



Sylas Garippo, age 3, plays on the bank of the Animas River at Santa Rita Park in Durango, Colorado, several days after the spill at the Gold King Mine in August 2015. Sylas normally would play in the water, but the river was closed. JERRY MCBRIDE/DURANGO HERALD

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On the cover

An orange sludge

tinges the Animas

River where it runs

through Durango,

above town.

IFRRY MCBRIDE/

DURANGO HERALD

Colorado, days after

the August 2015 spill

at the Gold King Mine

HCN's website hcn.org

**Digital edition** hcne.ws/digi-5009

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## Editor's note

### The scarred and the scenic

Every summer, readers stop by Paonia for a tour of High Country News' headquarters. And like everyone else who sets out to explore the West, they always ask: What's there to see around here?



The usual response is to send them to our beauty spots — the clear, trout-filled lakes atop 10,000-foot Grand Mesa; the immense aspen forest between here and the cute-as-a-button ski town of Crested Butte; the vertiginous chasm at Black Canyon of the Gunnison National Park; even the patio of a local winery with a spectacular view of the West Elk Mountains. But as publisher of a publication whose journalists cover the region's most difficult environmental and social issues, I can't help but encourage people to peek behind the beautiful scenery.

"You should check out the dismantled coal mine owned by a billionaire in the town of Somerset," I tell them. "Also the reservoir built by the Bureau of Reclamation, which is already a third filled with silt from the aptly named Muddy Creek. And don't miss the freshly cut stump of the Ute Council Tree in Delta, where tribal leaders once met in the shade before the U.S. government expelled them in 1881."

The West is so scarred by its turbulent, exploitative, hubris-fueled past - and present - that we have often thought of publishing A Guidebook to the Real Ugly West. But then again, that might be redundant. Almost every issue of this magazine delves into the complex layers of history that underlie our region, and, like a Hawaiian volcano, periodically erupt.

Contributing Editor Jonathan Thompson has excavated the Four Corners area for more than two decades, unearthing everything from the political fractures beneath Utah's Bears Ears National Monument to the real cause of the Gold King Mine disaster in 2015. Thompson's cover story on the uranium boom that left a dangerous toxic legacy in and around his hometown of Durango, Colorado, and deeply marked his own family, not only adds another chapter to the story of the West, it is literally a chapter, slightly reworked, from his new book: River of Lost Souls, published by Torrey Press. I highly recommend it.

This issue also features another dive beneath the surface, the second installment of HCN board member Wayne Hare's "Civil Conversations" series, which explores the African-American experience in the West. Hare travels to the progressive city of Portland, Oregon, where he uncovers its racist roots and the kind of practices that locked generations of African-Americans into economic and social depression, not only in Portland, but in every major U.S. city. Like Thompson's, it's an uncomfortable story, but critical for understanding this place. As you head out on the road this summer, we hope that these vicarious journeys with our writers help deepen your own understanding of our beautiful and ugly West.

-Paul Larmer, executive director/publisher

28 HEARD AROUND THE WEST By Betsy Marston





A staffer exits the Senate subway with a poster detailing EPA Administrator Scott Pruitt's ethics issues, in Washington, D.C. BILL CLARK/CQ ROLL CALL VIA GETTY

## Pruitt's ethics investigations haven't stopped his rollbacks

**Environmental Protection Agency** Administrator Scott Pruitt is the subject of at least 11 ethics investigations. More than 180 members of Congress, including several Republicans, have demanded his resignation. Meanwhile, Pruitt continues to gut pollution regulations and to weaken the science that supports the EPA's work. In April, Pruitt announced the rollback of a rule requiring automakers to increase average fuel economy to 54.5 miles per gallon by 2025. In May, Pruitt signed a controversial new rule that many researchers and medical professionals worry will hamstring the agency's ability to use good science in its work, under the guise of increased transparency. The EPA also recently proposed weakening rules governing how coal ash, a toxic byproduct from coalburning power plants, is stored. And the agency is working to loosen regulations concerning benzene pollution in communities near petroleum refineries.

MAYA L. KAPOOR

Read more online: hcne.ws/pruitt-ethics

## "Wyoming is footing the bill for everybody else's water projects."

-Mark Christensen, Campbell County, Wyoming, commissioner, explaining why he supports the POWER Counties Act. The bill would amend the 1920 Mineral Leasing Act to funnel more federal royalties from oil and gas extraction back to the counties where the minerals were produced. The federal government currently gets half the royalties; 80 percent of that money is earmarked for the Bureau of Reclamation to support water projects across the West. Campbell County would receive an additional \$160 million in royalties, if the bill passes.

TAY WILES Read more online: hcne.ws/mineral-royalties







Amka Aliyak, alias Snowguard, is Marvel Comics' new female Indigenous superhero, a 16-year-old Inuk from Pangnirtung, Nunavut. JIM ZUB/LINE ART BY SEAN IZAAKSE/COLOURS BY MARCIO MANYZ/MARVEL

### Native superheroes should be drawn from real life

In April, Marvel Comics announced a new superhero: Amka Aliyak, or Snowguard, an Inuk teenager. To understand her world and add depth to her character, writer Jim Zub reached out to the Inuit community. That represents a shift: Native characters have typically been portrayed as caricatures rather than thoughtful

illustrations of Indigenous people. Lee Francis, who established Indigenous Comic Con and whose family is Laguna Pueblo, welcomes the change: "We're not the Tontos in these stories anymore."

GRAHAM LEE BREWER

Read more online: hcne.ws/native-superheroes

13

Percent of the electricity used by Western
Colorado's Delta-Montrose
Electric Association that is supplied by small hydropower installations on local irrigation canals.
CARL SEGERSTROM
Read more online:
hcne.ws/small-hydro

## Tribes lead the battle against the opioid crisis

The opioid crisis has disproportionately devastated tribal communities across the country. In April 2017, the Cherokee Nation sued manufacturers, distributors and pharmacies — the first lawsuit of its kind in U.S. history. Since then, hundreds of other tribes, counties, towns and states have followed the Cherokee Nation's lead and filed their own suits.

SUZETTE BREWER

Read more online: hcne.ws/tribes-opioids



DEPARTMENT OF THE INTERIOR

"We spend approximately 70 to 80 percent of our time and resources on dealing with problems related to opiates. We see what's happening to our people, and we are overwhelmed."

> Kathleen Preuss, director of social services for the Upper Sioux Community

### Trending

# Utah admits climate change is real

The Utah Legislature recently adopted a resolution that moves the state from denying global climate change to recognizing that finding a solution is crucial, writes Jack Greene in an opinion piece. Students at Logan High School helped get the resolution passed. During an evening program, they explained their motivation: "We, as youth leaders of Utah, have assembled with you, our state leaders. to address what we consider to be the paramount issue of our generation — that of a changing climate. We hope this dialogue will ... ultimately lead to action to address this challenge on all levels – local, state and national. JACK GREENE

### You say

DIANE BRODAK: "It will take young adults all over the U.S. to help make these changes. These kids should go state to state and help get it started. Very proud of them."

**ELENA HILARIA LÓPEZ:** "Youth wins the day. Once again."

SUSAN JUSTICE: "This 'new' generation needs to start speaking up and out about everything. ... Way to go, high schoolers!"

Read more online: hcne.ws/utah-climate and Facebook.com/ highcountrynews High Country News EXECUTIVE DIRECTOR/PUBLISHER Paul Larmer EDITOR-IN-CHIEF Brian Calvert ART DIRECTOR Cindy Wehling DEPUTY EDITOR, DIGITAL Kate Schimel ASSOCIATE EDITORS Maya L. Kapoor Tay Wiles ASSISTANT EDITORS Emily Benson Paige Blankenbuehler Anna V. Smith WRITERS ON THE RANGE EDITOR Betsy Marston ASSOCIATE PHOTO EDITOR Brooke Warren COPY EDITOR Diane Sylvain CONTRIBUTING EDITORS Tristan Ahtone, Graham Brewer, Cally Carswell, Sarah Gilman, Ruxandra Guidi, Michelle Nijhuis, Jodi Peterson, Jonathan Thompson CORRESPONDENTS Krista Langlois, Sarah Tory, Joshua Zaffos EDITORIAL INTERNS Carl Segerstrom Jessica Kutz DEVELOPMENT DIRECTOR Laurie Milford PHILANTHROPY ADVISOR Alvssa Pinkerton DEVELOPMENT ASSISTANT Christine List DIGITAL MARKETER Chris King **EVENTS & BUSINESS PARTNER** COORDINATOR Laura Dixon WEB APPLICATION DEVELOPER Eric Strebel IT MANAGER Alan Wells IT SUPPORT TECHNICIAN DIRECTOR OF ENGAGEMENT Gretchen King ACCOUNTANT Erica Howard ACCOUNTS ASSISTANT Mary Zachman CUSTOMER SERVICE MANAGER Christie Cantrell **CUSTOMER SERVICE** Kathy Martinez (Circ. Systems Administrator), Rebecca Hemer, Debra Muzikar, Pam Peters, Doris Teel, Tammy York GRANTWRITER Janet Reasoner editor@hcn.org circulation@hcn.org development@hcn.org advertising@hcn.org syndication@hcn.org FOUNDER Tom Bell BOARD OF DIRECTORS John Belkin, Colo. Beth Conover, Colo. Jay Dean, Calif. Bob Fulkerson, Nev. Anastasia Greene, Wash. Wayne Hare, Colo. Laura Helmuth, Md. John Heyneman, Wyo. Osvel Hinojosa, Mexico Samaria Jaffe, Calif. Nicole Lampe, Ore. Marla Painter, N.M. Bryan Pollard, Ark. Raynelle Rino, Calif. Estee Rivera Murdock, Colo. Dan Stonington, Wash. Rick Tallman, Colo. Luis Torres, N.M. Andy Wiessner, Colo Florence Williams, D.C.

### **AFTER BUNKERVILLE**

Thank you, Tay Wiles, for your hard work explaining the complex and tortured nature of the ongoing saga of Cliven Bundy and his family ("Celebrity Scofflaw," *HCN*, 4/30/18). There is no easy answer to what should happen next to address the continued trespass, or the potential copycats. Right now, Cliven and his sons feel more empowered than ever, as evidenced by Ryan Bundy's run for governor in Nevada. I wouldn't be surprised to see Ammon run for governor in Idaho.

Cliven Bundy's personal convictions mean that he'll never willingly capitulate to the Bureau of Land Management or any other federal authority. However, it may be possible to have respected members or political leaders of the Mormon faith appeal to him directly.

I am not a member of the Mormon Church, but I have known and worked with people of Mormon faith for over 40 years. Despite the fact that Bundy's beliefs are not LDS doctrine, his fellow church members stand to be painted with the same negative brush in the court of public opinion. I've spoken with many privately, and I know they are concerned about that.

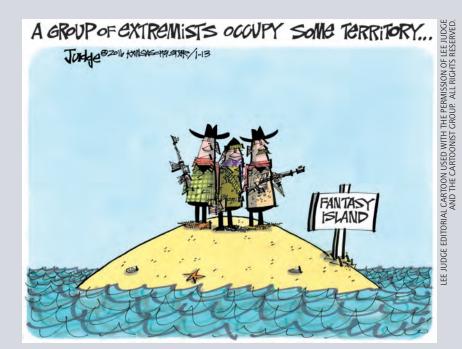
There also needs to be some legal action taken, federally or locally, to affect Bundy financially. Until then, chances are he will not agree to any recommendation — even from the LDS Church. He uses his religion when it suits him, like he does when picking the laws he follows. Still, I believe it would be worth pursuing and may represent the only peaceful and mutually acceptable outcome.

Mike Ford Las Vegas, Nevada

### **BUNDY, ANTI-HERO**

Cliven Bundy is not a hero to many of us ("Celebrity Scofflaw," *HCN*, 4/30/18). He is a crook. He has stolen public resources like grass and water. He owes about a million and half dollars and continues his thievery. Who would call that a heroic thing?

