

holiday gift guide

High Country News

For people who care about the West

A Weird and Perfect Wilderness

In southwest Oregon, a desolate landscape offers lessons on the modern wild

By Kate Schimel





Jill and Gabe Howe evaluate trail projects in the Kalmiopsis Wilderness. ZACH DOLEAC

FEATURE

16 A Weird and Perfect Wilderness

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CURRENTS

- 5 **The Bundy family, on trial** Their Oregon court date is over. Now, the Nevada one looms.
- 6 **The disappearing Bonneville Salt Flats** In Utah, a changing landscape brings an uncertain future for land speed racing
- 7 **The pipeline that wasn't** For 40 years, Alaskans have dreamed of a pipeline to deliver the North Slope's gas reserves to market
- 7 **The Latest: A new job for Nancy Fernandez**
- 8 **Out stealing snakes** In Arizona, reptile poachers slip through the cracks
- 8 **The Latest: Greater sage grouse**

DEPARTMENTS

- 3 FROM OUR WEBSITE: HCN.ORG
- 4 LETTERS
- 10 THE HCN COMMUNITY Research Fund, Dear Friends
- 12 HOLIDAY GIFT GUIDE Gift ideas for people who love the West
- 24 MARKETPLACE
- 27 WRITERS ON THE RANGE
When it comes to energy, Trump's promises are empty By Jonathan Thompson
- ESSAYS
- 28 The Anthropological Aesthetic By Leath Tonino
- 30 A place between By Peter Friederici, Photographs by Peter Goin
- 32 HEARD AROUND THE WEST By Betsy Marston

On the cover

Jill Howe, ax in hand for the trail work ahead, walks amid the burned-over trees on the Kalmiopsis Rim Trail in Oregon's Kalmiopsis Wilderness.

ZACH DOLEAC



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Editor's note

Solace in wild spaces

The weekend before the presidential election, I went into the Raggeds Wilderness, a few hours outside of Paonia, Colorado, hoping to fill my elk tag. I sat shivering on a ridge in the predawn dark, watching the stars of Orion wheel over mountains some 70 million years old. Then, as light broke across an aspen grove half a mile away, came the faint chirping of cow elk and the soft bugle of a bull. Through binoculars, I watched the elk drift out of the timber like ghosts, heading to a well-watered meadow beyond the trees. In that moment, I felt myself a part of something whole and beautiful — billions of years in the making, perfect in every detail: me, the cold, the elk, the mountains, the dawn.



Then the election happened, and I found myself the citizen of a country where at least 60 million people, for one reason or another, cast their vote for a man whose campaign was built on ignorance, intolerance and lies. What that means will be debated for years to come, but given the uptick in hate crimes, publicly displayed swastikas and brazen slurs by emboldened racists, I suspect our country is in for some rough years. Maybe I'm wrong. Maybe Donald Trump will surprise us and try to build a society of tolerance and prosperity and happiness.

But until that happens, you can expect *High Country News* to keep up thorough reporting on an administration apparently hostile to environmental protections and regulations, skeptical of climate change, and in favor of unfettered extraction of public-land resources. Or so it seems. It's hard to tell, given the number of contradictory statements we've heard this campaign. In any case, we'll find out.

In the meantime, let us not lose sight of the big picture. The value of the West remains its wide-open spaces, its vast public lands, and its rich natural and cultural resources. In places like the Raggeds, we find solace, as well as common values across cultural and political divides. And so this issue features both news and perspective. In our cover story, Kate Schimel, the magazine's digital editor, visits a scarred and tangled wilderness, asking what it means to love such a place. Correspondent Sarah Tory takes us to the Bonneville Salt Flats, where a piece of Americana, 12,000 years in the making, is crumbling away. Essayist Peter Friederici and photographer Peter Goin examine our complicity, via Glen Canyon, in the realities of climate change. And Contributing Editor Jonathan Thompson asks what presidential policy can actually do in the face of a global energy market.

We must continue to explore these and other fundamental questions, even as we face a new political reality. For the years ahead will test our values, and our willingness to defend them, as never before.

—Brian Calvert, managing editor

★ ELECTIONS 2016 ★

Greens prepare for battle

Environmental leaders were stunned by a presidential election that defied the polls and put into power a man who calls climate change a hoax and has vowed to do away with the Environmental Protection Agency, take the United States out of the Paris Climate Agreement and cancel the Clean Power Plan. While President-elect Donald Trump's stances on energy and climate change policy remain murky, his victory has galvanized GOP leaders who hope to undo President Barack Obama's climate legacy — and environmental leaders who say his pronouncements cannot change the fact that the planet is heating up. "This election, nobody went to the ballot box voting for dirtier air and dirtier water," says Anna Aurilio, D.C. director for Environment America. "So we have to mobilize."

ELIZABETH SHOGREN

MORE: hcne.ws/greens-react



Donald Trump holds a pro-coal placard during an October rally in Pennsylvania. As a candidate, Trump made pledges to save both coal and natural gas. MICHAEL BROCHSTEIN VIA ZUMA WIRE

Who won? What passed? A Western roundup.

The Senate California Attorney General Kamala Harris beat Loretta Sanchez, both Democrats, in California. In Nevada, Catherine Cortez Masto, D, defeated Republican Rep. Joe Heck. Republican Sen. John McCain retained his seat in Arizona. In Utah, Republican Sen. Mike Lee defeated Misty Snow.

Congress Denise Juneau, head of Montana's public school system, lost to Republican incumbent Ryan Zinke. In Colorado, Republican Rep. Mike Coffman beat Democrat Morgan Carroll.

State and local elections Joe Arpaio lost the bid for his seventh term as sheriff of Maricopa County, Arizona. The GOP gained control of the Montana Land Board.

Marijuana California and Nevada passed recreational marijuana use—Arizona was the only state (of five nationwide) to strike it down. Montana and North Dakota approved medical use.



Kamala Harris, on the campaign trail in California, was one of three women of color elected to the Senate, bringing the total to four. KAMALA HARRIS FOR U.S. SENATE

Minimum wage Arizona, Colorado and Washington approved minimum wage increases.

Health care Colorado struck down a statewide health-care system but approved a right-to-die law, joining California, Oregon and Washington.

Wildlife Oregon voted to ban trade in exotic animal parts within state boundaries. Montana rejected an animal-trapping ban on public lands.

Energy Washington rejected the nation's first carbon tax. Monterey County, California, became the state's sixth county — and first oil-producing one — to ban fracking.

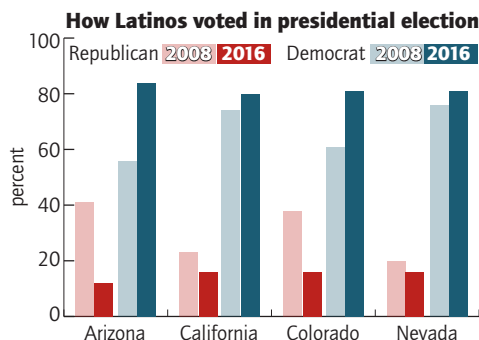
Education Oregon voters approved a measure to allocate funds for outdoor education.

California: gun control, taxes and more A gun control measure passed that bans large-capacity ammunition magazines and requires background checks for ammunition. Cigarette tax increased by \$2 a pack and voters opted not to repeal the death penalty.

LYNDSEY GILPIN MORE: hcne.ws/Election16-roundup

Latinos voter surge — in the West, at least

Leading up to Election Day, a historic increase in Latino voter turnout seemed possible, and while Latino support for Democrats waned, that hypothesis proved true. According to Pew Research, national exit polls suggest Latinos did make up a larger share of voters in the past, although more went Republican than in the past. Nationwide, 65 percent of Latinos supported Hillary Clinton, while 29 percent voted for Trump. Compare that to 2012, when Obama won 71 percent of the Hispanic vote (Mitt Romney secured 27 percent). Compared to the rest of the country, though, Latino voters in Western states voted resoundingly for Clinton over Trump. In Arizona, 84 percent of Latinos voted for Clinton (compared to only 56 percent of Hispanics voting for Obama in 2008). The growing clout of



Hispanics, though, wasn't enough to flip the state, as some analysts predicted. Arizona went to Trump, 50 percent to Clinton's 45.

PAIGE BLANKENBUEHLER

MORE: hcne.ws/Awakened-giant

Trending

Dealing with the divide

Columnist Maddie Butcher writes from her divided town, Mancos, Colorado, about what to do following a polarizing election. The answer? Step outside of your typical circles and listen. Butcher writes, "In my small town in southwestern Colorado, those who did not vote for Donald Trump seemed numb and stunned by the result. ... Maybe it was a shocking result. But if these folks had visited outside their circles, if they'd tried to get a fix on what makes the longtime locals tick, they might have had a better sense of what was to come."

MADDIE BUTCHER,
OP-ED

You say

NATHAN WIND: "Reminds me of where I live, here in Oakland, California. People move into the neighborhoods that are less expensive and get mad when neighbors play loud music 24/7 and when people are up all night outside. ... If you move to a new place, don't expect the place to change for you."

BLAKE OSBORN: "I'm from rural Colorado, but one thing I discovered while living on the Front Range for a few years is that it is much 'cooler' to live in the mountains. In today's landscape, transplants are of a certain demographic."

STEVE UNDERWOOD: "Maddie missed the beauty of Mancos in this story, instead focusing on the troubles of the rest of the world. We all view our world through rose-colored lenses."

MORE: hcne.ws/divided-town and
[Facebook.com/highcountrynews](https://www.facebook.com/highcountrynews)

"We are the watchdogs of Wallace Stegner's geography of hope, and we take that job very seriously. You can expect in coming weeks and months ferocious watchdogging of the new administration, which, by all indications, will not prioritize environmental protection or address one of the greatest threats to the planet, and especially our corner of it: climate change."

—Brian Calvert, HCN managing editor, in his piece "What we learned this election"
hcne.ws/rural-voter

Help us report on the West: Tell us what stories you want us to cover. hcne.ws/story-tip

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REAL REPORTING FOR A DIVIDED COUNTRY

Editor's note: Following the election of Donald Trump, High Country News Publisher Paul Larmer wrote a letter to readers about the challenges ahead. It reads in part:

"There remains a profound divide between rural and urban people in this country. My county, Delta, voted 70 percent for Trump, as well as for the conservative congressman who represents our district. It is one of the most impoverished counties in the state, with an average per capita income of \$23,890. Two of the three area coal mines have closed in the last couple of years.

I often get asked why *High Country News* ... is based in a place like this. Why not Boulder or Portland? Because, I say, you can't really understand the West, or the nation as a whole, if you don't understand its rural communities. And you can't really understand rural communities unless you live in one."

Many readers responded. Here is a sampling of the comments. Read Paul's entire message and all the comments, and join the conversation at hcn.ws/divided-country.

Have to bristle a bit at your claim that to understand the West (or the nation) one must live in a rural community. No monopoly on understanding there. If we, as you say, now need each other now more than ever (and I agree with that proposition), let's not undermine the discussion by claiming that those who reside outside of rural areas can't really understand the West or the nation.

*John DeVoe
Portland, Oregon*

These have been tough days since the election, but I'm hoping we will learn to listen to more people who are different than us as a result. There are many Delta Counties around our nation, and we must reach out to them with better news for their families and futures. Green energy can offer them the jobs they have lost, and I feel that the environmental movement, which wants fossil fuels left in the ground, should also be in the vanguard of helping these communities transition into new jobs and prospects.

*Colleen Cabot
San Jose, California*

Environmentalists should get to know hunters, ranchers and farmers better. Don't hunters want to preserve the Western landscape and maintain access to it? An abhorrence of guns and hunting has prevented some environmentalists from making this connection. I've met some environmentalists who have bigoted opinions of rural people. That, too, has prevented a connection. To preserve public land, and access to it, we'll do better if we're inclusive.

*Jeff Cross
Salt Lake City, Utah*

You and many others really missed the key to why Trump was elected. The thing that resonated with the rest of the "real world" was that of the loss of jobs and lower pay for blue-collar workers in America. As these jobs moved to other poorer countries (Mexico, Asia) people here lost their jobs, benefits and retirements. Blue-collar union workers once were the base of the Democratic Party. But that party moved on to more important issues of race, global warming, globalization, etc. The builders of America were forgotten. We can't continue to move forward with the great environmental issues until we find a way to both reduce the loss of basic jobs and protect our wonderful, beautiful country.

*Richard Chambers
Rancho Palos Verdes, California*

I was raised in a lumber town of 735 people in the '50s when a workingman's wages funded the American Dream: a home, a car, and college for your kids. Why is that mostly gone? Read *The Betrayal of the American Dream* by Bartlett and Steele, which pins the theft on every president and Congress since Carter, both parties. Now we'll see if President Trump can keep his promise of returning the middle class to prosperity. He'll have to deal with Republican majorities who have talked that talk, but never walked the walk.

