

High Country News

For people who care about the West



Los Promotores

Amid California's toxic dumps, local activists go it alone | Ruxandra Guidi



A hand-written sign warns Duroville mobile home park residents in Thermal, California, to stay away from a waste pond on the neighboring property. On the far side of the pond is Lawson Dump, now closed by the EPA because it contained dangerous amounts of arsenic, PCBs, asbestos, dioxin and other toxic materials. (2010)

ROBERTO GUERRA

On the cover

Eduardo Guevara stands at the entrance to the Duroville mobile home park in 2010. He and his family lived in a dilapidated trailer here for about a year, leading him to become an activist and environmental justice advocate, and founder of Promotores Comunitarios del Desierto. (2010)

ROBERTO GUERRA



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FEATURE

12 Los Promotores

Amid California's toxic dumps, local activists go it alone
By Ruxandra Guidi

CURRENTS

- 5 **Drilling threatens Dinosaur National Monument** Old public-lands battles are rekindled as Interior prioritizes oil and gas
- 5 **The Latest: Owens Valley moves to reclaim water**
- 6 **Get in line** Soon, hordes will flock to the West for the solar eclipse
- 7 **Rights and releases** Idaho water case highlights difficulty of dam management under climate change
- 8 **Cross-country** The discovery, and probable disappearance, of North America's newest bird species
- 8 **The Latest: Long-running pueblo water-rights case settled**

DEPARTMENTS

- 3 FROM OUR WEBSITE: HCN.ORG
- 4 LETTERS
- 9 THE HCN COMMUNITY Research Fund, Dear Friends
- 21 MARKETPLACE
- 25 WRITERS ON THE RANGE What a way to go By Rob Pudim
- 26 BOOKS *American Eclipse* By David Baron Reviewed by Ben Goldfarb
- 27 ESSAY Flirting with extinction By Maya L. Kapoor
- 28 HEARD AROUND THE WEST By Betsy Marston

Editor's note

Our invisible immigrant activists

California's distinctive character and its wealth are closely tied to its immigrants. From the early Gold Rush and railroad days, to the Central Valley's farms and Silicon Valley's high-tech boom, immigrants have helped make the state the sixth-largest economy in the world. California's estimated 2.5 million undocumented immigrants make up about 10 percent of its workforce, contributing \$130 billion a year to its gross domestic product — which is more than the annual GDP of 133 other countries.



The highest concentration of California's immigrant labor is in agriculture, where nine out of 10 workers are foreign-born and more than half are undocumented. Their backbreaking toil fills produce aisles and wine racks across the state and throughout the West, as workers accept low wages, long hours and cramped living conditions in hope of bettering their lives. And yet they remain invisible and largely unwelcome. Despite the importance of multiculturalism to California's success, non-whites are increasingly under attack. Hate crimes in the state spiked to double-digit growth in both 2016 and 2015. Of 931 hate crimes committed there last year, 519 — more than half — targeted race or ethnicity. The vast majority involved attacks on non-whites.

That intolerance coincides with President Donald Trump's immigration crackdown. Arrests of immigrants without criminal records have doubled, leaving farms without the workers they need — and generally adding to America's growing reputation as a hate-filled place. Meanwhile, Trump's beleaguered attorney general, Jeff Sessions, has announced renewed efforts to withhold federal funding from so-called sanctuary cities. That makes undocumented immigrants increasingly hesitant to report crimes or show up to court for misdemeanors, for fear of being deported. It also makes policing harder, as people become more distrustful of beat cops and local investigators. All of this is making these communities even less visible to the rest of the world.

This issue's cover story aims to bring the members of these communities out of the shadows. It is the product of a new initiative at *High Country News*, the Diverse Western Voices Award, which recognizes journalists of color who investigate the hidden corners of our region. This story, by the first recipient of the award, Los Angeles-based Contributing Editor Ruxandra Guidi, highlights the work of grassroots activists in the farmworker towns and crowded trailer parks of Southern California. As Ruxandra notes, these activists come from a long tradition of education and community service. They address exploitation and intolerance as bravely as any environmental activist, quietly and patiently moving house to house and field to field, to improve the lives of their compatriots one small step at a time. I find their work inspiring and worthy of attention, and I hope you will, too.

—Brian Calvert, editor-in-chief



Downtown Los Angeles with an inversion of smog. In July, the state Legislature extended California's cap-and-trade rules, which require businesses to buy credits to pay for greenhouse gas emissions. TED SOQUI/CORBIS VIA GETTY IMAGES

A bipartisan win for cap and trade

In July, the California state Legislature narrowly voted to extend the state's landmark cap-and-trade legislation by a decade. The program, which has been in effect since 2013, requires businesses to buy credits to pay for their greenhouse gas emissions. It is the only such program in the United States, and it has been touted as a potential model for other states and countries. The Legislature also passed a companion bill to strengthen air-quality rules. The cap-and-trade bill's passage was a victory for California Gov. Jerry Brown, D, who has emerged as a de facto climate leader following President Donald Trump's decision to withdraw from the Paris climate agreement. The bill, which received unusual bipartisan support, also revealed a split within the environmental community. Groups working nationally largely supported the extension, while groups more concerned with local pollution opposed it on the grounds that the concessions to industry went too far. **REBECCA WORBY**
MORE: hcne.ws/california-industry

Trending

Female farmworkers speak out

The *campesinas* of California are groups of female farmworkers who take on issues unique to their job, varying from pesticide drift to sexual assault. Through organizations like Lideres Campesinas, undocumented workers can fight for better working conditions. Under the Trump administration, though, the *campesinas* are facing a new set of issues with hardened immigration policies. They are worried that reporting crimes or workplace violations could cost them their jobs and family stability. But they'll find a way forward, says Executive Director Suguet López. "We left our countries and have started new lives over before, so we know we are resilient." **RUXANDRA GUIDI**

You say

MICHAEL STIEHL: "Hold employers accountable and provide permits for workers instead of making them criminals. In other words, make the systems on the books work, and enforce the laws."

PATRICK NETHERLY: "Undocumented folks should not be here in the first place."

DAN BORN: "Someone who is willing to work that hard should be provided with a faster path to citizenship."

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

\$9.9 million

Amount of tribal climate resilience award money proposed to be cut in President Donald Trump's budget

31 Number of Alaska Native villages threatened by coastal erosion. Several already have been forced to relocate.

After Trump withdrew the U.S. from the Paris climate agreement, tribal nations persisted in their own plans to prioritize climate change adaptation. In the West, many tribal communities are on the frontlines of climate change, uniquely impacted by drought, rising sea levels and wildfire. But U.S. tribes cannot directly enter into treaties with the United Nations, so they are instead working with Indigenous populations from around the world, like the United League of Indigenous Nations, to become leaders in the climate conversation. Still, the government's lack of interest is likely to be an obstacle, as renewable energy and climate resilient infrastructure often requires federal investment. **LYNDESEY GILPIN**

MORE: hcne.ws/tribes-climate

\$1 B

Estimated value of the "Indian-made" jewelry sold every year, 80 percent of which could be counterfeit, according to New Mexico Sen. Tom Udall, D. Under the Indian Arts and Crafts Act, it is illegal to market or sell fake Indian art as the real thing. But out of some 1,700 complaints since 1996, only 22 have been prosecuted.

FRANCES MADESON

MORE: hcne.ws/counterfeit-art

The quieter monument battles to watch

Though the Interior Department ended the public-comment period for its national monument review, these lesser-known places await their fate:

Cascade-Siskiyou National Monument in Oregon is known for its biodiversity. The Obama administration nearly doubled its size, and its inclusion in the review has raised concerns that the expansion could be reversed.

Officials in Nye County, Nevada, home of **Basin and Range National Monument**, opposed its designation in 2015, and some have lent their support to Interior's review.

Montana Sen. Jon Tester, D-Mont., and Gov. Steve Bullock, D, have come out firmly in defense of the **Upper Missouri River Breaks National Monument**. Rescinding it would be a "job-killing step backwards in our responsibility" to protect public lands, Tester says. **REBECCA WORBY**

MORE: hcne.ws/monument-battles



Cascade-Siskiyou National Monument in Oregon.



Basin and Range National Monument in Nevada.



Upper Missouri River Breaks National Monument in Montana.
BUREAU OF LAND MANAGEMENT

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circulation@hcn.org
development@hcn.org
advertising@hcn.org
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posted on our website, hcn.org.*

NO EMPATHY

In the story "Death Threats" (HCN, 7/24/17), Jessica Lefevre, an attorney for the Alaska Eskimo Whaling Commission, says, "The NGOs we deal with are ideologically driven; this is what they do, they save stuff. The collateral damage to communities doesn't factor into their thinking."

The same could be said for dozens of hard-line animal rights and environmental outfits across our country. Real, effective conservation includes hunting as a wildlife management tool as well as a cultural and subsistence tradition, hinges on science-based wildlife management, and — most importantly — works collaboratively with locals to advance healthy wildlife and wild places alongside thriving, healthy communities. Sea Shepherd, Paul Watson, their followers and similar uncompromising groups should be ashamed of themselves. Their approach is neither empathetic nor effective.

*Chase Gunnell
Seattle, Washington*

TOUGH QUESTIONS

At a superficial level, this story reveals the contradictions of people who claim to be sympathetic to both environmental preservation and Indigenous people living in traditional ways ("Death Threats," HCN, 7/24/17). But a little deeper down, we face some real human dilemmas. Beyond "managing" wildlife populations and limiting hunting to sustainable levels, many people do feel distress about harvesting certain species. And the restrictions of hunting rights to Native groups and subsistence lifestyles opens a range of uncertainty: Just who is a Native, and what is subsistence living? On the other hand, people with cultural traditions certainly have a claim to maintain their way of life, especially in resisting distant critics. Finally, many of these issues seem significant in a world with several billion people. Wind back the clock — and the collective global impact — and the ethics might seem easier.

*Robert Krantz
Durango, Colorado*

GRAHAM HARROP / ARTIZANS.COM

DISTRIBUTING TRAIL USE

The trail numbers seem off in your story "Trail Blazing" (HCN, 6/26/17). The American Hiking Society's 2015 report listed 103,000 miles of trails in 1965 on federal and state land, and 236,000 miles in 2015, not 326,000. (Editor's note: *Craig is correct; we've updated our story.*) The lack of numbers in between those two years leaves me wondering how much of that trail growth is recent. The greatest number of overnight stays in the Yosemite backcountry was in the mid-1970s; numbers today still haven't reached that plateau. Elsewhere in the Sierra, many backcountry trails that were present in 1965 are now gone or in the process of going: In Kings Canyon, the Baxter Pass Trail, Sawmill Pass Trail and Kennedy Pass trail are now unmaintained while the Gardiner Basin trail, Cartridge Pass Trail and the old Muir Trail over Junction Pass no longer appear on park maps.

So I'd argue that this article is actually identifying a somewhat different trend: the growth of charismatic and amenity-oriented trails at the expense of less desirable trails. Wilderness rangers along the Muir Trail all mention how heavy the use is on that trail and how empty things are on what were once mainstream trails. This risks a feedback loop, where even more secondary-trail mileage is dropped to focus on serving the multitudes on the Muir Trail and Pacific Crest Trail. For the health of wilderness, finding a way of better distributing that usage would be wise.

*Craig Jones
Boulder, Colorado*

TOURISM CAN'T REPLACE OIL

Replacing the economic benefits of oil production with trail tourism is a nice idea, but the economic reality is staggering ("Trail Blazing," HCN, 6/26/17). The current Trans-Alaska Pipeline carrying rate is about 500,000 barrels per day. At about \$43 per barrel, the value of that resource is \$21.5 million. Per day. All year long.