The government's grazing fee is very cheap. A cattleman can graze a cow and calf all summer for less than a hundred dollars and then sell the calf for \$800. That is a fine deal, and here in Colorado the waiting list for grazing permits is growing. Nobody can afford to buy land and then pay taxes and come out ahead. Bundy says: "What is a grazing permit?" He knows full well what that means. He



knows full well that neither the state, the country nor the Bundys own that Nevada land. The federal government owns it, and mostly it does a good job managing it.

Thank you for writing that update. I hope to someday soon read that Bundy pays up and adheres to proper grazing rates. Or else surely it is time to get him off that public land and take those cattle to pay his debt. Please keep us updated on this. And put me down, along with many others I know, as a citizen who is tired of seeing a crook take over and get away with it.

Signed: a small cattle rancher on a small, privately owned ranch.

Marilyn Colyer Mancos, Colorado

### **CLIMBING WITH CARE**

It was sad to read about those who lost their lives attempting to climb Capitol Peak in 2017 ("Death in the Alpine," *HCN*, 5/14/18). But one comment Peter Doro made was not correct: "You don't expect a giant rock to be loose. You expect that if you grab something as big as your body, it's going to stay put."

In climbing, one has to always expect what you grab is loose. One isn't safe unless you realize every move you make could be your last. I hope every person that goes into the mountains takes that to heart. Mountains don't care.

Steven Williams Arvada, Colorado

### **RESPECT FOR THE MOUNTAINS**

I was away from the mountains for the past two years with injuries ("Death in the Alpine," *HCN*, 5/14/18). As a member of the 14ers.com site, I was dismayed to watch the number of inexperienced climbers with cavalier attitudes grow both on the site and in other social media.

When I came to Colorado in 2005, I joined the Colorado Mountain Club and took classes and even then proceeded cautiously. I agree that social media downplays the reality and the dangers of mountaineering, but I also think that there is something missing among those who don't take it seriously, feed wildlife, and act as if every climb is another 15 minutes of fame: respect for the mountains. Sure, we've all bragged about "bagging" a peak — but the ones who will stay safe and survive to climb another day understand these truths: The mountain doesn't care about you. It's up to you to decide if it's welcoming you that day. If it's not, it's not up to you to try to defeat it. You will lose every time. Come back another day. It will always be there.

Lee Grillo Arvada, Colorado





**High Country News** is a nonprofit 501(c)(3) independent media organization that covers the issues that define the American West. Its mission is to inform and inspire people to act on behalf of the region's diverse natural and human communities. (ISSN/0191/5657) is published bi-weekly, 22 times a year, by High Country News, 119 Grand Ave., Paonia, CO

81428. Periodicals, postage paid at Paonia, CO, and other post offices. POSTMASTER: Send address changes to High Country News, Box 1090, Paonia, CO 81428. All rights to publication of articles in this issue are reserved. See hcn.org for submission guidelines. Subscriptions to *HCN* are \$37 a year, \$47 for institutions: 800-905-1155 | hcn.org



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## Rebels vs. reporters

The Sagebrush Rebellion takes a Trumpian turn

BY TAY WILES

For two days in late April, a small crowd of farmers and ranchers gathered at Modesto Junior College in Modesto, California, to discuss property rights at the third annual Range Rights and Resources Symposium. Conservative thinkers on range management and natural resource law networked with constitutional rights activists and the sons of the late Wayne Hage and Grant Gerber, two Nevada sagebrush rebels who became well-known for fighting what they considered federal overreach.

On the morning of the first day, U.S. Rep. Devin Nunes, R-Calif., told the gathering, "It's a very dangerous time in our nation's history." Noting that several reporters mingled with the 40 or so attendees, he added, "The media that's here, that's covering this right now, I'm sure they're here to mock you, make fun of you, call you cowpokes. ... They're here to perpetuate their brand of politics, which is a socialist brand of politics." Nunes, who also chairs the House Intelligence Committee, advised people to circumvent the mainstream media if they wanted to be heard.

He shared the stage with Trent Loos, a farmer and radio host from Nebraska and a member of the Trump administration's Agriculture Advisory Committee. Loos, who was the master of ceremonies at the symposium, later told me he thought the congressman "hit a home run" with his comments that day.

Several of the 24 speakers echoed Nunes' scorn for what they called the "corrupt" and broken Fourth Estate, urging attendees to share information through smart marketing and their own social media channels. As the distrust of mainstream media intensifies under the Trump administration, the symposium revealed how the decades-old Sagebrush Rebellion is using social media and alternative online sources to get its message out.

The annual symposium is a direct outgrowth of the 2016 armed occupation of the Malheur National Wildlife Refuge, led by Ammon Bundy. Following the 41-day occupation, an ad hoc group of supporters pledged to continue spreading awareness about what they saw as federal overreach on public lands. Thus, the Range Rights and Resources Symposium was born. With help from well-heeled sponsors, they held the first gathering in May 2016 in Layton, Utah, and the second last year in Bellevue, Nebraska.

The symposium is backed by bigger players in the Sagebrush Rebellion. A co-sponsor, National Federal Lands Conference, was founded by Utahns Kathy and Bert Smith, whom E&E News once dubbed "Mr. Sagebrush Rebellion," for his lifelong efforts to turn federal lands over to state control. Bert Smith, who passed away shortly before the first symposium, also helped found what's now known as the National Center for Constitutional Studies, a nonprofit that distributes the paperback copies of the U.S. Constitution that have become a shirt-pocket fixture for today's Sagebrush Rebels and farright activists nationwide.

The event's other sponsor, Protect the Harvest, has a different mission: fighting the Humane Society of the United States. The nonprofit's website states that "extreme special interests in America have evolved into a wealthy and successful attack industry determined to control our farmers, eliminate hunting, outlaw animal exhibitions (like rodeos and circuses), and restrict animal ownership."

Some presenters saw opportunity in the current distrust of mainstream media. "We are the new media," Kimberly Fletcher, founder of the conservative advocacy group HomeMakers for America, said at the event. "I work for Townhall.com and I will write any truth you send me. ... Even if the media won't report it, social media is powerful." As long as you frame the message right, people will listen, she said. She offered some advice on DIY marketing of conservative values. "'Individual' doesn't work right now because it makes it sound like 'I'm more important than you,' " she explained. "Make it about 'family,' make it about 'moms.'"

Nunes' condemnation of the press found a largely positive reception. "He sounded like, more often than not, he's distrustful of the mainstream media, doesn't count on them to tell stories correctly," said Kathy Smith. "It's really, really unfortunate that so many of us in the American public don't trust the media either. Thank heavens we have independent media sources and the internet."

Near the end of the conference, Ammon Bundy took the stage Saturday afternoon to describe his family's battle over grazing rights as part of a religious war. In an hourlong speech that often resembled a sermon, Bundy called environmentalists "an enemy to humans," and read from New American magazine, which is published by a subsidiary of the far-right John Birch Society: "The fact that the U.N. functions as a church for the religion of environmentalists reveals just how dangerous this religion is." Bundy also said that water shortage and overpopulation are "lies," adding later: "If anybody wants where my sources are from, I can give them to you; I'll just send you an email later."

"The media that's here, that's covering this right now, I'm sure they're here to mock you, make fun of you, call you cowpokes. ... They're here to perpetuate their brand of politics, which is a socialist brand of politics."

 -U.S. Rep. Devin Nunes, R-Calif., speaking at the Range Rights Symposium in Modesto last month



Ammon Bundy speaks during the Range Rights Symposium in Modesto, California. ANDY ALFARO/MODESTO BEE VIA ZUMA WIRE



### THE LATEST

**Backstory** White Sands **National Monument,** in south-central New Mexico, lies within the Army's 3,150-square-mile **White Sands Missile** Range, and the road into the 225-squaremile monument, established in 1933, is sometimes closed by weapons testing. Despite the military maneuvers, the area's desert grasses, shrubs and cacti support abundant wildlife, including pronghorn, desert bighorn sheep and exotic orvx. Petroglyphs and other ancient relics abound ("Accidental wilderness," HCN,

## 5/24/10). **Followup**

Now, the monument could become New Mexico's second national park. In early May, Sen. Martin Heinrich, D-N.M., introduced legislation to create White Sands National Park, with wide bipartisan and local support. The bill would protect military usage in the area through existing agreements and complete a land exchange with the Army begun in the 1970s to simplify management and protect cultural resources. In late April, the monument made headlines when scientists discovered fossilized Pleistocene-era footprints - perhaps the first-ever tracks that show early humans hunting, in this case, a giant ground sloth.

JODI PETERSON

# The next episode for California

## Why Compton said no to pot

BY CHRISTINE RO

we just got raided two Thursdays ago," says the tank top-wearing woman behind the counter, sounding nonchalant about it. We're talking inside an unmarked building on Rosecrans Avenue, a bustling street whose name has received shout-outs in songs by popular local rappers, including Dr. Dre and Kendrick Lamar. On this weekday afternoon in Compton, in southern Los Angeles, the smoky, dimly lit marijuana dispensary features a steady stream of customers, who pay \$20 and up for cannabis strains with names like Thin Mint and F\*ck Trump. This is one of a dozen or so dispensaries operating illegally in Compton. Though they're subject to regular police raids and closures, they always seem to bounce back.

In 2016, 62 percent of local voters (and the majority of voters statewide) supported legalizing individual cannabis use in California. This meant that recreational users wouldn't be prosecuted, and it paved the way for dispensaries to sell marijuana. But this January, just two years later, Compton voters returned to the polls and overwhelmingly rejected the two ballot measures that would have legalized local sales. This tension — between state-level support for use and city-level opposition to sales — is at the heart of many of the battles over marijuana that are happening across the West. In Compton, the situation is especially convoluted, as the city tries to move on from a painful history scarred by illegal drugs.

These days, Compton is majority Latino; about a third of its population is black. But six decades ago, it was a nearly allwhite suburb of LA. Once it became harder for property owners to pursue openly discriminatory policies and black families began arriving in large numbers in the 1950s, most of the white population fled. The erosion of the local tax base, as well as the departure of blue-collar jobs, led to rising unemployment and poverty. By the early 1980s, Compton had become known for the crack cocaine trade and the notorious street gang it spawned, the Bloods. This was at the height of the war on drugs, when law enforcement disproportionately targeted LA's black and Latino communities, spawning accusations of racial profiling and police brutality.

Christine Ro splits her time between Los Angeles

In Compton, which has since become increasingly prosperous, no one wants a return to the worst of the crack crisis. Chris Petit, a retired pastor and father of two who grew up in the area, has long been vocal about what he sees as Compton's problems. "The farce which was the war on drugs in the '90s incarcerated many of our young men and at the same time failed to do anything about a growing addiction problem in our city." Young minorities have long received unjust treatment for nonviolent drug offenses, he says, and he remains skeptical about whether legal weed would benefit them.

Petit recognizes that his city can't — or won't — enforce the law and keep illegal dispensaries from operating. "What I am against is opening the city to an industry that offers no value beyond tax revenue, especially when enforcement is lacking," Petit says. "It's not what I want to see in my neighborhood."

Such arguments are familiar to Fanny Guzman, who, with her husband, co-founded the advocacy group Latinos for Cannabis in 2014, with members in Compton. For Guzman, the issue is both personal and cultural. Her mother is a

conservative church-going Christian and teetotaler, and she didn't acknowledge the benefits of the plant until Guzman's terminally ill brother, who has a rare genetic disorder, began using medicinal cannabis.

This long-standing opposition to cannabis among the older generations is common in California's Latino communities. "One of the things that our communities face is fear: fear from the historical violence that came from the war on drugs, mass sentencing and incarceration," says Guzman. But Latinos for Cannabis is betting on the benefits of medicinal cannabis and safe recreational use, as well as the potential for job creation in communities of color.

Advocates say it's urgent for communities to get involved in shaping the cannabis industry now, by addressing the barriers to legal sales, including the high cost of licenses and the legal or financial restrictions on owners with criminal records. Some cities are trying to level the playing field: LA and Oakland have been experimenting with social equity programs for the new industry, providing support with licensing and other aspects for people and neighborhoods that have been particular targets for marijuana-related arrests.