*Robert Nein
Chewelah, Washington*

You can't really know someone until you go over to their home and have dinner. Then they become real people with plans and dreams and families like everyone else. Too many of us live in a "bubble." You think you know about stuff outside your bubble, but you really don't. The fact that a journal like *HCN* is located in

Delta County for me represents the best ideals our country has to offer.

*Stephen Koenigsberg
Denver, Colorado*

This notion that some hotel/golf course developer from New York City is going to be the savior of blue-collar whites in the West and Midwest helps shed new light on why the workingman is struggling so. Suffering, starving, getting hooked on opioids, the blue-collars were all too ready to blame their problems on the brown folks across the way, especially when encouraged to do so by the industrialists and their Republican pawns in government.

This gullibility, along with the quick retreat to tribalism when the chips are down, is the rich loam in which the seeds of our coming neo-fascist administration and disembowelment of American democracy were sown. There's no turning back now, and the blue-collars will find they've lost something else: access to their soon-to-be-privatized public lands.

*Jim Scarborough
Bellingham, Washington*

I've lived for 35 years along the Rio Grande in northern New Mexico in a village of about 100 people. It went 70 percent for HRC. The degree to which Trump has insulted and degraded Hispanic people was reflected in this vote. I don't buy into the "righteous anger" shtick that some comments reflect. Gettin' all riled up is just about the easiest thing a person can do. I'm just not all that sympathetic to folks who have despoiled their land and their water and want to blame "ecoliberals" for pointing out those uncomfortable facts.

*Meg Scherch-Peterson
Pilar, New Mexico*

President-elect Trump has stated that he is in favor of retaining public-land ownership and management under the federal government. We must not depart from the "multiple use" philosophy that underpins the management of our public land. That includes energy and mineral extraction. As someone who enjoys wild and scenic rivers, wilderness and monument designation, I also understand that ranchers, farmers and every other American should be able to enjoy their land too, and power local economies. Let's unite and do this together as Americans who love the outdoors for many reasons.

*George McCloskey
Mackay, Idaho*

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The Bundy family, on trial

Their Oregon court date is over. Now, the Nevada one looms.

BY TAY WILES

On Oct. 27, in federal district court, a jury delivered a not-guilty verdict for Ryan and Ammon Bundy and five other defendants, on charges stemming from their 41-day armed occupation of Oregon's Malheur National Wildlife Refuge early this year. The verdict came as a shock to many on both sides of the issue, with even some defense lawyers predicting a conviction. But several factors, including the diffuse nature of the Bundys' movement, strategic jury selection by the defense and the difficult-to-prove conspiracy charges, doomed the government's case.

In February, the Bundy brothers will again face a jury, this time with their father, Cliven, over their April 2014 standoff with federal agents attempting to round up illegally grazing Bundy Ranch cattle in Nevada. If prosecutors in Nevada learn from their Oregon counterparts' mistakes, it could help them bolster their case. "The government had a practice run, and they know what they did wrong and did right," says defense attorney Shawn Perez, appointed to represent Bundy supporter Richard Lovelien in the Nevada trial. But first, prosecutors have to grapple with just what went wrong in Oregon.

The Malheur occupation movement's leaderless nature challenged prosecutors from the start. Ammon Bundy certainly inspired the militants, but as news spread to networks of sympathizers via social media, the occupation took on a life of its own. With no clear leader in charge, especially when it came to people outside the refuge in the town of Burns, pinning responsibility on any of the seven defendants was difficult.

Prosecutors had planned to use testimony from federal employees and locals who felt threatened during the occupation. But in August, defense attorney Matt Schindler filed a motion to limit the government's ability to use some of those witnesses. "There was no evidence connected to anybody in this case," Schindler says. The defense also argued that people's feelings didn't prove the defendants' intent to intimidate them — key to the conspiracy charges the government sought to prove.

The defense attorneys' aggressiveness in shaping the jury also paid off. Federal cases usually draw jurors from within 100 miles of Portland. But the defense team requested that the jury pool include the entire state. "We ended up getting the

kinds of people we wanted: rural people, pro-gun or gun owners," says attorney Robert Salisbury, who ranked 200 potential jurors for favorability. "We also wanted people who would be able to think for themselves," and not be swayed by previous media coverage of the standoff. Nineteen of 20 of the final jurors and alternates were among Salisbury's top choices.

Finally, the defense team managed to bring an FBI informant to the witness stand, through what Schindler calls "some kind of investigative miracle." The appearance of an informant led to the government revealing that nine occupiers were actually informants. "You can't be part of a conspiracy if it's you and a government informant," Schindler says. One juror told Schindler that this information swayed a fellow juror.

The conspiracy charge was always going to be difficult to prove, but simply charging the occupiers with trespass, a misdemeanor that doesn't always result in a jail sentence, likely would have been an equally embarrassing outcome for the Department of Justice.

All these factors could come into play in Nevada, complicated by whatever changes occur in President-elect Donald Trump's departments of Interior and Justice. And

if government informants were present at the standoff, prosecutors may find that an added challenge: Revealing informant identities can compromise other ongoing investigations. Jurors will likely be chosen from the southern Nevada division that includes Las Vegas — unless defense attorneys get the judge to expand the pool, as they did in Oregon.

Still, Nevada attorneys have a different case to make: In April 2014, protesters and federal officers faced off directly, unlike in Oregon, where occupiers arrived at the refuge when no employees were present. In Nevada, standoff participants interfered with federal agents' attempts to impound the illegally grazing cattle. Bundy supporter Ryan Payne told reporters that he helped plan "counter-sniper positions" against federal agents. In Malheur, occupiers seemed to be more focused on spreading their ideology, rather than physically thwarting a specific federal action.

Seventeen Nevada defendants' charges do include conspiracy to impede federal officers. But unlike in Oregon, they're also charged with obstruction of justice and assault on a federal officer. The case is not a slam-dunk: Prosecutors must do more than just show that federal officers felt threatened; they have to definitively prove that the defendants' actions were unlawful. One Malheur juror emailed the *Oregonian*: "Doesn't (the public) know that 'not guilty' does not mean 'innocent'?" Whatever the outcome, the February trial likely will not be the last time the nation confronts the Bundys and the movement they represent. □

Cliven Bundy holds a bouquet of scrub in April 2015 near his ranch in Bunkerville, Nevada, during a celebration of the one-year anniversary of his standoff with the Bureau of Land Management. He'll be in federal court on charges surrounding the Nevada standoff in February, along with sons Ryan and Ammon.

© DAVID BECKER VIA ZUMA WIRE





The disappearing Bonneville Salt Flats

In Utah, a changing landscape brings an uncertain future for land speed racing

BY SARAH TORY

▲ A vehicle is hauled to the starting line at the Bonneville Salt Flats, outside of Wendover, Utah, in August, where racing speeds can exceed 420 mph.

▼ Larry Volk, founder of the Utah Salt Flat Racing Association, uses a pick to demonstrate the quality of the salt at the Bonneville Salt Flats near Wendover, Utah, where Speed Week resumed this year after its cancellation for the last two, due to wet weather and rough salt.

RICK BOWMER/
THE ASSOCIATED PRESS

Ali Youngblood sat in the driver's seat of her blue Ford roadster, inching toward a start line drawn across the Bonneville Salt Flats. It was day four of Speed Week, a series of speed trials held on the glittering white plain every August, and Youngblood wanted to set a new record.

Youngblood, 44, is one of the world's top female land speed racers, a tribe of amateur racecar drivers made famous by the 2005 film, *The World's Fastest Indian*. Land speed racers from around the world have long flocked to the Salt Flats near the Utah-Nevada border, whose 30,000 acres offer a perfect testing ground for their specialized cars and motorcycles. For the last couple of years, however, most of the races have been canceled due to poor conditions. The sturdy salt crust that racers rely on is deteriorating, and though

the precise cause remains unknown, the changes have revealed the surprising fragility of the landscape — and raised questions over whether or not it can be saved.

On the start line, Youngblood had other things to think about. After two seasons plagued by cancellations, she was just thrilled to race again.

When the starter's hand dropped, Youngblood floored the accelerator until the car's turbo-charged engine was revving at 170 miles per hour. "Such an animal of a car," she thought, feeling the wind whipping over the open cockpit. Then, suddenly, she spun off course. Her speed had caused the car's back wheels to lift just enough to lose traction — a common occurrence on the crunchy, snow-like surface. Youngblood prayed she wouldn't flip as her car spun one 360 after another.

The Bonneville Salt Flats formed roughly 12,000 years ago in the waning days of the last ice age. The massive lake covering central Utah began drying up, leaving behind a vast expanse of salt. By the early 1900s, speed enthusiasts had begun testing their cars on the hard wide-open surface, and over the years, faster cars were built and new records set.

But land speed racing remained largely a niche sport. There's little prize money or sponsorship, so most racers have regular jobs. And aside from the Bonneville Salt Flats, there aren't many places where they can practice. For the fastest cars — those capable of going over 400 mph — the only comparable spot is a dry lakebed in the middle of the Western Australian desert. Not surprisingly, most racers prefer Bonneville.

Lately, however the once-dependable cycle that regenerates Bonneville's salt crust has faltered. Right before Speed Week this year, the crust was so slushy and thin that race officials nearly cancelled

the event for the third year in a row. Conditions improved, but just barely. In places, the crust was less than an inch thick, allowing the underlying dirt to seep into the racetrack and increasing the danger.

Eventually, Youngblood's car came to a stop, but her heart kept racing. Although Youngblood believes the spin's cause was mechanical, the thinning salt did not help her confidence. "You never know how a piece of mud might dislodge something on the underside of your car," she says.

The crust's decline began in the 1960s, and Utah racers have long blamed the century-old potash mining industry, which removes salt from the Salt Flats as part of its extraction process. But the mine operator, Intrepid Potash, replaces all the salt it removes, as required under the terms of its permit with the Bureau of Land Management. Last year, for instance, the company put back over 500,000 tons of salt — far exceeding the amount it removed, though still short of the 1.3 million tons that the previous mine owner restored voluntarily each year from 1997-2000.

Racers would like the BLM to increase the salt-restoration requirements to meet the older target, and many have been petitioning the agency to update its 30-year-old Salt Flats management plan. "We feel that if they increase the amount of salt they put down, the salt flats will come back," says Dennis Sullivan, president of the Utah Salt Flat Racing Association and chairman of the Save the Salt Utah Alliance.

Still, that may not solve the problem, says Brenda Bowen, an associate professor of geology and geophysics at the University of Utah. Wetter springs and summers have grown more common in recent years, preventing the evaporation that regenerates the salt crust. Add the increasing number of people driving across the Salt Flats, and it's not surprising that the conditions are changing, says Bowen, noting that land speed racing also impacts this sensitive environment.

For Youngblood, the changes offer a hard lesson. "We're really at the mercy of mother nature," she says. After a storm blew in at the end of September, the final racing event for 2016 was canceled. "I keep joking with my dad that we need to come up with a new sport where we race remote control boats." □



The pipeline that wasn't

For 40 years, Alaskans have dreamed of building a pipeline to deliver vast gas reserves to market. Has its time come?

BY KRISTA LANGLOIS

In the summer of 1970, Bill Walker was hanging around the Johnson Trailer Court in Valdez when he was offered a job building the Trans-Alaska Pipeline. Walker had completed a year of community college but was out of money and couldn't afford to keep taking classes. The pipeline felt like his ticket to a better future.

Engineered to carry crude from the roadless North Slope to ports on the southern coast, the Trans-Alaska Pipeline brought jobs and revenue to the 49th state, transforming it from roughshod frontier to global energy powerhouse and lifting Walker and others from poverty along the way. Walker used his earnings to put himself through college, then law school. At 27, he became the youngest mayor of Valdez. He founded a law firm specializing in oil and gas issues. And in 2014, the lifelong Republican ran as an Independent to become Alaska's 11th governor.

Yet Walker's tenure coincided with a financial crisis. Oil prices have plummeted, thousands of Alaskans have lost their jobs and the state faces a \$3 billion budget deficit. Meanwhile, many North Slope oil wells are slowly drying up. The pipeline now carries just a quarter of the crude it once did, and the U.S. Energy Information Administration predicts that if production continues to drop, it could be decommissioned as early as 2026.

That's a devastating prospect for Alaskans, who depend on oil pumping through

the pipeline for nearly 90 percent of state revenue. Even if oil prices bounce back, the state's financial future remains hitched to a declining, volatile commodity. But Bill Walker believes there's an obvious path to prosperity: Build another pipeline, this time to transport the 34 trillion cubic feet of natural gas stranded beneath the frozen North Slope.

The proposed gasline and accompanying liquified natural gas (LNG) plant could bring 15,000 jobs and a flood of revenue, which Walker hopes could be used to develop other industries, such as mining, reducing the state's dependence on oil. But given the current fiscal emergency, a growing number of skeptics wonder if the new pipeline will be a boost — or a blunder.

The idea of moving natural gas from the North Slope to a plant where it can be liquified and shipped overseas was first proposed in the 1970s. But because re-injecting gas into oil wells to bring up greater quantities of crude proved more profitable than shipping it to market, the gasline never materialized. Instead, the project hovered like a mirage — tantalizing, but just beyond reach.

