious porch at the Hecht Creek Ranch. A medley of curious dogs greets visitors. Between their chores, the quiet wranglers at this multigenerational ranch lead guests on two-to three-hour cattle drives, moving cows from pasture to pasture. Ed, Harmony, Gus, and Moxie enrich the ride with information about natural history and land stewardship practices, including rotational grazing. Guests get a dose of working ranch life and are immersed in the prairie, mountains, and streams in the Centennial Valley.

PILOT BUTTE WILD HORSE SCENIC TOUR

Between Rock Springs and Green River, Wyoming

As the long drive to Yellowstone gives way to yet another stretch of endless desert near Rock Springs, despairing drivers can pull their rented Hyundais off the interstate onto County Road 53 to try their luck at glimpsing wild horses. The steeds might be hunkering down for the winter or romping with spring foals. The twenty-four-mile gravel road tour takes about one and a half hours to complete, and is one of the most reliable places in Wyoming to see wild horses.

DON E. ERICKSON MEMORIAL CHARIOT RACES

Buck Springs Rodeo Grounds, Saratoga, Wyoming

Each March, spectators in Carhartt coveralls and Sorel boots gather at Saratoga's rodeo grounds to place Calcutta bets on the State Championship Chariot Races. Pickups, backed up to the berms of snow plowed off the racetrack serve as impromptu grandstands. At the sound of the starting gun, the teams explode through the gates. Clods of ice and dirt pelt the drivers who shout encouragement to the horses as they thunder down the quarter mile track. Around twenty-five teams compete over the two-day weekend, and the winners take home prize money.

WORLD CHAMPIONSHIP INDIAN RELAY RACES

Sheridan Rodeo Grounds, Sheridan, Wyoming

The high-octane Indian Relay Races are one of the best-attended events at the Sheridan WYO Rodeo. Teams consist of three fast horses and four Native American contestants: one rider, two holders, and a mugger who controls the spirited horses as the rider jumps on bareback. The rider sprints each horse for a breath taking spin around the racetrack, leaping from one to the next between laps. Contestants vie for $50,000 in prize money, awarded both for speed and decoration—think headdresses, loincloths, neon body paint, and beaded masks for the horses.

BIG HORN POLO

Big Horn Equestrian Center, Big Horn, Wyoming

The thunder of hoof beats, thwack of a mallet hitting a ball, and shrill whistles from referees may seem like unlikely sounds to hear in Big Horn, Wyoming, but this town is home to an international polo scene that dates back to 1890. Every Sunday throughout the summer, teams from places as distant as Nicaragua and Argentina engage in fierce competition. Tailgating sideline spectators gasp at the breakneck maneuvering of horse and rider and cheer for the two home-team clubs.

PACK BURRO TRIPLE CROWN

Fairplay, Leadville, and Buena Vista, Colorado

Runners in bright shirts and shorts toe the line. A flag drops. The participants take off, each leading a burro packed with a minimum of thirty-three pounds of prospector paraphernalia, which must include but is not limited to a shovel, pick, and gold pan. The courses are grueling, varying from twelve to twenty-nine miles, and climb as high as 13,000 feet up rugged 4-wheel-drive roads through Colorado's historic mining areas. Although prohibited from riding, runners are allowed to "push, pull, drag, or carry" their furry friends.