None of this will apply to Compton, however, where local sales remain illegal. At the Rosecrans Avenue dispensary, the staff simply reopened a few days after the last raid, welcoming back their loyal customers, cutting through the police tape.



Chris Petit is a retired pastor and outspoken critic of the legalization of marijuana dispensaries in Compton, California, where he grew up and still lives with his wife and two sons. Petit was among those who voted earlier this year to prohibit the legalization of marijuana sales, despite the fact that it is legal throughout the state and in surrounding communities. ROBERTO (BEAR) CUERRA

# cannabis

## Black women rewrite weed's legacy in Los Angeles

BY RUXANDRA GUIDI

Bridgett Davis wore a bright flowery dress to welcome friends and acquaintances into her parents' home in Inglewood, a historically black city in southwestern Los Angeles. A big sign propped by the entrance read "Launch Party for Big Momma's Legacy," Davis' start-up company, which makes cannabisinfused essential oils and salves. The invitation said noon, but things were running late: The so-called edibles like lemon and rose cookies and the ubiquitous brownies didn't get served until closer to 1 p.m. Neither did the "medicated" hibiscus tea.

The gathering, mostly of women of color, was not simply to find new customers and foster women-owned businesses. It was part of an effort to celebrate a product that — until this year — was illegal. Not long ago, people here feared arrest for marijuana possession; according to the American Civil Liberties Union, back in 2013, African-Americans were nearly four times more likely to be arrested for marijuana possession than whites. Today, Los Angeles is considered the largest legal marijuana market in the world, with more dispensaries than the entire state of Colorado. Now, black women like Davis - and many others in the very communities that were most harmed by marijuana prohibition — see an unexpected opportunity.

Davis started working with cannabis four years ago. A real estate agent by day, she wanted to kick a drinking habit, so she began using essential oils "to stay calm." Inspired by the homemade remedies prepared by "Big Momma" — her greatgrandmother, Rachel Richardson — Davis cooked up all sorts of salves with natural ingredients meant to relieve aches and pains. "And then one day a lightbulb went off," she told me. "What if I put some cannabis in it?"

Weed proved to be the ingredient that set Davis' products apart. With a growing body of research showing that marijuana

Contributing editor Ruxandra Guidi writes from Los Angeles, California. **У** @homelandsprod



Bridgett Davis, one of several female entrepreneurs who have taken advantage of the wider acceptance and legalization of marijuana and started businesses selling marijuana products. Below, one of Davis' artisanal salves and essential oils, which she has now infused with cannabis oil. They're based on homemade remedies she learned from her great-grandmother, known as Big Momma.

ROBERTO (BEAR) GUERRA

can help ease chronic nerve pain caused by injury or surgery, it is increasingly being seen as a natural, non-habit-forming option for pain management.

"Many of my clients are seniors," said Davis. "I tell them that they're not going to go to hell for using cannabis, then I show them how to incorporate it into their everyday life."

But legal weed is very complicated, and entrepreneurs like Davis are still learning the ropes. On Jan. 1, California became the sixth state to allow licensed shops to sell marijuana to anyone 21 and older. At the same time, new state regulations and temporary licenses kicked in for every type of marijuana business. The process is neither easy nor cheap: Between licenses, permits and taxes, start-up costs can run as high as \$20,000.

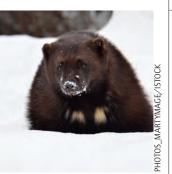
"Let's say you get a license, but if you're not compliant, you're going to fail," Kathy Smith told me. Smith owns three legal dispensaries in Los Angeles and is director of the California Minority Alliance, a membership organization supporting people of color in the marijuana market. "And this business is overtaxed and overregulated: Anyone from the state can come to your shop and ask for your records, at any time." Cannabis taxes in California are higher than for other industries, and companies cannot claim typical business deductions.

Only about 1 percent of weed businesses around the country are in the hands of African-Americans and people of color, according to the Drug Policy Alliance. In California, where the market is expected to bring profits of \$3.7 billion by the end of 2018, an effort is underway to ensure that the burgeoning industry is inclusive. The city of Los Angeles is currently developing a "social equity" component to its regulations that would give licensing priority to those populations that have historically been most affected by drug law enforcement. Smith is hopeful about plans to make training programs and technical assistance more accessible. And she's helping other black women find success in legal weed, by guiding them through the licensing process and helping them develop a business plan and a path to becoming financially stable.

So far, Davis hasn't sought out the help of the California Minority Alliance or the city of Los Angeles, preferring instead to grow "Big Momma's Legacy" on her own. "I've had a few rappers and investors reach out to me offering to help," she tells me. "But I stay away from that," wary of get-rich-quick schemes and scams targeting marijuana entrepreneurs.

At the launch party at her parents' home, a table on the side of the room displayed Davis' salves alongside her friends' products — Kat's homemade beauty creams and free samples of Will's "Hot Chocolate Cannicakes." The guests exchanged business cards, and around 20 people, mostly young women, lingered for lunch, becoming giddy with "medicated" treats. They began to disperse as the afternoon wound down, chatting about their plans to work in the cannabis industry, still amazed by the knowledge that now they could do this openly.





### THE LATEST

### **Backstory**

By the early 1900s, trapping and poisoning had killed off most wolverines in the Lower 48, and today, fewer than 300 remain, mostly in Washington, Idaho, Montana and Wyoming. The deep snowpack they require to raise young is declining, due to climate change. The U.S. Fish and Wildlife Service proposed federal protections in 2013, but backtracked in July 2014, citing uncertainty about the impacts of climate change ("Climate changes for wolverine listing," *HCN*, 8/4/14).

### **Followup**

Now, for the first time in more than a century, both male and female wolverines have been found in Wyoming's Wind River Range, and a breeding female was documented in **Washington's South** Cascades, south of I-90. The discoveries came during the first range-wide wolverine survey, conducted this spring by federal agencies, five states and tribes. Bob Inman. furbearer coordinator for Montana Fish, Wildlife and Parks, told the Casper Star-*Tribune*, "The three things we're working on are connectivity, reintroductions to historic range and monitoring the population."

JODI PETERSON



## Consider the source

Communities challenge the bottling of Mount Shasta's water

BY JANE BRAXTON LITTLE

County, a commanding presence even when cloaked in clouds. The snow on its flanks percolates into a vast underground aquifer of volcanic tunnels and bubbling springs. Steeped in legend and celebrated for its purity, Shasta water is almost as mysterious as its namesake California mountain. Little is known about how much is actually stored there or how it moves through the subsurface fractures.

Locals and reverent pilgrims might have been the only ones to appreciate this water if it weren't for the private companies now descending on the small towns at the mountain's base. Ten different proposals have sought to bottle and send water to markets as far away as Japan. Four have been approved.

Nestlé, Crystal Geyser and startups like McCloud Artesian Spring Water, attracted to the region by its combination of water availability and economic decline, have been welcomed by county officials. This cradle of the s state of Jefferson is generally resistant to regulations, and it has been particularly accommodating to bottled water. With the collapse of logging and mining before that, "other industries are not exactly beating a path to us," says Siskiyou County Supervisor Ed Valenzuela.

But some residents of the towns scattered across this Northern California county are questioning the effects of commercial pumping on the aquifer and demanding more scientific information. Even as bottled water sales grow — from 9.2 billion gallons nationally in 2011 to 12.8 billion gallons in 2016 — numerous

Jane Braxton Little writes on science and natural resources from Northern California.

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Western communities are resisting the companies determined to extract their water. Some, like the Siskiyou community of Dunsmuir, welcome the jobs, while others, such as McCloud, are fighting the attempts of international corporations to privatize their local water sources. "Water is a resource. It's *our* resource. It's why we are here," says Bob Hall, former mayor of Weed.

The latest proposal to bottle Shasta water is aimed at McCloud, a faded logging town whose broad streets offer glimpses of the peak's glaciered slopes. Dominating downtown is the century-old McCloud Hotel, built for lumber workers in an era when the sawmill provided the town's electricity and steam heat. Today, the three-story hotel caters to skiers, hikers and anglers lured by one of the West's most famous trout streams.

Across Main Street from the hotel is Mountain Community Thrift Center, an artfully arranged hole-in-the-wall with ice skates and vintage clothing for sale at bargain prices. On a cold January afternoon, Angelina Cook presides from behind the ironing board that serves as a sales counter. Lean and athletic, with weathered laugh lines around blue-green eves. Cook has a gray-flecked braid that swings across her back. A McCloud resident and watershed advocate with the Mount Shasta Bioregional Ecology Center, Cook, 42, has spent 13 years working to protect the area from threats to its communities and ecosystems.

"And here we go again," she says with a weary smile.

When Nestlé Waters North America came to McCloud in 2003, the community of 1,100 residents had just days to review the corporation's proposal to pump 1,250 gallons a minute of spring water into a

Mount Shasta, seen from Highway 89 near McCloud, California. GREG VAUGHN/ALAMY

million-square-foot bottling facility. The McCloud Community Services District, the only local government, had entered into a closed-door agreement for a 100-year contract that placed no limits on the amount of surface and groundwater Nestlé could use.

Locals feared that Nestlé would siphon off the surface water that supplies their homes and gardens — an increasingly precious asset threatened by climate change. A grassroots coalition challenged the contract in Siskiyou County Superior Court, which ruled it null and void. It took five years of pressure before Nestlé scrapped its lobbying and legal efforts.

But the respite for Cook and other opponents was short-lived. In 2015, the Mc-Cloud Artesian Spring Water Company arrived with a new proposal: a small "boutique" operation using environmentally friendly glass bottles. On a damp January night this year, the three Sacramentoarea contractors behind the company met with the public in a community clubhouse. Their modest original plans have grown to include a 100,000-square-foot plasticbottling plant and the right to divert up to 200 gallons a minute for 25 years from Intake Springs, where the company's pipes would be installed just above the water tank that supplies McCloud. They have no experience with water bottling, but were drawn to McCloud by its lack of other industries, says Brent Wiegand, one of the partners. "We think we can be a part of the solution for this town."

Under its agreement with the services district, the company would pay \$500,000 annually for spring water. The project would help fund the fire department, ambulance and other services, and provide around 30 well-paying jobs, says Kimberly Paul, the district general manager.

That's more than Nestlé offered, says Cook, but the community still risks losing control of its water by giving the bottling company first priority. And the plant may preclude other businesses that might prove far more beneficial for McCloud without depleting the water supply: microbreweries, water parks, "businesses that use but don't export water," says Cook. "I am not opposed to attracting wealth to the region, but let's do it in a way the community can benefit."