For years, Walker worked behind the scenes to convince oil producers of the plan's merits. "I watched all these other LNG projects be developed around the world," he says. "But ours was like milk with no expiration date — it never got to the front of the shelf." Finally, he became convinced that the best way to get the pipeline built was for the state to take over, and the best way for that to happen

was to spearhead it himself. So in 2014, he ran for the governor's office on a pro-pipeline platform — and won.

By this point, Alaska already had a state-owned gasline corporation partnering with several oil companies. Walker's administration kicked it into high gear. Shortly after his election, the state paid \$65 million for TransCanada's 25 percent stake in the project. The corporation hired a new CEO with a \$550,000 salary, and a state agency estimated that extracting North Slope natural gas could soon be more profitable than injecting it to stimulate oil wells. Things looked promising.

That changed in August. Cheap natural gas had flooded the global market, and the energy research firm Wood Mackenzie concluded that the Alaska LNG Project's \$45 billion price tag made it one of the least competitive proposals of its kind worldwide. ExxonMobil, ConocoPhillips and BP abruptly backed out.

Industry analysts predicted that without the oil companies' backing, the project was dead. But Walker saw this as an opportunity for the state to assume full control of it. Walker believes that by the mid-2020s, as the global oversupply diminishes, Asian countries will be again hungry for gas. He's hoping to find outside investors, such as Asian utility companies, to fund the gasline.

Yet many Alaskans and analysts remain skeptical. "I think investors will be very reluctant," says Larry Persily, who has worked on Alaska oil and gas policy for 20 years. He points out that the state has barely begun the regulatory process, creating uncertainties that may dissuade investors. "You don't know how much the project is going to cost or when they'd make first deliveries," he says.

Plus, lawmakers are concerned about the cost of state involvement: Every dollar spent on the pipeline is a dollar that doesn't go toward schools, law enforcement or other services. "The budget is strapped," says state Sen. Cathy Geissel. "Alaskans are very concerned about going this alone." If three major oil companies consider the project a financial gamble, she adds, why would it be any different for the state?

Still, Persily and Geissel believe that though the timing isn't yet right, the gasline will one day be built, and they're prepared to be patient. But as a mid-term governor forced to make unpopular cuts to education, transportation and social services, Walker doesn't have time to wait for a market shift. "Politically," Persily notes, "I'm not surprised that the governor has said this is the right time." □

The Trans-Alaskan pipeline, which carried 2,145,297 barrels of oil daily in 1988, now carries about 500,000 barrels. Alaska Gov. Bill Walker, I, has plans to build a natural gas line across the state to refuel the jobs and revenue that have been lost during the drop in oil production. U.S. GEOLOGICAL SURVEY



Nancy Fernandez presents a climate change study that was conducted at National Park Service sites in Oregon and Washington.

GLENN NELSON

THE LATEST

Backstory

The National Park Service has long struggled to diversify its mostly white and male workforce.

During its centennial this year, the agency confronted its difficulties recruiting young, diverse job candidates and connecting with communities of color.

Nancy Fernandez, 25, a bilingual Latina, exemplifies the problem; she completed three internships at national parks but could not land a permanent position, thanks to the arcane federal hiring system ("Why has the National Park Service gotten whiter?" HCN, 8/22/16).

Followup

In early November, Fernandez achieved her goal — a full-time job with a federal land agency. **She had clocked enough internship hours to earn noncompetitive employment status, giving her an edge in a hiring system that favors veterans.** Her status was just about to expire, however, when the U.S. Fish and Wildlife Service made her an offer. As an urban ranger at Savannah National Wildlife Refuge along the Atlantic Coast in Georgia and South Carolina, Fernandez will focus on community outreach and managing volunteers.

GLENN NELSON



Correspondent Krista Langlois lives in Durango, Colorado, and frequently covers Alaska.

Twitter: @cestmoiLanglois



A male greater sage grouse. ALAN KRAKAUER, CC VIA FLICKR

THE LATEST

Backstory

Greater sage grouse numbers have plummeted over the past decades as housing and energy development destroy the bird's habitat. When the U.S. Fish and Wildlife Service announced in 2011 that federal protection was warranted, collaborative conservation efforts kicked into high gear to avoid an Endangered Species Act listing. **Last September, the feds announced that the bird would not be listed** ("The Endangered Species Act's biggest experiment," *HCN*, 8/17/15).

Followup

In early November, federal officials released a plan to gather data about the 500,000-square-mile sagebrush habitat that sage grouse and 350 other species depend on. This blueprint for science-based decisions is a major step in Interior Secretary Sally Jewell's 2015 strategy to reduce the size and severity of rangeland fires, check the spread of invasives like cheatgrass, and restore ecosystem health. "This is the biggest systemic effort to learn more about those ecosystems that we've ever seen," John Freemuth, professor of public policy at Boise State University, told the Associated Press.

JODI PETERSON

Out stealing snakes

In Arizona, reptile poachers slip through the cracks

BY TIM VANDERPOOL

Dave Prival picks his way across a tumbledown slope, carefully peering into crevices among the broken rocks. We're alpine-high on a southern Arizona mountain range that shall remain nameless, for reasons you'll soon understand. It's been another year of crackly drought, and wildlife is feeling the heat. That includes the twin-spotted rattlesnakes that Prival and his small crew of fellow herpetologists have been catching, measuring and marking each July for the past 18 years. The snakes are drawn to this vast scree patch by their primary prey, Yarrow's spiny lizards, which dart before us in flashes of green. Although the lizards are abundant, the snakes have experienced a slow but undeniable decline.

Suddenly, sensing movement, the scientist drops to a squat. Perhaps it was just a trick of the light. But it could have been a twin-spot: "As soon as they see you, they dive," he explains with a sigh, adjusting the leather welder's gloves needed for catching venomous snakes without becoming a statistic. He looks around, to see if anyone's watching.

Western twin-spotteds are hardly the biggest rattlers, barely two feet long and thin as a thumb. But they're pretty, with parallel, rust-colored dots trailing down their backs, and sleek, almond-shaped heads, and that makes them highly prized among collectors. As does the fact that taking them is prohibited by Arizona law. On popular internet reptile-trading sites such as kingsnake.com, a prime twin-spot can easily fetch \$1,500.

And snake poachers know about Prival's long-running research locations. As a result, his crew spends much of its field time chasing off guys who lurk around with snake hooks and canvas bags. "Everyone will say they just want to photograph the snakes," Prival says. "So I'll say to them, 'Hey, this is a protected species. Can you leave your collecting gear in the trunk?' But some people, when they think I'm not looking, will go take the gear back out of their trunk."

Occasionally, his team even inadvertently helps the thieves. "Sometimes a snake will get away from us, and now we've shown them where a snake is," he says. "It makes it pretty stressful."

The twin-spot's range is limited to

a few high mountains in southern Arizona and northern Mexico, and climate change has already taken a toll. Less rain means fewer spiny lizards to eat, while rising temperatures force the snakes to move higher up. Now that they've reached top elevations, there's nowhere else for them to go. Prival's research population probably took another hit from the enormous Horseshoe Fire in 2011. He estimates that perhaps 70 twin-spotteds still dwell on this slope, down from an estimated 86 in 2009. Poaching is only making it worse. "If just seven of those snakes are taken by poachers," he says, "that's 10 percent of the population right there."

Although collecting twin-spotted rattlesnakes is illegal in Arizona — and a federal law called the Lacey Act prohibits buying and selling protected wildlife — there's little chance that thieves will be caught. Even if they are, they likely won't pay more than a few hundred dollars in fines. For commercial dealers, who can earn thousands from a single animal,

that's simply part of business overhead. Meanwhile, the difficult task of proving that a snake was poached falls upon the authorities.

Nor are twin-spotted rattlesnakes the only targets. Arizona boasts 107 species of native reptiles — 49 lizards, six turtles and 52 snakes. Eleven of them, including highly coveted Gila monsters and Arizona ridge-nosed rattlesnakes, are protected by state law, arguably driving up the price and adding to their allure.

Internationally, the black market in wildlife is a multibillion-dollar industry, believed to rank only below drug trafficking in the amount of the money it generates. In turn, the illegal reptile trade may be second only to habitat loss as the greatest threat to species survival. It is a thriving subculture, with the animals sold online, at herp shows and, covertly, in shops. That provides a strong motivation to replenish inventories with poaching junkets to the Southwest.

"Southern Arizona is a hotbed for that kind of activity, especially with the montane snakes," says Joshua Hurst, director of the Arizona Game and Fish Department's Operation Game Thief. But no one knows just how many reptiles are being snatched each year. "It's one of those unknown things," Hurst says. "We don't have a clue."

And bringing poachers to justice is a heartbreaking challenge. "The amount of



Tim Vanderpool is a Tucson-based journalist who writes about politics, environmental issues and the U.S.-Mexico border.

effort it takes to catch somebody doing that is unbelievable," he says. "We change our tactics, and they change their tactics." Ploys have included the use of decoy Gila monsters, chilled down to immobilize them and placed beside roads frequented by nighttime thieves. "Then the poachers became privy to that," he says. "They reach down and touch the (Gila monsters) to see if they're cool or not. If they are cold, the poachers just get away from it and leave."

Thieves often place stolen reptiles in ice chests and stash them in motel rooms or even roadside shrubbery for later retrieval. Sometimes, newly caught animals are quickly handed off to inconspicuous associates, perhaps an innocent-looking family driving down the road.

Still, from July 31, 2013, to Oct. 13, 2016, a 16-member Game and Fish team wrote 31 citations for illegal reptile taking in southern Arizona's poaching hotspots. While that may not sound like much, Hurst notes that each citation can contain a fistful of violations, raising the stakes for thieves. Oftentimes, the cases are simply resolved with fines and never make it to court.

It helps when the federal government gets involved. Unfortunately, that's not often: Cosme Lopez, a spokesman for the U.S. attorney for Arizona, couldn't recall a single reptile case prosecuted by his office. And a Freedom of Information request

to the U.S. Fish and Wildlife Service revealed only a single illegal-take violation for all species of wildlife over the past three years across the Western states, including Texas, New Mexico, Arizona, California, Utah, Nevada and Colorado. But that case involved a violation of the Endangered Species Act, rather than the Lacey Act.

Gene Elms is law enforcement branch chief for Arizona Game and Fish. When asked about the dealer's assertions, he pauses. "If they are collected illegally, that label follows them throughout all the states," he says. "But this shows the difficulty of tracing the trajectory of these reptiles, and proving that the person who is actually in possession of them knew they were stolen." Another complication comes with the patchwork of state laws across the nation, which are often more lax than those in Arizona.

There lies the rub: The nation is a mélange of reptile regulations, and poachers know them intimately. They also understand that once they make it out of one state, like Arizona, they're not likely to see that state's laws enforced anywhere else. To bring states' laws more into sync, the Tucson-based Center for Biological Diversity has started a campaign to clamp down on the rampant turtle trade. That could spark more consistent protections for all reptiles, according to the center's herpetofauna attorney, Collette Adkins. "It's slowly becoming a domino effect," she says. "Many states are beginning to restrict the sale of native reptiles, and those states are now putting pressure on other states that don't have the same protections."

International enforcement is even spottier. The World Wildlife Fund estimates that some 9 million herps (reptiles and amphibians) are exported annually from the United States. But only a small number of species are regulated by a global accord called the Convention on International Trade in Endangered Species of Wild Flora and Fauna. They don't include the twin-spotted rattlesnake.

Even in Arizona, state prosecutors rarely take up poaching cases. And when they do, judges are often blasé. "We try to educate the courts," says Gabriel Paz, Game and Fish's law enforcement program manager for southeastern Arizona. "But all of our cases in recent history were misdemeanors." Misdemeanors don't get much attention on crowded court dockets — a fact professional reptile thieves count on.

But this may be starting to change. In 2012, southern Arizona welcomed the nation's first Animal Welfare Court, designed to adjudicate animal abuse and wildlife cases. While the court has yet to hear a poaching case, game officials hope to use it as a future tool. "We do what we can under the state statutes," says Judge



Maria Felix, who oversees the Pima County court. "But until the state Legislature finds a reason to change them, it's not going to be taken seriously."

However, there have been some victories, such as when a dealer was nabbed with one of Dave Prival's twin-spotted rattlesnakes in 2006. On the dealer's internet ad, the snake's tell-tale research markings — each rattle segment is painted a different color — were still visible, proving conclusively that the reptile had been illegally taken in Arizona. It was, however, a bittersweet triumph: The South Carolina dealer faced a mere \$525 fine. The snake was eventually returned to Arizona, where the Game and Fish Department used it as a public-education tool.

Prival believes that only tougher federal laws, such as one prohibiting the sale of any live wildlife — along with more money for enforcement and education — will significantly reduce the illegal reptile trade. In the meantime, he says, the occasional bust can have a ripple effect. "The collecting community is pretty tight-knit, and when you catch somebody, they hear about that sort of thing. So if you catch enough people that it becomes a hassle, collectors may say, 'Well, Arizona is not a good place to go.' I think that really is the hope." □

▲ Dave Prival measures a twin-spotted rattlesnake as part of a research project that's lasted 18 years. Poaching has reduced the population of the snakes he researches.