Until the recent oil-price crash, the state took in billions per year in royalties and production taxes. Alaska has no income tax, but the economic benefits of tens of thousands of industry employees, most of them making six-figure salaries, kept the entire economy alive.

Assuming trail users want to travel from Valdez to the North Slope, a length of 800 miles, that

could require about 80 huts (for hikers) or 20 huts (for bikers). With bigger huts that could accommodate 10 people, that's 200 to 800 visitors per night, and at \$200 per bed, that's \$40,000 to \$160,000 per day. While that sounds like a lot, it looks tiny compared to the dollars the state government, and the state workforce, have enjoyed in the past. Of course, building the huts and associated infrastructure would require millions of dollars.

So a tourist economy is better than nothing, but the scope is limited and often seasonal, and most of the jobs pay little.

*Robert Krantz
Durango, Colorado*

TOURISM IS NOTHING NEW

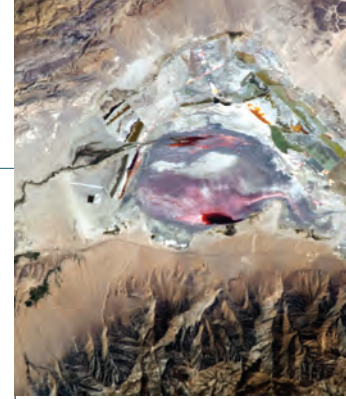
Alaska's economy isn't in need of salvage ("Trail Blazing," HCN, 6/26/17). There is already a multibillion dollar tourist economy in the state. There are glacier tours, whale-watching tours, dog-sledding tours, bear-watching tours and hiking tours, in addition to fishing and hunting tours. Alaska actually has too many tours. We are selling off our wilderness as a commodity. Some trails are almost unusable because guided tours block your way as you hike. I hope the Tongass and the Chugach national forests build more trails, but don't try to pretend that tourism is new or that one project is going to "save" Alaska.

*Carl Reese
Juneau, Alaska*

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Owens Lake in Inyo County, California.
NASA

Drilling threatens Dinosaur National Monument

Old public-lands battles are rekindled as Interior prioritizes oil and gas

BY ELIZABETH SHOGREN

For several years, Dinosaur National Monument enjoyed a respite from the oil and gas leasing that previously threatened this natural wonder straddling the Utah-Colorado border. People visit not just to behold its extraordinary fossils but also to take in the deep canyons carved by the Yampa and Green rivers, high desert plateaus and distant mountain peaks. The Obama administration declined to lease parcels near the monument until it could consider competing priorities in a public process.

Now, under President Donald Trump, the Bureau of Land Management has proposed offering one lease abutting the monument and several more within view of its visitors' center. Monument Superintendent Mark Foust has asked the BLM to remove two of these parcels from a lease sale scheduled for December, fearing that drilling will damage the pristine air quality, dark night skies and nearly limitless views. "These vistas are fundamental to the visitor experience at the Monument," Foust wrote in a May letter. Utah's Gov. Gary Herbert, a Republican, echoed these sentiments in a July letter, expressing concerns about the BLM leasing the three parcels closest to the monument.

Dinosaur National Monument's new drilling threat provides a preview of how the Trump administration's approach to fossil fuel development on public land and in federal waters may impact beloved and fragile Western places. In executive orders in March and April, Trump called for expanding and expediting drilling in federal lands and waters, and Interior Secretary Ryan Zinke fleshed out the pro-drilling strategies in secretarial orders in March and July.

This determination to ramp up drilling likely will revive old conflicts, sparking more protests and lawsuits. Already the Trump team is backtracking from Obama administration efforts to head off litigation by getting earlier public input on which areas are appropriate for drilling and which others are better left for recreation, wildlife, grazing or other uses. If these struggles end up in court, they could snarl energy projects for years, backfiring

on industry and Trump. "I would predict a great increase in litigation, as an attempt to slow it all down. That's what (President George W.) Bush found out," said John Freemuth, a professor of public policy at Boise State University.

As a first order of business, Trump's Interior Department launched an assault on Obama-era regulations designed to heighten environmental protections and drilling safety. Targets include the BLM's methane and hydraulic fracturing rules, protections for drilling inside national parks and national wildlife refuges, and an Environmental Protection Agency methane rule.

The Trump administration has already asked the GOP-controlled Congress to open the Arctic National Wildlife Refuge to drilling. It also plans more offshore leasing in the Arctic and Atlantic Oceans and may reject a rule designed to prevent disasters like the 2010 BP spill in the Gulf of Mexico.

But rolling back such rules takes months or years, because the administration is legally required to conduct environ-

mental analyses and get public comment. Proposed rollbacks will likely prompt lawsuits from states and environmental groups, creating delays and uncertainty for all involved.

Nonetheless, the oil industry is optimistic. "Without the political will to move forward during the Obama administration, we saw activity slow or even grind to a halt in some areas," said Kathleen Sgamma, president of the Western Energy Alliance, a trade group. "Just the wherewithal to clear some bureaucratic hurdles and not throw up new obstacles should help encourage energy development."

Meanwhile, Zinke is trying to speed up the work of BLM field offices. In early July, Zinke ordered them to hold quarterly lease sales and reduce response times to 30 days for drilling permit applications. "Oil and gas production on federal lands is an important source of revenue and job growth in rural America, but it is hard to envision increased investment on federal lands when a federal permit can take the better part of a year," Zinke said. In 2016, processing an application took an average of 257 days, according to Interior, in part because complex modern projects require more sophisticated analysis.

But Democrats and environmentalists counter that industry has plenty of federal land to drill. During this time of low oil and gas prices, companies have yet to drill on nearly 8,000 leases where they already have permits, according to the BLM.

Still, Zinke has asked for \$16 million extra from Congress to accelerate leasing and permitting. Katharine MacGregor, Interior's deputy assistant secretary for



Storm clouds build up over Dinosaur National Monument. The Bureau of Land Management has proposed an oil and gas lease bordering the monument. MARK BYZEWSKI/FLICKR

THE LATEST

Backstory

In the early 1900s, the burgeoning city of **Los Angeles sent agents posing as ranchers and farmers to purchase property and water rights in California's Inyo County.** Water from the Owens Valley was diverted to the city via an aqueduct, drying up agricultural land and draining Owens Lake. Since then, LA's Department of Water and Power has spent more than \$1 billion to mitigate the carcinogenic dust that blows off the dry lakebed ("Keeping the dust down in California's Owens Valley," *HCN*, 3/2/15).

Followup

Inyo County has begun eminent domain proceedings to reclaim lands lost to LA, after the city turned down its offer to buy them. **A hearing set for August is the first step in acquiring about 200 acres of land and water rights along Highway 395.** LA officials appear wary, telling the *LA Times* that the use of eminent domain could be a "slippery slope."
ANNA V. SMITH

Correspondent Elizabeth Shogren writes *HCN's* DC Dispatches from Washington. [@ShogrenE](#)

**"In 20 years,
(an oil) well will
be dry, but if a
1,000-year-old
site is destroyed,
it is destroyed
forever."**

—Kevin Jones,
Utah's former
state archaeologist

land and minerals management, told a House committee in June that the BLM is relocating staff, filling vacancies in offices with serious backlogs.

As it prioritizes drilling, the new administration has put on the backburner a time-consuming process initiated by its predecessor. Master leasing plans were designed to reduce conflicts by doing early assessments of what places might be appropriate for leases in landscapes that are important for recreation, wildlife, or cultural or scenic values. If a master plan was pending for a certain area, the BLM temporarily deferred most leases. In Utah alone, that kept millions of acres off the auction block for several years — including near Dinosaur National Monument. Now the new administration has stopped automatically excluding those parcels. "We are aligning our available resources to support the administration's America First Energy Plan," said Kent Hoffman, BLM-Utah deputy state director for lands and minerals.

The Trump team also ditched another new BLM process called Planning 2.0 that was created to get more upfront public input. And it's scuttling another informal practice that helped minimize

controversy. In recent years, the BLM had automatically deferred parcels in Utah known to have a high density of prehistoric dwellings or other archaeological remains, according to Lisa Bryant, a BLM spokeswoman in Utah.

In 2015, the BLM yanked 36 of 54 parcels from a sale because of public outcry about the archaeological resources at risk. One was Alkali Ridge in southeastern Utah, a national historic landmark since 1985 that contains complex structures used by ancient Puebloan people more than 1,000 years ago. In 1991, the BLM designated it an area of critical environmental concern, "significant in the history and archaeology of the southwestern U.S." Now the agency is considering offering leases there and in other rich archaeological areas of southeastern Utah.

The BLM will consult with local tribes and other experts to see if it can both protect cultural resources and allow development, Bryant says. But archaeologists are skeptical. "In 20 years, (an oil) well will be dry, but if a 1,000-year-old site is destroyed, it is destroyed forever," said Kevin Jones, Utah's former state archaeologist.

So far, the new administration has not

yet sparked major litigation by opening important areas to drilling, and there are places even Trump won't drill. The BLM backed off offering leases near Rocky Mountain National Park in April and Zion National Park in June, after protests from Herbert and local communities and businesses.

As for Dinosaur National Monument, the BLM says it isn't ignoring the Park Service's concerns. The agency has asked for additional requirements on leases, such as hiding oil and gas equipment with rugged topography or camouflaging paint, and turning off lights and equipment at night. "BLM is working closely with (the Park Service) to determine if appropriate resource protection measures exist or can be developed to address their concerns before making any final leasing decisions," Bryant said.

Conservation groups warn that leasing special landscapes like those near Dinosaur will just stall energy development. That happened before: "People went to court and protested and dragged stuff out and created a big stink," said Nicholas Lund of the National Parks Conservation Association. "It's exactly what master leasing plans and cooperative processes were designed to avoid." □