Critics object to what they call sweetheart exemptions for bottling companies, citing a dearth of information about the water table and a lack of scientific studies on groundwater pumping's impacts. Exporting groundwater out of the county requires a permit, but the ordinance

Please see Mount Shasta, page 22

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Karin P. Sheldon & James Thurber | Lafayette, CO

Jeri D. Shepherd | Greeley, CO

Leila Shepherd | Twin Falls, ID

W. Kenneth Sherk | Salt Lake City, UT

Sally Sherman | Boise, ID Doris & Bob Sherrick | Peculiar, MO Christine & Mike Siddoway | Colorado Springs, CO Valerie & Scott Simon | Twentynine Palms, CA Jack & Joanne Sites | Orem, UT Daniel Slater & Ann Wiemert | Grand Junction, CO Robert L. Slatten | Sumas, WA Doug & Joanne Smith | Steamboat Springs, CO Erma J. Smith | Lake George, CO Larry & Debbie Smith | Butte, MT Larry & Margie Smith | Johnstown, CO Robert B. Smith | Hemet, CA Florian & Lou Smoczynski | Madison, WI Jim & Nancy Soriano | Vashon, WA Mary Lou Soscia | Portland, OR Timothy C. Spangler | Littleton, CO Sam H. Sperry & Joyce Beckes | Los Ranchos, NM Alicia Springer & Christopher P. Thomas | Chico, CA Wendy Spurr | Grand Junction, CO Carrie Starr | Mountain Center, CA Alan Stearns & Heidi Huber-Stearns | Eugene, OR Sari Stein | Grants, NM Sherman Stephens & Martha Taylor | Flagstaff, AZ Nancy Stevens & Charlie Davis | Seattle, WA Darlene Marie Steward | Boulder, CO Jim & Peggy Stewart | Ferndale, WA Lon R. Stewart | Eagel, ID James Stickman | Seattle, WA Rick & Lynne Stinchfield | Pagosa Springs, CO Marilyn Stone | Paonia, CO Daniel Stonington | Seattle, WA David & Miriam Stout | Salida, CO Dan Stowens | Kennewick, WA Louis E. Strausbaugh | Colorado Springs, CO Bill Strawbridge & Meg Wallhagen | Mill Valley, CA Laura Stuntz | Fort Collins, CO Andrea Suhaka | Centennial, CO Donald Sullivan | Denver, CO Mike Sullivan | Tustin, CA Lorraine Suzuki | Los Angeles, CA Kent & Linda | Bozeman, MT Steve Swanson & Val Metropoulos | Aberdeen, WA Diane Szollosi | Lafayette, CO Liz Taintor | Steamboat Springs, CO Sherrion Taylor & Sid Lewis | Paonia, CO Theodore Taylor & Denise Stone | La Grande, OR William Taylor | Sacramento, CA Beth Thebaud | Wilson, WY Alice Thomassen | Belfair, WA Russell B. Toal | Santa Fe, NM Mike Todd | Phoenix, AZ Larry E. Tomberlin | Mountain Home, ID Chuck Tonn | Port Orford, OR Janet & Greg Torline | Harrison, ID Constance L. Trecartin | Tucson, AZ Janna Treisman | Fall City, WA Dale & RuthAnn Turnipseed | Twin Falls, ID Jessica Turnley | Albuquerque, NM William Tweed | Bend, OR Chuck Twichell & Mary K. Stroh-Twichell | Santa Rosa, CA R.T. Twiddy | Mesquite, NV

James Tydings | Boulder, CO Bruce Van Haveren | William Vancil | Prescott, AZ Shirley Vander Veen Chrilo Von Gontard | Bainbridge Island, WA Kirk & Kris Vyvrberg | Sacramento, CA Ellen R. Walker |

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Mark Vellequette |

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Wendy Zeigler & Jamie Longe | Holladay, UT

Richard C. Young | Carlsbad, NM

Paul Zarn | Petaluma, CA





# The River of Lost Souls

Life and death on the Animas

"The farmers along the Animas River are sitting down and permitting the waters of that river to be so tainted and polluted as that soon it will merit the name of Rio de las Animas Perdidas, given it by the Spaniards. With water filled with slime and poison, carrying qualities which destroy all agricultural values of ranchers irrigated therefrom, it will be truly a river of lost souls."

—Durango Wage Earner, 1907

WAS MAYBE 6 YEARS OLD, and the pungent aroma of the season's first cutting of hay still lingered in the air on my grandparents' farm in the Animas River Valley in southwest Colorado. My father led my older brother and I on a walk, stopping occasionally to point out a stalk of asparagus just gone to seed, a red-tailed hawk floating overhead, telling us what it was and looking at us with warm brown eyes to make sure we understood. We ambled past a raspberry patch and cornfield, then the low, whitewashed milk house and the rickety hay barn, through a gaping, dank culvert. The culvert had been built to divert the Animas' floodwaters under the highway that led to Durango, five miles to the south, but to a 6-year-old boy, it felt like the gates to the underworld.

Beyond the culvert, the river ran slow, lazing through sandbanks and wetlands and cotton-wood groves, bending back on itself, as though to rest from its tumultuous southward tumble from the nearby San Juan Mountains. Sand gathered on the outside of the sharpest bends, creating beaches like the one we called the Sandbar, where we fished and played and picnicked and camped.

I didn't have a fishing pole, so that day, my dad cut a long willow branch, to which he added fishing line, a lead sinker and red-and-white bobber, and a worm on a hook. I would throw the bait as far as I could, which probably wasn't that far, but then it didn't really matter. I gently held the line, until I felt the telltale tug that prompted me to grab the branch and sprint up the beach. I turned back to see a trout on the line, flopping in the sand, its scales shiny like mica. I picked up the fish, felt its weight, its power, its will to live, and watched for a moment as its scarlet gills fluttered in the sun. "Don't let it suffer like that," my dad said, bending down and gently but firmly taking hold of the gasping fish. He struck it against a driftwood log, and it twitched a few more times before it stilled. Blood trickled from its mouth. From the trees, cotton fell like snow.

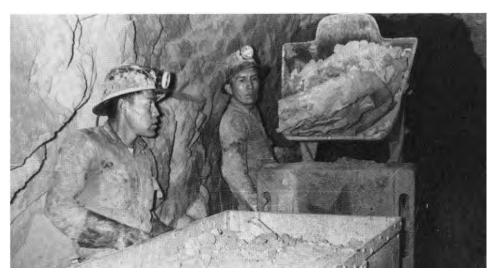
Just downstream from the sandbar there was a place where the riverbanks got steeper and the water darker, and cottonwood branches jutted like bleached bones from the current, which whispered in what I imagined to be ancient tongues. Stand too close, my grandmother warned, and the bank would give way and you'd fall in, the undertow pulling you deep down into the cold, where you would join the lost souls, the *animas perdidas* of the river's name.

My grandmother did not mention the other dark secrets of those waters. She could not have known that on an August day four decades later, 3 million gallons of toxic water would come bursting out of the Gold King Mine, turning our beloved river a psychedelic shade of orange for miles downstream, reminding us of the myriad ways our world has come unhinged, of the transgressions we've committed against the land, the water, the air and even ourselves. She never told us that the real lost souls of this river are those killed or displaced by our insatiable hunger to pull the riches from this land, to take, take, take and never give back.

### IN 1955, A 33-YEAR-OLD DOCTOR NAMED GEORGE MOORE

ARRIVED IN DURANGO, then a town of 7,500 people, to oversee the San Juan Basin Health Department, which served four counties of southwestern Colorado. Moore, who served in the military and later worked in Kathmandu, Nepal, for the U.S. Public Health Service, might have expected a staid office job in a healthy community; instead, he found a leaderless organization in disarray, in a region full of health hazards and illness. Rico, a small mining town to the northwest, had a tuberculosis outbreak. Mesa Verde National Park, an hour away, lacked sanitary drinking water. The Southern Ute Indian Reservation had high rates of obesity, alcoholism, pneumonia, tuberculosis and infant mortality — along with an epidemic of sexually transmitted diseases brought by a recent wave of oil and gas workers.

To top it off, in relatively affluent Durango, a uranium mill and mountain of radioactive tailings loomed along the shores of the Animas. In 1942, the federal government purchased the remains of an old smelter on Durango's south side and leased the site to the United States Vanadium Corporation, which secretly milled uranium for the Manhattan Project. After the end of World War II, the Atomic Energy Commission bought the site, and Vanadium resumed milling uranium and producing yellowcake.





Navajo miners operate a mucking machine at the Rico Mine in 1953, where pyrite was extracted to use in the manufacture of sulfuric acid for uranium processing, top. Above, the smelter, stack and tailings pile along the Animas River, where uranium was processed.

SPECIAL COLLECTIONS/CENTER FOR SOUTHWEST RESEARCH (UNM LIBRARIES); LOC HAER CO-38-A

Moore didn't like the looks of the operation, so he sent staffers to check it out. They "brought back dead fish heavy with uranium ore," he later wrote. The mill, he learned, had been giving tailings to area highway departments and construction companies, to use as road base, on streets and sidewalks, and even in homes in Durango's burgeoning post-war suburbs. He notified his former colleagues at the U.S. Public Health Service, but it took three years before the agency finally sent a team of researchers to assess the situation. What they found was unnerving.

Each day, the mill churned through about 500 tons of ore. The chunks of pale yellow rock were pulverized into a sandy powder, then processed with a chemical soup. One ton of ore yielded around 6 pounds of uranium, the remainder ending up as waste. The Durango mill kicked out some 997,000 pounds of tailings per day, containing leftover uranium, a host of naturally occurring toxic metals, and leaching chemicals, including sulfuric acid, salt and soda ash, tributyl phosphate and kerosene.

Norman Norvelle was in the seventh grade in Farmington, New Mexico, in 1958. His family had moved to the region not long before, and his father was a big fan of the mountains, so nearly every weekend they all drove up the Animas River and past the uranium mill. "The (mill) had several large ponds next to the river that were usually full and a deep green," Norvelle, a tall man with a friendly demeanor, who worked for years as a scientist with the New Mexico Health Department, told me. "Many times when we drove by the ponds, the dirt walls and dikes retaining the acid process wastewater would be breached. The ponds would be empty, and on the river shore you could see where the contents went into the river."

What the young Norvelle did not see was a separate liquid waste stream that flowed directly into the river at about 340 gallons per minute, carrying with it at least 15 tons per day of spent ore solids, leftover acid leaching chemicals and an iron-aluminum sludge.

At the time, the Animas and San Juan rivers were the primary drinking water sources for at least 30,000 people downstream. Farmers irrigated thousands of acres of crops with the water, and their cows, sheep and goats drank it. Of all the nasty ingredients, radium-226 — a radioactive "daughter" of uranium, with a half-life of 1,600 years — was of most concern to the researchers.

Radium was discovered by Marie Curie — in ore mined in western Colorado, about 100 miles from Durango, in fact. It was once seen as a sort of miracle substance. Paint it on watch numbers or even clothing, and they'd glow in the dark. It purportedly could cure cancer and impotence and give those who used it an "all-around healthy glow," as one advertisement put it. During the early 1900s, it was added to medicines, cosmetics and sometimes even food. Makers of the "Radiendocrinator" instructed men (and only men) to wear "the adapter like any 'athletic strap.' This puts the instrument under the scrotum as it should be. Wear at night. Radiate as directed." Radium's glow dimmed, however, when the women who painted it onto watches began dying, and the inventor of the Radiendocrinator was stricken with bladder cancer. We now know that radium is highly radioactive and a "bone-seeker," meaning that when it is ingested it makes its way to the skeleton, where it decays into other radioactive daughter elements, including radon, and bombards the surrounding tissue with radiation. According to the Toxic Substances and Diseases Registry, exposure leads to "anemia, cataracts, fractured teeth, cancer (especially bone cancer), and death."

The government scientists sampled river water, milk from cows that drank the water, and crops that were irrigated with river water for 75 miles downstream from the mill. They found that the Animas River was polluted with chemical and radioactive materials. Water, mud and algae samples taken two miles below the mill were 100 to 500 times more radioactive than the control samples taken above the mill. Another 20 miles downstream, farmers were drinking and irrigating with water that was 12 to 25 times as radioactive as the Animas above the mill, double the Public Health Service's "maximum permissible concentration."

Water that Norvelle drank from the taps in his Farmington



Dolph Kuss, a downhill ski coach in Durango in the early 1950s, skis down the Smelter Mountain tailings pile.

COURTESY OF THE CENTER OF SOUTHWEST STUDIES. FORT LEWIS COLLEGE

home had 10 times the radioactivity of Durango's tap water. Cabbage, sweet corn, apples and other crops from downstream farms tested similarly high in radioactivity. Downstreamers who drank from the river and ate local food were taking in at least 250 percent of the maximum permissible concentration of radiation. This was added to the strontium-90, another bone-seeker, that wafted in high concentrations over most of the Interior West as a result of the extensive nuclear bomb testing at the Nevada Test Site during the same time period.

The river also had high levels of other toxic metals, both from upstream metal-mining pollution and the uranium mill, and was virtually devoid of "bottom fauna," such as aquatic bugs and algae, and fish, for nearly 30 miles downstream from the mill. "The river was a pea-green color during low flow near the state line," Jack Scott, who was in elementary school in Aztec when the study occurred, told me. "The river was mostly dead, except for a few suckers."