TIM VANDERPOOL

◀ Daniel Marchand, curator at the Phoenix Herpetological Society, introduces visitors to Fredrick, a Gila monster that was rescued from an apartment complex in Scottsdale, Arizona. The Phoenix Herpetological Society works with Arizona Game and Fish to confiscate illegally caught animals and give them temporary homes. BROOKE WARREN



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RÍO: A PHOTOGRAPHIC JOURNEY DOWN THE OLD RIO GRANDE

Melissa Savage, editor

144 pages, \$29.95. University of New Mexico Press, 2016

The Río Grande snakes its way through the Southwest, telling the long, rich history of the Puebloan, Spanish, Mexican and Anglo settlers who lived and worked along its banks. In *Río*, geographer and conservationist Melissa Savage has assembled a tribute to the river and its people.

The book follows the course of the 1,900-mile-long waterway, exploring floods, crossings and cultivated fields, ultimately confronting the river's end at the Gulf of Mexico. A variety of essayists help illuminate the black-and-white photos, which document river life from the 1800s through the 1900s.

Río is a celebration of place, of how the people who lived there shaped the river, and were in turn shaped by it. As Savage writes in the preface, describing her own experience living by the river in northern New Mexico: "I have become who I am because of where I have been." ANNA V. SMITH

Two women from San Juan Pueblo, now known as Ohkay Owingeh, clean baskets of wheat by submerging the grain in an acequia, allowing water to carry off straw chaff and dirt in 1905.

EDWARD S. CURTIS, COURTESY OF THE PALACE OF THE GOVERNORS PHOTO ARCHIVES, NEW MEXICO HISTORY MUSEUM

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Come to our open house!

As a nonprofit newsmagazine, *High Country News* has always been dedicated to independent reporting about the West and its communities. A big thanks to all our supporters and donors for helping us continue to dig deep into important stories. We're going to be listening to and relying on our readers more than ever, and we now have a tip form online: hcn.ws/story-tip.

In other news, **Gretchen King** was recently promoted to director of engagement; she'll keep on leading social media and impact strategies and developing media partnerships. Our current editorial intern, **Anna V. Smith**, will stay on for another six months as a fellow. Congratulations, Gretchen and Anna!

It has been unseasonably warm in Paonia so far this fall, but we've started to see some snowfall. This is good: The land is awfully dry, and some of our staff members are itching to break out their skis. Yet even with the mild weather, visitors have been few and far between lately. **Tim Shortell**, a longtime resident of the North Fork Valley, came by the office before the roads up to his nearby cabin close for the winter. And **Mara Abbott**, a recently retired professional cyclist from Boulder, dropped in while visiting Paonia for a few days. A dedicated subscriber, Mara is considering journalism as a second career; we hope she'll apply for our internship program.

As we zero in on the holidays, a quick reminder: On Thursday, Dec. 8, from 5 to 7:30 p.m., we will be hosting an open house here at the *HCN* office in Paonia. If you're on the Western Slope, stop by for some food, drinks and conversation. We look forward to seeing you there!

—Lyndsey Gilpin for the staff



High Country News staff gathered at the office for an election-watching party on Nov. 8. BROOKE WARREN

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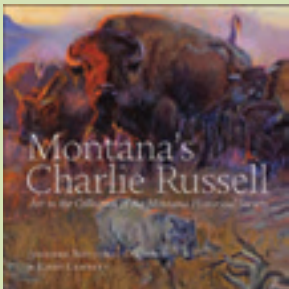
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A Weird and Perfect Wilderness

In southwest Oregon, a desolate landscape offers lessons on the modern wild

Not many people visit the Kalmiopsis Wilderness. Situated at the intersection of the Siskiyou and Klamath ranges, it is an inhospitable, almost unapproachable place. Most of its ridges rise just a few thousand feet, and many of its 180,000 acres remain scarred from a massive fire that burned through its scrubby forest of Douglas fir, Jeffrey pines and manzanita over a decade ago. It's a brutal place, whipsawed by the seasons and still barricaded by deadfall from the fire. Only a handful of trails breach the wilderness border, and even fewer cut to its heart. The shortest backpacking trip becomes a thorny, prickly, dangerous endeavor.

But despite — or maybe because of — its challenges, Gabe and Jill Howe have built their lives around the Kalmiopsis. Their daughter, Azalea, is named for one of the area's flowering plants, and their son, Carter, for one of its creeks. They spend their vacations clearing its brush and swimming in its rivers. They founded the Siskiyou Mountain Club, and with the help of a small trail crew, they have beaten back overgrowth and cut through thousands of fallen logs in order to reopen a few paths into the wilderness.

On a dry September day, I get my first taste of their oddball devotion. We're five or so miles down one of the routes they've cleared, standing on a bare ridge at a fork in the trail. The right-hand trail will take us to the far side of the wilderness. The left cuts across the ridge and down to a defunct dude-mining operation known as Emily Camp. Pointing the way to Emily Camp is a freshly carved sign hung on a stump by one of the Siskiyou Mountain Club volunteers. To my eyes, it's a helpful marker in a landscape almost devoid of them. But Gabe, a round and ruddy-faced man in his 30s, is enraged, kicking the stump and threatening to knock it down. *Specifications*, he tells me: In order for a trail sign to meet Forest Service standards, it needs to have a post four feet tall and a sturdy base made of piled rocks. This graying stump is liable to fall down as it decays, or be buried in snow when winter comes. He says it makes the already-scrappy Siskiyou Mountain Club look like an amateur outfit.

Gabe kicks the stump again to show its frailty. When Jill, a small, dark-haired woman with a capable air, tells him to knock it off, he mimes urinating on it.

His anger spent, he retreats to the side of the trail and pulls out a bag of Cheetos.

This isn't my first time in the Kalmiopsis. I've experienced its brutality before, and every time I think of it, I get an odd, dusty taste of fear in my mouth. But I can't forget about it, either. I've come back to understand why people like the Howes — and people like me — care about the Kalmiopsis, and whether it matters that we do.

MY FIRST TRIP HERE WAS INSPIRED by a college professor, a native-plant enthusiast who pointed me to the work of Lilla Leach — the Oregon botanist who, in 1930, identified the elusive *Kalmiopsis leachiana*, the fragrant and secretive flowering shrub from which the wilderness draws its name. She spent weeks deep in the Kalmiopsis each year, botanizing while her husband, John, managed their burro team. In a speech at a garden club meeting, Leach described coming upon a patch of *Kalmiopsis leachiana*: "Before us, beside the trail, lay a patch of low evergreen bushlets, simply covered with deep rose flowers, vividly pink in the sunshine. Thrilled? We were!" She put that first specimen in a plant press and wrote next to it: "#2915. June 14, 1930. Gold Basin — the only flower on the whole ridge."

The place had a long history of human habitation by the time the Leaches arrived. The Northwest tribes came first, leaving traces hikers have found along the high ridges, followed later by miners and homesteaders. John and Lilla Leach are part of a small tribe that knew the place's nasty side and loved it anyway. In a 1966 Christmas letter, reproduced in the book *The Botanist and Her Muleskinner*, John Leach writes, "We worked Yellowstone, Yosemite, Death Valley, Crater Lake, Glacier and some other parks ... but Curry (County, home to the Kalmiopsis) is and has always been our love. At one time, we were looked upon as knowing that territory better than any other persons. (The locals) called us the mule people."

Jill Howe, ax in hand, hikes through young Douglas-fir on the Babyfoot Lake Rim Trail in the Kalmiopsis Wilderness.

*“It isn’t a place for the faint of heart.
It’s a place you’ll go and scratch your head
and ask why you’re here.”*

—Barbara Ullian, Friends of the Kalmiopsis

For a century, logging and mining had nibbled at the edges of the area. The Leaches’ botanizing helped prove that its desolate-looking hills harbored some remarkable habitat: On maps of the Pacific Coast, it is one of the most significant swaths of protected land between Olympic National Park and the Mexican border, a rare intact area of lowland forest that offers a potential safe haven to plant and animal species whose habitat is threatened by the warming climate. It is also part of one of the most diverse ecoregions in the Lower 48 states, home to one of the most diverse temperate conifer forests in the world, and a continental hotspot for, of all things, snail species. The rivers that flow out of it help provide clean water to towns like Gasquet, California, and Brookings, Oregon, as well as to the salmon that draw fishermen.

Because of these virtues, the Forest Service set aside a portion of the Kalmi-

a half-million acres burned, much of it within the bounds of the wilderness and surrounding roadless areas. Following the burn, the Forest Service, nudged by President George W. Bush, planned salvage logging and associated road building in areas that advocates had hoped would be added to the wilderness. Years of fierce controversy and environmental push-back ensued. Eventually, the promise of revenue from logging sales evaporated, curtailing much of the planned logging and road building. The Kalmiopsis largely receded from the national dispute over land use.

Visitor numbers, which had never been high, dropped even lower, and the trails, built by previous generations of miners, loggers and Forest Service employees, continued their slow slide into impassability. The wilderness, left alone, slowly recovered from the Biscuit burn.

When I graduated college with a degree in plant biology, my partner, Ethan Linck, and I followed in Leach’s footsteps, heading south from Portland, Oregon, to the Kalmiopsis. The days that followed were remarkable for their isolation: We saw no other cars at the trailhead, and only one other person in five days of backpacking. On the second afternoon, we followed a trail to the banks of the Illinois River. Here, near an abandoned homestead, the water pooled in a white stone bowl rimmed with submerged green plants, providing a home to water snakes and salamanders. For two glorious hours, we swam in the cold water, diving off the rocks again and again, watching these creatures wriggle in the verdant growth, and waiting for the heat to dissipate. But this moment of pure enjoyment was followed by several days of bushwhacking, mostly uphill, through peeling manzanita bushes, fallen trees and poison ivy. After three days, we turned tail and made for home. But I carried the pleasurable memory of that pool with me, and, far from the wilderness, more enjoyable recollections began to outshine those of the bushwhacking and the heat.

After that trip, we gradually entered the small crowd of Kalmiopsis devotees. I learned that emails about trail conditions, treasured spots and damage done to the wilderness circulated among a dozen or so “Friends of the Kalmiopsis,” the name of both an advocacy group and an informal collection of interested parties. These include Gabe Howe; Steve Marsden, a former Forest Service employee and activist who now spends weeks travelling off-trail along the wilderness’ bare ridges; and Barbara Ullian, the daughter of a fisherman who chanced upon the clear waters that flow out of the

Kalmiopsis leachiana,
namesake of
the Kalmiopsis
Wilderness, in a
burned area.

MICHAEL KAUFFMANN/
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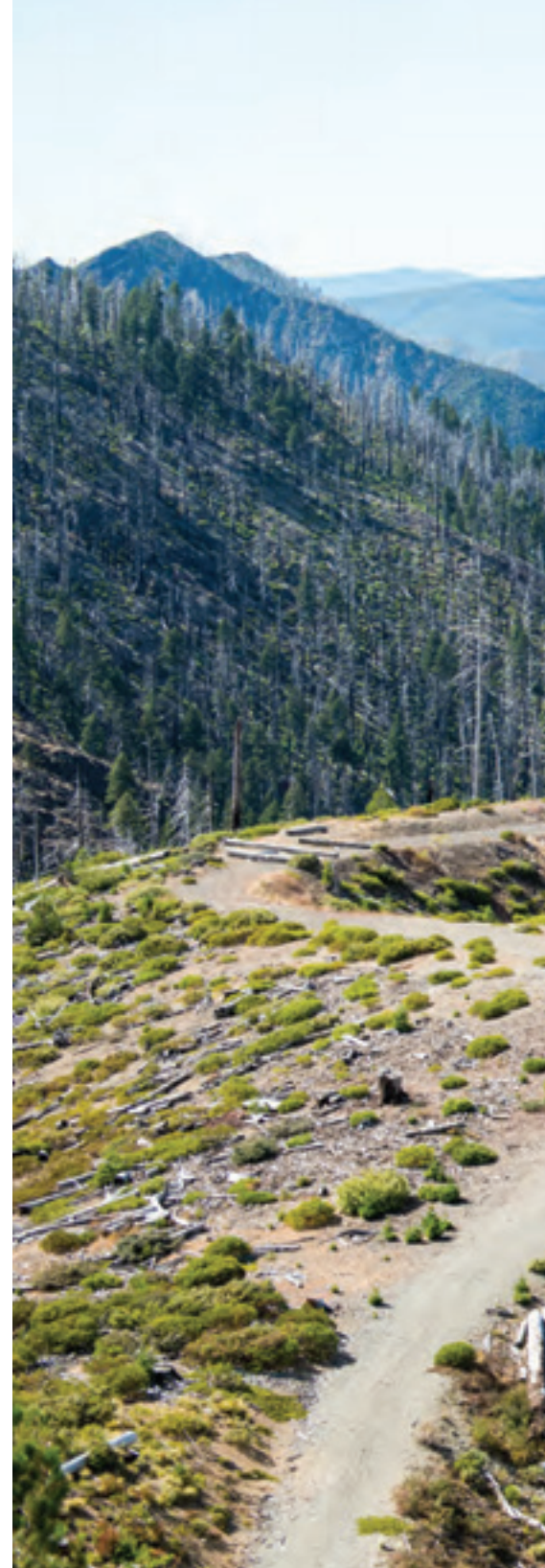
opsis as a “wild area” in the 1940s. In 1978, Congress expanded that protected area, designating a total of 179,817 acres as wilderness. This fell far short of some advocates’ hopes; at the time, as many as a half-million acres were without roads, meaning they could potentially be designated as wilderness. Many of those acres remain roadless, and in the decades since, both advocacy groups and the Department of Agriculture have proposed designating some or all of them as wilderness.