Snapshot

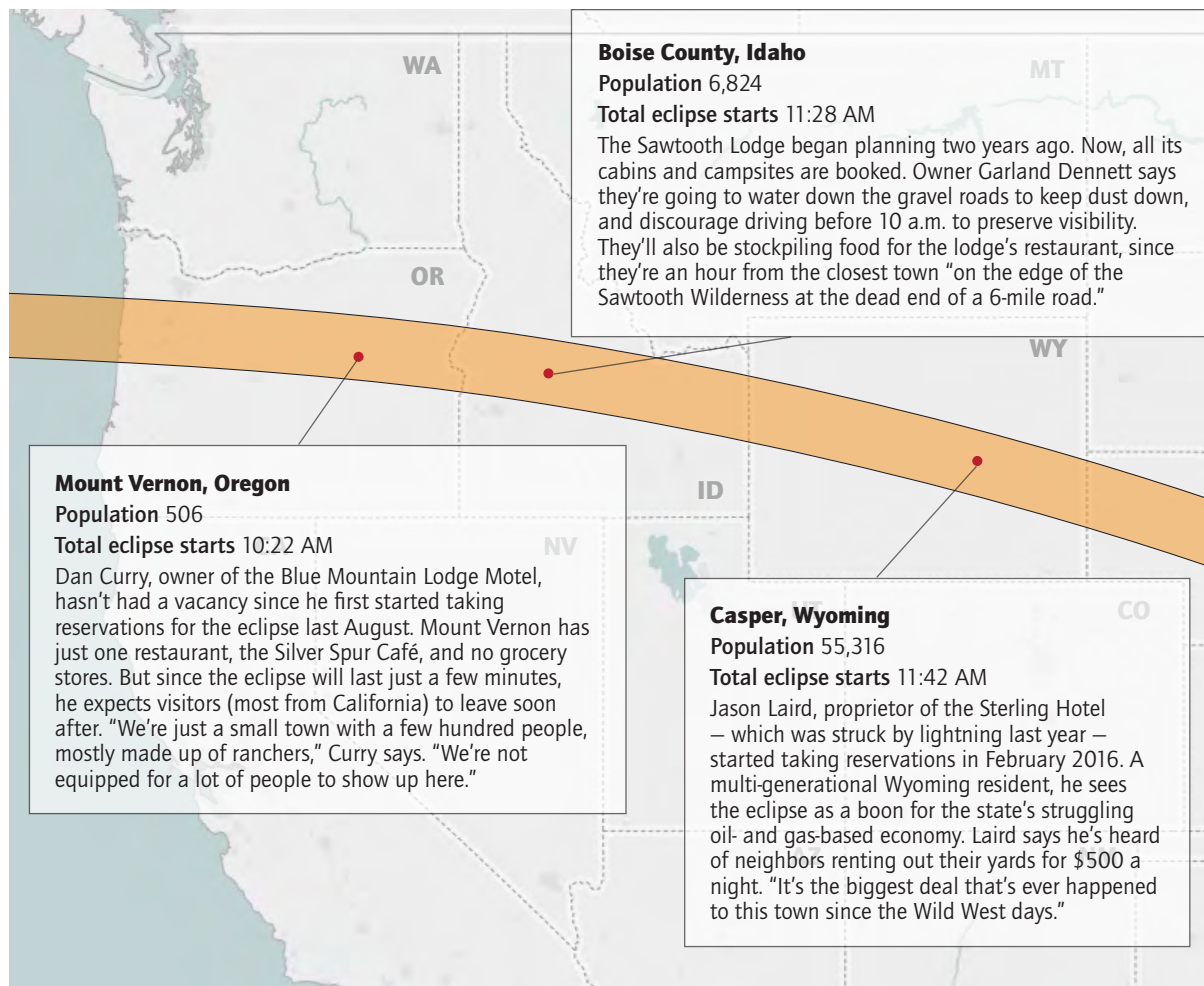
Get in line

*Soon, hordes of travelers
will flock to the West
for the solar eclipse*

The four Western states within the path of Aug. 21's total solar eclipse are getting ready as if they're expecting a natural disaster. Towns have set up task forces and hotlines and are rerouting police to the path of totality to prepare for the crush of visitors. Services are likely to be overwhelmed, so locals plan to stock up on food, water and gas.

With an estimated 1 million people coming to Oregon alone, the state's Department of Transportation is warning of a "cosmic traffic jam." Oregon's 1,300 campsites near the path of totality were reserved within an hour of becoming available online in November. The state added an additional 1,000 "eclipse" campsites in April. Some hotels have cancelled old reservations and tripled their rates, provoking lawsuits from angry patrons. In Wyoming, Grand Teton National Park is anticipating its "busiest day ever," according to its website, as backpackers descend on the park's first-come-first-serve campsites and permits. Idaho is expecting up to several hundred thousand visitors, with totality passing primarily over its five national forests.

ANNA V. SMITH



Rights and releases

Idaho water case highlights difficulty of dam management under climate change

BY EMILY BENSON

On a sunny day in late April, the U.S. Army Corps of Engineers released hundreds of millions of gallons of water from Idaho's Lucky Peak Dam, a dozen miles upstream of Boise. The dam operators call it a "rooster tail" display; thousands of observers took in the spectacle. The water, roaring out of a dam gate, arced high above the Boise River, rainbows shimmering in its spray.

Rooster tails are one way the Corps releases excess water to reduce the risk of flooding — a partially empty reservoir can capture spring runoff before it can race downstream and inundate Boise. Releases are necessary about seven years out of every 10, including this year, when basin flows were among the highest recorded. Lucky Peak and two associated reservoirs also store water for irrigation. In snow-heavy years, that means dam operators must strike a balance between letting enough water go early in the spring and retaining sufficient water for the hot, dry days to come.

Getting releases right is crucial for the farmers who depend on the Boise River to irrigate crops like sugar beets and seed corn. The river also waters lawns and parks, and supplies about 30 percent of Boise's drinking water. As in other Western states, water users with older rights get first dibs. But since 2013, several irrigation companies and the Idaho Department of Water Resources have been fighting over administrative details that determine which water Lucky Peak irrigators are entitled to use during a wet year: flood-control releases, or the "refill" water that collects after releases are done. The case is now before the Idaho Supreme Court. Its outcome will determine how the water in the Boise River system is doled out — no small consequence for the people and fish that depend on it. The fight itself, however, highlights a larger challenge water managers across the West are confronting: How do you operate dams effectively as climate change alters the historical patterns used to predict runoff timing and volume?

Emily Benson is an HCN editorial fellow.

🐦 @erben1



The Department of Water Resources contends that water counts toward storage rights upon entering the reservoir. That means flood-control releases could include already-allotted water. But irrigators say those releases arrive too early in the season to be useful, sometimes while snow still covers their fields. They claim they are entitled to the water that subsequently refills the reservoir, which is distributed later in the summer when they need it most.

While the department does dole out refill water, it considers it to be excess and unappropriated water that doesn't fulfill any reservoir storage rights. In September 2016, District Court Judge Eric Wildman ruled partially in favor of the department, writing that water entering the reservoir satisfies users' rights. However, he also pronounced the department's practice of allocating refill unlawful, leaving the refill water distribution in limbo. The Supreme Court is expected to make a decision by year's end. "For anybody to say that (releases) should be counted against our storage rights, as water that we're actually using — it's ridiculous," says Roger Batt, executive director of the Treasure Valley Water Users Association, the irrigation companies' lobbying group.

Regardless of its legality, the department's method has largely kept water flowing to the irrigators. Since its implementation in 1986, there's only been a single year in which there were flood-control releases but users didn't get their full amount.

But the problem isn't purely

theoretical, says Mathew Weaver, Idaho Department of Water Resources deputy director. With no rights attached to the refill, future demands could take water that current users have come to rely upon. Extremely wet years could, paradoxically, leave fields and lawns parched if big flood-control releases happen and the refill water has been claimed for other uses. A similar case occurred in Idaho's Upper Snake River Basin, where large diversions for groundwater recharge spurred a 2015 settlement in which irrigators gained legal rights to refill water. Those rights, however, date to 2014, meaning they have lower priority than older water rights.

Adding to the complexity of the situation, refilling reservoirs may be getting more difficult, thanks in part to shifting precipitation patterns caused by climate change. Greater extremes — wetter wet years and drier dry years — and earlier spring thaws could make it harder to manage dams, says Doug Kenney, the director of the Western Water Policy Program at the University of Colorado. "All these operating guidelines that you built up based on data from the last century just don't work very well anymore," he says.

Whether next year is wet enough to warrant a rooster tail display at Lucky Peak depends on nature; exactly how flood-control releases will be accounted for, however, is up to the Idaho Supreme Court. Whatever the decision, climate change will continue to impact water in the West. "We really need to use our reservoirs more skillfully than we have in the past," Kenney says. "And it's a challenge." □

Water being released from Lucky Peak Dam creates a rooster tail flowing into the Boise River.

DAVID R. FRAZIER
PHOTOLIBRARY, INC. /
ALAMY STOCK

THE LATEST

Backstory

In 1966, the state of New Mexico filed a lawsuit to untangle water rights in the Pojoaque River Basin north of Santa Fe. Four tribal communities and hundreds of Hispanic and Anglo landowners were caught in a confusing web of Native, state and federal rules. The Aamodt case — named for the first of the more than 1,000 defendants — churned through the courts for decades (“Pueblo water battle nears its end,” *HCN*, 10/30/06).

Followup

In mid-July, a federal judge finally brought the 51-year adjudication to an end. The settlement agreement gives high-priority water rights to the Nambe, Pojoaque, San Ildefonso and Tesuque pueblos.

It also calls for a \$260 million regional system that will send Rio Grande water to the pueblos and non-Indian users. Opponents who dispute tribal rights may still appeal, but Arianne Singer, one of the state’s lawyers, told the *Albuquerque Journal*, “We worked together with all the other major players and other governments to solve a problem.”

JODI PETERSON



Pojoaque Valley.
POJOAQUE VALLEY
SCHOOL DISTRICT



A male Cassia crossbill is extracted from a net. The birds’ red, orange and yellow hues come from carotenoids in their diet, but no one knows the exact source. NICK NEELY

Cross-country

*The discovery, and probable disappearance,
of North America’s newest bird species*

BY NICK NEELY

At 6:30 one July morning, Craig Benkman, a University of Wyoming ecologist, began to stalk red crossbills in the South Hills of Idaho. He and a few students had strung a diaphanous mist-net between two poles. Several of these sanguine birds — a large finch with a beak that looks curiously off-kilter, one mandible overlapping the other — were resting in the grass by a salt lick. Crossbills feed exclusively on conifer seeds, and so must supplement their diet with sodium. “It’s like how, in the Sierra, marmots chew on your sweaty boots,” Benkman explained. For more than 30 years, he has followed crossbills across North America, and for the past 20 summers, he has visited this remote mountain range at the Great Basin’s edge to study this unique population.

Benkman crept hunched in an arc

Nick Neely is the author of a new book of natural history essays, *Coast Range: A Collection from the Pacific Edge*, and a former *HCN* intern.

through the lodgepole pine forest with a fleece pullover in his hand. Slowly, he raised his arm — and then the coat took flight, a polyester goshawk, flushing three crossbills like flares into the net. He and his students rushed forward and began to untangle them. But the birds hanging in the net were in limbo in more ways than one: Benkman and his colleagues believed that they should be named a new species, the first bird discovered in the continental United States since the Gunnison sage grouse in 2000, and only the second since 1939. They had also discovered that it is likely to disappear.

Cross your index finger over the knuckle of your thumb, and you shape this bird’s signature cleft, which it jams between two scaly bracts. As it bites down, the curved tips press in opposite directions, prying a cone’s scales apart. Next it flexes its lower mandible (your thumb) sideways, using a hyper-developed muscle. Its long tongue slips in to extract

the seed, which it husks using a special groove on its upper palate. Crossbills perform this sequence a thousand or more times a day.

But the red crossbill, one of North America’s two long-recognized crossbill species, is unusual in another way: Unlike most birds, it comes in a range of sizes, from relatively delicate to bulky. As it turns out, each average size has its own kip call note. Ten red crossbill “call types” have been identified, and each type seems to mate and flock within itself. Benkman made his name, in part, when he helped illuminate this complexity with a now-classic Darwinian experiment: In aviaries, he measured red crossbill types’ feeding rates on the Northwest’s “key conifers.” Each type in the region just about matched the perfect bill depth for exploiting one conifer. Large bills are ideal for ample, bony cones like ponderosa pine; lesser bills for tiny, soft cones like hemlock. As Benkman later put it, “Their bills are as finely adapted to a cone as a key is to a lock.” This revelation has encouraged ornithologists to speculate that the call types might be “cryptic” species hidden in our midst, each filling a different coniferous niche. It’s long been one of ornithology’s most tantalizing mysteries.