Clearly, the Vanadium Corporation was violating the laws and regulations. But since the same laws were virtually toothless, there was little the feds could do except ask them to stop. Shortly after the results were revealed to the general public, Vanadium officials vowed to build a treatment facility to reduce the poisoning of the Animas River, prompting the government to report that the "situation was brought under control before the population of the area had ingested sufficient amounts of this radioactive material to cause detectable health damage."

The declaration, while calming, is dubious. By that time, downstreamers had been drinking tainted water for at least a decade, if not more, and no one had done a systematic investigation of the effects on human health. In 1959, Public Health Service officials launched a study to much fanfare, asking Farmington and Aztec school kids to skip the tooth fairy and turn their baby teeth over to them. In return, the children would receive a lapel pin that read: "I gave a tooth for research!"

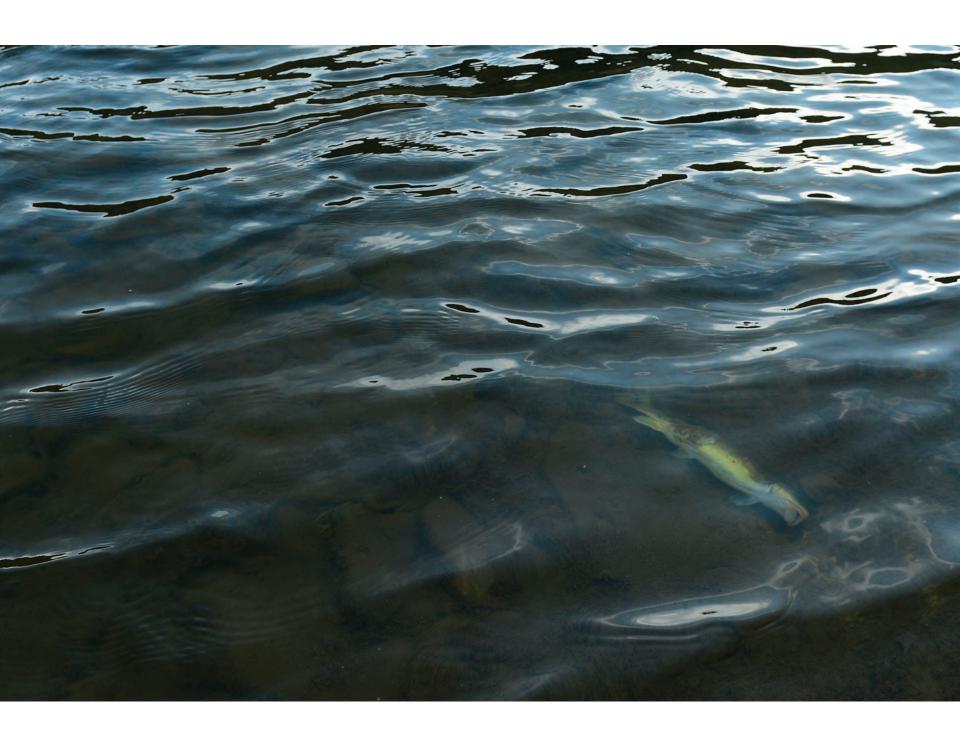
And yet, there's no record of the study ever being completed, nor was any other epidemiological study ever done on the downstream residents, who for nearly two decades had consumed radioactive and otherwise poisonous food. Fearing more public outcry and grappling with a drop in uranium prices, Vanadium

shuttered the Durango mill in 1963, and moved its operations to Shiprock, New Mexico. There, Vanadium took over the Kerr-McGee uranium mill, constructed in 1954 on the banks of the San Juan River, on the Navajo Nation. It's hard to see the move as anything but a blatant act of environmental injustice — a continuation of late 19th century policies when Native Americans were forcibly relocated to make way for greedy extractive industries. Nearly everyone for hundreds of miles downstream from the Kerr-McGee mill was Diné. There was no George Moore to sound the alarm, nor government scientists at hand to get to the bottom of pollution problems. In 1960, when Kerr-Mc-Gee was operating the mill, one of the evaporation ponds broke, sending at least 250,000 gallons of highly acidic raffinate, containing high levels of radium and thorium, into the river. None of the relevant officials were notified, and people continued to drink the water, put it on their crops and give it to their sheep and cattle. It wasn't until five days later, after hundreds of dead fish had washed up on the river's shores for 60 miles downstream, that the public was alerted to the disaster.

WHEN VANADIUM CORP. LEFT DURANGO, it left a festering mess behind. Two huge piles of tailings lay piled up at the mill site, perilously close to the Animas River. No lining was installed below the piles to prevent leaching into the groundwater, and no cap put on the piles to prevent tailings from running off into the water. Wind picked up the fine dust and blew it over the river onto town. The closest neighborhood to the pile was low-income and predominantly Hispanic. Kids played in the tailings, reveling in the sandy beach-like texture; one local told High Country News in 1980 that it was "the biggest, best sandpile in the world." For a long time, folks would go over to the mill and fill a truck with the tailings, to break up the clay-like soil in gardens, or use in the foundations of homes, or under the concrete sidewalk. In September 1970, a huge rainstorm dumped onto the San Juans and sent torrents running down the Animas River, swelling it to double the volume of the peak spring runoff. The rushing waters didn't quite reach the bottom of the uranium tailings piles, but the event reminded residents of the potential for such a catastrophic event.

"The river was a pea-green color during low flow near the state line. (It) was mostly dead, except for a few suckers."

-Jack Scott, who was in elementary school in Aztec, New Mexico, in the 1950s, when the Public Health Service conducted a study on pollution in the Animas River



A dead fish lies in the shallows of the Animas River a week after the spill.

BRENT LEWIS/THE DENVER POST VIA GETTY IMAGES

I was born in a Durango hospital just days after the flood-waters subsided, and while I was still an infant, my family moved from a little trailer on my grandparents' farm into a house in town, a couple of blocks from the river and about one mile north (upstream) of the old uranium mill and its tailings piles.

The river, which twisted through Durango like a scoliotic spine, was our playground. We spent hours on the Animas, wading, swimming, fishing and chasing minnows. We'd dislodge old cottonwoods that had drifted downriver, drag them into the current, and grip them with our skinny legs, riding maybe 20 yards before the log bucked us into the icy waters. My brother, a trout-whisperer of sorts, reeled in a half-dozen fish a day, feeding the family all summer long. When we got older, we'd head to the river on warm summer nights, strip down and leap from the footbridge into the deep, dark cold.

We mostly had the river to ourselves. But always, in the background, the tailings piles loomed. We traversed the rocky banks of the river just below, where rattlesnakes posed a more immediate danger than radon or thorium. Occasionally, on nights after a snowy winter storm, people would sneak up the piles and ski down their steep slopes, illuminated under the orange glow of streetlights. When I was 8 years old, 15 years after the Durango mill stopped operating, a scientist examined river-

bottom sediment downstream from the old mill site. One sample registered 800 picocuries-per-gram (pCi/g) of radium-226, which is 160 times the Environmental Protection Agency's limit for drinking water, and at least as radioactive as a typical uranium mill's wastewater.

In the late 1970s, when I was still a boy, a local doctor named Scott McCaffrey noticed what seemed to be an unusually high number of lung cancer cases in town. When state health department researchers took a closer look, they determined that McCaffrey's statistics were off, but they did notice anomalies on the south side of town, where folks were being dosed with elevated levels of radon-222, which can cause lung cancer. They cautioned against alarm, claiming the sample size was too small to be conclusive. A more systematic epidemiological study was never performed.

My father was a writer and an intellectual jack-of-all trades. But more than that, he was a resident of this particular region, and as such he tended to get dragged into other positions. In the late '70s, he was elected to the Durango City Council. He and his colleagues were pushing hard to nudge the city out of its fading industrial, extractive past and into what today we might call a New West amenity economy, one that banked on quality of life, cottage industry and tourism. He thought the town should value the river not as a conveniently located dump, but for its

intrinsic, ecological and recreational values. I still remember when he brought home plans for the downtown riverfront — with parks and walking paths and restaurants with patios overlooking the water — and how exciting it seemed at the time. Sometime during his term, someone put a big yellow placard atop the mill piles, warning of their radioactive dangers. This upset my dad, though I'm not entirely sure why. I suppose he felt it was alarmist, and that such scaremongering might hamper their efforts to replace the old with the new. No one would want to live in a radioactive town or play in a radioactive river.

In 1986, the Department of Energy finally came in and spent \$500 million in taxpaver dollars to clean up the mess — a mess it had originally financed with taxpayer dollars. I was in high school, and I vividly remember going out onto the roof of the school to watch the demolition of the original smelter, its tall brick chimney crumbling into a cloud of dust. The chimney had served as a sort of monument to a hundred years of industry that had built our community; its fall was mourned even then. Over the next five years, the bricks (and all the detritus from mill and smelter) were scraped away and buried just over the hill, less than two miles away as the crow flies. Especially egregious hot spots around town, where tailings had been used for construction, were also cleaned up. But a lot of tailings were left behind and still lurk underneath streets and sidewalks. The site of the once-sprawling industrial complex is now a dog park, and is slated to become the city's official homeless camp. The place where the radioactive water once poured into the river is the biggest rapid in town, and a favorite of rafters and kayakers

Mills all over that part of the West were cleaned up at around the same time, from Uravan to Grand Junction, and from Rifle to Moab, where the cleanup of the old Atlas Mill continues. At Shiprock, the waste was impounded on-site in a giant tomb-like repository. Yet no matter how many millions of tons of tailings are removed, the toxic legacy endures, somewhere, somehow. Studies in Shiprock have found elevated levels of birth defects, kidney disease, cancers and other persistent health problems. Radioactive, heavy-metal-laden water continues to seep into Many Devils Wash, adjacent to the site of the Shiprock mill, and then into the San Juan River, flummoxing scientists. Groundwater beneath the Durango dog park still swims with high levels of uranium, lead and other contaminants. We can only guess at what lurks in the silt of the Animas riverbed.

If my father were still alive, I suspect he'd be surprised and even a little baffled by how quickly the people of Durango managed to forget that part of their town's history — how soon after it was gone they'd pushed not just the tailings and the old mill, but all of that toxic past, into the dark corners of their minds, convincing themselves that it was all safe now, all cleaned up, and that it now made sense to drop a million dollars or more on a house in south Durango — where for decades sulfurdioxide-tinged train smoke, lead-loaded smelter smoke and radon-tinged dust had settled out of the sky. He had hoped that historic preservation and remembering would not only attract people to the region, but also help us learn from our mistakes. Instead, we got mass amnesia as a form of economic development.

There are those, however, who will never forget. The surviving mill workers whose friends died painful deaths won't forget. Those who lived downwind or downstream from the mill — anyone whose grandmother, father, aunt or friend died of cancer or kidney failure — will always wonder if it was the tailings, the Nevada nuclear tests, not enough sunscreen or just terrible luck that killed their loved ones.

MY FATHER WAS DYING. They found cancer in his lungs in the spring of 1997, when he was 56. Over the next winter, the cancer slept, but it returned for springtime, leafing out, blooming mercilessly throughout his body and brain. He sat in his chair by the window and stared out at the Sleeping Ute, at the sky, at the canyon in between. This was something he did long before the sickness invaded his body, but I could never figure out what so raptly held his gaze. I put a garden into the earth outside his little house, hacking away at the claylike soil with tearful ruth-

lessness. I put drops of morphine on his dried-up tongue, like the Sacrament. I pushed tiny seeds into soft, rich soil, lit his cigarettes and dressed him for chemotherapy and could never get his shoes onto his swollen feet. The seedlings thrived in the warm air of death, grew as he withered.

Cancer took his mother a decade earlier. It would take his younger sister 15 years later. Victims and survivors of the disease are everywhere around here, it seems, in Silverton and Shiprock, Durango and Farmington. We look to the world around us for answers: the plume of fallout from the Nevada bomb tests, the junk pouring from the coal plant smokestacks, the smelters and the mines, the metals and radon wafting in the wind over our towns.

