

High Country News

For people who care about the West





Environmental scientist Daniel Shaw of California State Parks, in his boat on Mono Lake. THOMAS NASH/NASHPIX.COM

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Editor's note

The desert and the sown

"Aridity, more than anything else," Wallace Stegner once wrote, "gives the Western landscape its character." Though we sometimes forget it, we can never escape this fact. This issue of *High Country News* offers us a chance to check in on that essential piece of our nature, one that is shaped, for better or worse, by water and its lack.



The dark side of our character is portrayed in Matt Jenkins' cover story on an impending trial in Nevada, where two men are facing a long list of charges related to a complicated water rights swap. In an echo of the water wars that have simmered in the West for more than a century, prosecutors hope to prove that the two nearly pulled off a major water heist — to the tune of \$1.3 million. One of the accused is a top water regulator. We've followed this case's many twists and turns in order to explain how a complicated system of water rights is still open to corruption and abuse.

On a somewhat brighter side, writer J. Madeleine Nash travels to Mono Lake, in California, a terminal lake that was nearly destroyed a few decades ago by Los Angeles' water greed. Wielding lawsuits and savvy publicity campaigns, environmentalists saved the unique briny ecosystem in the 1980s, forcing the city to return to the lake some of the water it siphons off. The saving may prove temporary, though, as Nash reports: Climate change and drought are exerting new pressures, and the lake's survival is tenuous.

And finally, writer Sarah Tory offers a more optimistic view of Los Angeles, in a story about two architects, a married couple who want us to better see water and its value. Inspired by the waterways of Rome, as well as the *acequias* of New Mexico, they imagine a world where water is not an invisible commodity, but an everyday part of our lives. They've created a beautiful model that informs planners how and where to capture water and limit its waste. There's more water out there than you might think, and urban designers in Los Angeles, or any Western city, could do a lot more to connect people to the arid reality of their lives.

All three stories remind us that, as a warming climate retunes the planet's hydrological system, the West needs to adjust its approach to water. In the end, we'll need better systems, better laws, and better ideas about water. That requires rethinking a vital part of our character. Because in the end, as Stegner wrote, "aridity still calls the tune, directs our tinkering, prevents the healing of our mistakes; and vast unwatered reaches still emphasize the contrast between the desert and the sown."

—Brian Calvert,
managing editor



The West Elk Mine outside Paonia, Colorado. Economic forces were causing cutbacks in western Colorado mine operations even before Clean Power Plan regulations were announced. ED KOSMICKI

A sign of coal's decline

Arch Coal seems to be following other coal companies into financial peril. Stock worth \$360 in March 2011 was worth less than \$1.50 earlier this month, and the company now says it may have to file for bankruptcy. Congressional Republicans have laid the blame for the coal industry's nosedive at the feet of President Obama's Clean Power Plan and other air pollution regulations. But coal's bleak present has more to do with other factors, chief among them the low price of natural gas combined with bad business decisions on the part of the country's biggest coal companies. Now, Western coal mines, which have largely been bystanders to the high drama of the industry's business travails, are facing the fallout. Some less profitable mines, particularly costly underground ones, have made cutbacks; more are likely. If world leaders make the deeper cuts in greenhouse gases needed to fend off the worst effects of climate change, coal's future looks grim indeed.

ELIZABETH SHOGREN

MORE: hcne.ws/coal-woes

Trending

Sacred ban

Federal agencies are deciding whether to allow oil and gas exploration to go forward in the Badger-Two Medicine area of Montana's Lewis and Clark National Forest. The area is sacred to the neighboring Blackfeet Tribe, which led federal officials to suspend oil and gas leases there in 1985. Most of those leases have since been surrendered or retired; about 18 remain in limbo. Two years ago, Solonex LLC, which holds one of the outstanding leases, sued. Now, the Forest Service and the Bureau of Land Management must either finally cancel the lease or allow exploration to go forward.

JODI PETERSON

You say

RICH SHREFFLER: "The Forest Service and BLM had 30-plus years to do environmental studies to determine if the leases should be cancelled or be allowed to proceed with exploration. Why has nothing been done?"

JIM THURBER: "The feds have shown time and time again that Native American religious beliefs and practices matter not one whit when it comes to profiteering by extractive industries."

CAROLE J. BENNETT: "Now that the pernicious plan is current news, we the people oppose it. Support Native land and say no to drilling."

MORE: hcne.ws/badger-2medicine and [Facebook.com/highcountrysnews](https://www.facebook.com/highcountrysnews)

\$700 million

Taxpayer dollars spent by Immigration and Customs Enforcement in 2005 to detain illegal immigrants.