But the Kalmiopsis Wilderness has remained at its originally designated size, in part because of the Biscuit Fire. When it raced through here in July of 2002, it was the largest recorded wildland fire in the continental United States; nearly

Kalmiopsis and moved his family from California to southern Oregon.

The relationship between the Kalmiopsis and the people that surround the wilderness is far from straightforward. “It isn’t a place for the faint of heart,” Ullian says. “It’s a place you’ll go and scratch your head and ask why you’re here.”

It’s a place that tends to draw people on the edge: people who go seeking rare flowers, carrying just enough in their packs to survive a few nights of sleeping under bushes; people who commandeer a forgotten corner to grow pot; people who head for the harsh, serpentine hillsides to escape the troubles of the human world. Gabe Howe tells a story of a man,





clad only in a Hawaiian shirt and shorts, who took a left where he should have gone right and ended up spending eight nights wandering the wilderness. Months after he was rescued, one of Howe's crew leaders, deep in the wilderness, happened across the fruitless "HELP" he had spelled out in stones.

My own frustrating experience gradually softened in my memory. Ethan and I talked often of going back, and argued about whether any other wildernesses came close to its oddly alluring rigor. We daydreamed about moving to a town nearby and spending more time with the Kalmiopsis. Several times we skirted its edges on trips to more hospitable places. Finally, Gabe Howe invited us to join him

on a winding trip, from one edge of the wilderness to the other on the 26-mile Trans-Kalmiopsis Trail, newly cleared by the Siskiyou Mountain Club.

It was a proposal we couldn't resist. But once we hit the trail, the romance was over.

OUR GROUP consists of Ethan and me, Gabe and Jill Howe, and Tom Piel, a volunteer and donor for the Siskiyou Mountain Club. Piel, a local kayaker, is scoping out a route to the Chetco River. After Gabe's battle with the trail marker, we take a right turn and head up a breezy ridgeline of serpentine soil. This red-tinged, nutrient-deficient layer creates the wilderness' characteristic

bare slopes, but it also nurtures a group of rare plants uniquely adapted to it. Earlier, we were shielded from the full sweep of the wilderness by the ridge. Now we can see, in every direction, the dreary, sunburned planes of the Kalmiopsis' low mountains. The ridge is dotted with Jeffrey pines, recognizably coniferous but exotically warped and twisted. A characteristic species of the Kalmiopsis, they were untouched by the fire. Though they provide something to look at, they do little to block the sun.

Still, I miss them as we descend the ridge's north face, through what the Howes call "the moonscape." We are back amid burnt widowmakers, the occasional low-growing laurel the only groundcover.

The "moonscape" of the Kalmiopsis, created by the 2002 Biscuit Fire, which burned most of the wilderness area's 180,000 acres of Douglas-fir, Jeffrey pine and manzanita. Fire suppression efforts and salvage logging, including the now-closed logging road seen here, took an additional toll.



*When faced with
miles of bushwhacking,
Gabe and Jill Howe
did not turn back,
but crawled ahead,
their feet only rarely
touching the ground.*

I see a single wildflower, a small purple-blooming creeper a few centimeters wide. I dawdle in this barrenness, watching the others crawl over logs and pick their way toward a wide bowl carved by a long-gone glacier where, Gabe says, a homestead once stood. There, we regroup by a spring nearly filled with *Darlingtonia*

californicum, a rare plant native to southwest Oregon and the California mountains, which resembles a curved jade scepter.

Comforted by the water and greenery, we smile, joke, wade in the water, fill our bottles and head back up towards another ridge. I'm the caboose again. A few yards down the trail, I see Jill's backpack leaning against a log. *Bathroom stop*, I think, and move on. I catch Gabe and Ethan and fall into conversation. But Jill, the fastest hiker among us, doesn't reappear. I tell Gabe that I saw her backpack some distance back, but he seems unconcerned. She knows this place better than most. We slow down anyway. Then we pause, call her name, walk. Wait, call her name, then move on.

Finally, we reach a high point. Below us is the bowl that holds the *Darlingtonia* spring, and we can see the trail as it

twists down the slope. Jill is nowhere in sight. Dark possibilities creep into my mind: Did she head downhill from the stream, deep into the trackless valley? Did she trip over deadfall and knock herself out? Did she stop, thinking I'd appear soon, and start looking for me just as I started looking for her?

Gabe tells us to stay put, and runs back down the trail. We watch him walking back and forth in the bowl, calling her name. He turns the corner out of sight, and his calls fade. When he doesn't return, Ethan and I discuss contingency plans. Unsure if there's an emergency underway, we're paralyzed, our dilemma made worse by the menace of this empty place. The sun bakes the bushes around us; we retreat as far into the shade as we can and wait.

And then I see Jill, walking briskly in our direction with Gabe in tow, and my fears ebb as they make their way up the hill. When Jill reaches our packs, she says she went the wrong way, tricked by the moonscape. She retraced her steps nearly back to the crest of the last ridge before she realized her mistake. A half-hour and a mile's diversion, but unnerving for all nonetheless.

As we begin to walk again, I stay close on Ethan's heels. Like Gabe and Jill, we have a love of this place entwined in the fibers of our shared life, but neither of us can say why — especially right now. "I've spent five years of my life thinking about this place," Ethan says as we walk through sun-beaten brush. "But I can't think of a single person I'd recommend

it to." He thinks for a moment. "Except if they were really into plants."

JILL AND GABE HOWE BOTH GREW UP on the east side of Portland, Jill out in the triple-digit streets at the edge of the city and Gabe in the town of Boring, just outside Portland's city limits. They were both drawn south to Ashland, where they met as students at Southern Oregon University. Initially, the region didn't take; after their first year, they dropped out and returned to Portland for what they both describe as "having a good time." But they ultimately sought a way back to the woods. Gabe worked as a cook for an Appalachian Mountain Club family camp in New Hampshire, while Jill stayed in Portland. They returned to southern Oregon to visit and, one summer, took a job caring for an isolated ranch on the Rogue River. One evening, Gabe turned over a map of the region and saw that a single diamond-shaped wilderness filled nearly the entire other side. He was drawn to the Kalmiopsis, captivated by the notion that it was an unconquered frontier. "Some people still have that explorer in them," Jill says.

In 2009, after their first few forays were thwarted by bad trails, Jill and Gabe decided to try to get as far as Carter Creek, where we eat lunch the first day. They started at Babyfoot Lake, one of the few obvious entry points. They skirted the lake on a relatively well-maintained trail. But within a couple of miles, they encountered a forbidding wall of manzanita and other shrubs. What happened



The Howe family at Babyfoot Lake, near the start of the Trans-Kalmiopsis Trail. From left, Gabe comes up for air; Jill swims below the shimmering reflection of burned trees; Jill spots as 3-year-old Azalea, named for one of the area's flowering plants, readies for a plunge.



next helps explain why Gabe and Jill are so well-suited to the Kalmiopsis (and probably each other): When faced with miles of bushwhacking, they did not turn back, but crawled ahead, their feet only rarely touching the ground. When they headed back the next morning, they began clearing the trail, work that would come to dominate their lives.

"Everything grew from this trail," Jill says.

Gabe and Jill founded the Siskiyou Mountain Club the following year with a half-dozen volunteers, mostly friends and family. Neither had ever built trails before. They thought it might take them two seasons to clear a path from Babyfoot Lake to Vulcan Lake, 10 miles as the crow flies on the other side of the wilderness. The first summer, they got as far as the confluence of Slide Creek and the Chetco River, where we camp on our first day. It was only in 2014, five years after they started, that they finally broke through at a place called Box Creek Canyon, which we reach by sunset on the second day.

Those early trips gave them momentum. "At first, there was an imperative to clear," Gabe says. "We made mistakes. But out here, there's no one to see them." He points them out to me, whacking roughly trimmed manzanita stumps and stomping on poorly graded stretches of trail.

When Gabe first filed the paperwork required to do trail work in the wilderness, Brian Long, who oversees recreation in the Forest Service districts encompassing

the Kalmiopsis, was taken aback. "It's rugged and remote and hot, and there are rattlesnakes and all manner of things out there," he says. "I was worried about them being out in the backcountry if an emergency situation arose." But he says the Siskiyou Mountain Club has become a reliable and much-needed partner. Long believes the number of people visiting the wilderness has grown since Gabe and Jill began their work, although there's no official count. "I've definitely seen an increase in people coming into the office or giving me a call asking me about going into the wilderness," he says. Long used to discourage people from visiting the Kalmiopsis when they called his office. These days, he points them to the trails Gabe has cleared.

For Gabe, the Siskiyou Mountain Club's work marks a return to the Kalmiopsis' history as a logging region. When his crew began operating, few local trail crews knew how to run a crosscut saw or do the other handwork required for wilderness trail maintenance. The Forest Service lacked the staff: The agency's budget for trail work nationwide has atrophied over the years, as wildfire spending has increased and other issues, like permitting, have drawn the agency's limited funds. With little knowledge of his own and few teachers to turn to, Gabe took trail-skills classes, and sought out old-timers and crewmembers from other areas to learn what he needed.

When Gabe started the club, he felt a class divide between himself and many local environmental groups: "I'm white trash," he says. "East Portland white

trash." He has focused on the physical work of trail maintenance rather than the politics of wilderness expansion or roadless-area protection, and his trail crew is populated with logging types as well as young environmentalists. His right-hand man is a logger named Luke Brandy, whose motto is "red meat and board-feet."

These days, Gabe fields a dozen or so trail crewmembers, as well as a few dozen volunteers, in a professional trail-clearing and maintenance operation. They're funded in part through donations and grants and partly through work with the Forest Service throughout southwestern Oregon. Jill, who has had her hand in every part of the organization, has stepped back to care for their kids, Azalea and Carter, 3 and 5, and hold down the family's steady job. Gabe, meanwhile, after five years spent working to clear the Trans-Kalmiopsis trail, now dreams of creating an enormous loop that connects all the spots where *Kalmiopsis leachiana* can be seen.

They are proud of the crew's progress, of course, but still, that sign — that sign! — sticks in Gabe's craw. We're miles away, and he's still cursing the volunteer who installed it. "How far have we fucking come?" he grumbles, as we descend a slippery hillside.

IT'S LUNCHTIME ON THE SECOND DAY

when we reach Taggarts Bar, hot, sore and scratched from the bushes that still encroach on some stretches of trail. There's a wide flat bench that's home to a pile of old dishes, an old bulldozer head



and a rusting metal barrel, topped with a sun-cracked leather boot. A little trail goes down to a rocky back and a narrow beach, where the Chetco widens out into a pool a dozen feet deep and perfectly clear. Across from us, the opposite bank drops into the water, but the cliff has a

narrow ledge and a nub to climb up and jump off.

(The rivers of the Kalmiopsis really are its oases. The creeks are welcome, too — scrubby breaks from the burned-out hillsides — but the rivers are perfect. Bordered by smooth river rocks, gravel beaches and unburned forest, their cool shallows and colder depths distract me at my desk months later.)

We ditch our packs gratefully. We swim, bask on the rocks, and swim again. We nap and read and eat. It turns out that Jill

and Gabe have another bag of Cheetos, and they offer some to Ethan and me. Tom reads and dozes in the shade.

The fact that so few people come here, some say, makes it an ideal wilderness. In the early years of the Siskiyou Mountain

Club, Gabe says, he “got pushback from people who said, ‘No humans in the wilderness.’” The Kalmiopsis’ intrinsic ecological value was enough to satisfy them. On the other hand, there’s a cost to letting this corner of the world lapse into inaccessible hillsides of manzanita and burned stumps. Since a legal wilderness designation can be undone by a simple act of Congress, even formally protected wilderness needs a constituency. And wilderness offers something to human visitors: not only recreation but also an opportunity for scientific research and discovery, as the Leaches found, as well as access to places where we cannot help but be reminded of our smallness. Howard Zahniser, architect of the Wilderness Act and former head of The Wilderness Society, wrote that wilderness was intended to serve “a need to maintain an awareness of our human relationships to all life, the need to guard ourselves against a false sense of our own self sufficiency.” Places humans never visit do not meet that need.