The science and the statistics tell us we're looking in the wrong places. Sure, living next to an old uranium mill or gas well may elevate your cancer risk, but it's by an infinitesimally small amount. Studies of the folks living in uranium country at Grants, New Mexico, and Uravan, Colorado, have failed to turn up unusually high cancer rates among the folks who lived near the mills but didn't work in the mines. And when a cluster is found, the researchers and health officials attribute it to elevated smoking rates, or natural background radiation. We learn that the zinc, lead, cadmium and copper spilling out of the hardrock mines will kill fish, but unless one drinks the chronically orange and acidified waters of Cement Creek every day, the acid mine drainage won't hurt the humans.

We are Westerners, pathologically independent, pragmatic people. We accept the science, and scold those who put giant, scaremongering signs atop tailings. We scoff at the ones who cringe in fear when they see a river run orange with iron hydroxides, the same stuff that, after all, gives some curry sauces their burnished color. And we're happy to shoulder the blame for our own demise. The tailings piles didn't kill my father. He smoked too much, worked too hard, didn't use sunscreen, had bad genetics or just plain rotten luck. That's what killed him. And yet a seed of doubt remains, an inkling that something else is going on, something the data cannot reveal.

**DUANE "CHILI" YAZZIE IS A DINÉ FARMER,** and he irrigates his fields of corn, squash, tomatoes and hav with San Juan River water. The day after the Gold King Mine blew out in August 2015, as word got out about the yellow river, he was out in those fields. Like other farmers downstream from the spill, Yazzie had to shut off the water to his fields and watch his crops wilt under the rainless summer sky. The Environmental Protection Agency sent giant tanks of water for the horses, sheep and goats, but the water arrived in old gas-field tanks, tainted with residue. The plume passed by, the water returned to its regular silty state, and a few weeks after the spill, the EPA and state and county health departments assured everyone along the Animas and San Juan rivers that all was back to normal. They had sampled the waters exhaustively, and the data didn't lie: The water may not have been pure, but it was no worse than before the spill. It was safe to swim in, fish in, irrigate with and, with proper treatment, drink.

Nine months after the spill, Yazzie stepped up to the lectern at a conference on the Animas and San Juan rivers in Farmington. Most of the other speakers were scientists, engineers or bureaucrats, presenting technical papers on sediment transport, bulkheads and microbial communities. Yazzie, his graying black hair pulled back into a bun, recited a poem he had written, titled "Yellow River." The poem tells the story of his farm, the Gold King spill and the aftermath — a story of sadness, trauma and desperation — and he read it with force and passion, beat style, like Allen Ginsberg.

"Water is our life," he intoned. "It's who we are. ... We don't know what will happen, the water is being shut off. We are confused, anger starting to boil, our elders have sad misty eyes, this is so surreal. ... Government sez farmers will get compensated, payday time, lawyers licking their chops. Water tests ok, Rez Prez sez turn on water, EPA steps out, water must be ok, bye, bye."

Despite the reassurances from the authorities, Diné farmers in the Shiprock Chapter, Yazzie included, refused to use the

"Water is our life. ... We are confused, anger starting to boil, our elders have sad misty eyes, this is so surreal."

—Farmer and poet Duane "Chili" Yazzie, from his poem about the effects of the Gold King spill on the Diné people water. They were so uncertain that they abstained from irrigating their crops for at least a year. Their fields fallowed, corn went unplanted. The scientists and officials were baffled by this and, admittedly, so was I. Even at its peak, the Gold King slug was not especially dangerous. It didn't kill any fish as far as anyone could tell, and by the time it reached Utah, it wasn't even distinguishable from the usual San Juan River silt. Why ignore science, at the expense of your crops, maybe even your sustenance?

But when I think of that spring, and my dad, I think that maybe there are some places science just can't reach. Chemically speaking, the water quality may be no different, but the place — the interaction between the people here and the land and water — I think that did change somehow. Those who value the river the most, who draw physical and spiritual sustenance from its waters, were altered. Once a mountain is mined, it is diminished, a place out of balance, transfigured. When dynamite and draglines chomp apart traditional grazing lands, they take away more than just grass, rocks and shrubs; they shatter a delicate balance that existed between humans and the land for thousands of years. When a cluster of oil wells and holding tanks explodes, rending the night, the place is tainted. This diminishment, or unbalancing, produces a trauma that wends its way into our psyches and into our cells, maybe even our genes.

About six months after the spill, the University of Arizona Institute of the Environment held a panel discussion to explore the Diné perspective on the Gold King spill. Yazzie, who has become something of an authority on the subject, was a panelist, along with a man named Perry Charley, who is also Diné and a professor at Diné College. Charley grew up in Waterflow, New Mexico, along the San Juan River, not far from two giant coal power plants, and has worked for years on uranium issues on the Navajo Nation. He was a witness to the orange slug coming down the San Juan, and he explained how its effects transcended the data and the science. "My first inclination as a scientist was to go out there and do sampling ... but I started to back off, because I knew that this was catastrophic," Charley said.

"I stepped away from being out in the field sampling and ... started to think about interpreting data. You and I can sit here and talk about arsenic and talk about manganese and barium ... but these chemicals have no word in the Navajo language. They have no meaning. Scientists were looking at the origin of the contamination. ... I was looking as a scientist at cultural and traditional aspects — how the Navajo live and how they use the water in their daily lives.

"We are made up of four basic elements: water, land, air and heat," Charley said. "If any one of these elements is disrupted, we are out of balance with nature. We are out of sync. We are not walking in harmony. We are not walking in beauty. That's what happened out there."

I don't know whether my father walked in beauty or not, but I believe that he spent his life trying to do so, constantly searching for that harmony and balance, in spite of the culture from which he came. And finally, all that searching took its toll.

My father's body wilted away to a skeleton, his lips dried up and we doused them with sponges, and his arms were no more than loose skin draped on brittle bones. His teeth fell out, one by one. But his hands remained the same. His hands, which had always seemed huge and powerful to me, had somehow been spared from the disease and its equally brutal treatment. His hands that had written thousands of words. His hands that could pull away dried springtime grass on the edge of a mountain meadow to reveal the speckled eggs of a snowy plover. His hands that could coax a lush array of spinach and tomatoes; zinnias and radishes; cosmos and squash from the rocky, red soil in the garden in the backyard of our house in Durango.

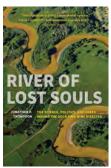
I had always assumed it was his mind that gave him his power. But as his life faded, I realized it must have been his hands, for they, more than anything, connected him to his beloved earth, this beautiful land, this unbalanced place — where on spring days, when the wind kicks up, the yellow dust lifted off the tailings piles and drifts, ghost-like, toward the bright blue sky.  $\Box$ 



Jonathan Thompson is a contributing editor at *High Country News*.

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Adapted from River of Lost Souls: The Science, Politics, and Greed Behind the Gold King Mine Disaster. Torrey House Press. 2018.

Roy Etcitty points out debris on the banks of the San Juan River, which catches water from the Animas, following the Gold King Mine spill. Etcitty was among the farmers and residents of the Navajo Nation whose water was shut off after the spill. BRENT LEWIS/THE DENVER POST VIA GETTY IMAGES

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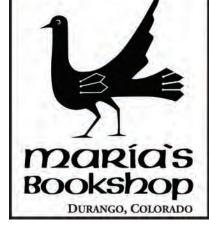
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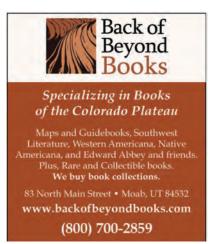
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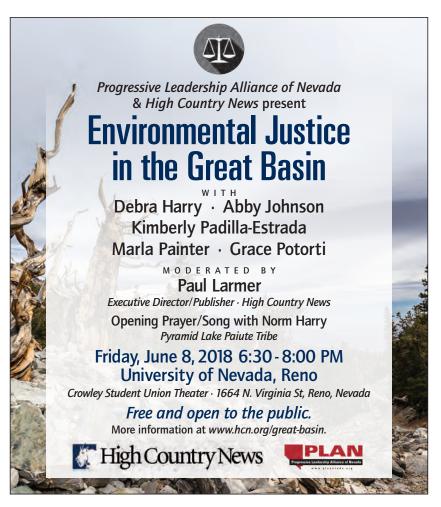






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## Scorpions and other fair-weather friends

Peg and David Engel, left and right, who arrived in a camper sporting a "West Obsessed" bumper sticker, are shown with **HCN** Development **Director Laurie** Milford. PAUL LARMER

With spring warming up, camping season has come to western Colorado. On an early May weekend, a group of editorial staffers ventured into the nearby Gunnison Gorge Wilderness to test our tents and bags. The trip was bittersweet, celebrating Editor-in-Chief Brian Calvert's birthday while saying adieu to Assistant Editor Anna Smith, who will work for HCN from Portland, Oregon. But we made some new friends, including the tiny scorpion that crawled onto editorial intern Jessica Kutz's ball cap, completely disrupting our card game. The little fella



had to be shooed — very politely — into a patch of bunchgrass before play could continue.

Meanwhile, some non-venomous friends have visited our Paonia office. Peg and David Engel came by in their 20-plus-year-old pickup with attached camper, after hiking Comb Ridge in Bears Ears National Monument. Both work with an organization called Stay Cool, which seeks to bring climate change curricula into schools.

Alan Apt and Nancy Olsen, from Nederland, Colorado, dropped by on a Friday afternoon, on their way home from a fiveday camping trip in Utah's San Rafael Swell. The longtime subscribers talked about their hometown's growing pains, as new residents arrive from elsewhere on the Front Range, especially Boulder. They left as Research Fund contributors. Thanks, folks!

**Gregory Staple**, a longtime resident of Washington, D.C., likes to spend time in Marble, Colorado, in the mountains east of town. Gregory, who calls HCNa "national treasure," had lunch with Development Director Laurie Milford and Publisher Paul Larmer, and shared thoughts on expanding our readership in California and on the East Coast.

Subscriber Johanna Solms visited while on an extended trip around the

West. Johanna, a Colorado native whose father set up one of the first alpine research stations outside Boulder, reads HCN to keep tabs on the West from her home in rural Wisconsin.

We also welcomed new staff members. Debra Muzikar and Rebecca Hemer have joined our customer support staff, so next time you call you might hear their friendly voices. Debra comes to us from Aspen, where she worked in the nonprofit world. Rebecca just moved to Crawford from the big city of Grand Junction, Colorado. When she's not at work, she's hanging out in the garden with her 4-year-old daughter, Briley. Josh McIntire, who still works part-time for the Delta County Library District, is joining the tech wizards in the IT department. When he's not at work here (or fixing a library computer), Josh is likely chasing around one of his four kids, or enjoying a movie.

Corrections: A caption from our Research Fund page, (HCN, 4/16/18), incorrectly said Gates of the Arctic muskoxen came from Russia; they arrived via Greenland. "What to do with an extra billion or two?" (HCN, 4/30/18) called New Mexico Sen. Tom Udall chair of the Senate Committee on Indian Affairs: he is the vice-chair. We regret the errors.

> — Carl Segerstrom, for the staff

### **Mount Shasta** continued from page 8

exempts bottling companies, and it doesn't apply to spring water. State laws requiring local regulation of groundwater do not apply because most of Siskiyou County is not considered a groundwater basin.

Cook coordinated a 2016 ballot measure that would have required a permit for all groundwater exports. Nearly 56 percent of the voters rejected it, however. Fears that bottling companies will drain community water are unfounded, says Jill Culora, a spokeswoman for International Bottled Water Association. Bottled water comprises just 0.011 percent of all water and 0.02 percent of all groundwater used in the United States.