\$2 billion

Amount spent in 2014.

In the post-9/11 border security crackdown, immigrant detentions exploded, and the trend has continued under the Obama administration. Rural Western towns have benefited from the resulting boom in privately or publicly run detention centers. Detained immigrants boost population counts in rural areas, increasing state funding for things like the local police force, libraries and social services. In Eloy, Arizona, the Corrections Corporation of America, which runs a detention center in town, also pays the county \$2 per day for each inmate held in its facilities. It has become the county's largest employer. SARAH TORY

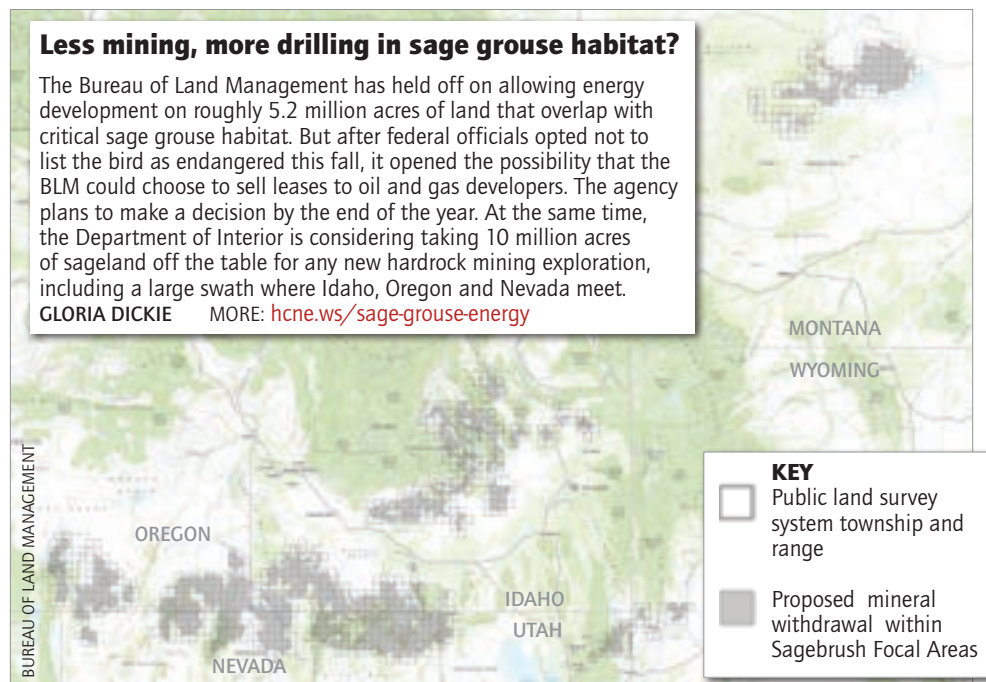
MORE: hcne.ws/profit-immigrant

Less mining, more drilling in sage grouse habitat?

The Bureau of Land Management has held off on allowing energy development on roughly 5.2 million acres of land that overlap with critical sage grouse habitat. But after federal officials opted not to list the bird as endangered this fall, it opened the possibility that the BLM could choose to sell leases to oil and gas developers. The agency plans to make a decision by the end of the year. At the same time, the Department of Interior is considering taking 10 million acres of sageland off the table for any new hardrock mining exploration, including a large swath where Idaho, Oregon and Nevada meet.

GLORIA DICKIE

MORE: hcne.ws/sage-grouse-energy



60

Percent of the 534 drilling operations in national park units that are exempt from NPS regulation. A proposed rule would close this loophole and lift the \$200,000 cap on the amount companies pay if they damage the resource. ELIZABETH SHOGREN

MORE: hcne.ws/NPS-oilgas

Gallery

Geography of Poverty

More than 11.5 million people in the West live below the poverty line, according to the American Community Survey. Last year, photographer Matt Black made a circuit of the United States to trace the effects of poverty in communities where many struggle to make ends meet. His photographs show the inhabitants of those areas and the trappings of their daily lives. MATT BLACK

MORE: hcne.ws/poverty-west



Oakland, left, and a girl in a farmworker camp in Alpaugh, California, above, where more than half the population lives in poverty.

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WE CANNOT BE TRUSTED WITH GUNS

In Brian Calvert's Oct. 26 essay, "Growing up with guns," the accompanying photo and the context that it suggested led me to expect a far different conclusion. Yet, as I read on, I found that we largely agreed. His experiences, and his resulting observations, were much like mine. I long ago concluded that "we are not responsible enough to be trusted with guns."