The Kalmiopsis will probably never provide the kind of blissful recreational experiences portrayed in outdoor-equipment catalogs. Zach Collier, a river guide who occasionally runs trips on the Illinois and the Chetco, told me that he grills his prospective clients. “When people call me to book it, I actively try to talk them out of it,” he says. “It’s physically demanding and not much fun.”

But Peter Landres, an ecologist with the U.S. Forest Service and an expert in wilderness studies, says the very difficulty of visiting the Kalmiopsis helps it fulfill

the more abstract needs that Zahniser described. “It’s exactly what we need in the age of the Anthropocene,” Landres says. “We can feel we’re a small part of this larger universe. That reinforces the feelings of humility and restraint,” feelings, he says, we need now more than ever.

The Kalmiopsis is also a superlative example of wilderness’ role as an ecological safe harbor. “Wilderness is the best place and maybe the only place that evolution can go on its merry way,” Landres says. As the climate changes, disrupting ecosystems along with it, those pockets of intact landscape where non-human life can adapt are increasingly precious. The Kalmiopsis, he says, is a perfect example of such a place. It’s rare to find a swath of low-lying hills as intact and protected as these among the alpine and desert areas that make up most legally designated wilderness areas. And the region’s plant diversity is off the charts.

The boundaries of the Kalmiopsis may shift. A group of organizations, including the Friends of the Kalmiopsis, is advocating for a mining exploration and development withdrawal on more than 100,000 acres around the wilderness, which would temporarily halt two proposed nickel mines and prevent further mining development around its fringes. Oregon Democratic Sen. Ron Wyden has introduced several bills that would extend more permanent protections and halt mining on a 17-mile stretch of the Chetco River. And there are whispers about expanding the wilderness, of realizing the dream early defenders had of a

There’s a cost to letting this corner of the world lapse into inaccessible hillsides of manzanita and burned stumps. Since a legal wilderness designation can be undone by a simple act of Congress, even formally protected wilderness needs a constituency.



Trail work on Babyfoot Lake Trail, where progress is measured one felled log at a time. From left, Gabe uses a wedge in the early-morning hours; Jill and Gabe use leverage to move a heavy chunk of tree Gabe had cut earlier that day. Below, the Howe family has breakfast at their campsite near Babyfoot Lake. From left, 5-year-old Carter, named for a creek within the wilderness, Gabe, Jill and Azalea.



half-million acres of relatively untouched landscape away from the sprawl of the Willamette Valley and the San Francisco Bay Area.

Meanwhile, Gabe crankily straddles two visions of wilderness, objecting to both human-free wilderness and industrial tourism. The Kalmiopsis is not an untouched ecological preserve: The scars of the Biscuit Fire prevent purist thinking, as do caches of old mining equipment and the old road cuts built for mining and logging that sometimes form the basis for today's hiking trails.

But even though he is proud of his trail work, Gabe says he'd be fine if the wilderness had no signs, and people had to rely on experience and old-fashioned route-finding to navigate its trails. He favors a bit of a Goldilocks approach: Just enough trail to get in, but not enough to get around easily.

"It's kind of a birthright as an American to be able to see frontier," he says. In the Kalmiopsis, he has found a place that defies domestication and clings to its frontier essence; this, he says, is the wilderness quality he values the most.

"There's a boundary around it, a wilderness boundary," he says. "That's political but that doesn't make it wilderness. It's wilderness because it's ugly, rugged and remote."

AS THE DAY DRAGS ON and the midday heat leaves the air, we load up and begin the 1,500-foot climb out of the river canyon. We can see hillsides with live trees still growing on them. We can also see

rocky outcroppings and landslides high on some of the slopes, rather than just flat planes. The trails are loose and covered in charred bark, fire-touched branches and other blackened tree bits. By the river, I fell in love with this place anew. Now, I'm backpedaling. It's so plain, so unappealing, so scarred. I'm tired and discouraged. I wonder if I'm just a fool, drawn to this place by Gabe's tall tales and passion. Is there any point in caring about a landscape like this? I ask Tom what he thinks of it. "Not enough trees," he says. He wishes he'd gotten here before the fire, when the trees were still standing.

I mention my doubts to Ethan as well. The son of two conservationists, he chides me, pointing to the Kalmiopsis' vastness and ecological uniqueness.

I mull his response as we trudge up towards the ridge above Taggarts Bar. A few hundred yards from the top, Gabe passes me. I trail along behind him. Then I walk through an aromatic cloud of sweet peppermint. *Ceanothus*, Gabe says. These bushes grow throughout the wilderness, germinating after the fire, many thousands of bushes that shade my meandering course across the landscape. For me, it's a breath of fresh air, a rebuke to my dark musings.

The next day, we pack up camp for the last time and begin the final climb, up to the complex of ridges that will take us to Vulcan Lake on the wilderness' western side. For days, we've been weaving up and down burnt ridgelines. Our camps have been tucked by springs, out of the wind and as far away from widow-makers

as possible. It's been a game of evading the lingering effects of the burn. But as we climb, we get a glimpse of what the Kalmiopsis might have been like before the Biscuit Fire. We pass through small gullies that avoided the worst of the burn. Tiny sapling conifers share the undergrowth with happy-looking shrubs. The plants are all green, not red and oxidized from the sun. Leaves and twigs litter the trail, rather than charcoal and fallen logs. From the woods come the sound of bird trills and chatter, whose absence I'd registered but not understood in the past days. I feel relief, at ease for the first time since we entered the wilderness.

And then we break treeline, walking out on to one of the Kalmiopsis' serpentine spines where almost nothing grows. Here, the land falls away in wide, flat planes, and I can see for miles into the heart of the wilderness and beyond to its edges. It's very like the view I saw on the first day but only now, refreshed from the greenery, do I appreciate it. Here, before me, are the plain, ugly pyramids of the wilderness, and trees or no trees, I decide: I do love this place. I'm reminded of the value of loving wild things that can't love you back — the elk that passed our tent on my first trip, the bears whose spoor Ethan and I followed then, and the mountain lions whose traces we never saw, the salamanders and the warblers and snails, and all those who share these scarred hills and valleys. There, in the unrelenting sun, with the bare soil at my feet, I stand humbled — just one of the many beasts to have passed this way. ■



ETHAN LINCK

Kate Schimel is the deputy editor-digital at *High Country News*.
 @kateschimel

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CONFERENCES AND EVENTS

Mountain West Seed Summit – March 2-4, Santa Fe, N.M. www.rockymountainseeds.org.

Notice of NRCS Scoping Period and Public Meeting – USDA's Natural Resources Conservation Service (NRCS) has provided funding to the Colorado River Water Conservation District for a project to modernize agricultural water management within several Lower Gunnison River sub-basins. The purpose of the project is to improve water use efficiency by coordinating, expanding and integrating off-farm irrigation conveyance systems and on-farm water application efficiency improvements. NRCS will review the potential impacts of the project within a Watershed Plan-Environmental Assessment (Plan-EA).

NRCS is hosting a public meeting for the scoping phase of the Plan-EA for the Lower Gunnison Project on: Thursday, Dec. 1, 2016, from 4:30 p.m. until 7 p.m. at the Chamber of Commerce located at 1519 E. Main Street A in Montrose, Colo. A presentation will be given at 5:30p.m. NRCS invites all interested parties to attend to learn about the project, as well as provide comments and suggestions in regard to the scope and content of Plan-EA. Written comments will be accepted in person at the Scoping Meeting or via U.S. Mail to NRCS Colorado State Office Denver Federal Center Building 56, Room 2604, Attention: Randy Randall P.O. Box 25486 DFC, Denver, Colorado 80225 or to randy.randall@co.usda.gov. The comment deadline is Dec. 19, 2016. USDA is an equal opportunity provider, employer, and lender.

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Development Director, Whatcom Land Trust – Description and application at www.whatcomlandtrust.org.

Ranch business manager – Pine Cliff Ranch, a responsibly run grass-fed beef ranch in Sedalia, Colo., is seeking an entrepreneurial Ranch Business Manager to manage daily operations, grow the grass-fed beef business, as well as launch additional businesses on the ranch. The Ranch Business Manager will split duties between growing the Pine Cliff

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Private Lands Management Fellow

The University of Wyoming Haub School of Environment and Natural Resources is accepting applications for a MacMillan Private Lands Management Fellow to conduct research/information synthesis, outreach and teaching on private-lands management in the West. Application review begins Nov. 21. Job ID 8344, www.uwyo.edu/hr/prospective.

Executive Director – GOCO

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ENERGY PROJECT COORDINATOR – Western Watersheds Project is filling a part-time contract position to advocate for protection of lands, waters and wildlife in

the context of energy development on public lands. Apply by Nov. 30. www.westernwatersheds.org/jobs.

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Executive Director – Crested Butte Land Trust seeks an executive director to lead an accredited and established land trust in Crested Butte, Colo. Résumé and letter of interest must be submitted to cblandtrust@gmail.com.

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Photo by Michael Remke

Western Watersheds Project, California director – WWP seeks to expand and continue the campaign to protect and restore public lands in California and parts of Nevada, particularly in the context of reining in livestock grazing and related environmental problems. See website for job and application details. www.westernwatersheds.org/jobs.

Grassroots Coordinator – Colorado Trout Unlimited, a leading river conservation organization, seeks self-starter to support conservation and education efforts with our 24 local chapters. Email letter and résumé by Dec. 7 to dnickum@tu.org. Full posting at coloradotu.org.

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Trucks and heavy equipment sit idle in Hobbs, in New Mexico's Permian Basin, where oil and gas production has declined due to low energy prices.

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When it comes to energy, Trump's promises are empty



OPINION BY
JONATHAN
THOMPSON

On the day after Election Day, the biggest newspaper in the oil and gas patch in northwestern New Mexico ran a story headlined: "Trump win has energy industry leaders hopeful."

Most of the local industry folks quoted by the *Farmington Daily Times* said that President-elect Donald Trump would relax regulations on drilling on public land. Meanwhile, over on Facebook, energy workers were ecstatic, convinced that a President Trump would put them back to work almost immediately.

They should know better.

The San Juan Basin's energy-reliant communities have been hit especially hard in recent years. The first blow came in 2008, after horizontal drilling and multi-stage hydraulic fracturing opened up huge shale formations in the East.

Shortly thereafter, oil prices skyrocketed to as high as \$150 per barrel, prompting drill rigs to pop up again all over North Dakota's Bakken formation and, a little later, in the San Juan Basin's Gallup shale. The fossil fuel mojo was back, until it wasn't. As global supply increased faster than demand, prices started dropping, and OPEC declined to cut production. In 2014 prices crashed, and the oil boom busted.

It's a simple equation. When demand outpaces supply, prices increase. When prices get high enough to make drilling profitable, companies invest in development and put people to work. When all that drilling increases supply, prices crash, as do the drill rigs. Today, oil prices are stubbornly stuck below \$50 per barrel.

Just one rig is working in the San Juan Basin, and the vast equipment yards in Farmington and Aztec, New Mexico, are crammed full of idle rigs. Thousands of workers have lost their jobs.

President-elect Trump promised to "lift restrictions on ... energy reserves" and to dismantle environmental regulations. But will the drill rigs go back up as a result? No. Will laid-off energy workers get their jobs back? No. Regulations have nothing to do with this bust. Commodity booms and busts are driven by supply and demand, not regulations.

The only way to kick-start the faltering industry would be to increase oil and natural gas prices. And the only way to do that is to curtail supply or increase demand — no easy task with a global commodity.

Natural gas supply and demand, and therefore prices, would be somewhat easier to manipulate, since the commodity is regional, not global, meaning we export and import very little of the stuff. A president could boost demand by subsidizing a nationwide fleet of natural gas-burning long-haul trucks, which might make gas drillers happy, but not the oil drillers (since it would displace gasoline-burning trucks). He could ram through liquefied natural gas export-terminal permits, opening up foreign markets to domestic natural gas. If foreign demand was high enough, that might do the trick, but Trump's promise to kill the Trans-Pacific Partnership would damage, not help, efforts to sell natural gas overseas.

A president could regulate power plant emissions in such a way that encourages utilities to replace coal with natural gas in the electricity generation mix. Oh, wait, that one's already in the works. It's called the Clean Power Plan, which Trump has pledged to repeal.

The San Juan Basin is also coal country, so at least the workers at the mines and two massive power plants will get to go back to work, right? Wrong. Coal-burning units at both plants have

been shut down. The curtailments came from settlements with the Environmental Protection Agency over Clean Air Act violations, and because California didn't want to buy coal power anymore. Killing the Clean Power Plan — even eliminating the EPA — won't restore these plants to their former smog-spewing, coal-burning glory.

While the environment and the people who live near the rigs are getting a break during this bust, the economic pain in the oil patch these days is real, and deep. Individuals who just a few years ago were raking in \$80,000 or more per year are struggling to hang on. City, county and state governments have watched revenues plummet. It's the sort of malaise that breeds resentment and that spurs people to vote for the likes of Trump.