MUSTANG MAKEOVER DAYS

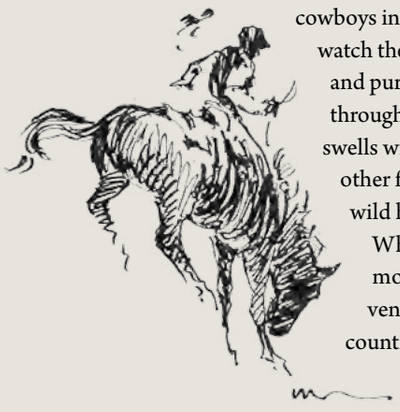
Wyoming State Fair, Douglas, Wyoming

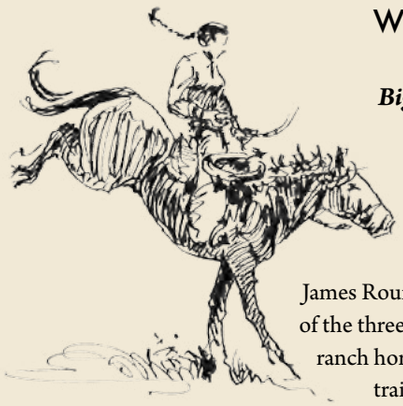
Every year, the Bureau of Land Management seeks homes for thousands of wild horses removed from the range. In August, mustang enthusiasts gather to celebrate success stories at the Wyoming State Fair. Previously adopted wild horses and their owners, including children, perform in western pleasure, team sorting, dressage, and halter classes. More recently captured wild horses, gentled at the Mantle Ranch in Wheatland, Wyoming, or by inmates at the Wyoming Honor Farm, compete to show off their skills before going up for adoption.

MILES CITY BUCKING HORSE SALE

Miles City Fairgrounds, Miles City, Montana

Each spring in little Miles City, Montana, the best bucking broncs try to land themselves careers by landing cowboys in the dust. Stock contractors watch the animals' performances closely, and purchase them to supply rodeos throughout the country. The town swells with spectators, also there to see other fist-clenching events, including wild horse races and mutton bustin'. When the dust settles, the crowds move into the streets for the parade, vendors of all things western, five country music bands, and bars that stay open late into the night.





WILL JAMES ROUNDUP AND RANCH RODEO

Big Horn County Fairgrounds, Hardin, Montana

Forget screaming crowds and star-studded circuit-touring rodeo stars. Real working cowboys and cowgirls converge in little Hardin, Montana, for the Will James Roundup. The Ranch Rodeo, one component of the three-day get-together, features contestants on ranch horses racing to brand calves, load stock into trailers, doctor yearlings, and milk cows. The roundup is a fundraiser for the local museum, and the teams with the most cumulative points take home modest cash prizes.

What the Pioneers Saw

Protecting viewsheds on National Historic Trails

By Ariana Brocious

Less than thirty miles from the Nebraska-Wyoming border, an etched wagon wheel marks the grave of Rebecca Winters, a Mormon woman who died of cholera in 1852. She and her family were early pioneers in the westward migration that hundreds of thousands undertook in the mid-nineteenth century, seeking gold, land, religious freedom, or a new future on the American Frontier.

Many of these travelers followed similar paths west along broad, flat river valleys. So many moved along the Platte River that historians later named it "The Great Platte River Road." Four trails through Nebraska and Wyoming overlapped or ran parallel, marking a formative era in the Euro-American development of the American West: the Oregon Trail; the California Trail; the Mormon Pioneer Trail; and the Pony Express, a short-lived mail service.

"This is one of the most iconic landscapes of American history," said Lee Kreutzer, cultural resources specialist with the National Park Service, "as important as the Liberty Bell. And it should be protected for all generations to appreciate."

One hundred and fifty years ago, an estimated 300,000 to 500,000 men, women, and children carted their wagons across a landscape very different than the one we see today—wide, lush prairie rolled as far as they could see.

Today, travelers follow nearly the same path on Interstate 80, flying past monoculture corn and soybean fields and the apparatus of industrial agriculture at seventy-five miles an hour. Today, the original "viewsheds" of these trails are largely gone.

Zack Frank/Shutterstock

Chimney Rock, in Nebraska, was an important landmark to pioneers traveling westward. Today it is protected as a national historic site.

"It's really difficult in an urban setting to get a feel for what it was like in 1850," when views from the trail include modern buildings and roads, said Travis Boley, association manager of the Oregon-California Trails Association. In many places, "there's no viewshed from the area to save anymore," Boley said. And that's true for much—but not all—of the trails' lengths.