In an aquifer as convoluted as Shasta's, it's not easy to determine the effects of pumping groundwater or diverting springs for bottled water, says Gordon Grant, a hydrologist with the U.S. Forest Service's Pacific Northwest Research Station. With most of the 80 inches of annual precipitation seeping underground, some estimates suggest as much as 40 million acre-feet may be stored in the complex volcanic fissures — more than California's top 100 reservoirs combined.

The residents of Mount Shasta City, 12 miles northwest of McCloud, want to learn more about their aquifer. They hope to bring some scientific scrutiny to Crystal Geyser's proposal to reopen a Coca-Cola plant idled since 2010. Neighbors complained the previous operation depleted their household wells. But in 2013, Siskiyou supervisors authorized the new project with no public hearings and no caps on pumping groundwater, which pays nothing to the community. A citizens' group demanded a review of the impacts and eventually won an environmental report certified in December.

It was not the victory they hoped for, says Bruce Hillman, president of We Advocate Through Environmental Review. The report contains numerous factual errors, relies on "old scientific data," and provides no way for the county to enforce limits on pumping if the operation affects neighboring wells, he says. Crystal Geyser officials declined to comment.

County officials say they'll be monitoring the company to ensure it does not harm the environment. "No one's going to get a free ride," says County Supervisor Valenzuela.

Hillman and his group are not convinced. With the Winnemem Wintu Tribe, they have asked a Siskiyou County judge to set aside the county's environmental

In Weed, a gritty working-class town on the northwest flanks of Mount Shasta, former Mayor Hall has been watching the water table for decades. "We know it's not what it was 40 years ago," he says. Here, the expansion of a Crystal Geyser plant in operation since 1996 is eclipsed by a court battle over who owns the water in question.

Around the West, other rural communities are also contesting bottling proposals. Nestlé's decade-old effort to open a plant in Cascade Locks, on the Columbia River in Oregon, failed in October, when Oregon Gov. Kate Brown, D, halted a critical exchange of water rights. In Southern California, Nestlé is disputing a state report that says it lacks proper rights to about three-quarters of the water it withdraws from the San Bernardino National Forest.

Siskiyou County citizens are pressing for information about their water before more international corporations move in. The Mount Shasta group is involved in court-mandated settlement discussions with the county over the Crystal Geyser environmental review, while Weed's citizens expect a ruling later this year on water ownership. In McCloud, a draft environmental review for the proposed bottling operation should be available in 2019.

From her perch behind the ironing board at the McCloud thrift store, Cook seems resigned to a long struggle over corporate prospecting for Shasta water. She shakes her head with a wry smile. "It's nothing less than a water industry siege on Mount Shasta," she says.



of a woodland caribou in the southern Selkirk Mountains of Idaho. PACIFIC REGION

A 2007 photo

STEVE FORREST/LISEWS

# A quiet goodbye to the Selkirk caribou



OPINION BY **BEN LONG** 

To steal a line from the poet T.S. Eliot: This is the way the world ends / Not with a bang but a whimper. Worse yet, extinction comes without even a whimper, only a click and a yawn.

The end of the line seems imminent for the last caribou of the Lower 48. Woodland caribou once roamed the forested northern tier from Maine to Michigan to Washington state, as they had for centuries. One herd has struggled for decades along the border of Washington, Idaho and British Columbia, in the Selkirk Mountain Range. Although I have seen the distinctive footprints of these caribou, I never caught up with any of them on the hoof.

Now, my chances may soon be over. Biologists recently completed their winter survey of these animals and found only three individuals in the Selkirks. This is down from nearly 50 a decade ago. All three caribou are female. You don't need a degree in biology to know how this story ends.

Even if those animals happen to be pregnant, the outlook is grim, said biologist Bart George, who works for the Kalispel Tribe of Indians.

"We are all in mourning," George told

The southern population of mountain caribou in British Columbia, Alberta, Washington and Idaho is in a tailspin. The Selkirks are one of perhaps 15 mountain ranges that face similar problems, though some are not quite as dire.

I've been writing about these caribou for 30 years and reading about them my entire life. In my business — conservation and journalism — I frequently write about extinction. But it's usually an abstract concept, something that could

happen in the future, or has already happened in the past. This is happening now, on our watch.

Mountain caribou are uniquely adapted to life in snowy mountains. They thrive so well in harsh winter climates that they migrate *up* the mountains in the winter, surviving on certain types of lichen that hang from low tree branches. It's a precarious way to make a living, though, and it doesn't take much to impact their survival.

Caribou get killed by cars and poachers and cougars and wolves. But these are tiny nicks in the population compared to the slashing wounds of the large-scale clear-cut logging that has swept over British Columbia, Idaho and Washington since the 1960s. I don't intend to point fingers; I print words on pulp, live in a wooden house and have friends and neighbors who make a living cutting and milling trees. But clear-cuts are killing the caribou. It's just a fact.

I believe that people have a right to log trees, but also a responsibility not to push our fellow beings into oblivion. That was the idea behind the Endangered Species Act. Extinction can be a natural process, but not when it's driven by human greed and consumption. The Endangered Species Act is sometimes described as the "emergency room" of conservation. Unfortunately, critical care appears to be coming too little and too late for our caribou.

I could tell you all about how humanity's fate is tied to our natural world, how healthy forests are crucial for clean water and "ecosystem services." But forget all that. I'll just say this: Caribou have a right to be here, and our nation is poorer without them. Extinction doesn't

always come about with a meteor strike from outer space. It's usually a slower process — a trickle of bad news that comes gradually to a stop.

The fate of Selkirk mountain caribou isn't unique. Today, there are less than 100 bighorn sheep left in the Teton Range near Jackson Hole, Wyoming. There are about 75 resident orca whales in Puget Sound off Seattle. When population numbers get this low, conservation gets expensive, and the odds of survival grow increasingly long.

The Endangered Species Act is important, but the way out of this cycle is to not end up relying on it so heavily in the first place — to keep the land and water and wildlife healthy enough to not need the emergency room. For that, we need to acknowledge that wildlife habitat has a value, whether we are weighing it against cheap oil and a policy of "energy dominance," or the growth of another foothills subdivision, or just the price of a two-by-four at the lumberyard.

Only a tiny handful of U.S. news outlets have even mentioned the crisis of the Selkirk caribou. I guess extinction in our time cannot compete with the latest tweetstorm from Hollywood or Washington, D.C. There is only a whimper, or maybe a few tears. I want to believe that America can do better than that. For the sake of our grandchildren, I hope I am

Ben Long is senior program director for Resource Media in Kalispell, Montana.

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** To see all the current Writers on the Range

## 'Alienated' in Portland

### How segregation, redlining and racism pushed out black residents



A CIVIL CONVERSATION WAYNE HARE

A few years ago, after the violence in Ferguson, Missouri, a brilliant friend of mine, a surgeon, told me that if black people wanted to live better lives, they should move to a better place. I'd heard this sentiment before, always uttered with the unspoken privilege of ignorance that comes with being white. "Why don't those people make better decisions ... like we do?" But it's not that simple. How to explain? Race is complex.

I think white people assume that the America they experience is the only America. After all, it's all they know. If whites want to move and can afford to, they move. But if blacks want to move to a "better place," i.e. a white neighborhood, we have to make a different calculation: Will I feel accepted, or isolated? Will I feel ... safe? Will my children? How will the police and neighbors treat us? Perhaps this explains why black families making \$100,000 a year tend to live in the kinds of neighborhoods inhabited by white families making \$30,000.

I was raised on a small dairy farm in New Hampshire, so I know little about the challenges faced by blacks in places like Ferguson. But I know they don't choose to live there because they love crime and poverty and government-built projects. Still, my friend's statement got me thinking. Why do black Americans end up in these places? And what keeps them there?

My quest led me to Portland, Oregon, considered one of the nation's most livable cities. I lived there in the late '80s and early '90s and enjoyed its easy access to whitewater rivers, big mountains and miles of single-track mountain biking. And yet I'd heard that, behind its progressive façade, Portland had a racist history. I wondered if it held the key to my questions. That key, as it turns out, was literally to the closed door of that most American of dreams: home ownership.

When Oregon became a state in 1859, its Constitution boldly declared: "No free negro or mulatto not residing in this state at the time of the adoption of this constitution, shall come, reside or be within this state or hold any real estate, or make any contracts, or maintain any suit therein. ..." Oregon voters didn't amend their Constitution until 2001. The state, like the rest of the country, was conceived as a white utopia.

Yet blacks came to Portland anyway — first with the railroad in the late 1800s, and then during World War II, with the construction of the Kaiser ship-

building plant. The company built a slap-dash, segregated city north of Portland to house some 100,000 workers. When a 1948 flood destroyed Vanport, as it was called, white residents had some choice as to where to move. Blacks did not. They could either leave entirely or move to the Albina district of northeast Portland, the only place they could legally buy or rent homes. The code of ethics of the Portland Realty Board forbade realtors and bankers from selling or giving loans to "Negroes or Orientals" for properties in white neighborhoods.

Across the nation, federal law reinforced this housing discrimination. In 1934, Congress created the Federal Housing Authority to insure private mortgages. This led to lower interest rates, a drop in the required size of down payments, and eventually lower housing prices. The FHA rated neighborhoods using maps: All-white neighborhoods received an "A," while neighborhoods with even a single black family received a "D" and were outlined in red. Black people were viewed as a contagion, and no federal money was loaned to "redlined" districts.

Realtors were complicit. As late as 1950, the National Association of Real Estate Boards' code of ethics concluded, "A realtor should never be instrumental in introducing into a neighborhood ... any race or nationality ... whose presence will clearly be detrimental to property values."

Even banks were complicit. In 1990, The Oregonian found that altogether, Portland's banks made just 10 mortgage loans in the black community of Albina, at the same time they'd made over a hundred loans in similarly sized tracts elsewhere in the city. And housing discrimination continues today: In 2011, Eric Holder's Department of Justice fined Bank of America \$335 million for predatory racist lending practices, and Wells Fargo \$175 million in 2012. Federal Reserve Chairman Jerome Powell, asked about modern-day redlining, said, "If people are denied access to credit, then they are going to be less able to attend school, less able to start a family, less able to move to a new job, all kinds of things... and if you take that out across a broad population, it would certainly hurt the growth of the country."

Whites could rely on a legitimate lending system backed by their government; blacks, however, were excluded or herded toward unscrupulous lenders. The result was devastating. White families grew relatively wealthy as their homes grew in

value. They sent their children to college, took care of their parents, and bequeathed wealth to the next generation. Black families largely could not. Black American incomes average about 60 percent of white incomes, and yet black American wealth is just 5 percent of white wealth. This enormous difference is almost entirely attributable to federal housing policy implemented — by law or by custom — throughout the 20th century.

Portland, I visited Albina, today considered a "mixed race" neighborhood. I passed beautifully restored Victorian homes and modern condos with patios over-looking tree-lined streets; I saw remote-control parking garage gates, green-painted bike lanes and \$4-a-scoop ice cream shops. I saw white women jogging, yoga mats tucked under their arms, but very few blacks.

With the help of Gloria Cash and Florida Blake, two spunky women who had grown up in Albina, we tracked down historical markers. They showed me where black businesses had once stood: the drugstore; the print shop; the bowling alley; the Burger Barn, where four white cops had once flung dead possums onto the steps to leave a message. All were now hipster, white-owned businesses. Gloria and Florida didn't seem sad or bitter; they talked about their childhoods here and laughed. But at lunchtime, Gloria was clear: "I don't support white businesses. I figure they already have enough support."

Albina's gentrification was preceded by the deliberate evacuation of its black residents.

What the city's leaders really wanted was a white corridor from downtown to the new Lloyd Center shopping mall. So they brought in development, building a new coliseum in the heart of Albina, and began to displace black families — condemning 476 mostly black-occupied homes, all of the district's businesses and many of its churches. Residents were told they had to be gone before the bulldozers arrived.

Highways were constructed, separating black neighborhoods from white, a tactic endorsed by the Federal Housing Administration nationwide. In 1956, construction of I-5 eliminated another 125 black homes. City officials, as housing discrimination expert Richard Rothstein told NPR, viewed the interstates as "a good opportunity to get rid of their local nigger town."