My conclusion was born from my role as a light and heavy weapons trainer in the U.S. military, and my subsequent experiences with licensed and unlicensed civilian handgun owners. Ironically, my accuracy with my M-16 was the direct result of my childhood experiences target shooting with my father.

It is true, however, that "guns have become something terrible." After the military, I gave up hunting, target shooting and weapons in general. I draw a firm distinction between assault weapons (I know what they are, and I used them) and hunting weapons. There is no turning back with a gun, and there are few, if any second chances. I would also agree that we, as a society, have reached a threshold. My son has not grown up with a gun.

*Erick Miller
Salida, Colorado*

YOU CAN'T LEGISLATE INTELLIGENCE

It seemed appropriate to receive and read HCN's Oct. 26 issue on Saturday, Oct. 24 — officially designated as "United Nations Day."

I loved Elizabeth Wyatt's crafty piece, "The trash without, and within" — as she writes: "Throwing away" just may be the dominant fiction of American consciousness." She hits close to the heart of the matter of the American/Western worldview: the pipe dream of endless consumption.

Brian Calvert's opinion, in "Growing up with guns," left me feeling uneasy about the possibility of being homogenized to the lowest common denominator of fear(s) and intelligence — or rather the lack of intelligence.

Both of those articles, and especially Judith Lewis Mernit's cover story, "Clean Energy's Dirty Secret," bring to mind the errors of thinking bigger is better, and of trying to legislate intelligence, when ultimately and immediately we need enlightenment. We need to make a conscious effort to evolve in a decidedly improved manner, to individually and collectively align



RJ. WATSON/CAGLECARTOONS.COM

and harmonize our worldview with the total welfare of all of Earth's creatures, creations and ecosystems. Our communal well-being, our destiny/fate are inextricably bound to the well-being of this planet.

The "dirty secret" of energy (and virtually every aspect of the modern world) is that it has become an industry, designed not just to serve society, but rather to divert and extract a significant amount of energy in the form of endless profits to undying entities. Consequently, the power-grid systems and solar, wind and other alternative energy projects must be conceptualized and built on massive scales in order to be controlled and profitable for those entities. Thinking that leads to technologies that would bring energy independence for all, i.e., "free power," etc., is not encouraged.

An idea for reducing the impact of expanding footprints of some new alternative energy projects would be to utilize much more of the existing infrastructure of the already-in-place transmission grid system. We should avoid disturbing any more virgin landscapes until this investment in years of time and billions of dollars in rights of way, labor, and concrete and steel has been maximally utilized.

*Steve Howland
Syringa, Idaho*

LET IT BURN

Within the "Fall board meeting" note in the Oct. 12 edition, you mention "150 HCN fans" who "sparked a lively discussion on how climate change, fire suppression and exurban development

have encouraged repeated megafires in our region."

The premise behind the statement, i.e., that Western wildfires are getting larger and more intense, is not supported by the preponderance of scientific information, particularly science not done by Forest Service Research and Development and other scientists working for agencies that have an organizational and/or budgetary stake in fire suppression and fire risk reduction.

The fire-suppression paradigm makes sense on its face, and many Westerners, the vast majority of media and some environmental groups have bought it completely. But science does not support the paradigm. In fact, the preponderance of relevant studies find that Western fires are not getting larger or more intense; mixed-severity fire, including occasional large areas of high-intensity fire, are not only natural but an essential Western habitat. Most vegetation in the West evolved with fire, and certain plants and animals require intense burns or a diverse fire mosaic that includes all burn intensities.

Here in the Klamath Mountains, some locals have long known that large fires do not conform to the Forest Service one-size-fits-all simplifications. Since 1987, activists with the Klamath Forest Alliance have walked and studied most of the really large fires that burned in the Klamath Mountains, documenting the ineffectiveness of fire suppression in the backcountry as well as the unnecessary watershed damage that firefighting often causes.

*Felice Pace
Klamath, California*

High
Country
News

High Country News is a nonprofit 501(c)(3) independent media organization that covers the issues that define the American West. Its mission is to inform and inspire people to act on behalf of the region's diverse natural and human communities.

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Who heads the state?

In Colorado and Nevada, attorney generals sue the feds against their governors' wishes

BY ELIZABETH SHOGREN

When Interior Secretary Sally Jewell announced in September that the greater sage grouse would not be listed as endangered, Nevada's Brian Sandoval, a Republican, was one of four Western governors on the stage, applauding.

States retained management of the bird in what Sandoval described as a "big win" resulting from intense negotiations. "It's a lot easier to fight than it is to work together," he said. Just a month later, though, Nevada's attorney general, Republican Adam Laxalt, defied Sandoval, joining a lawsuit challenging federal plans to protect grouse habitat. A public row ensued, with the governor's office declaring that Laxalt was acting on his own behalf, not the state's. Laxalt fired back with a press release calling the governor "wrong."