Farther west in Nebraska and Wyoming, the rural nature of the landscape has helped preserve some of the historic viewsheds. In such places, those who value the trails' natural settings are working hard to protect what remains.

"It's important to preserve scenery because they're not making any new scenery," said Loren Pospisil, supervisor for Chimney Rock National Historic Site. Someone's sense of history can really be enhanced by the proper context, he added, like historical landmarks. But "once they're compromised, they stay compromised."

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Congress designated the four aforementioned routes as National Historic Trails. The trails run through several states, crossing a patchwork of private, federal, and state lands, and as a result, most are jointly managed by several different agencies. Even with collective management agreements, protecting these trails—and their viewsheds—can be challenging.

"It's difficult, but it's that way on purpose because Congress didn't want a 2000-mile linear park with solid boundaries," Kreutzer said. "It's a matter of partnerships."

Protecting sites and sections of historic trails can be especially challenging in a state like Nebraska where nearly all property is in private ownership. Private landowners donated Chimney Rock—whose whittled peak served as a guidepost for westbound emigrants through Nebraska's broad panhandle—to the Nebraska State Historical Society in 1941. Site Supervisor Pospisil estimates they receive about 25,000 visitors a year, several of whom are retracing their own family's westward experience through the diaries of their ancestors.

Pospisil said manmade intrusions on the landscape, like family farms, aren't necessarily the problem, "but power lines, windmills, those are the kind of things that detract" from scenic views. Though a recent attempt to buy more private land adjoining the landmark fell through because of price disagreement, he expects the strong tradition of stewardship

by local landowners will continue to protect Chimney Rock's viewshed in the future.

Thirty miles farther west, the Scotts Bluff National Monument may face more pressures from development, given that it abuts the growing cities of Gering and Scottsbluff. In mid-September, NPS staff and volunteers held a visual assessment workshop for the monument.

"So you're looking at everything from subdivision developments going in around your national park to high-voltage power lines, wind generating farms, things that would impact a viewshed," said Resource Management Specialist Bob Manasek.

The workshop is part of a recent shift in the way the National Park Service considers visual resources of lands they manage, modeled after existing methods within the Bureau of Land Management and US Forest Service—agencies that have to balance recreation with energy development, logging, and mining. Visual resource assessments help agencies make decisions on land use by providing a way to evaluate the scenic quality of a place—the integrity of landscape, dominant shapes and colors, how pristine or developed it is—as well as how it's experienced by a visitor.

Involving volunteers in that process is important, Manasek said, because working with the local community can help guide land planning decisions outside of national parks. Stewards of national historic trails say viewshed protection often comes down to engaging locally with landowners, land managers, and the general public to collaborate on what makes sense.

Zack Frank/Shutterstock

Wheels from pioneers' wagons gouged ruts into the rock at what is today Guernsey State Park in Wyoming.

In parts of Wyoming, much of the trails' historic viewsheds have been changed by development, oil and gas, and increasingly, renewable energy and transmission lines—what Kreutzer described as the biggest landscape change she's seen in the last decade.

"A lot of us do see a need to protect these viewsheds and these trails, but it's a competition between that need and the need for power, moving energy to where it needs to go, our needs for minerals and all of these other uses of public lands," Kreutzer said.

South of Rawlins, the Bureau of Land Management has nearly finished its environmental review of the Power Company of Wyoming's 3,000-megawatt wind project. When fully built, it will be the largest wind farm in the country, with as many as 1,000 turbines stretching more than three hundred feet high, likely visible from parts of the Overland and Continental Divide National Scenic trails.

But Wyoming also has some of the best trail remnants, particularly in the BLM's Lander Field Office northwest of Rawlins, where 90 percent of the trail segments retain their original setting. That's according to Kristin Yannone, a planner who's in charge of the office's most recent resource management plan, which specifically outlines protections for the national historic trails.