Crossbills are notoriously hard to study, because their only loyalty is to hearty cone crops. Thus they don’t migrate north to south like the typical songbird,

Please see Crossbills, page 24

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JEREMIAH HUTCHENS

LETTER TO CONGRESS: A WILD SANITY

Directed by Deborah Colley
Performance Aug. 25 and 26 at 7 p.m.
at Sustainable Settings, Carbondale, Colorado
Tickets can be reserved at www.danceinitiative.org.

Inspired by Wallace Stegner’s 1960 Wilderness Letter, a group of artists in Carbondale, Colorado, will celebrate public lands in music and dance in a unique outdoor film and performance this summer. Stegner concluded his letter by arguing that wild country can reassure us of “our sanity as creatures, a part of the geography of hope.” *Letter To Congress: a WILD sanity* is an attempt to advocate for that hope.

According to the artists, “This letter will be danced, spoken and sung into some of the most inspiring public lands found in the Rocky Mountains.” It’s a way of bringing the experience of those lands to lawmakers who may not have time to visit them. In addition to the film, the dancers and musicians are adapting the work into a live performance in Carbondale. **REBECCA WORBY**

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Heat, summer visitors and goodbyes

It's been a hot July at *High Country News* headquarters here in Paonia, Colorado. Post-work dips in the North Fork of the Gunnison and weekend trips to cooler, higher ground have kept us sane — as have visits from our friends.

Liz Cohen and **Randy Sclar** came from Evergreen, Colorado, on a road trip. Liz writes grants for Colorado Parks and Recreation, and Randy co-owns a primary care clinic. They're first-time *HCN* readers, so we sent them home with a stack of recent issues to dive into.

Subscribers **Lauren** and **Mike Amundson** (and Tessa, their adorable dog) stopped by while taking the scenic route home to Flagstaff, Arizona. Lauren is an archivist at Lowell Observatory, and Mike uses *HCN* in his history classroom at Northern Arizona University. Thanks for letting us pepper you with questions, Mike! We love hearing about students working with our stories.

Gail Peters from Clarkdale, Arizona, came through on day three of a two-and-a-half-month wander. Gail founded Friends of Arizona Rivers back in the 1980s and appreciated our circulation crew's friendly reminder to renew her subscription. (*Hint, hint!*)

Don Cushman dropped by on his way to a music camp in Breckenridge, Colorado, from Jackson, Wyoming. An avid musician who plays baritone sax, trombone and trumpet, Don started a community band in Jackson 28 years ago. He's now retired, but his day jobs included work as a naturalist at Grand Teton National Park and outdoor recreation planner

at National Elk Refuge near Jackson.

Logan Strenchock of Budapest, Hungary, and **Tom Figel** of Denver visited on a sunny Friday. Tom, who works for a solar nonprofit, was giving Logan a whirlwind tour of Colorado before Logan headed to the University of California, Irvine, to spend the summer as a sustainability fellow.

Erik Moeller from Pueblo, Colorado, stopped in while he and his wife were roaming the western side of the state. They crossed Independence Pass for the first time and were headed toward Crested Butte. Erik's been reading *HCN* since 1984, and he even wrote a few stories for us in the early 1990s. Once a reporter for the *Durango Herald*, he became an attorney. Now he's closed his practice in Pueblo and hopes to write again. We look forward to seeing his work!

Our annual photo contest is now underway, with the theme "Show us your backyard!" Send us images of the people, creatures and landscapes outside your back door, wherever you live. See www.hcn.org/photos17 for details.

Lastly, we've said a couple of bittersweet goodbyes. Our finance manager, **Beckie Avera**, found a job closer to her home in Grand Junction, and we wish her the best of luck. Circulation assistant **Kati Johnson**, whom many of you know from her friendly voice on the phone, has moved to Nebraska to be near family. Kati was with *HCN* for half a decade, and she'll be greatly missed.

—Rebecca Worby,
for the staff



Liz and Randy Cohen, left, and Erik Moeller, right, were just some of our visitors this month. BROOKE WARREN; GRETCHEN KING

L O S

Activist Eduardo Guevara takes a picture inside Lawson Dump as smoke rises from a fire smoldering belowground. Although it was ordered closed in 2006, underground fires continued to burn for years afterward, and residents of nearby mobile home parks continued to complain about noxious odors and possible contamination. (2010)

P R O M O T O R E S

Amid California's toxic dumps, local activists go it alone

One warm spring day a year ago, Griselda Barrera, a Mexican-born mother of three, went to a middle school auditorium in Thermal, California, an unincorporated community in the desert east of Los Angeles, to square off against a panel of regulators. Barrera, who is just 5 feet tall, wore a black pencil skirt and platform pumps, the kind of shoes she favors now that she no longer works in the fields. She was flanked by mothers like herself, there to give public comment to the South Coast Air Quality Management District.

At issue was persistent air pollution. Since 2010, the agency had responded to over 215 complaints about unpleasant odors in the nearby community of Mecca — smells that at times were so sickening that teachers and students called paramedics. Barrera waited patiently, microphone in hand, as regulators laid out their plans to help the school districts replace their old diesel school buses and install air filtration systems in the classrooms. When her turn came, she addressed the panel confidently in Spanish through an interpreter.

“There are so many needs in this community, it’s hard to know where to even begin,” she said. “Kids out here have to play on the street because there aren’t enough playgrounds. We have working-class families paying as much as \$650 a month for water, gas and garbage pick-up because we have no municipal services.” Instead of investing in cleaner school buses, said Barrera, the county and state regulators should be doing more for local communities right where they live, too.

Riverside County Supervisor John J. Benoit replied that he was invested in cleaning up air pollution for the entire Eastern Coachella Valley, as well as protecting the local economy and jobs. “It is not always the county’s fault,” he said, expecting the kind of criticism he had gotten at public hearings before.

Barrera then passed her microphone to Noemí Castellanos, who was evicted from her trailer after she complained about living conditions; to Emma García, who described her granddaughter’s first asthma attack and

how she had to drive for 30 minutes to get to the nearest hospital; and to Rita Galindo, who told the room: “The agricultural companies out here act like they own the place. They don’t tell us anything about the impact of their pesticides.”

After the two-hour meeting ended, Barrera was visibly frustrated by the lack of concrete action. She strode across the room, shaking hands and making plans with the other women, all Mexican former farmworkers in their 30s and 40s. “I’m tired of the agencies that come here asking us to bring people from the community as an audience for their presentations,” Barrera told me as she made her way out of the auditorium. “We have no idea what they do with the information we give them. Nothing changes.”

In 1994, Barrera came to the U.S. from Mexico with her family and moved into one of the most derelict mobile home parks in the Eastern Coachella Valley, a collection of unincorporated towns amid desert and agricultural fields. Like most migrants, Barrera got her first job picking grapes. Then she graduated to harvesting chiles and doing temporary seasonal farm work up and down the state.

Even as she worked long days in the field, Barrera hoped to one day become a *promotora* in the Mexican tradition: A self-taught community advocate who goes door-to-door to dish out basic health and environmental education — and a good dose of activist know-how — to her neighbors.

Eastern Coachella Valley migrants like Barrera power a highly profitable agricultural region, but they live at the center of environmental ruin. Workers deal with an unrelenting list of health threats, from substandard housing to pesticide pollution, hazardous waste and water contamination. *Promotoras* have become increasingly involved in dealing with urgent local issues on this side of the border — the unending problems that endanger migrant communities. But in the Coachella Valley, the *promotoras* and their allies are starting to see their efforts bear fruit.

"Maybe researchers couldn't link the asthma directly to the dumps, but it's a big coincidence for a community that has been living next to a burning open-air dump for years, don't you think?"

—Eduardo Guevara,
Eastern Coachella
Valley activist

THE MOST NOTORIOUS MONUMENT to the valley's environmental injustices is still visible: Lawson Dump, once a 50-foot-high man-made mesa, the size of a five-story building, considered "the largest toxic dump in California." The illegal dump is a 30-minute drive from Palm Springs and a short walk from the middle school in Thermal. I've been reporting on it since 2010, when I made my first trip out there, to meet another *promotor* named Eduardo Guevara. At that time, a federal judge had already ordered the dump's closure, alongside a pending cleanup with a huge \$42.8 million price tag to be paid by the dump operators.

Guevara and I headed out there on a spring afternoon, under a punishing desert sun. We parked a short walk away, hoping to avoid drawing attention. The dump, which sits on the Torres Martinez Indian Reservation, was supposed to be off-limits. "STAY OUT," proclaimed a handwritten sign in bold red letters. "Call 397-6318 if you smell odor." When I dialed, my call was forwarded to the answering machine at the reservation office.

The stench was overwhelming, coating our nostrils and throats and making it difficult to breathe. Feeling nauseated, I could almost taste each particle in the toxic mix: Wood ash, incinerated household trash, and otherwise-recyclable cans, plastics and electronic waste — spread across a massive dump site that had been building up since sometime in the 1990s, when the tribe began to lease land to waste companies eager to cut down on disposal costs. Since tribal lands are exempt from county code enforcement, the problem grew — grew, literally, upwards and aboveground — and went undetected for years. According to the Environmental Protection Agency, the site contained dangerous amounts of arsenic, PCBs, asbestos, dioxin and other toxic materials. It sits only three miles from the middle school in Thermal; in fact, Lawson Dump and its harmful emissions were among the myriad environmental problems that prompted the meeting Barrera and other worried mothers attended last year.

As we walked along the "ground" — fill dirt covering the trash — smoke rose out of long cracks, as if from the smoldering flanks of a volcano. The dump, though, was a man-made disaster, and a stubborn one. The site was shut in 2006, and it is still technically closed, though it has remained for years a major source of air pollution. Since its closure, more than 20 fires have spontaneously ignited, and nine firefighters have been injured putting them out. We stood there in the heat, gazing across the massive earthen and garbage mesa, noxious smoke rising from below. Then we felt the dirt shift and start to give under our feet, and we got out of there.

For two years, Guevara had little choice but to live next door to the dump. When he came to the U.S. from northern Mexico, he and his family shared a trailer in Duroville, a mobile home park also

located on Torres Martinez land. Like many others before them, they moved to California's Eastern Coachella Valley in search of seasonal work. They heard about Duroville by word of mouth: Housing there was available and cheap, \$200 a month, and close to the fields.

Without paved roads or garbage pickup, the trailer park was in a deplorable state. And it was overcrowded — at one point, up to 4,000 people occupied some 500 trailers across the 40-acre site. The residents knew little of the health risks the dump presented. "This is where nearby farms disposed of grape stakes covered in pesticides — where people discarded their old cellphones and computers," Guevara told me as we drove away from the dump. "We knew people burned trash here, but we didn't know it was that bad."

Guevara was a church-going family man, stocky, with a wary smile. He worked two administrative jobs to support his wife and teenage boy. When the sun went down, he drove to the nearby College of the Desert to attend classes toward a bachelor's degree in business. Once he learned about the environmental conditions in the mobile park and beyond, Guevara did what most people in his situation would do. First, he reached out to the tribal members running the trailer park office, but there was no response. Then he tried to join a local group demanding better conditions. (He ended up having to create his own, *Promotores Comunitarios del Desierto*.) Finally, he contacted a couple of county officials, who told him they were "working on it." Before long, he realized that not only had there been no research on the possible health impacts of Lawson Dump and the living conditions at Duroville; there seemed to be little interest in remediating the problems — no outrage beyond his own.