Currently, two Western attorneys general are suing the federal government over high-profile environmental issues against their governors' wishes. Colorado's Republican attorney general, Cynthia Coffman, is suing to block President Barack Obama's signature climate change initiative, the Clean Power Plan, despite Democratic Gov. John Hickenlooper's explicit objections.

Both attorneys general were elected a year ago with the support of a lot of outside money, signaling big donors' appreciation for the importance of these offices, as states push back against the federal government. "There is a percep-

tion that the (Obama) administration is running roughshod over states' interests," says Idaho Attorney General Lawrence G. Wasden, especially in Western states, where large portions of the land and resources are owned and managed by the federal government.

The Democrats view things differently: "There are several attorneys general who seem to see themselves as partisan warriors," says Matt Lee-Ashley, director of public lands at the Center for American Progress, a liberal think tank. "They are so determined to boost their political profile and grab headlines that they're willing to undercut their own state's leadership."

In Nevada and Colorado, the governors are challenging the legitimacy of the lawsuits and the authority of their attorneys general, who act as chief lawyers for governors and state agencies as well as top law enforcement officials. While such public disputes are infrequent, they're not unheard of, because in most states, governors and attorneys general are elected separately. In purple states like Colorado, New Mexico and Nevada, it's not uncommon for the two to be from different parties.

Colorado Gov. Hickenlooper says Coffman is exceeding her authority. "The law makes it clear that except in limited circumstances — which don't exist here — the attorney general is not permitted to file such lawsuits unless directed to do so by the governor," Hickenlooper declared. He has said he will petition the state Supreme Court to weigh in. Former Colo-

rado Attorney General Ken Salazar, who served as Obama's first Interior secretary, says that Colorado law requires the attorney general to support the governor unless the governor's position is "clearly unlawful."

Coffman, meanwhile, says she is doing her duty by joining 23 other states in suing the Environmental Protection Agency over the first-ever federal greenhouse gas rules for existing power plants. She claims that the rules will cost jobs and usurp state authority, and that she has the power to decide what is in her state's interest, regardless of the governor's stance. "The Colorado attorney general has independent authority to initiate a legal action on behalf of the state and its citizens," she declared.

In Nevada, Laxalt says he is looking out for the state's legal interests by backing a suit filed by two counties over a federal plan to set aside habitat for sage grouse and also prohibit new hardrock mining across nearly 3 million acres. "It's my job as the elected attorney general to decide when it's right for the state to be in litigation," Laxalt told KNPR radio.

Sandoval says that his fellow Republican's action does not represent Nevada, its governor, or state agencies. He also argues that only by working with the federal government were Western states able to avoid Endangered Species Act listings of the greater and the bi-state sage grouse. He shares his attorney general's concern about development restrictions on BLM lands, but believes that collaboration, not litigation, is the best way to get more flexible terms for the bird's conservation.

The back-and-forth between Laxalt and Sandoval has been especially sharp. Lawrence Wasden, Idaho's attorney general and chair of the Conference of Western Attorneys General, says disputes between attorneys general and governors are often most intense when the two belong to the same party. "There's an expectation that the attorneys general should get in line. When they don't do that, that becomes a bitter battle."

The current divisions in the Republican Party make such internecine battles increasingly likely. For instance, some Western Republicans want to file lawsuits claiming federal lands for their states, while others argue that the states agreed to the current arrangement when they joined the union. As the struggle over the vision for federal lands and the nation's energy future intensifies, more disputes are sure to come. □



Pryor Mountain wild horses, Montana's only herd of its kind.

BRAD PURDY/BLM

THE LATEST

Backstory

The 1971 Wild Free-Roaming Horses and Burros Act made the Bureau of Land Management responsible for protecting these iconic Western animals. As of 2012, 37,000 wild horses roamed public lands. The BLM regularly rounds them up and sends them to sanctuaries or holding pens; thousands then go to buyers who promise good homes. Wild horse advocates worry the horses are mistreated or sent to slaughterhouses against agency policy ("Is there a way through the West's bitter wild horse wars?" *HCN*, 11/19/12).

Followup

In late October, an Interior Department investigation justified horse advocates' worst fears: **At least 1,700 wild horses died in Mexican slaughterhouses.** Between 2008 and 2012, rancher Tom Davis of La Jara, Colorado, bought truckloads of horses from the BLM, which spent \$140,000 to deliver them to him. Davis then sold the horses to "kill buyers" for roughly \$100 apiece, making a \$154,000 profit. Despite public outcry, federal and state authorities don't plan to prosecute him.