The BLM Lander Field Office receives tens of thousands of visitors annually. Many are pioneer reenactors and groups affiliated with the Mormon Church. In the past, national historic trails were granted protection in the form of a quarter-mile buffer zone. While the Lander Field Office was drafting their new resource management plan, the BLM released updated guidelines for assessing visual resources.

> "This is one of the most iconic landscapes of American history, as important as the Liberty Bell. And it should be protected for all generations to appreciate."
>
> Lee Kreutzer,
> cultural resources specialist, National Park Service

Zack Frank/Shutterstock

Pioneers carved their names into Independence Rock. Visitors today enjoy relatively unaltered views from the four historic trails in this area.

"We have taken a much broader understanding of what is important to protect for trails," Yannone said, not only the physical paths but also their viewshed. "If you're a pioneer or visitor, what do you see? That's what we want to preserve."

Instead of the standard buffer, the agency used GIS to project what a visitor could see from the trails, ranging anywhere from three to thirty miles. Inside that new trail corridor, the Lander Field Office prohibited many activities, including surface occupancy for oil and gas, wind development, sand and gravel excavation, and mining. The new plan protects around 450,000 acres.

Yannone points out that her field office is an exception, however.

"We have very few resource conflicts here… we don't have a lot of oil and gas, don't have a big expanding population. We haven't had the challenges—not all parts of country can do that," Yannone said.

On a bluff near Guernsey, Wyo., a series of ruts carved by hundreds of wagons persists in the soft rock.

"It's one of a number of places where you can really stand on the trail and let your imagination flow," said Lyle Mumford, who leads tours along national historic trails for the Mormon Heritage Association.

Like many modern tourists, Mumford's group follows the highways that shadow or mirror the actual trails, "so that we can get a feel for the landscape and the landmarks that pioneers were navigating by and learning from," he said. Last summer, one of Mumford's tour groups included a descendent of Rebecca Winters. When they visited her grave, "it was extremely moving for him to be there at that spot," Mumford said.

Therein lies the value of protecting what remains, said Kreutzer, because there's so little of the original trail left "where you can stand in their wheel ruts and see what they saw."

Ariana Brocious *is a writer and reporter based in Lincoln, Nebraska. Her last piece for* Western Confluence *was "One Irrigator's Waste is Another's Supply" in the winter 2015 issue.*

Courtesy of Jackson Hole Art Auction

The oil painting Wind River Country Wyoming *by Albert Bierdstadt (circa 1860) was up for sale at the 2015 Jackson Hole Art Auction.*

Stories Told in Paint

Discovering fine art in Jackson

By Carly Fraysier

On a hazy evening the streets of Jackson blur with summer tourists. Laughter and chitchat rises from outdoor patios like bubbles in a fizzy drink. In addition to the usual food, beverage, and music to cap off a day sightseeing Yellowstone or rafting the Snake, tourists tonight enjoy Jackson's Art Walk. Every summer Thursday, the galleries, usually closed by dinnertime, open their doors to casual observers and serious buyers alike. Inside big-paned windows, I see people moving in waves through well-lit, colorful rooms. I watch a couple in plaid shirts hold hands as they walk past scenes of big mountains, big rivers, and big animals. Three smiling ladies with tall hair and heavy jewelry sip wine from Dixie cups. The gallery owner, wearing a bolo tie with a plum-sized turquoise fastener, smiles at whoever walks in the door.

Visitors looking for art in Jackson will find the National Museum of Wildlife Art, the Jackson Hole Galleries Association, thirty-some diverse galleries, the Center for the Arts, and a month-long summer arts festival. In the last decade, thanks in large part to the Jackson Hole Art Auction, the town has become one of the premier art centers in the country alongside cities such as New York, San Francisco, Scottsdale, and Santa Fe. Going on its ninth year, the auction draws serious western art collectors from around the globe. "A lot of the clients do the rounds—from California to here, to New York," Joan Griffith, Director of Trailside Galleries, explained.