Over the years, local activists like Guevara have tried to draw attention to their plight. They knew they weren't the only low-income Latino farmworking community in California that suffered disproportionately from environmental hazards. North of Coachella, in the San Joaquin Valley town of Kettleman City, people began noticing an unusual number of birth defects among babies born to local women. Greenaction for Health and Environmental Justice, a San Francisco-based nonprofit, surveyed about 200 residents and found a high incidence of abnormalities that they linked to emissions from Chemical Waste Management Inc., a nearby industrial hazardous waste facility. Years would pass before qualified medical experts and state agencies addressed Kettleman City. Even then, they couldn't pin down the culprit: The evidence collected in the town of 1,500 people wasn't extensive enough to support epidemiological statistics, and there was no reliable scientific method that enabled researchers to identify the health impacts of a particular mix of substances. In other words, there simply wasn't



enough evidence to blame the waste facility for the birth defects; the afflictions could have been caused by a complicated combination of factors.

"We were surrounded by people with respiratory problems," Guevara told me. His wife had suffered from severe asthma since their arrival at Duroville. "Maybe researchers couldn't link the asthma directly to the dumps, but it's a big coincidence for a community that has been living next to a burning open-air dump for years, don't you think?"

The investigation of disease clusters — such as the higher incidence of respiratory problems found throughout much of the Eastern Coachella Valley — remains controversial in public health circles. Up



until now, very little basic research has been done in these communities, and there is no scientific evidence to link the plant to the area's health problems.

Consequently, remote places like Duroville, two hours from the nearest city, and the wider unincorporated region of the Eastern Coachella Valley suffer greatly from poor policy and general neglect. And that means people like Guevara and Barrera have had to learn how to advocate for their communities. In doing this, they have followed and improved upon a long tradition in California and other states along the U.S.-Mexico Borderlands.

IT WAS NOT BY CHANCE that local residents like Guevara, who mostly came

from Mexico and Central America, put down roots in the Eastern Coachella Valley. After all, this was an area where they could find steady work. But their decision to stay and raise children here meant that they would have to take on a uniquely long fight for environmental justice.

The work these men and women do powers the agricultural industry, but the industry pays meager wages in return. Philip Martin, a labor economist at the University of California at Davis, estimates about 30 percent of the money Americans pay for produce goes to the grower, while 10 percent goes to the farmworker. In other words, for every \$1 you spend at the market, a worker is

likely to take home 10 cents. That adds up to about \$15,000 to \$17,000 per year, per worker.

That's why so many farmworkers endure substandard, environmentally unsafe living conditions in mobile home parks like Duroville. Or why, at the height of the harvest, four men sometimes share a single room for months, or, worse still, live out of their cars.

Low wages also take a toll on the health of migrants. In 2010, county health records indicate only one primary care physician per every 8,400 residents in the Eastern Coachella Valley, coupled with a 30 percent uninsured rate among patients. Local clinics report higher rates of diabetes and asthma, particularly among young

Guard dogs look out from within the fence that stands between Duroville mobile park and Lawson Dump, both now closed. (2010)



An old billboard stands at the edge of the Torres Martinez Indian Reservation, discouraging people from dumping trash there. The surrounding Southern California desert is a patchwork of tribal, private agricultural and public lands. (2010)

children. Guevara's own family epitomizes this, with his sister's kidney disease, his wife's asthma and his own diabetes.

"Be angry about injustice!" activist Dolores Huerta famously said. Huerta, a major role model for U.S. farmworkers, grew up poor in California's San Joaquín Valley. She became an activist during the civil rights era, setting up voter registration drives and lobbying politicians to improve the economic conditions of farmworkers. As the founders of the United Farm Workers, Huerta and César Chávez organized a successful strike of Coachella Valley grape growers in 1965, with Huerta negotiating the contracts. Within five years, the United Farm Workers would sign a historic agreement with 26 area farms that reduced pesticide exposure and introduced basic unemployment and health benefits for workers.

But now, more than half a century later, Huerta's work has faltered. Wage theft and child labor are illegal, yet common: Nine in 10 farmworkers report not being paid for overtime, and an estimated 400,000 children under 18 work in the fields. And farming has become one of the deadliest jobs in America: According to the U.S. Bureau of Labor Statistics, farmworkers die on the job twice as often as police officers.

AS A FORMER LABORER no longer afraid to speak up, Griselda Barrera chose to

follow in Huerta's footsteps. After the meeting at Toro Canyon Middle School in Thermal, I asked her if I could speak with her family. Barrera feels a strong sense of responsibility for her community and its problems. "First, please promise me one thing," she said. "Please tell me you won't write a story about how poor we are, how we can't help ourselves." The last time she saw the Eastern Coachella Valley featured on the TV news, it carried the headline "The Face of Poverty," she said. People were upset by the label and vowed not to speak to journalists again.

We agreed to meet at 9 a.m. in Mecca, where, on May Day, it was already 105 degrees outside. I climbed in her car, and Barrera drove us past light-green lettuce fields, where workers had been hunched over since 4 that morning, and past the Coachella Canal, which brings water from the Colorado River to irrigate the desert.

"I'm taking you to the *new* Duroville," Barrera told me. We pulled into a brand-new housing development only six miles away from the old ramshackle mobile park. Mountain View Estates had brand-new homes and an athletic field, green spaces, paved roads, a community center, and basic water and electricity infrastructure. In 2009, Duroville was ordered shut down by a U.S. district judge. As a result of resident complaints and *promotora* activism, the county created the new

mobile home development, a \$28 million public-private development, as a refuge for the hundreds of people pushed out of the old, crowded site.

Barrera took me inside one of the new homes, this one belonging to her former husband, Samuel. From the outside, the mobile trailer looked like any other single-family home — a white picket fence, a small front yard, a carport over on the side. Samuel was out working in the lettuce fields, but his daughter-in-law, Mary Marroquín, sat on the couch holding her newborn child, Sammary, and keeping an eye on 1-year-old Sofia, who ran around the living room, trying to get her attention.

"I was 15 when my dad brought our family here from El Salvador, and I found Duroville so depressing," Marroquín, who looks barely older than 20, told me. "What we have here is totally different. We don't have to deal with raw sewage or burning trash." But rent is high: A two-bedroom trailer rents for \$800 in an area where the average family income is just over \$25,000 a year.

Marroquín had married Samuel Jr., Barrera's son, in 2015. Now, the couple and their two kids shared a room in the trailer. They pay \$250 a month, and they hope to save enough money to eventually get a trailer of their own. Samuel works in construction, and until she had Sammary, Marroquín worked in housekeeping

or harvesting chiles.

That's the easiest job you can get out here, she said. It's typical for young people to finish high school and head straight to the fields. "The first time I worked in a farm, I cried all night," she said. "By the third day, I'd gotten the hang of it. People can only last so long, because the work is horrible: You're constantly running around and crouching over in the suffocating heat. I suffered from blurry eyes and diarrhea all the time."

For young people like her, there are few options in the Coachella Valley beyond informal labor. Barrera's 20-year-old son, Miguel, who sat with us in the trailer, was a sophomore in a nearby community college. He'd recently taken a part-time job at a fast food restaurant and had told his mother he was considering dropping out. Barrera, wearing a wine-colored sleeveless shirt and her signature high heels, listened stoically on the other side of the living room. "My mom had told us not to do the same thing as she did," Miguel said, avoiding her gaze. "She told us to go to college. But here we are. We did the same thing she did."

Her children did not seem to realize that Barrera had moved on from her past in more ways than just the obvious ones — going back to school and ending her marriage. "The reason I got divorced was because I stopped thinking of myself only as a mother," she told me later, back in her car. "I left the house more and got out of the fields. I wanted to learn, so I talked to as many people as I could, asking them questions about what they were experiencing in our community." The more Barrera uncovered about the environmental and health conditions in the Coachella Valley — the high rates of asthma, hunger and diabetes — the more she realized that her family suffered from similar burdens, too. She couldn't be complacent, she said, and she knew she couldn't just stay at home with her kids. "Now I am conscious of what goes on around me," she said, her voice a mixture of self-assurance and regret.

As a *promotora*, Barrera often goes door-to-door on behalf of researchers at one of the handful of academic institutions working in the area. The research work doesn't pay much, around minimum wage, but it brings her into family homes where she gets to discuss everything from immigrants' mental health to how local moms deliver their babies. Ultimately, the experience motivated Barrera to start her own community health nonprofit — the first such *promotora*-led and staffed effort in the Eastern Coachella Valley. It would allow her to raise money directly from foundations, and she has already started to recruit a board of directors.

"I'd like it to be made up entirely of other *promotoras*, like myself," she said, "by women who are out there already, signing up their neighbors for Medicaid, or volunteering during get-out-the-vote

drives." The Coachella region has long depended on outside organizations to try to solve local problems, but Barrera would like to change this. "Now is as good a time as any other for people to start owning up to this place."

REAL CHANGE, of course, takes time. And when it comes to environmental injustice, it requires credible data, typically gathered by government agencies or academic institutions. An hour away at Loma Linda University, Ryan Sinclair, an assistant professor at the School of Public Health, has helped lead that effort, supporting the *promotoras* with data collection.

A tall and slender man, Sinclair can often be seen wearing his signature white lab coat. He grew up in nearby Desert Hot Springs, where he occasionally heard about the farmworker communities a few miles east of his home. His mom's job as a foreclosure inspector took her to properties where she sometimes met the people who were being evicted from them. The towns of Thermal and Mecca, in particular, she told Sinclair, were "not a place you'd want to go." Thinking back, Sinclair said he believes this was due to the fact that whites feared the largely misunderstood, working-class Mexican farmworking towns a short drive away. "I remember playing outside in the heat and having a swamp cooler and a septic tank," he said. "It turns out we lived a lot like them. But we didn't visit those communities; we had no clue that's where all our food came from."

Alongside *promotoras*, including Barrera, Sinclair has contributed data to an ongoing assessment of the quality-of-life issues affecting farmworkers — from air quality to electrical infrastructure, waste disposal and water management.

"There's so much going out there," he told me. "How is the local population supposed to prioritize? The odors, the particulates in the air, or the arsenic in the water? Or should it be the organic smell from the electric generation plant? The heat?"

Sinclair believes there is one underreported issue that needs to be first on the list: sewage. The extent of the problem is not fully known, but Sinclair said every single one of the seven major mobile home parks he has visited deals with wastewater contamination.

"Wastewater flowing in open trenches of the Eastern Coachella Valley is equivalent to a public health standard common in the early 1900s," Sinclair wrote in a recent paper, referring to a time when poor sanitation made typhoid and cholera relatively common. There have been no recent outbreaks in the Coachella area, Sinclair told me, but that doesn't mean the conditions for disease don't exist.

Duroville had notoriously bad sewage problems. Just down the road in Thermal, at the Rancho García Mobile Home Park, sewage contamination was a common occurrence, too. Sinclair agreed to take me on a research trip there, so in September

last year we headed out to tour a few of the mobile parks he has been visiting over the past few years.

Guard dogs barked incessantly from behind fences as we made our way into the compound, home to around 50 people. A couple of trailers sat abandoned, and between them, Sinclair found a spot where the previous tenants had built a makeshift cesspool, now covered by a moldy plank of wood. The dirt around it had turned into mud since the last time it overflowed, he said, as he put on surgical gloves to take a sample for the lab.

"Typically, mobile park residents will



build their own cesspools, like this one, going down 8 feet into the ground," he said. "But no one ever takes the sewage out, so it is bound to overflow." And when it does, it is of course a major health hazard for the residents, their neighbors and the underground water that ends up in nearby irrigation systems and beyond.

A couple of trailers down, María Beltrán stood outside her trailer with a toddler propped on her hip. She invited us in, showing us the tank next to her home and the system her husband rigged, with pipes coming out from an opening on the floor and snaking around the back of her house.