KATE SCHIMEL



Colorado Attorney General Cynthia Coffman is suing the Environmental Protection Agency over the Clean Power Plan, despite Colorado Gov. John Hickenlooper's opposing stance on the issue. JON AUSTRIA/THE DAILY TIMES VIA AP

THE LATEST

Backstory

In Alaska, federal and state officials have long clashed over the management of wolves and bears in national parks and preserves.

State law requires sustaining abundant caribou and moose populations for food security, a goal that often entails killing off predators, while the federal 1916 Organic Act mandates keeping healthy populations of all wildlife species. In the

Yukon-Charley region in 2013, the National Park Service spent \$100,000 studying wolves even as the state spent roughly the same amount killing them ("Alaska's wildlife war," *HCN*, 5/27/14).

Followup

In mid-October, the Park Service banned practices meant to curb Alaskan predator populations, including hunting wolves or coyotes with pups in tow, or using dogs or artificial light to rouse hibernating bears from their dens. Though the rule appears to offer greater protection for wolves and grizzlies, the state will still target any predators that wander outside federal boundaries.

PAIGE
BLANKENBUEHLER



A wolf in Alaska carries a meal.

NATIONAL PARK SERVICE



Ranchers bid on cattle at La Junta Livestock, an auction house built in the '50s. For some, cattle auctions are considered a steady economic engine for southeastern Colorado, despite low numbers of cattle trading hands during the summer. BROOKE WARREN

Wrangling heritage tourism

Southeastern Colorado regroups after one idea for economic revival is shot down

BY JOSHUA ZAFFOS

Steve Wooten stands on a low ridge overlooking the Purgatoire River and the yellowed grass and red rock of southeastern Colorado's canyon country. His family, which first settled here in 1929, now runs about 300 cows on 27,000 public and private acres of shortgrass prairie spiked with cholla cactus.

Wooten points to a juniper-covered mesa across the Purgatoire. His neighbor there is not in the ranching business: That's the Piñon Canyon Maneuver Site, a 238,000-acre training area that the U.S. Army set up in the early 1980s. V-22 Osprey aircraft and helicopters sometimes scatter Wooten's cattle.

About a decade ago, the Army proposed a massive \$1 billion expansion of the site, up to 7 million acres. It would have involved seizing private lands — through a legal process called eminent domain — across most of the southeastern corner of the state, an area bigger than Maryland, displacing more than 17,000 people.

A feisty group of local ranchers, farmers, businesses and officials sprang up in response. Wooten became vice president of the Piñon Canyon Opposition Coalition, which allied with university scholars and conservation groups. They surveyed the area and identified its rare and impressive natural and historical resources, including neo-tropic bird migration stopovers and centuries-old Native, Hispanic and Anglo artifacts. In late 2013, congressional representatives from Colorado convinced the military to withdraw the waiver allowing the expansion. Somehow, this ragtag group of ranchers, farmers and nature-lovers had defeated the world's largest military.

But even as they celebrated their victory, Wooten saw other challenges looming: a long-lasting drought, an up-and-down livestock market, struggling ranches and dying downtowns. "We see our young people not coming back from college and opening new businesses here because they don't see an economic chance. We have more attrition than we have growth," Wooten says. "That should be a wake-up call."

Wooten's family sells landscaping stones, raises horses, and opens its lands to hunting, art workshops and "guest ranching" to get by. That led him and others to embrace the idea of "heritage tourism" — bringing in visitors who want to experience an area's natural and human history. Perhaps they could preserve the region's resources, avert future Army expansions, bring in money and even attract new residents.

"My thought is, how do you create a community that is economically stronger and more diversified and balanced, and I saw a heritage area as a tool to help us do that," says Wooten.

He had no idea that garnering the necessary support would make defeating the U.S. Army seem almost easy in comparison.

Heritage tourism is not a new idea. Since 1984, the National Park Service has designated 49 national heritage areas across the country, including several in Colorado. Unlike national parks, the government neither owns nor manages all lands within a heritage area. Instead, heritage areas recognize "lived-in landscapes" with a cohesive identity and unique historical and natural resources. Though there is not a lot of data on the designations' long-term impacts, they have opened the door to increased government funding, which helps leverage other

Please see Heritage, page 20

Correspondent Joshua Zaffos writes from Fort Collins, Colorado. @jzaffos

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Continued on next page

45 years

High Country News

High Country News: The reopening

The third in a series celebrating our 45th anniversary

"Today, the rural West is as wide open as any 19th century mining or ranching town ... in precisely the sense of those old movie-set towns: Law and order have been broken down. Because this is the late 20th century, people are not shot in the streets. ... Today's West is wide open in ways too subtle for an episode of Gunsmoke."