I came to Jackson to glimpse this national art hub at its peak. This first week in September marks the beginning of Jackson's month-long art season. With the art auction just two weeks away, I have a view into the world of fine western art and its allure for collectors. I'm here to meet the people who work in the galleries, to see the art, and to try to learn why the western fine art scene in Jackson evokes such passion from all involved.

The current of the crowd sweeps me past the elk antler arches in the town square to Trailside Galleries, and I duck out of the hazy street into the warm light. The gallery, a fixture of Jackson's traditional western fine art scene since 1963, houses this year's auction pieces. Tonight there also happens to be a reception for five prominent western artists, and the gallery is packed.

I work my way past overstuffed leather couches surrounding a two-story fireplace. A hired bartender hands me a Chardonnay. It's a good pour in a real glass. I pluck a bacon-wrapped goat-cheese-stuffed date from a platter that is circling the room. A little terrier sits serenely in her owner's arm as if born to be amongst the art and I overhear the owner say, "She prefers impressionistic art of wildlife running."

Three of the five artists mill about close to their work. Painter Jim

Norton wears a cowboy hat and a blazer over a plaid shirt. He brought his brushes and touches up a painting to the crowd's delight. I overhear him describe being at a bison sanctuary with his personal photographer when the herd spooked, the resulting stampede nearly sweeping the two men up.

His audience seems eager to hear such real-life stories of ruggedness and adventure, then to connect such experiences to the paintings that hang on the wall. One collector told me, "I'm interested in the artist, the story of the artist."

People "buy art if they have a connection to it," Griffith told me. They come here to feel a connection to this place and its colorful culture, big game, and sweeping landscapes. They come here to take a piece of that home with them. And they buy art if they trust the gallery owners and the staff.

Working in the fine art world requires an eye for aesthetics, yes, but more than anything else it requires people skills. Earlier, Diehl Gallery's art dealer Kiera Wakeman confirmed, "It's a lot about trust. The best thing you can do is really be straight up with a client if a piece will look good or bad in their home."

Trust is important both in the galleries and in the lead up to bidding on auction pieces.

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After I've consumed more than the appropriate amount of bacon-wrapped dates, I head upstairs to see this year's auction pieces. Earlier in the day Jill Callahan, Jackson Hole Art Auction Coordinator, described the auctions. "We've really defined ourselves as the wildlife art auction," she said. Unlike the Christie's and Sotheby's auctions you might imagine, Jackson's auctions are always lively and fast-paced, moving at the speed of cattle-auctions.

Recalling the 2014 auction, Griffith tells me how a Bob Kuhn fox (Lot 89, Bob Kuhn [1920 – 2007], *Red Fox on Patrol* [2001], acrylic on board, 14.75 x 24 inches) went for over four times its estimated price of $60,000. "That was really exciting," she said, "the crowd went crazy, everyone cheering and clapping."

During the auction, one of Griffith's jobs is handling phones. As many as ten clients may bid on one lot. Griffith sometimes holds two phones at a time, bids going as high as a million dollars. Last year, her most tense moment involved a client on a private jet.

"And I tell him," she said, "'It's goin' pretty fast, seven to ten lots out,' and he says, 'Darlin' we're about to land! I'll have to call you back.' I'm sweating bullets and time is a-ticking…"

She did connect with him before the bidding started, but he fell short of the winning price.

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I move around the upstairs space past some of the finest pieces of western art in the world. I'm looking for clues about what captures the fascination of western art collectors who will bid in this year's auction. I stop at a white tag that projects an estimated selling price of $1-2 million dollars (Lot 184, Albert Bierstadt [1830-1902], *Wind River Country Wyoming* [ca. 1860], oil on canvas, 28.25 x 39.5 inches).

In an ornate metallic frame, cliffs and trees open up to an oxbow river winding through a valley. Jagged mountain peaks rise into dim yellow light of either a sunset or a sunrise. I later read an article that described the piece as "a seemingly endless landscape untouched by the modern world."