"I spray it with fresh water every day and then take the extra sewage out with the pump. I can't afford to let the cesspool fill up — there are five of us living here." The sewage that Beltrán pumps out from under her trailer ends up on the edge of a large agricultural field next door, or on the dirt road in front of the complex. "What else are we supposed to do?" she said. "We have no municipal services here." It would cost Rancho García \$2.75 million to connect the mobile homes to county sewage and water lines.

In an ideal world, Riverside County or the Torres-Martinez Desert Cahuilla Indians would maintain the water management infrastructure on the residents' homes. Since 2010, I have tried, unsuccessfully, to speak to tribal leaders

The Coachella Canal, an offshoot of the All-American Canal, is a concrete-lined irrigation channel bringing water for agriculture to the entire Coachella Valley. (2016)



A Mexican flag waves in front of a home at the Rancho García Mobile Home Park in Thermal, California. In 2012, residents of the park sued the owner for neglecting sewage and electrical problems for years — and won. In the Eastern Coachella Valley, there are some 400 unregistered mobile home parks, mostly inhabited by low-income, often undocumented, laborers working in agriculture and construction. (2016)

regarding these allegations — running unregulated housing or waste disposal businesses on their reservation. But the story is complicated: Unlike other, wealthier Southern California tribes, the Torres Martinez have no shopping outlets or luxury hotels to profit from. But they do have land — 24,000 acres. As the area's need for housing and industry has grown, some tribal members saw economic opportunity in managing mobile home and trash disposal ventures. According to the EPA's Office of Inspector General, there were 600 illegal dumps across California, Nevada and Arizona in 1994. Now there are an estimated 1,000.

"Illegal waste dumping is bigger than the tribe; we need to get this monster under control," Torres Martinez Tribal Chairman Raymond Torres told the EPA, which in 2003 sued the tribe and ordered it to pay for the cleanup of Lawson Dump. Since the EPA lawsuit, the tribe has made an effort to close other smaller dumps on its land and conducted public education programs on the impacts of dumping.

The county of Riverside and the state of California finally turned their attention to housing conditions in 2000, recommending an infusion of money to upgrade the unlicensed mobile home parks. But

\$40 million in public funding managed to cover only half of the cost of getting the trailer parks up to code. In 2012, California's Redevelopment Program was terminated, leaving the county without the money it needed to rehabilitate farm-worker housing across the Valley.

Rather than wait for the county, the tribes or the employing farms to respond, Barrera, Sinclair and others have championed homegrown answers, such as the Eastern Coachella Valley Environmental Justice Taskforce. The task force is made up of community-based groups, including Guevara's Promotores Comunitarios del Desierto, alongside academic partners and government representatives, like Cal/EPA and the state Office of Environmental Health Hazard Assessment. It meets on the third Wednesday of each month, welcoming questions or complaints in an effort to generate a lot of the missing data they will ultimately need to find solutions.

As a first step, the group is crowdsourcing citizen science by training local high school students to use smartphones to document and map their communities' environmental health risks. The reports — on everything from illegal dump fires to sewage spills and odor alerts — appear online almost in real time. "Illegal dump-

ing of tires in Mecca: Avenue 64 and Dale Kiler, about 100-200 tires," reads one eyewitness report. These reports, which are shared with the *promotoras*, are a topic of discussion and action at the monthly community meetings held at a couple of the trailer parks. "We are trusted in our communities because we are from here and we are always educating ourselves on what people need and want," Barrera said, addressing the need for more tech-savvy advocates. "*Promotoras* want to change the system."

THE PROMOTORAS are slowly doing just that. But with so many challenges to tackle and so little outside help, improvements come in increments. One small success story is the San Antonio del Desierto mobile home park on Grapefruit Boulevard in Mecca, next door to the lettuce fields where most of its residents work. From the outside, the trailer park looks like all the others: Chain-link fences demarcate the edge, a few citrus trees provide much-needed shade. What isn't immediately noticeable is its reverse osmosis water filtration system, designed to lower arsenic levels in drinking water, or the new sewer-lift station, which can handle 4,600 gallons of wastewater per day.

It would have cost the mobile home



park \$3 million to connect to a pipeline for sewage and another \$2.5 million to hook up to the main water pipeline from the municipal system. Instead, the park's current manager, Pueblo Unido Community Development Corporation, or PUCDC, raised \$300,000 from foundations and state grants to drill its own well and develop a pilot filtration system.

"It makes sense to invest in projects to beautify — I'm all for that, and we do it when we can," says Sergio Carranza, PUCDC's executive director. Carranza is a Salvadoran immigrant with a background in community organizing in his native country. "But you also can't forget about these kinds of projects that the eye can't see." Two decades ago, Carranza fled the gang violence that followed El Salvador's civil war and landed in Indio, a city near Mecca. During the day, he worked in manufacturing, while on weekends, he attended Mass with other Spanish-speakers in the Eastern Coachella Valley. That's how he became something of a *promotor*: going door to door on behalf of his church, trying to get people to vote or organizing for better working conditions in the fields.

An outsider to daily life in the trailer parks, Carranza soon realized that the residents themselves had to become fully

invested in their living conditions, despite working numerous low-paying jobs and having little time or energy to volunteer for the collective good. "We needed to build capacity among the members of these communities," he told me as we drove into San Antonio del Desierto, waving hello to residents gathered on their stoops. "The government agencies don't care about people being involved or not; they're not there to organize."

Since taking over management of the trailer park in 2012, PUCDC has made community organizing an important part of life inside San Antonio del Desierto. Once a week, residents and *promotoras* are given technical assistance on basic infrastructure: sewage treatment, water filtration, domestic water distribution and electricity. Everyone is encouraged to speak up on environmental issues beyond conditions at home, and they are asked to pitch in with labor and knowhow in other projects, too. Working alongside Sinclair and his team of student researchers, PUCDC is also collecting data related to their infrastructure improvements, which, in turn, has proven useful when trying to engage their residents.

"We're not organizers," Carranza said. "But we can help the community figure out what it needs so we find ways to

implement the necessary changes. The difference is that now some of the residents are becoming watchdogs."

Roberto Méndez, San Antonio del Desierto's handyman, is one of those unsung watchdogs. Wearing a sweaty T-shirt and a wide-brimmed straw hat, he'd spent the morning on the roof of the mobile park office, helping technicians with a solar installation. He has also helped install the water filtration system and taught himself — and many of his neighbors — how to hook up to the new sewer-lift station. "I was interested in this job because it allowed me to become more involved in the place I call home," he said. He and his family moved here in 1988, back when he harvested grapes and paid only \$85 a month for his trailer. In those days, the mobile home park functioned precariously: Sewage overflowed constantly; the lights would go out throughout the day; the water was a cloudy brown color straight out of the faucet.

Conditions were so bad that the county threatened to shut down the park. Almost 100 residents faced a fate similar to Duroville's back in 2009. Back then, amid the slum-like conditions at home and the unaddressed reports of toxic emissions beyond, Méndez thought there wasn't much he could do, other than complain. So he

Roberto Méndez, left, is San Antonio del Desierto's handyman. He and his family moved here in 1988, back when he harvested grapes and paid only \$85 a month for his trailer. Maria Garcia, above, has been living in the same trailer home in San Antonio del Desierto since 1968. With the help of Pueblo Unido Community Development Corporation, or PUCDC, she's applying for a government grant to fix her leaky roof. (2016)

did, time and time again, to no avail.

But then, perhaps five or six years ago, Méndez noticed a shift. He saw how his neighbor, Guadalupe Rosales, formed a homegrown residents' association she called "La Unión Hace la Fuerza" (Unity Is Strength), a group that would later join the Eastern Coachella Valley Environmental Justice Taskforce. At the nearby Rancho García trailer park, he heard that 34 current and former residents had sued the private park manager in 2012 over poor infrastructure and maintenance — and won. Méndez himself got more involved, evangelizing to his fellow residents about the importance of pitching in to labor for San Antonio del Desierto's small, and often invisible, water and sewage infrastructure projects.

Most recently, he has seen something people thought would never happen even though they'd fought for it for many years: paved roads, connecting a total 39 local trailer parks. In their Duroville years, residents like Guevara and Barrera had to breathe in clouds of dust when cars drove by. On rainy days, their own vehicles got stuck in the mud, and their children played outside near overflowing cesspools. The \$5 million infrastructure project finally materialized earlier this year by way of air-quality mitigation fees from a nearby natural gas-powered electricity generation plant — funds that the residents demanded be used to that end.



Contributing Editor Ruxandra Guidi writes from Los Angeles, California.

✉ @homelandsprod

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Two decades ago, Sergio Carranza fled gang violence in El Salvador and landed in the Eastern Coachella Valley. Now he directs Pueblo Unido Community Development Corporation, and works to improve rural infrastructure where farmworkers live, increase their access to clean water, and organize them to take action against negligent mobile home park owners. (2016)

"You wouldn't think that a newly paved road is good for health," Méndez said, chuckling. "But now I see my neighbors walking and exercising outside like I'd never seen them before."

As a maintenance man, Méndez is always fielding calls from residents, though not as often as he did a decade

ago. "Some people may still complain about life here because they want things to happen from one day to another," he says, as he makes his way to a neighbor's trailer to help her fix her swamp cooler. "Maybe they don't realize how far we've come — that we're just at the beginning of a long process." □

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Painted in the snow
Within a family of trees
A trio of friends

TOM BIHN
SINCE 1972 - MADE IN U.S.A.

Crossbills *continued from page 8*

but suddenly traverse the continent, “irrupting” great distances in any direction in search of better cones. There was one spot in North America, however, where a resident, or sedentary, red crossbill population lived: Newfoundland. Benkman visited in 1988, but this large-billed bird, call type 8, had become scarce. Later, he had an epiphany: Maybe squirrels were to blame. They didn’t exist in Newfoundland until 1963, when humans released them.



Craig Benkman below a large lodgepole pine, the *Cassia* crossbill’s seed source and coevolutionary partner, on which it entirely depends.

NICK NEELY

Because Newfoundland’s spruce had evolved no defenses against the rodents, they feasted unchecked to the detriment of the island’s endemic crossbill, chewing off scales and dropping them like shingles from a torn-up roof.

As Benkman’s pursuit of crossbills continued, he kept an eye out for other places without squirrels, including isolated mountain ranges, those “islands in the sky.” He explored the Interior West until, in 1996, he came to the South Hills, a volcanic plateau with a patchwork of lodgepole pine. When Benkman drove into

this rolling range near Twin Falls, he discovered that crossbills were everywhere. “And they sounded a little different,” Benkman remembers, more “burry.” It was another sedentary red crossbill, the ninth call type in North America, and it had the third-largest bill among them.

Squirrels typically dictate the shape of conifer cones by harvesting those easiest to open, with lots of seeds. Gradually, the forest’s average cone shifts in size — for lodgepole, cones become smaller and denser, the harder to gnaw. But when Benkman arrived in the South Hills, he noticed the lodgepole cones were elephantine compared to other places, and he suspected that only coevolution with crossbills could explain it. Since the birds pry open a cone’s tip, those upper scales had become thicker and larger in defense.