Ed Marston wrote this in 1988 to introduce a four-part *HCN* series called "The Reopening of the Western Frontier." Five years previously, there was a different kind of reopening, when the *HCN* board of directors hired Ed and his wife, Betsy, to run the paper, and *High Country News* moved from Lander, Wyoming, to Paonia, Colorado (the Marstons' home) in the back of a pickup truck.

The West's traditional economy was in crisis in the early '80s. Oil prices tumbled, and Denver office towers hollowed out. Beef prices slumped. Even Paonia dwindled, as two nearby coal mines closed.

The "reopening" involved the idea of a New West, based on the non-extractive values of the public land. The Marstons were intrigued by the region's vast public lands, perhaps because they saw the West with fresh eyes. Ed had been a college physics professor and Betsy a TV journalist in New York City, before they moved to Colorado in 1974.

At first, *HCN* struggled, but as the Marstons gained understanding of Western issues and recruited freelance and staff writers from across the region, the paper grew stronger. Its circulation climbed; it even created a financial reserve.

A four-part *HCN* series in 1986, called "Western Water Made Simple," untangled the subtleties of water management in the West's three major river basins, winning a prestigious national prize. *HCN* sought middle ground in the grazing conflict, profiling progressive ranchers. Ed Marston could be provocative, too, saying the Forest Service should be abolished because it refused to adapt to a world beyond tree-cutting. By 1990, *HCN* had become almost cool, with *Rolling Stone* and *People* magazine touting the little paper with the large ambitions.

As *HCN* entered the digital age, Marston's '88 intro remained relevant. He'd warned readers not to expect a *Gunsmoke*-style dramatic ending. "The outcome of the reopening," as he said, "will not be known for decades."

To read from "The Reopening of the Western Frontier," plus other articles highlighting this era, visit hcn.org/45.

MARSHALL SWEARINGEN



Ed and Betsy Marston outside the *High Country News* office in Paonia, Colorado in 1990. COURTNEY WHITE/THE INDELIBLE WEST

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YOU ARE ON INDIAN LAND: A multimedia exhibit at the Museum of Northern Arizona
On view with regular museum admission
Nov. 21– Feb. 15, 2016

You Are On Indian Land takes a provocative look at contemporary American Indian art and identity, demonstrating how history and heritage can blend with modernity. This exhibit at the Museum of Northern Arizona in Flagstaff offers a powerful new perspective on Native culture, featuring a variety of photographs, sculptures and video installations by leading American Indian artists. Its title was inspired by the 1969-1971 occupation of Alcatraz by Native American activists, who were attempting to reclaim the California island — site of a legendary penitentiary and now managed by the National Park Service — as Native territory. The exhibit itself might be seen as a kind of symbolic reclamation of Native culture, in which indigenous artists confront North America's contested landscape through a range of nontraditional mediums. These Native American artists are waging an old struggle on a contemporary battleground, combating stereotypes and cultural misappropriation while boldly staking claim to their own identity. **PAIGE BLANKENBUEHLER**

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Remembering friends

A blast of colder weather and a bit of biting wind and rain meant fewer visitors have made it to our Paonia office in recent weeks. Fortunately, our friends aren't the fair-weather variety, so we won't take it personally. The truth is, we're amazed at how many readers brave the back roads and the mountain passes in search of our remote little town. We'd like to acknowledge all the hard work that the members of our community — which stretches over a million square miles — do every day, just by reading *HCN* and loving the West. Thanks for your continued support. Although it really, truly does make our day when you visit us in person. ...

A special nod to **Rocky Barker**, an Idaho environmental writer and a longtime contributor to *High Country News*. Over the years, Rocky has written for us on topics ranging from wolves to fish, dams, fire and floods. In September, he was honored with The Wilderness Society's Aldo Leopold Award for Distinguished Editorial Writing, which awards writers who "articulate the importance of protecting American wilderness." We feel incredibly fortunate to work with people like Rocky and are delighted when their work is nationally recognized.

We are saddened to report that **Susan Tixier**, who founded Great Old Broads for

Wilderness, passed away Oct. 8. She was 73. An avid outdoors-woman, Susan helped found the organization in 1989. "Susan was always a gracious friend, full of energy and enthusiasm, and a lot of fun," co-founder **Frandee Johnson** said in a statement. "She had spontaneous and daring ideas. Calling the organization Great Old Broads for Wilderness was a stroke of imagination. She was innovative and a great leader, and she did amazing things for the environment for which we are all grateful."