In an interview on the Cowboy Artists of America's website, painter Bill Anton, one of the featured artists at tonight's reception downstairs, is quoted, "If I'm recording anything, I'm recording how I feel about the West." Works like Anton's and Bierstadt's contain drama, history, frontier myths and also truths about what has been lost and what is changing before our eyes. Whether these paintings portray a piece of a landscape that once existed or one imagined, they convey what it feels like to be in a place at a given time.

Two weeks from now, this Bierstadt painting will bring in $800,000 at the Jackson Hole Art Auction, less than anticipated. The auction on the whole will generate $6.5 million, only half as much as the previous year. The decrease reflects an ever-fluctuating art market as well as things like stock market volatility. The money will be divided between the sellers and the Jackson Hole Art Auction.

At its heart, the Jackson art scene is big money and high drama.

Back downstairs the crowd dissipates out into the dusk and I'm still thinking about the allure of the West, and the significance of the images these paintings portray. "This art," Griffith offers, spreading her arms wide "is important because it represents a history of what happened, how the West came to be. It's about the evolution of time and the passing of time and you never want to loose a connection to that."

Carly Fraysier *is the 2015/16 Editorial Fellow at* Western Confluence *magazine. She is studying creative nonfiction writing and environment and natural resources at the University of Wyoming.*

Price Chambers

A Clyde Aspevig oil painting on the auction block at the Jackson Hole Art Auction.

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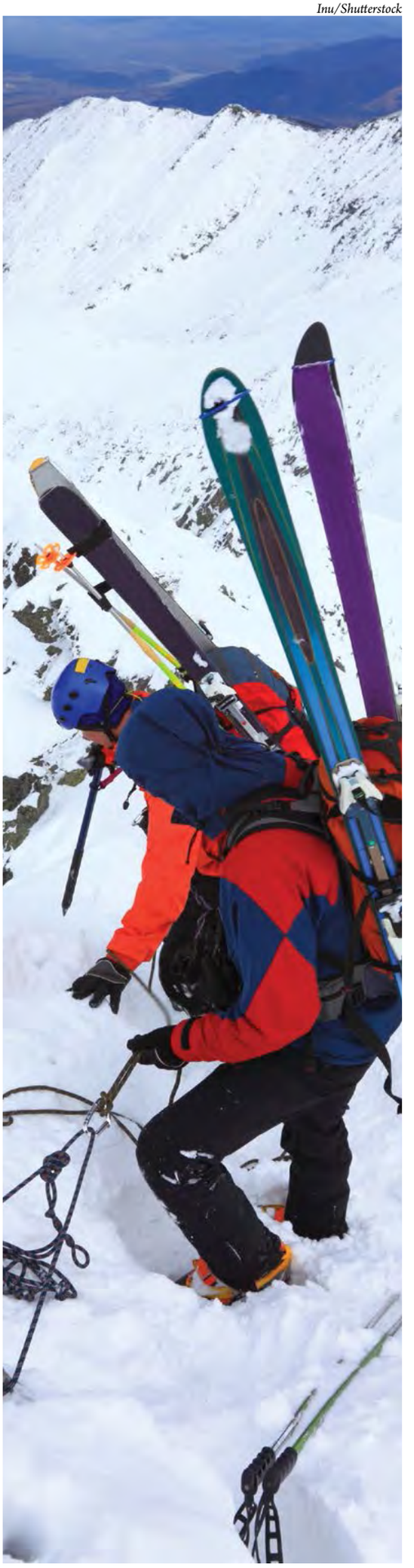

A New Conservation Model

How do we get outdoor enthusiasts to protect the places they play?