It is maddening and tragic to see these people put so much hope in one person, particularly when that person is clearly so unequipped to deliver on his promises, and so likely, in the long run, to make their lives more miserable by removing what few social safety nets exist.

What will they do after Trump has finished rolling back all the regulations, dismantling the rules that keep us safe and our environment healthy, and they still don't have a job? Who will they blame then? □

Jonathan Thompson is a contributing editor at High Country News. He is currently writing a book about the 2015 Gold King Mine disaster in Colorado.

Writers on the Range is a syndicated service of High Country News, providing three opinion columns each week to more than 200 media outlets around the West. For more information, contact Betsy Marston, betsym@hcn.org, 970-527-4898.

WEB EXTRA

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The Anthropological Aesthetic

On the captivating word-magic of a dry, dusty academic text

Over the past couple of months, I have galloped across Comancheria with the Texas Rangers, discovered lost Epicurean manuscripts in the company of the Renaissance humanist Poggio Bracciolini, endured a raging snowstorm conjured by Tolstoy, and contemplated the cloud-reflecting Yangtze with ancient Chinese poets.

I am an omnivorous reader: sonnets, satires, you name it. I'll read and read, regardless of subject, so long as the words sing to the heart and the lines snap together in the mind like puzzle pieces — so long as it's "good" writing, painstakingly crafted to create some intellectual-emotional movement within me.

Strange, then, given my appreciation of literary artistry, that the best book I've encountered in some time is a monotonous, encyclopedia-style academic text originally published in 1933 as part of the decidedly obscure Bulletin Of Milwaukee Public Museum series. *Miwok Material Culture: Indian Life of the Yosemite Region*, written by a pair of University of California anthropologists and based on interviews with "Native informants," should be a total snooze, right? Outside of a few ivory tower-dwellers, primitive-skills enthusiasts, and families descended from Miwok stock, who cares that a decoction of skullcap was utilized as a wash for sore eyes? Or that acorn mush was "regarded as insipid" without an accompaniment of seed meal? Or that the Plains, Southern, Central and Northern dialectic groups each had their own unique terms for the twined burden basket?

It turns out that I care, intensely, and if you're a bibliophile, that's big news. There's a certain aesthetic at work in Miwok — what I've taken to calling the Anthropological Aesthetic. This is über-nonfiction, nonfiction that goes so far into reality it becomes a unique subspecies of art, a poem-myth about skills, knowledge, possibilities. Not only is it beautiful, it's useful.

I don't want to oversimplify things by saying that the American Empire is crashing, taking much of nature down with it, but I can't deny that, looking around, absorbing the news and the sights, it often feels as though I'm falling. What to reach for? The Russian masters? *Vanity Fair*? How about a book that gazes forwards and backwards at the same time? To borrow a phrase from the

late Arizonan writer Charles Bowden: "memories of the future."

I FOUND MIWOK AT A YARD SALE three years ago and bought it for a dime, mostly because the cover — a black-and-white photograph taken in 1880 of two painted, deadpan, headdress-wearing fellows — was intriguing and a little spooky. Over the past handful of summers, I've explored what once was the core of the Sierra Miwok's territory, a huge swath of "Gold Country" running from around Mariposa in the south to around Placerville in the north, but I never intended to study the landscape or its people. The book was one more volume on a crowded shelf, that's all.

Last winter, needing something to browse at the breakfast table — and why not something with pictures of obsidian blades, deer-bone awls, soaproot brushes, willow cradles, and dance skirts made of magpie feathers? — I gave Miwok a try. To my surprise, I was swiftly transported to a strange and vivid world, one that sprang from the empty spaces between the dry-dusty facts.

Women wearing hide skirts chatted as they milled nuts in a bedrock mortar, golden sunlight on their bare shoulders. An entire hungry village circled a meadow for a grasshopper drive, beating the insects towards pits and smudge fires. A hundred pairs of hands worked sinew and milkweed fiber and grapevine withes and steatite and soil, crafting from the raw earth a richly nuanced way of life.

Manzanita cider.

Walnut dice games.

Shamans shaking butterfly-cocoon rattles.

Come evening, the book was finished and I was exhausted, most every page dog-eared and exuberantly underlined.

WANTING TO BETTER UNDERSTAND THE WORD-MAGIC of the Anthropological Aesthetic, I picked *Miwok* up recently and read it once more, cover to cover. As with the fantasy and sci-fi stories that captivated me as a kid, for the better part of 24 hours I inhabited an alternate reality. But here's the wondrous thing: It's a real reality, not a make-believe realm. Visiting the quarry at "Lotowayaka,"



observing the tattooing of an adolescent girl, these allow for the most expansive, important and enlivening thought a person can think: There are other ways to live. Our way right now, with its glowing screens and nature-deficit disorder, its drone strikes and La-Z-Boys, its Trumps and Clintons, is not the only way. That

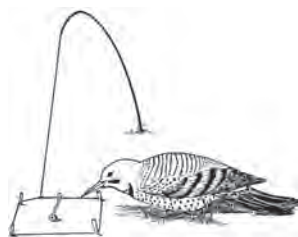
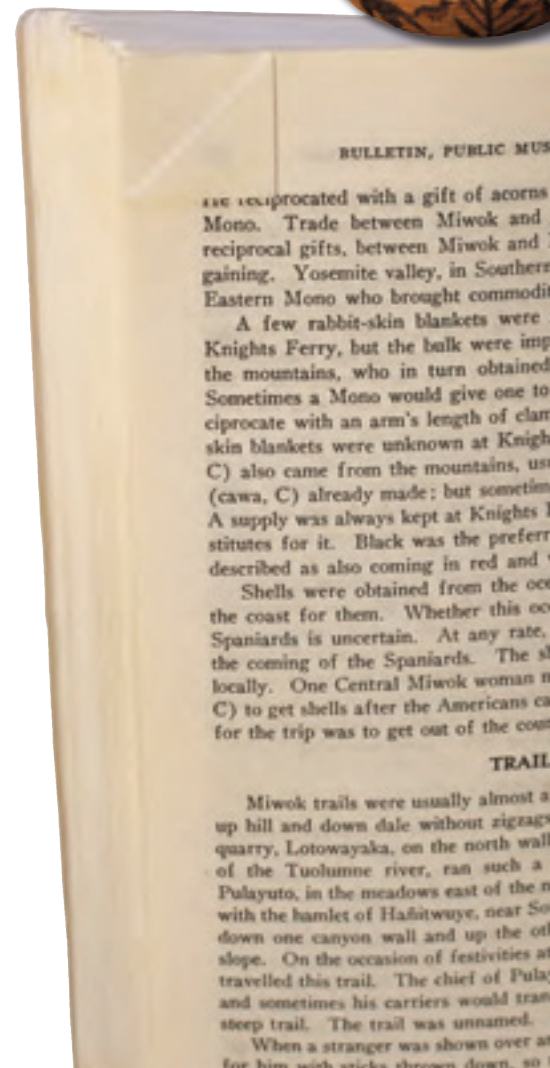


Figure 24 — Baited snare

may seem obvious, but it's depressingly easy — and dangerous — to forget.

Other ways? Sweet blessed breath of fresh air and perspective! *Miwok* provides what Malcolm Margolin, publisher of the magazine *News From Native California*, has described as “glimpses of almost forgotten aspects of our own selves.”

Still, the question remains: How does a basic text — not a masterfully told narrative or entertaining yarn — cast such a compelling spell? The answer lies, I think, in another quote, this from the Montana writer William Kittredge: “Listings are attempts to make existence whole and holy in the naming.”

The no-frills *Miwok* — essentially a 150-page ladder of paragraphs with rungs labeled “Salt,” “Ear and Nose Piercing,” and “Dogs,” to mention but a few — is surely meant to be consulted, browsed, not read straight through. When we do read it page by page, though, its thousands of super-specific details form a pattern of daily life, cycling seasons and humans in place. This survey of material culture isn't limited to tools and ornaments, but encompasses everything from the proper technique for harvesting *Pinus sabiniana*'s cones (twist them off when they're green), to how people should treat their hair during a period of mourning (cut it and bury the locks alongside the deceased). There's a hypnotic, incantatory quality to the

relentless iterations: X was stone-boiled or roasted in ashes, whereas Y was exclusively boiled, whereas Z was parched, pounded and eaten dry.

On the other hand, what this survey of material culture omits (along with characters, plot and similar devices) is any commentary on the meaning of the artifacts and techniques documented. I've come to believe that this absence of interpretation — this vacuum around the bare, skeletal facts — is actually integral to the functioning of the Anthropological Aesthetic.

George Saunders, a much-lauded contemporary fiction writer, says he cuts everything he can from a story so that the reader is forced to fill in the gaps and engage. In *Miwok*, the novelist's imperative “show, don't tell” is pushed to an extreme. For example, the section “Taking of Fishes” offers a tantalizing reference to rainbow trout “caught by hand in the holes along the banks of creeks and rivers.” That's it. No glimpse of interior life, of a real person standing motionless in cold water, performing what most of us today consider an impossible task.

Critics might accuse a book like this of draining a culture's vitality by presenting its flutes instead of its tunes, its bead necklaces minus the ceremonies they adorned. But this spare treatment is precisely what can spark a whole and holy existence in the imagination. How

does it feel to stare for hours into a swirling eddy, waiting for a shadowy piscine flicker? And what is it like to snap awake, the trance of focus broken, a rainbow trout glittering in your fist? To find out, *Miwok* insists, we must wade into the current ourselves.

AS MENTIONED EARLIER, THE HIGHEST PLEASURE of reading is, for me, a synchroinized movement of the intellect and the emotions — that's when we're truly in the current. The epiphany of “other ways” is primarily mental. What, then, of that juicy red muscle beating inside the chest?

In the early pages of *Miwok*, a truth most of us would rather avoid forces itself upon the heart with words like “disrupted,” “impacted,” “depleted,” “vanished,” “replaced.” Of the numerous California tribes decimated and displaced by white settlers and military troops, we learn that the Sierra Miwok were arguably “the greatest sufferers because the principal gold-bearing regions lay in their territory.” It's a familiar story, one of intricately textured inhabitation and catastrophic violence. *Miwok* doesn't tell it outright, instead moving briskly along to the fire drills and arrow straighteners and coyote-skin pillows, but the story haunts the margins of each page nonetheless.

I encountered this very ghost during a summer backpacking trip in the Stanislaus National Forest, on the Sierra's western slope. Douglas firs, granite outcrops, northern flickers galore — these ridges and valleys were once also home to an animal called *Homo sapiens*. Now they're a federally protected wilderness area where a guy needs a permit to walk and sleep. Times change, as they say. And cultures, for sometimes ghastly reasons, disappear.

On that trip, there were moments charging uphill when I felt as if my heart might explode. It's just the exercise, I told myself. But then, upon reaching some incredible vista, I'd want to both weep and laugh: for the beauty of the land and for its sadness, for the memory — and the future possibility — of people living on it and with it and as part of it. At those moments, I pulled out a certain dog-eared, exuberantly underlined book, took a seat, and read a page at random.

Brush assembly house.

Digging stick.

Warriors in grass caps.

Thank you, I said aloud, remembering that morning at the breakfast table, the cover falling open to reveal a whole and holy world I didn't yet know that I badly needed to read, and read again.

Snowberry.

Moccasin.

Grizzly bear.

Thank you, I said, standing up, shouldering my pack, pushing deeper into the range — into that world and this world and the next world, all at once. □

How does it feel to stare for hours into a swirling eddy, waiting for a shadowy piscine flicker? And what is it like to snap awake, the trance of focus broken, a rainbow trout glittering in your fist?



IMAGES: BOOK PHOTOS: BROOKE WARREN; MIWOK BASKET: ERNEST AMOROSO, NATIONAL MUSEUM OF THE AMERICAN INDIAN; SNOWBERRY AND GRIZZLY BEAR, NPS.

A place between

ESSAY BY PETER FRIEDERICI

PHOTOS BY PETER GOIN

What are we supposed to do with our knowledge that we live at the end of nature, that the driver of the Earth's powerful cycles has become us as much as it is the other thing?

We have to grieve, of course. And celebrate. It would be a way of acknowledging a truth that we have tried to shirk. Too often when we use the word nature, we employ it as a sort of armor to protect ourselves from blame. Natural disasters come with no blame, no guilt. They just happen: because of the black-box workings of weather, geology, God. Studies have shown that people feel less panic and dismay about natural disasters than about human-caused ones. Somehow the lack of mindful causality behind a fire or flood removes all those difficult questions of guilt. Despite Job's travails, "Why me, God?" remains an easier question to deal with than "Why me, neighbor?" or, worse, "Why me?"

Nature has been an easy out.

Let's say that previous droughts that slammed the American West — like that of the 1890s that killed millions of head of

We have to wrestle with the knowledge that we are not only in a tough spot where practical action is needed, but that we have to understand our own complicity.