Another major ecological force — fire — also helps explain this rare sedentary population. Nearly all of the lodgepole in the South Hills is serotinous: Their cones’ scales are held shut by a resin that releases only in extreme heat. This strategy has its advantages in the blaze-prone West. But where squirrels exist, it’s a handicap, because the zealous rodents have more opportunity to harvest cones. In the Rockies, only a third of the lodgepole pines are serotinous, but in the South Hills, most cones remain closed for a decade, and this vast seedbank is the reason these crossbills never leave. No type 9 has been confirmed anywhere but the South Hills and the neighboring Albion Mountains — just 27 square miles of lodgepole forest — and, importantly, they seldom interbreed with nomadic red crossbills.

Based on these observations, in 2009 Benkman argued that the South Hills bird should be named *Loxia sinesciurus*, or “the crossbill without squirrels,” and the American Ornithologists Union species committee considered the question: Does the type 9 crossbill belong in our field guides? The bird fell one vote short that year. But in a study in *Molecular Ecology* published last September, Benkman and several colleagues finally showed that the crossbill deserves to be christened *Loxia sinesciurus*. They sequenced the DNA of 219 red crossbills from all of the call types except the rare Newfoundland bird and found that only the South Hills bird is a discrete evolutionary branch. The species was finally approved this spring and officially announced in July: the *Cassia* crossbill (pronounced “Cash-uh”), after its home county. A new bird for your life list.

But the origin of this species is not only the tale of lodgepole, squirrels and fire: It is also the story of climate. Benkman has found that the strongest correlation to the *Cassia* crossbill’s fluctuating numbers — about 6,000 birds currently, but as low as 1,700 in 2011 — is clusters of days over the previous

three to five years that are warmer than 90 degrees Fahrenheit. To access seeds, the birds need a crevice to form naturally between a cone’s scales as its serotiny degrades, but across the forest, it must happen gradually, so that fresh seed is always available. Benkman performed a simple experiment to illustrate how heat waves could disrupt this economy: He gathered South Hills cones and put them in a drying oven, setting it to 104 degrees Fahrenheit and slowly raising the temperature. Then he measured the surface temperatures on one live tree’s cones. On a 90 degree day, a cone’s plated surface reaches 138 degrees in places. At this temperature in his glorified Easy-Bake, nearly all the cones popped open.

Overnight, the *Cassia* crossbill has become officially one of the most endangered birds in America. “I don’t think it will go extinct in my lifetime,” Benkman said, speculating that 300 or 400 birds could be a viable population. “But who knows, if there’s a catastrophic fire, or a combination of things.” One conservation measure Benkman imagines is to harvest unopened cones from the South Hills’ hottest groves. You could plant those seeds in polar-opposite areas — shady north-facing slopes — to create islands of hardy lodgepole for future crossbills. More and more, species will rely on islands within islands. But the harsh fact is that lodgepole is forecast to disappear from southern Idaho by 2080.

Benkman is sad, but philosophical about this prognosis. By their very nature, species are ephemeral. “They wink in, and wink out,” Benkman told me. “If an ice age were to occur, as was supposed to happen before climate change, the *Cassia* crossbill would also go extinct.” In truth, a creature like the red crossbill is not one entity, but myriad populations always breaking apart and coming back together — particularly over the course of interglacial periods — even if something tips the scale, as it has, for now, in the South Hills, and a new name is warranted. This is evolution unfolding: a vast “kaleidoscope,” as Benkman has called it, of intricate interactions — of crossbills, pines, squirrels, fire, climate and more — across time and landscape. And it’s always shifting.

I drove up Pike Mountain, the heights of the South Hills, with Benkman one evening. In all directions, stands of spiry pine clung to the hills’ sage suede. We had this imbricated, somehow pastoral view to ourselves, until there came a familiar whine and a trailing plume. “OK, good,” Benkman said. “There’s finally an ATV. It just wasn’t right.” You could imagine those fumes warming our atmosphere, and you could imagine the *Cassia* crossbills flitting through their lodgepole kingdom and hanging from cones with bands around their legs: specks of flame-colored dust, swept up for a moment. □

What a way to go



OPINION BY
ROB PUDIM

The West seems to have a different attitude about life and death than other parts of the country. Of the five states that allow medical aid in dying, known as MAID, four are west of the Mississippi — Oregon, Washington, California and Colorado. The fifth is Vermont and, although it is not a state, the District of Columbia.

Other states have come close. Montana courts have found that there is no public policy against assisted death, and New Mexico briefly allowed it in 2014 before overturning it in 2015. In Arizona, the Legislature will not let the bill out of committee even though most Arizonans are said to favor it.

Most Westerners, I think, believe that allowing people to obtain medical aid to die is simply a matter of choice that should not be a decision made by the state, a state legislature, a medical association, a religion or any other person. Maybe it has to do with the independent nature of the people or our geographical distance from each other, or the knowledge that we sometimes have only ourselves to depend on. A lot of us believe that each person has the right to decide about our life or death, and whether life is worth living when a condition is incurable and the future filled with pain.

Granted, we all have the ability to commit suicide but generally that choice is not pleasant — jumping off the Golden Gate Bridge, using guns, death by police or an auto crash.

If you assist or encourage someone — and there was a recent controversial case of a young woman encouraging a boyfriend to commit suicide — you can be charged with being an accessory to murder. Medical help in dying, however, is neither suicide nor murder, and most cases of a loved one helping another to die are dismissed.

In 1996, the 9th Circuit Court of Appeals ruled: “Those who believe strongly that death must come without physician assistance should be allowed to follow that creed, whether they be doctors or patients. But they should not be free to force their views, their religious convictions or their philosophies on all other members of a democratic society, nor should they be free to compel those whose values differ from theirs to die a painful, protracted and agonizing death.”

Briefly stated, it's your life. It's your death. It ought to be a personal and private choice.



In this 2001 photo, breast cancer patient Mary Hall hugs her son, Paul, before taking a lethal dose of sleeping pills in Santa Rosa, California. It would be 15 more years before physicians could legally assist with a patient's death in California.

LONNY SHAVELSON/
ZUMAPRESS.COM

A dear friend I have known for more than 50 years has an incurable, progressive disease that will kill him. He is educated, alert and rational, and right now feels no pain or anxiety because a hospice manages his discomfort. Yet he does not like being tethered to an oxygen line while he slowly suffocates. He wants his life to be over but is too incapacitated to do anything about it. At one point he asked me if I could get him a gun.

According to the Colorado referendum, two physicians have to agree that a person's medical condition is incurable, and the drug cocktail has to be self-administered. It sounds simple.

Nothing is simple.

What if your doctor has religious beliefs that preclude assisted dying, or has a literal interpretation of the Hippocratic Oath, which states that before anything else, do no harm? What if your doctor's beliefs require you to live out whatever life has dealt you? What if the pharmacist thinks the same way and refuses to issue the prescription?

What if the hospital does not have the correct protocols in place or the legal boilerplate necessary to allow a patient to die by choice? What if the hospital is run by a church? What if you are physically unable to take the drugs you need to end your life?

According to Compassion & Choices, a national organization that advocated

for medical aid in dying in Colorado, 10 prescriptions have been filled so far, but it is not known how many have ever been used. Advocates say about one in three patients who receive the drugs fails to take them. They may have just wanted the option available.

My old and dear friend has been facing this. He could move to another state and establish residency. But that could take at least six months, or is it a year? He does not have the time or ability to do this, though paradoxically he has a lot of time — to lie in bed and think about his future.

In Colorado, lawmakers put \$44,000 into the budget in May to help doctors with patients who might ask about receiving aid in dying. Republican State Sen. Kevin Lundberg says taxpayers should not support the practice: “This is not the job of a doctor, it's certainly not the job of the government.”

Well, whose job is it when you're stuck in a bed with tubes and wires attached to you? And what if this happened to you? □

Rob Pudim, a writer in Colorado, says his friend died while in hospice care on June 16.

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

WEB EXTRA

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Throwing shade

On Aug. 21, 2017, the moon will ride its elliptical orbit precisely between Earth and sun, plunging the land below into the crepuscule of a total solar eclipse. Beginning at around 10 a.m. Pacific Time, the dark path of totality will sweep northwest to southeast across the United States, casting its eerie gloom upon Western towns such as Madras, Oregon; Rexburg, Idaho; and Casper, Wyoming. The sky will turn violet; shadows will sharpen; pigeons will roost and owls take wing. Millions of umbraphiles — eclipse chasers — will crane their necks to witness more than two minutes of lunar ecstasy, transfixed by an occluded sun that science writer David Baron describes as “an ebony pupil surrounded by a pearly iris ... the eye of the cosmos.”

Although partial solar eclipses and lunar eclipses are relatively common, total solar eclipses are rarer beasts: When totality last traversed the entire width of the continental U.S., Woodrow Wilson was struggling to negotiate an end to World War I. Baron, himself a devoted umbraphile — you might call him a lunatic — has pursued the phenomenon to Germany, Australia and the Faroe Islands. His new book, *American Eclipse*, chronicles an instance much closer to home: the shadow that sped from Montana to Texas in 1878, perhaps the most significant total solar eclipse in the country's history.

For much of the 19th century, the young United States was a second-rate nation, scientifically speaking, shrouded by what one astronomer deemed a “period of apparent intellectual darkness.” The 1878 eclipse promised to lift that metaphorical blackness by supplying literal dusk: Under the moon-dimmed Rocky Mountain sky, American scientists would have the opportunity to seek new planets, study the sun's outer atmosphere, and even deduce its chemical composition. Researchers leapt at the chance to help America “fulfill its responsibility as an enlightened member of the global scientific community” — and, in the process, gain personal glory.

Westerners know Baron from his first book, *The Beast in the Garden*, which documented — some would say sensationalized — a series of cougar attacks in Colorado. In *American Eclipse*, the fiercest beasts are the scientists competing to document the astronomical anomaly. Baron introduces us to James Craig Watson, an astronomer with a Jupiter-sized ego who's convinced that the eclipse will help him discover an unseen hypothetical planet called Vulcan. We meet Cleveland Abbe, a meteorologist, known charmingly

as “Old Probabilities,” who persists in eclipse-watching at Pikes Peak despite a near-fatal case of high-altitude cerebral edema. And then there's a young inventor named Thomas Edison, eager “to demonstrate that he was a scientist and no mere tinkerer” by measuring the heat of the sun's corona with a zany (and ultimately failed) invention called the tasimeter.

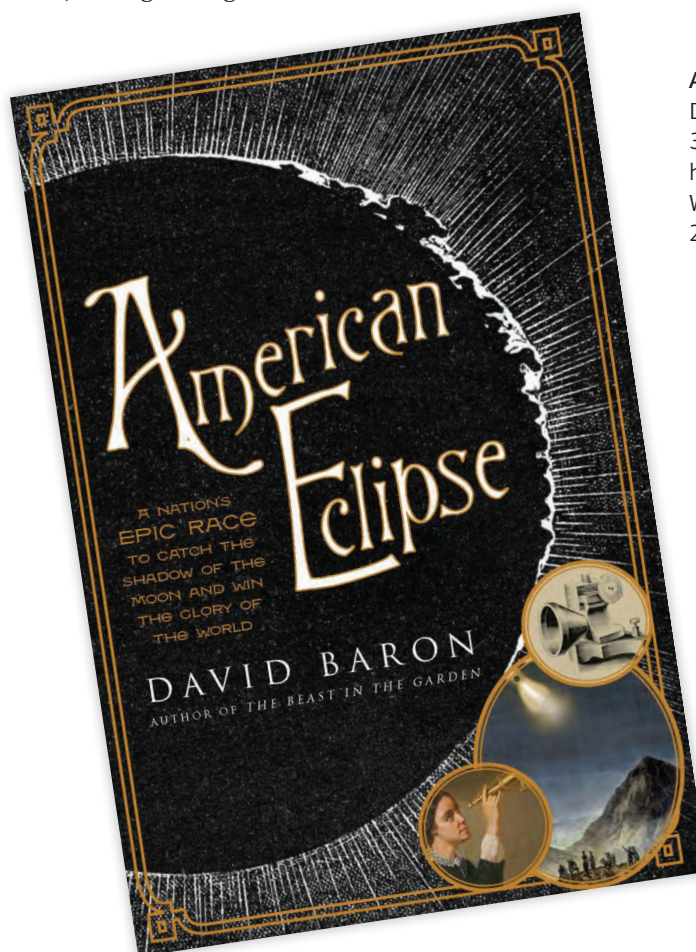
Amid all this scientific machismo, the book's most sympathetic character is Maria Mitchell, an astronomer and suffragette intent on demonstrating the equal abilities of women. At the time, certain pseudo-academics posited that “higher education caused a girl's body — especially her reproductive organs — to atrophy.” To debunk this repugnant theory, Mitchell dispatched a cohort of “lady astronomers” to Colorado to study the eclipse and provide “a kind of political theater, promoting social change.” Mitchell's mission succeeded — one newspaper called her squad “a conspicuous example of the power and grasp of the feminine intellect” — though the sexual harassment scandals that roil modern astronomy prove that true equality still eludes the field.