By Manasseh Franklin

Several years ago, Sonoran Institute founder and long time conservationist Luther Propst was mountain biking on the Lunch Loops in Grand Junction, Colorado, when he had a major conservation realization. He was riding in the company of two friends, both conservation professionals, who were arguing fervently about a proposed wilderness designation for the Hidden Gems area of Colorado. The designation, which one friend had supported via the conservation organization behind the proposal, would protect wildlife habitat and natural resources. However, it would also exclude mountain bikers—mechanized travel of any kind is not allowed in designated wilderness. Cyclists, including Propst's other riding partner, hadn't been involved in early conversations about the wilderness proposal and were fighting hard to derail the designation so they could keep access to a favorite riding area.

Propst was deeply bothered by his friends' feuding, and by the greater division that lay at the heart of it. "There was this public, very negative, kind of ugly battle going on between people whose values were very similar," he said. In Propst's mind, these would-be allies—both of whom wanted to protect the wild places they loved—should have been working together rather than pitted against one another. He realized that there had to be a better way to get the people who wanted to protect places for recreation, and those who wanted to protect places for conservation, to work together as allies in causes they both supported.

Nearly a decade later, Propst's idea culminated into action. In fall 2014, he participated in a roundtable discussion at the conservation- and recreation-centered SHIFT festival in Jackson, Wyoming, that focused on soothing tensions between public land user groups and management. Then, in June 2015, he was among a group of fifteen people gathered at the Murie Center in the heart of Grand Teton National Park for the Conservation and Recreation Summit—a two-day collaborative meeting designed to establish a framework to actually put that goal into practice. A variety of land users and managers including folks from the National Park System, US Forest Service, and US Fish and Wildlife Service along with a handful of conservation and recreation groups attended the summit.

"It's important to have the hunters and the climbers and the horsemen and the skiers and backpackers sitting down with the environmentalists and conservation advocates, the organizations that are cultivating the next generation of stewards, as well as the land managers," said Christian Beckwith, a renowned climber and director of SHIFT, who attended both meetings.

The group looked to the well-established North American Model for Wildlife Conservation for guidance. That model, developed in the early twentieth century, operates on the premise that wildlife is a public resource and should be managed for public use in perpetuity. In order to achieve that, the model outlines seven principles, including that harvested wildlife cannot be wasted or sold commercially, that science must inform decision making, and that all citizens have equal access to hunting and fishing. It also established a self-perpetuating funding system by which taxes and license fees help to cover the costs of professional, science-based management. The model has been incredibly successful in guiding the actions of hunting and fishing throughout the past century and is credited with preventing the decimation of wildlife populations around the continent.

The document conceived at the Murie Center during the summit—The Principles for Advancing Outdoor Recreation and Conservation—hinges on similar fundamentals. The six principles outline the following: Well-stewarded public land and water are central to the American land legacy. Conservation and recreation depend on each other for protection and use of public lands in the US. Those who use public lands and water have a responsibility to do so ethically and with respect for the lands and other users. Public education and proactive, professional management are essential for land care and recreation opportunities. Biological, social, and physical sciences are necessary to inform management decisions. And, similar to that of the North American Model for Wildlife Conservation, stable long-term funding sources need to be established, with the emphasis on new and creative sources to bolster funding from government agencies and conservation groups. Ideally, the amount of funding will match the economic and public benefits associated with outdoor recreation and healthy environments.

Before the principles' public release at the second annual SHIFT Festival in October 2015, a variety of associated recreation, conservation, and land management community members engaged in a comment and discussion period. Those involved in the document's creation—including approximately seventy stakeholders total—hope it will be a guiding light for the future of conservation and recreation in the United States. With these principles in place, hard decisions about recreation and conservation management have the potential to be nuanced, collaborative, and inclusive for the betterment of the public lands and the people who use them.

"We're in a much better position to effect outcomes on issues that we all care about when we're unified. [These principles] help us to see one another as natural allies in the common cause," Beckwith said.

With the principles now in the public eye, the goal is to spread the message far and wide through popular media, public forums, and social media. While it's too early to tell just how the principles will be received and implemented, Propst and others involved stand by the document as a necessary development among those who work and play in the outdoors.