Wayne Hare is a member of the *High Country News* board who lives in Grand Junction, Colorado.

And then there was Emanuel Hospital. A 1962 study by the Portland Development Commission declared Albina "a 'worthless slum' and proposed clearance to prevent the spread of slums to adjacent neighborhoods," writes Portland historian Tom Robinson. The hospital, which wanted to add 19 acres to its campus, "was a perfect partner to accomplish this. The commission received a grant from the Model Cities Program to make an urban renewal district for Emmanuel Hospital that would clear about 10 blocks of homes and businesses."

Homeowners received a flat \$15,000 for their homes, far below market value. Renters received a mere pittance, and all were given just 90 days to be gone. Some 300 black residences were destroyed. In an ironic twist, just as the demolition neared completion, Congress failed to appropriate funding for the hospital. Decades passed before the hospital expansion started. Gloria and Florida pointed out lots that are still vacant 45 years later. I snapped a photo of Gloria standing in front of her childhood home, now a Ronald McDonald House.

As the neglected and decimated neighborhood declined in the 1990s, Portland officials, under pressure from the black community, started another urban renewal process that ended up pushing out even more residents. White folks swooped in to buy Victorian homes for less than the price of a used car. Black residents, priced out, left. A decade after urban renewal began, black residents owned 40 percent fewer homes in the community while white folks owned 43 percent more.

While in Portland, I watched *Priced* Out, a 2017 documentary about Albina's gentrification. It features lifelong resident Nikki Williams, who fought to rid its streets of trash and drugs. She persevered because she loved her neighborhood, the only one she'd ever known. Now. however, she felt like an outsider: "I guess cleaning up the neighborhood meant getting rid of the brown folk!" Eventually, she sold her Habitat for Humanity home for \$330,000 and boarded a bus for Texas. "I'm at the point in my life where I need to be around more brown folk," she said. "I have begun to feel so isolated and alienated here in Portland that I cannot call this living. This is just existing."

As I hopped into my motorhome and headed back to Colorado, I wished that my surgeon friend had been with me. He might have gained some insight into the complexities underlying his simple, well-intentioned statement, "Blacks should just move somewhere better." There's a perception out there — promoted by some — that slums, poor schools, menial jobs, poverty, high crime and incarceration are who black Americans are. But that's not who we are. It's what we endure.



Families escape the Vanport Flood in May 1948. Because of segregation, black families searching for homes were limited to Albina, a neighborhood that was already overcrowded.

© THOMAS ROBINSON



The Model Cities Citizens' Planning Board discusses the expansion of the Emanuel Hospital, which would result in the demolition of 209 homes in the community, in June 1970. Their voting power had been stripped by the mayor prior to this meeting, and 25 days later the federal funding came through for the hospital to acquire the land and begin building. ©THOMAS ROBINSON

## The benediction of a bird

BY MELISSA HART

he song of the Swainson's thrush defies description — three low notes followed by an upward burble in a cautionary key, like a sound you might hear in space, as if R2D2 sang a piece by Mozart. While the females forage in the forest for insects and berries, males mount song battles to establish territory. Across the trees, they trade tunes, growing louder and more resonant. It's *America's Got Talent* of the genteel sort.

I first heard the thrush in the mist outside a coastal cabin where I'd gone for two days to retreat from the news — budget threats to the arts, the cries for border walls, impending climate travesties. The liquid trill rang out among the spruces, shaking me out of despair and into the world unfurled. Though I scanned the prickly branches, squinting through binoculars, I couldn't spot its source. I dashed across the road to my neighbor's house. "What's that bird?" I demanded

"What bird?" the man asked. After so many years, the song had become mere background noise to him. Familiarity, the enemy of awe, overtakes us all

"It sounds like this." I attempted to replicate the melody, but choked on my warble.

"You've lost me," my neighbor said, so I returned to my cabin and threw open the windows and shivered in a symphony of unseen, nameless singers.

The Swainson's thrush, like other birds, possesses a two-sided voice box — a syrinx — that allows it to switch rapidly between pitches, even to sing two at once. Two centuries ago, British naturalist Thomas Nuttall traveled to the mouth of the Columbia River and discovered the vocal acrobatics emanating from the syrinx of the thrush. He documented it accordingly, then relegated the bird to the role of specimen. How his pulse must've quickened beneath his high starched collar when he first heard the song, how his heart must've ached at the sight of the little chorister dead in

Naturalists then were a generous sort; they named their

discoveries

its box, eastward bound for some

after one another in a gesture of homage. Nuttall — who shared his surname with a woodpecker, a magpie and a violet — named the thrush after British naturalist William Swainson. Sadly, Swainson never got to see or hear his bird; he'd relocated to New Zealand, to the bloodcurdling shriek of the kiwi.

I learned all this in my mother-in-law's home, her Audubon CD echoing through the hallways dawn to dusk as company for her caged songbirds. The Swainson's call, fragile exuberance in the midst of parakeet screech, rang out from her study. I raced across the house to investigate.

"What is that?" I yelped to the trio of budgies, who lacked in voice what they made up for in pastel plumage. What a thing to possess both substance and style; alas, the thrush in my field guide is a drab little creature with a brown and buff body which it fills unglamorously with insects and earthworms. But, oh, that memorable musical motif. ...

Two centuries after Nuttall's discovery, we can listen to almost anything we desire, whenever we desire. But to hear birdsong in its natural environment — that is a gift. A wild creature calls when it wants to, how it wants and where. I assumed, leaving the cabin on the coast, that I'd not hear the song of the thrush again in real time until I returned.

Miraculously (I've learned to take my miracles where I can), I was wrong. Pruning blueberries and fuming over politics in my backyard a hundred-plus miles southeast of the spruce forest one day, I heard the thrush among the firs. I froze and called for my husband. "The Swainson's!" I whispered. "It's here."

I shouldn't have been surprised. Swainson's thrushes migrate, flying eight hours a night without food or water, from Canada to Central America and back again. Still, this was the first time I'd heard one in my yard. I bowed my head under the benediction of the bird, its song reminding me to breathe and to listen, to feel the ripening blueberries under my fingertips.

My thrush was a soloist, staying but a day. But he left me this: If a song can define a place — and I think that it can — what does it mean when we can no longer hear it? When the anthem has vanished, when the symphony shuts down and the concert falters, when we retreat behind walls, we become inured to a different background noise: the creak and shriek and gears of our destruction.

We'd do better to throw open our windows and launch song battles ourselves, tournaments of melody, adding wonder to the world instead of terror. Then no one, not even the smallest and drabbest among us, would be mute. We'd all of us sing our names through the trees as proof of our existence and worth, our voices echoing generously for centuries.

Melissa Hart is the author of the forthcoming Better with Books: Diverse Fiction to Open Minds and Ignite Empathy and Compassion in Children (Sasquatch, 2019). Website: www.melissahart.com

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Michael O'Casey of the Oregon Natural Desert Association removes old barbed wire fencing in the Steens Mountain Cooperative Management and Protection Area, allowing native wildlife to move freely through the land-scape once more. **SAGE BROWN** © 2018 Patagonia, Inc.

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### HEARD AROUND THE WEST | BY BETSY MARSTON

### ARIZONA

A British-owned newspaper is such a spoilsport, issuing dire warnings to Phoenix-area residents that they're living in a fool's paradise of bluegrass lawns and cooled pools. The nation's fifth-largest — and growing — city is dangerously overstretched, warns the Guardian. Its "megapolitan" area has become "a shrine to towering concrete," and when you drive through the sprawl of its satellite towns up to 35 miles away, it's all too easy to imagine "there is no such thing as a water shortage." Yet drought is a perilous threat, says writer Joanna Walters. Phoenix gets less than 8 inches of rain each year, and it's dependent on the ever-shrinking Colorado River, 300 miles away. Phoenicians might have noticed recent warning signals about the local impacts of global climate change: In February, "the U.S. government calculated that two-thirds of Arizona is facing severe to extreme drought, and last summer, 50 flights were grounded at Phoenix Airport because the heat — 116 degrees — made the air too thin to take off safely." Nonetheless, proposals for new growth abound, including a plan from Microsoft founder Bill Gates to build a "smart city" on undeveloped desert west of Phoenix. Gates reportedly invested \$80 million in a development firm that would build 80,000 new homes. Still, the city has not declared any water restrictions, and the state government has not drawn up a drought contingency plan. The same old "solutions," however, keep popping up: "The conversation ... turns periodically to the outlandish ideas of drawing water from the Great Lakes 1,700 miles away or building expensive desalination plants on the Pacific Ocean..." If the past is any guide, Phoenix could be headed for depopulation: In the 15th century, the 40,000 original inhabitants of Phoenix, known as the Hohokam people, fled the area "for reasons believed to relate to disagreements over scarce water."

### NEVADA

While Phoenicians endure summer heat that hovers above 98 degrees night after night, summer visitors to Death Valley National Park *really* like it hot. They travel thousands of miles just to



ARIZONA Drivers get a cutting-edge update on bear awareness. MELISSA URREIZTIETA

experience air so intense that it shimmers, and they delight in seeing mirages on the horizon. "August has become one the of the busiest months of the year," reported National Parks Magazine. Most visitors come from Asia and Europe, A German tourist told writer Kate Siber that he relished the extreme temperatures on his first visit, but returned a second time for the landscape: "There's heat and stone and silence. In a world with so much built up, this is hard to find." The record for hottest-hot in the world was set in Death Valley in 1913, when temperatures soared to 134 degrees. How hot is that, you ask? So hot that a ranch caretaker reported seeing swallows fall dead from the sky at midnight. But 2017 was no slouch in the sweltering department: A summer scorcher sent Death Valley thermometers to 127 degrees. That kind of extreme heat turns 15 minutes of exposure outdoors into an endurance contest. In any season, dehydration and heat exhaustion remain problems, say park rangers, and each year the search and rescue team responds to about 180 medical emergencies. Tragedy occurred in 2014, when a Frenchman on a bus tour wandered onto the dunes during a break. The temperature in the parking lot was 117 degrees, and though he was found within four hours, the man died. On a happier note, in August rangers sometimes treat visitors to "dashboard cookie day." All it takes to

bake delicious cookies, says park staffer Isabelle Woodward, is a closed car and relentless heat: "When you move to an extreme place, you have to learn to make your own fun."

### UTAH

Folks with a taste for wanton destruction seem to harbor a grudge against Utah's dinosaurs, reports The Associated Press. Over the last six months, vandals have flung hundreds of ancient raptor tracks — incised in sandstone — into the reservoir at Red Fleet State Park. "Some of the slabs sink to the bottom of Red Fleet Reservoir, some shatter upon hitting the surface, and others dissolve entirely," said Utah Division of State Parks spokesman Devan Chavez. "Some of them are likely lost forever." The park is putting up more signs asking visitors not to touch the stone toe tracks, and staffers are also considering sending a team of divers to recover what it can from the lakebed. Some 193 million years ago, the park was a bog where carnivorous Dilophosaurus raptors "ambushed other dinosaurs while they were resting or drinking from the swamp." The park's fossils have been targeted before; in 2001, three teenagers were tried in juvenile court for destroying a paleontological site there.

### THE WEST

**Twenty-year-old Dylan McWilliams**, who was dragged out of his sleeping bag by the head and bitten by a bear in Colorado, a few years after he was bitten by a rattler in Utah and, more recently, bitten by a shark in Hawaii, is "one of the unluckiest people on the planet," says *National Geographic*. McWilliams, who is thrilled to be alive, disagrees, telling the Grand Junction *Daily Sentinel*: "I'm thinking I should buy a lottery ticket!"

**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 on Instagram.



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Those who mourn the loss of Glen Canyon know that this was the year the gates slammed shut on the 'damn dam.' All I knew, at the tender age of 4, was that I loved the red rocks.

Crista Worthy, in her essay, "The playground of Lake Powell isn't worth drowned canyons" from Writers on the Range, hcn.org/wotr