Susan, who was born and raised in Aspen, earned a law degree at the University of New Mexico and edited the *New Mexico Environmental Law Journal*. She also held master's degrees in both Eastern and Western philosophy.

Susan told *HCN* in 2013 that Great Old Broads for Wilderness was in part inspired by Utah Sen. **Orrin Hatch**, R, who had argued against wilderness designation, claiming that prohibiting motorized vehicles in the backcountry discriminated against the elderly. "We thought, 'Jeez, we are all old and we still hike!'" she said. "So, what better than to have old people, particularly old women, stand up for wilderness?" What better, indeed? Thank you, Susan, for your hard work for wild places.

—Brian Calvert for the staff



Susan Tixier, left, Dave Foreman and Ronni Egan, former executive director of Great Old Broads for Wilderness, in 2009.

GREAT OLD BROADS FOR WILDERNESS



W

Twenty years ago, Los Angeles was forced to give water back to this ecological jewel of the eastern Sierra. Now, drought is raising new questions about its future.

With long, loping strides, geomorphologist Scott Stine zigzags through sagebrush and rabbitbrush to the edge of Mono Lake, whose still, saline waters reflect the forested flanks of California's eastern Sierra. He speeds along the chalky shoreline, stirring up clouds of alkali flies that congregate along the lake's edge. In the shallows, pale-pink brine shrimp nip at microscopic algae, and in the muck are the tracks of a California gull, which — just minutes ago, perhaps — was sauntering along, beak agape, feasting on the shrimp and the flies.

Soon, we reach the mouth of Lee Vining Creek, one of Mono Lake's freshwater tributaries. In the midst of the worst drought in living memory, the creek fans out in multiple channels like a mini-Mississippi. Lupine and Indian paintbrush daub the banks with color, and crowds of young cottonwoods and willows provide shade for trout and cover for nesting songbirds. "This area has really come back," observes Stine, a professor emeritus at California State University, East Bay. "You can't even walk the stream anymore because of all the vegetation."

Stine stops occasionally to examine treasures: a chunk of pumice, a polished cobble, the feather of a red-tailed hawk. In 1979, when he started doing research here, he was not yet 30. Now, his straw-colored hair is tinged with gray.

It's hard to appreciate today how close Mono Lake and its creeks came to ecological collapse, Stine says, and how catastrophic that would have been. The flow of rain and snowmelt — from the mountains into the creeks, from the creeks into the lake — sustains a mosaic of habitats that are increasingly rare along the western edge of the Great Basin, an arid expanse that stretches from here across Nevada and into Utah. To more than a million eared grebes and tens of thousands of migrating shorebirds, the Mono Basin is arguably the last best place between the Sierra Nevada and the Great Salt Lake.

The existential threat to this high-desert oasis materialized in the 1940s, after the Los Angeles Aqueduct added a 106-mile northern extension, which tapped the waters of Lee

Vining Creek and other feeders of Mono Lake. The aqueduct's first section, completed in 1913, captured the flow of the Owens River and dried up Owens Lake. Mono Lake and its tributaries seemed doomed to a similar fate.

For years, virtually no water flowed down the lower reaches of Lee Vining and the other creeks, causing a mass die-off of cottonwoods and willows. Then, in the 1960s, and again in the 1980s, came a series of extremely wet winters. From spillways and bypass ditches, torrents of water barreled downstream, biting into denuded soils and gravels. As major channels deepened, plummeting water tables threatened the re-establishment of riparian vegetation.

Cut off from its tributaries, the lake contracted, exposing shorelands that had been submerged for centuries. Dust storms filled with fine particles irritated the locals' lungs and obscured their vision. The lake's chemical profile changed, to the point that its waters were becoming too salty and mineral-laden to support even the tough little invertebrates at the base of the food chain. If nothing changed, many feared, recovery in less than thousands of years would be all but impossible.

And that might well have happened, without the reams of data and hours of testimony provided by Stine and others. Instead, in 1994, following a lengthy legal battle and a historic ruling by the California Supreme Court, the State Water Resources Control Board limited the amount of water Los Angeles could take.

It was one of the biggest environmental victories in the history of Western water. It set the stage for a remarkable ecological recovery, and an equally remarkable shift inside the Los Angeles Department of Water and Power. "The Mono Lake decision caused a change of mindset," says Martin Adams, senior assistant general manager for the water system. "It recognized that Los Angeles needed water, but so did the environment." This year, when Mono Lake fell below a pre-determined trigger point, the utility absorbed a big cut in its imports without protest.