"I'm committed to the idea that outdoor recreation and conservation have way more in common than not, and that conservation needs to work closely with people involved in outdoor recreation because that's who the conservation advocates are," he says. "This is a call for recognizing that we're all in this together."

***Manasseh Franklin** is pursuing a master of fine arts in creative nonfiction writing and environment and natural resources at the University of Wyoming. She has reported for magazines including* Afar, Rock and Ice, Trail Runner, *and others.*

Outdoor Recreation and the Still Unlovely Mind

By Richard L. Knight

"Recreation is a perpetual battlefield because it is a single word denoting as many diverse things as there are diverse people."

Aldo Leopold, one of our nation's founding conservationists, penned these words decades ago as though he could fathom the future. Wallace Stegner joined Leopold with this warning: "The worst thing that can happen to a piece of land, short of coming into the hands of an unscrupulous developer, is to be left open to the unmanaged public."

In a 1995 review published in *BioScience* examining uses of public lands, outdoor recreation was second only to water development projects as the culprit behind the listing of species covered by the Endangered Species Act. The traditional threats to our natural heritage—logging, grazing, mining—affected fewer species. As the opening quote by Leopold suggests, outdoor recreation is indeed one word that describes uses as bizarrely diverse as bird watching and paintball combat. A subheading in a recent *High Country News* cover story asked the question, "Will a growing, technologically evolved army of thrill seekers overrun every corner of the West?"

That question suggests we revisit the role that outdoor recreation plays in our new century. Clearly it is an important economic driver, particularly for rural economies. According to the Outdoor Industry Association, recreation accounts for over 6 million jobs and close to $650 billion in spending each year. Indeed, consumer spending on recreation is just behind financial services and insurance, and outpatient health care. When one contemplates the economic power in an increasingly amenity-based American West, it makes sense to consider the upsides and downsides of this important land use.

The overriding good news about our continued passion for recreating outdoors is the reconnection of people with places, water, soil, plants, and animals—what Aldo Leopold called "land." There is no doubt that America, a society of suburbs, finds release in rural landscapes, chiefly on the one-third of our nation that is in the public domain. As we become an increasingly urban nation, recreation may be our last way to join up with the natural world—in town or in country. And, in addition to the joys nature gives us freely, reconnecting with our home planet may be an adaptive strategy. If we don't feel nature in our souls, then we may not be interested in saving—and restoring—the natural world. The bounties of healthy lands and water have been taken for granted far too long. And just at the right time, Americans are pioneering a new form of recreating outdoors—repairing degraded lands and waters.

Obviously, recreating outdoors by rehabilitating nature will never be as widely pursued as mountain biking or jet skiing, but it is gaining in popularity. Wildlands Restoration Volunteers, in my home watershed, is just one of thousands of organizations across the nation that provide opportunities for volunteers to rebuild degraded landscapes (much of that degradation from unmanaged recreation). City, county, state, and federal agencies concede that they have neither the time nor resources to undo the damage to land health that has occurred this past century. The response of these agencies and organizations has been to mobilize the energy of legions of citizens who feel that restoring sick land is a valuable way of recreating outdoors.

This "new" recreation signals that as a society we are reconceiving ourselves as able to find true enjoyment in renewing our lands and waters. And this form of recreation does more than simply qualify as fun; it honors the most sacred connection between people and land as restorative to both.

Since I am relying heavily on Leopold in this essay, let me close with his inimitable insight to outdoor re-creation. Concerned with the "qualitative bankruptcy of the recreational process," Leopold reinterpreted the very idea. "Recreational development is a job not of building roads into lovely country, but of building receptivity into the still unlovely human mind." Such receptivity, he suggested, might allow us to expand our notion of recreation to include such activities as nature study, ecological restoration, and participation in conservation projects.

"[T]his sport knows no bag limit, no closed season. It needs teachers, but not wardens. It calls for a new woodcraft of the highest cultural value."

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Rick Knight and his mule, Dottie. Courtesy Rick Knight.

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Campers in Arches National Park, 1972.