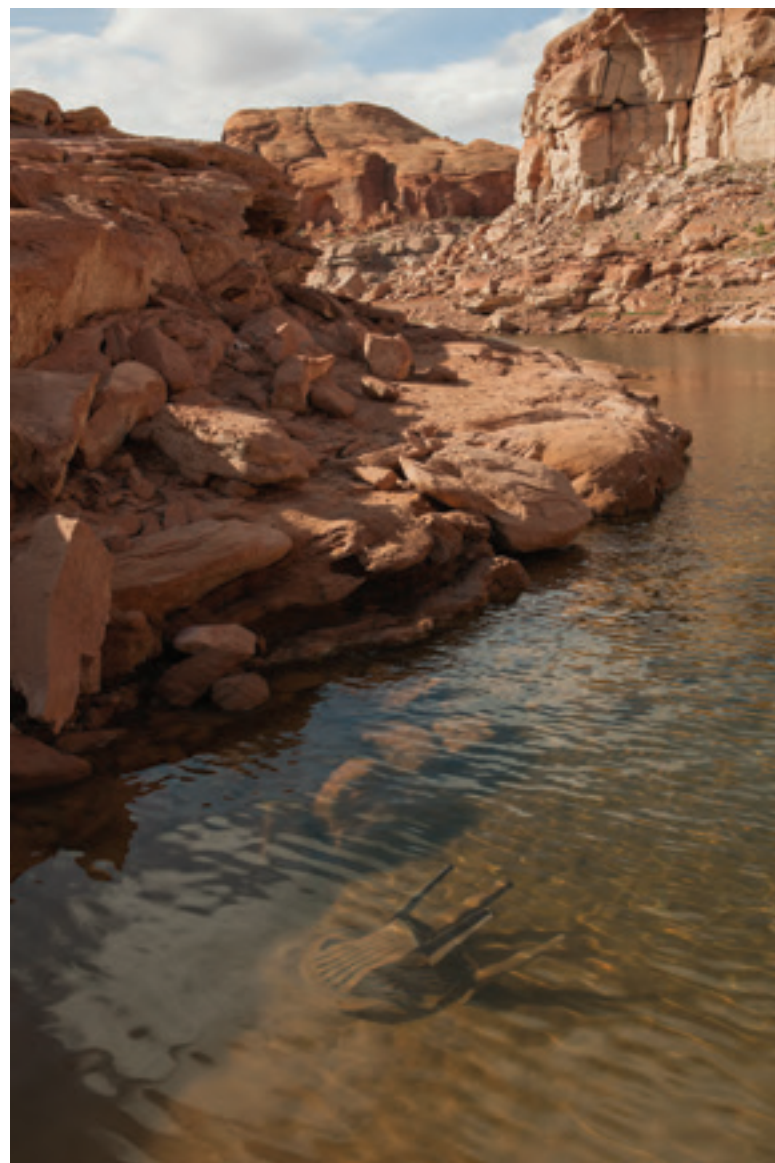
cattle and spelled the end of the open range, or that of the Dust Bowl — were natural events. Many of their effects on particular places were the result of particular, often unwise, land uses, but the raw fact of dryness itself, the aching failure of the sky to deliver moisture year after year, we might call natural. Calamitous, yes, but lacking an ethical edge.

The current drought that has caused so much of Lake Powell to vanish into clear air is in a different category. It is nature intertwined as thoroughly with human agency as the main stem of the Colorado River merged imperceptibly with its myriad tributaries as the reservoir filled, forming a single whole on which you could sometimes no longer tell just where the river had flowed. And so we have to wrestle with the knowledge that we are not only in a tough spot where practical action is needed, but that we have to understand our own complicity.

We have fought against nature for so long, spent so much energy and ingenuity in trying to run the show as gods. Now we have succeeded, only to find that the job is so much less clear-cut than we'd thought, more a tangled web of Olympian intrigue than an easy monotheistic exercise in omnipotence.

But this mess is our new terrain. This is our new task.

I do not wish to diminish the seriousness of the job before us in dealing with a drier West, or a melting Arctic, or eroding coastlines. I do not want to gloss over the innumerable and inevitable casualties that are going to accompany the too-fast changing conditions of our planet. But I do want to point out



Submerged green chair, Cedar Canyon.

that much of what fueled the Powell Expedition's almost manic dash down through the canyons of the Colorado River was a mingled sense of mystery and destiny: the conviction that it was only by embracing a dangerous unknown that a fledgling country could grow into what it surely ought to be.

In any timeframe meaningful to people alive today, Glen Canyon will not house a mountain-fed stream running through a pristine canyon.

Nor will it be managed purely by human intention, as the construction of Glen Canyon Dam was.

Rather, the place that we have called Lake Powell is likely to be governed by a murky combination of human and natural factors, and to constitute a huge in-between zone in flux between water and land. Much of Glen Canyon is likely to be, for the foreseeable future, a place between: between flood and drought, water and land, human and natural. It will be a liminal place,

WEB EXTRA

For more Peter Goin photographs from *A New Form of Beauty*, see hcne.ws/glen-canyon.

*Maybe the fact that so many places need to be
reinvented will enable us to break
out of the old forms and make a new start.*



Anchor chain, Iceberg Canyon.

constantly in the process of becoming — whether what's being created is water or land.

It will be a place of mud and sand and swept-away roots, a place where the scent of decay might just carry a waft of freshness about it, like a volcanic field that reminds us of the intricate ever-locking dance between destruction and creation.

That ambiguity will be hard for many of us — whether water managers, tourism advocates or rank visitors — to deal with. In purely practical terms, it's hard to manage a place that unpredictable: Where will the boat ramps go, and the campsites? Should visitors plan to boat, or to hike? How will they get through the mud flats?

The canyon country has for a long time been one of the purest examples of the human-nature divide that characterizes much modern American understanding of our surroundings: the wild river subject only to itself, the tame reservoir locked up by engineers. Whether you believe that Glen Canyon Dam degrad-

ed or improved its setting, the two forces have almost always been viewed as distinctly twain.

The result is the logjam we've seen in our political system, a grinding paralysis that has made it almost impossible to do anything meaningful about the climate change problem.

Maybe what we need instead is the ambiguity that is the new Lake Powell. Maybe the fact that so many places need to be reinvented will enable us to break out of the old forms and make a new start.

The Hopi farmers who live on arid mesas not far from the Colorado say they have been experiencing the effects of climate change in striking parallel with the predictions of climate scientists. Less snow falls in winter to soak into the ground. The growing season is longer, the spring winds are worse. And when rain comes in summer, it is less likely than before to come softly. Instead, it comes in torrents that erode the fields and run away in the arroyos without nourishing the roots. The same amount of water might fall, on average, but still the farming is harder. This is known; this is seen.

And the Hopi know why. Yes, they have heard what the scientists say about fossil fuel emissions and the greenhouse effect. But the real reason for climate change? It begins, not ends, with human behavior. The climate is changing, according to some Hopi people, because of a failure of prayer, of humility. That is the ultimate reason for the physical changes. And just as the river we see on the ground and the unseen river flowing upstream in the atmosphere above us form a single unbreakable whole, the torn bond that has sundered prayer from precipitation cannot be made whole again without a proper attitude.

Maybe what we need to do, then, is to embrace this new ambiguity, to accept that we are as gods but far from omnipotent, that we are rather co-creators, that we are as much nature as what we once labeled as nature because it seemed outside ourselves, but that with this new promotion comes new responsibility that might truly be labeled what has become one of the most clichéd words in American English: awesome.

It cannot be downplayed that this acceptance of our new role will be at least as hard as the task that faces the water managers in the face of diminishment. It will be akin to the drawing back that young people face as they embrace adulthood, a recognition that the unbridled use of new powers without responsibility results only in disaster.

Some people never manage that. And maybe some societies never manage that. But "never" is not an option anymore.

Accepting our new role, and responsibility, will be a matter of finding poetry in a new mud flat where speedboats once raced — or in the muddy, debris-filled broth caught in the branches of drowned cottonwood trees after a wet winter. There will not be much easy majesty to our way of seeing. Maybe the light will be flat, the shorelines barren, the red rock stained white. Lake Powell has already been a good place to practice this sort of sight, with its innumerable rockbound coves that in the stark light of noon appear lifeless and abandoned, as if some calamity had already swept away most of life. We will have to gain a layered appreciation of complexity, and of flux. And of our own limitations.

I don't have a good recommendation for precisely how to do that, but I am fairly certain that getting out into the mud — into some mud, somewhere — is a necessary step. □

Excerpt from *A New Form of Beauty: Glen Canyon Beyond Climate Change* (University of Arizona Press).

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HEARD AROUND THE WEST | BY BETSY MARSTON

THE WEST

"The gun hidden in my back pocket is dying to meet the gun in your purse" might be the motto of a new dating website for the "carry firearm community." Singles who share a passion for the Second Amendment might just kindle one for each other, or so goes the expectation of Concealed-CarryMatch.com.

THE WEST

If you're an ambitious woman living and working in the West, it's entirely possible that you've examined your paycheck and wondered, "Am I fairly paid compared to that slacker, Joe, who does the same job, and do I have any shot at moving up in this male-dominated company?" According to 147wallst.com, which worked with the Center for American Progress to collect the data, the answers to those questions might well be "no" and "no." Julie Anderson at the Institute for Women's Policy Research looked at four key indicators of gender inequality in all 50 states, and when it came to the wage gap between women and men working full time, six Western states ranked close to the bottom. Wyoming ranked dead last in the nation, with women making only 64.4 percent of what men earned, followed by Utah, fourth lowest, North Dakota, fifth lowest, Montana, sixth lowest, Idaho, eighth lowest, and South Dakota, which came in at 20th. It is a dubious distinction that these six Western states also showed up among the website's "10 worst states" when it came to the percentage of management jobs and legislative seats held by women. And although 42 states now fund preschool slots for 3-to-4-year-olds, none of those six Western states do so, which makes it difficult for women to stay in the work force. For the record, Mississippi scored as the very worst state for working women seeking gender equality.

COLORADO

What we don't know about bears could kill them, so Colorado wildlife managers began tracking 85 bears starting in 2011, using radio collars that told them exactly where those bears were



CALIFORNIA **The U.S. Border Patrol keeps a close watch on the birds.** JIM WEST

every hour. They focused on bears living around Durango, in southwestern Colorado, because the college town is expanding into prime bear habitat — just like Glenwood Springs, Aspen, Colorado Springs and Boulder. While the researchers never figured out exactly how the bears spent their time, they learned a lot about these highly adaptable bruins, and what they've found out might change the state's policy on nuisance bears. For example, researchers found that though bears often visit developed areas when they need a food boost, the animals don't stick around and become addicted to human garbage. This new notion of urban-food-as-snack challenges the state's two-strike policy, which calls for killing bears that have been reported more than once for becoming habituated. The *Denver Post* reported other interesting findings from state wildlife officials: While older bears can thrive in a city, cubs are likely to get hit by cars, since they've never had a chance to learn to dodge them. And if separated from their mothers, cubs are liable to mistake "power poles for trees, leading to regular electrocutions." Meanwhile, in 2015, there were 1,200 reports of "problem bears" across the state, and hunters killed more than 1,000 bruins. The allowable kill has doubled over the past decade, and researchers now say that the bear population in southwestern Colorado is decreasing.

MONTANA

In West Yellowstone, at the Grizzly and Wolf Discovery Center, captive grizzlies get to work at fun jobs testing storage containers that are designed to be "bear-resistant." In the last 10 years, grizzlies, including "the infamous Kobuk the Destroyer," have "brutalized" 425 containers, reports the *Jackson Hole News&Guide*. Only about three out of five bins survived an hour with Kobuk and his cohort, which is the officially sanctioned success standard for a container. But a problem has developed: "The grizzly bears responsible for tearing containers to shreds are getting bored and depressed." If they can't bang around bins because the containers are built to stay firmly seated on the ground, said Forest Service bear expert Scott Jackson, "they just lick the bait off the outside and leave them alone."

MONTANA

In other ursine news, what looked like a teddy bear picnic of 13 grizzlies was spotted by the pilot of an airplane flying above a ranch in the foothills of Montana's Rocky Mountain Front. Wayne Kasworm, a biologist with the U.S. Fish and Wildlife Service, said he'd never seen that many bears in one place; he thinks they included mothers and daughters "and possibly even a grandmother." So why were male bears missing from this family reunion? Kasworm said that when the males leave home, they go farther afield than females, who tend to adopt part of their mother's turf. At 1,000 bears, the population of grizzlies in the Northern Continental Divide Ecosystem, which includes the Rocky Mountain Front, is now the largest in the Lower 48, and growing, reports the *Great Falls Tribune*.

WEB EXTRA For more from Heard around the West, see hcn.org.

Tips and photos of Western oddities are appreciated and often shared in this column. Write betsym@hcn.org or tag photos [#heardaroundthewest](https://www.instagram.com/heardaroundthewest) on Instagram.



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“Call me a purist — which, indeed, I am, when it comes to environmental tinkering — **but I think species belong where they belong.**”

Sandy Wilbur, in his essay, "The case against condors in Hells Canyon," from *Writers on the Range*, hcn.org/wotr