American Eclipse's most vivid character, though, is the fledgling West itself. In 1878, the region lingered in a kind of

limbo: civilized enough that you could journey to Wyoming in a railcar hung with chandeliers, wild enough that your train stood a considerable risk of being boarded and cleaned out by bandits. The citizens of burgeoning Denver — a town that “aspired to elegance, even enlightenment” — were particularly desperate to prove their city's worth to snooty East Coast scientists. As one local boasted to a visiting Englishman, “Sir, Colorado can beat the world in eclipses as in everything else.”

While modern astronomers no longer require eclipses to study the heavens, this year's event will still inspire epic Westward pilgrimage. An eclipse festival in Oregon expects 30,000 visitors, and some Jackson hotels have been booked for three years. We live with our eyes cast downward, fixed upon hand-sized screens; this year's American eclipse offers a chance to lift our gaze to a universe far grander and stranger than the circumscribed worlds we cradle in our palms. “These rare and unearthly events ... suspend human affairs and draw people out of their quotidian existence,” Baron writes. We may comprehend our solar system vastly better than we did in 1878, but our capacity for awe remains, fortunately, undiminished.

BY BEN GOLDFARB



American Eclipse

David Baron
330 pages,
hardcover: \$27.95.
W. W. Norton & Company,
2017.

Flirting with extinction

ESSAY BY MAYA L. KAPOOR

In the spirit of summer love, *High Country News* imagines online dating from the perspective of some of the West's rarest species. Our conclusion? The next time we have a rough go at romance, we'll look on the bright side: At least we humans still have several billion potential mates out there.

Maya L. Kapoor is an associate editor with *High Country News*.



Small Toad, Big Spoon

Male Yosemite toad here, looking to meet a lady friend near my favorite high mountain lake. When I'm not hunting for beetles or wrestling centipedes, I saunter over to a sunny basking spot — I've never been much for hopping. When love's on my mind, I get right in the lake and sing my heart out. I may be small but I can wrap myself around you and hold on tight. Let's not waste any time; before you know it, winter will be here, and I'll be snuggled up in the entrance of a deer mouse burrow again, dreaming away the snow.



Not you, Daniel

I'm a sleek swimmer who loves chasing fish with her friends. I'm hoping for a partner who enjoys exploring the warm waters of the northern Gulf of California as much as I do. But let's be realistic here: Since fewer than 30 of our kind remain in existence, I'm down for a first date with any guy who's not my cousin, Daniel. Some call me vaquita, some call me cochito, some call me Gulf of California harbor porpoise, some call me *clickclickclickEEEE*. I don't care what you call me — if you think this could work, just call me!



Conifer Wanderer

Just a quiet guy who enjoys cool misty mornings on the edge of a giant collapsed extinct volcano. I'm trekking through the pine needles, looking for love and larvae. I haven't seen another Jemez Mountains salamander in a few years, so I'd love to meet a gal who's ready to connect over some termites and who might even drop some eggs in a rocky crevice, after I've crawled back under the rotting piece of wood I call home.



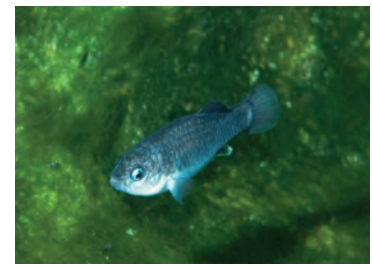
Fun night on the (prairie dog) town

If you enjoy smelling flowers on a gentle spring breeze that's tickling your whiskers as you slink through grass on your belly and clobber prairie dogs, we've got something in common (other than, let's be honest, a lot of DNA). This male black-footed ferret is hoping to find a lady love who's in the mood. I know you'll only want me around for a few days and that's fine; I prefer my space — like, acres and acres of space — too. I've never had the plague but I can tell you some crazy stories about a bobcat who stalked me a couple of years ago.



Sending you love letters, by which I mean birds

You'll recognize me by my unusual yellow color — all the other paintbrushes grow in reds, oranges, even pinks. As a golden paintbrush, I'm not the most social species on the Washington prairie; I'm more of a homebody. In fact, I'm pretty well rooted in place, but if you send me a hummingbird, I'll share some pollen and some nectar. It's an old family recipe we've been perfecting since the last Ice Age.



Devils Hole Date Night

Hi, I'm one of fewer than 100 Devils Hole pupfish, and I'm proud of our small Nevada oasis. It almost crushed me when those drunk bozos trashed our pool last year — literally. I was hatching and one of them almost stepped on me. I'm female, silvery with dark stripes. My dream pupfish is a blue guy with a yellow tail, who enjoys gnawing algae from the ever-popular limestone ledge. If you can handle the heat of a Mohave desert pool, love swimming in salinity that would make other fish crawl onto land and run away, and don't mind treading water in famously low levels of dissolved oxygen, let's get together and splurge on some snails.



On the Prowl?

Does your idea of a perfect day include bounding across the snow on giant furry paws, chasing snowshoe hares in the forests of the Northern U.S.? If so, you may be the mountain male for me. Just follow the scent trails I've peed around my territory. I'm a free-living Canada lynx girl doing my own thing, looking for that special someone to commit to for the spring-fling breeding season. By early summer, I'll be welcoming new kittens and showing you the log den door. #singleladies



Feeling myself

Hey, any Kanab ambersnails looking for love? I'm a glossy gastropod, flatworm-free, half an inch long from spire to operculum, if you're wondering. I'm living in a spring on the Colorado River in the Grand Canyon, enjoying life, staying cool, exploring the algae. Actually, I'm also hermaphroditic and I can fertilize myself. Go away.

HEARD AROUND THE WEST | BY BETSY MARSTON

THE WEST

If a Western business is booming these days, it's likely connected to marijuana. In Colorado, the "new normal" is \$100 million in cannabis sales every month, reports the *Denver Post*. And this May, adds *The Cannabist*, the state passed a major milestone: Since legalization in 2014, \$500 million has been collected in state tax.

Pent-up demand in Nevada was demonstrated this July 2 — opening day for the sale of recreational marijuana. Customers lined up by the hundreds outside the newly opened pot shops, and the Department of Taxation expects to rake in at least \$100 million in the next six months. Dozens of new businesses, mainly in the Las Vegas area, were so mobbed that many of them ran out in less than two weeks. That forced the governor and state Legislature to quickly change a restrictive law on restocking "to continue the flow of product to the retail store," reports *The Associated Press*. A 77-year-old Navy veteran, who waited in line for hours on the Las Vegas Strip, told the *Las Vegas Review-Journal*, "I never thought I'd live to see it. I thought it would be undercover forever and I'd just have to continue finding it the best way I could."

In Oregon, after the sale of recreational marijuana became legal in 2014, the tiny town of Huntington, population 435, took its time to decide whether to allow pot shops. Meanwhile, the interstate had bypassed Huntington, the town's economy was in tatters, and only the hope of attracting pot customers from Boise, Idaho, just 30 miles away, where marijuana is illegal, seemed an option. Reluctantly, the town permitted retail pot sales. Now, Huntington's marijuana dispensaries are enjoying a "mini-boom" that has also boomed the town budget. A few residents remain adamantly opposed, but as Shellie Nash, deputy city recorder, put it, the businesses are "not bringing in riffraff and stuff like people originally expected." Visitors hang around town when the dispensaries get busy, said Councilman Chuck Guerri, "so they mingle ... and have a hamburger or something. Every little bit helps when you're a small town."



UTAH Western diets. GREG WOODALL

WASHINGTON

In 2008, wildlife biologist John Marzluff at the University of Washington made news when he tested the hypothesis that crows could learn to identify individual faces. He and his researchers — wearing Dick Cheney masks — found that the birds could easily tell one person's face from another, and what's more, "crows teach other crows to detest specific people and sometimes attack them," says *Seattle Met* magazine. Recently, Kaeli Smith, a Ph.D. candidate at the university's Avian Conservation Lab, showed writer Ross Gardner something else: Crows hold crow funerals. Swift demonstrated this by holding a dead crow in her hands near some dumpsters. Within minutes — "It was like sorcery," marveled the writer — a flock of crows converged above them, shrieking so loudly that talking was impossible. But once she gently covered the dead bird, the crows slowly quieted and eventually left. Researchers have also found that crows will reward humans who treat them well, giving them gifts that can include candy, keys — probably not the ones you lost — and coins. As for what the urban-adapted birds like to eat, that's easy, says Marzluff: "They will eat anything and they will try everything."

IDAHO

Ordinary grasshoppers and earwigs can be annoying enough, but ranchers in Owyhee County, Idaho, are at war with formidable 3-inch-long Mormon crickets, reports the *Idaho Statesman*. The "creepy scourge" strikes about every eight years, and the bugs are a serious nuisance: Besides devouring alfalfa, stored animal feed and even vineyards, they appear to have it in for vehicles, causing "slippery, bug-slick car crashes as they march across highways and roads." But that's not as unnerving as the recent truck accident in Oregon that catapulted 7,500 pounds of eels onto Highway 101. The slimy hagfish emitted so much goo on the road — about five pounds from each fish — that the *Oregonian* describes "a chain reaction" of vehicles smashing into other vehicles. Injuries were minor, unless you count the eels, which all died. This gives us an excuse to quote the inimitable Ogden Nash: "I don't mind eels. / Except as meals. / And the way they feels."

COLORADO

"A gang of goats," as *Fox News* characterized it, vandalized Kryptane Systems in Louisville, about 20 miles north of Denver, splintering two glass front doors. A surveillance camera revealed the story: One of the goats, probably seeing his reflection, butted the door for 20 minutes until it shattered, left, then later returned to attack the adjoining door, too. "I don't know why" he came back, Greg Cappert, an engineer at the company, told police. "Just to be mean, I guess." Kids today, we'd say, except these goats were grownups. And as Cappert warned: "They're still out there somewhere, so protect your doors, everyone."

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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“Six weeks after we moved to Nederland, Colorado, the most destructive wildfire in Boulder County's history wiped out over 160 homes.

My husband made jokes that we had officially moved into the 'fire pit.'”

Leslie Brodhead, in her essay, "A note to neighbors: Cut those trees down," from *Writers on the Range*, hcn.org/wotr