What happened here might have been widely copied. It wasn't. Today, Mono Lake remains a rare example of how people

The tenuous revival of

MONO LAKE



in the arid West can balance their water demands with those of other species. But the recovery remains partial, even tenuous. Once again, the lake is falling, and some of the old threats are resurfacing — this time due to drought instead of diversions.

Long after this dry spell ends, the worries it has awakened will shadow the future. How will Mono Lake fare in a world in which the carbon-loaded climate threatens to become unhinged, raising the specter of droughts more profound than any we've ever experienced? Will it stand as a shining example of how people can use natural resources without destroying them? Or will it be regarded as a lesson in limits, so that the best we can hope for is to keep this strange inland sea in a liminal state, neither optimally full nor desperately empty?

DANIEL SHAW GUNS THE OUTBOARD on his aluminum boat and heads into the lake, which, at its present area of around 66 square miles, is about a third larger than San Francisco. Trailing my fingers through the water, I'm struck by how slippery — soapy, almost — it feels. Mono Lake is a so-called “terminal” lake, meaning that it has no outlet. Over time, its waters evaporate, leaving behind high concentrations of dissolved salts, including the likes of table salt, Epsom salt and the laundry booster borax.

Shaw, an environmental scientist with California State Parks, notes that Mark Twain, who visited Mono Lake in the 1860s, claimed he laundered his clothes by tying them to a boat and towing them a quarter-mile. Twain did not admire Mono Lake. “This solemn, silent, sail-less sea ... is little graced with the picturesque,” he wrote. And yet the picturesque is all around us, in the iconic mineral formations known as tufa towers and the eerie islands and islets heaved up by volcanic activity.

Shaw, a large, talkative man who studies osprey, gives me an up-close view of the lake in its present state. With water levels at their lowest in 19 years, it bustles with birds. In pre-diversion days, he says, many tufa towers were concealed by some 40 feet of water. Today, they serve as avian habitat. Atop one, we see a female osprey on her nest, shading her chicks with

outstretched wings. Typically, osprey build nests out of twigs and branches. Here, they also use bones. “There’s a whole stack of dead seagulls up there!” Shaw exclaims.

Since the 1970s, when DDT was banned, osprey have expanded their range. The first nesting pair arrived at Mono Lake in 1985. This year, Shaw and his colleagues counted 12 nests and 18 chicks. The osprey’s diet centers on rainbow and brown trout introduced to the area many decades ago. The osprey and their non-native prey are reminders of how this human-altered landscape retains a surprising degree of biological function.

Shaw idles the boat to get a better look at the volcanic islands. Negit, a black, brooding presence in the middle of the lake, was the California gulls’ favored nesting area until the late 1970s. Then, falling water levels caused by diversions exposed a land bridge that allowed coyotes to cross from the mainland and gobble up eggs and chicks. With few exceptions, the gulls have avoided Negit ever since, nesting on smaller islets nearby.

Had the lake not fallen so low, the gulls’ resurgence would seem an unequivocal success. The population, now some 50,000 strong, is higher than it’s been in 10 years, says Kristie Nelson, who heads up the Mono Lake California Gull Project for Point Blue Conservation Science. This summer, Nelson and her colleagues counted a higher-than-average number of chicks. But if the drought persists, the land bridge could resurface, putting the Negit islets in tempting proximity to hungry coyotes. From the boat, we can see the land bridge, beneath just a few feet of water.

There are invisible dangers as well, from rising salt concentrations to a lake-encircling “nick point” — geologist-speak for a steepening in slope that greatly increases the erosive force of water flowing downhill. Should the lake ever drop below this nick point, Stine warned the Water Board, thousands of ephemeral rills would start cutting into exposed sediments, setting in motion an inexorable process that would transform the lake’s skirt of lagoons and marshes into deeply incised badlands. At summer’s end, the lake plateaued at a good 10 feet above the danger zone.

California gulls in flight over Mono Lake, with Negit Island in the background.



Grant Lake reservoir, where the spillway will be re-engineered to allow more water to flow into Rush Creek, Mono Lake's largest tributary.

"It's amazing to consider all the damage we humans have done to the planet, but only recently have we upset the underpinnings of the whole thing. That's where we are with the climate."

— Scott Stine,
California State University

To protect the lake in times like these, the Water Board established a sliding scale that curtails diversions as water levels fall. As we zoom back to shore, I spot the gauge that measures those levels. On April 1, it revealed that the lake had dropped below 6,380 feet of elevation, forcing the L.A. Department of Water and Power to cut its exports from 16,000 to 4,500 acre-feet. (One acre-foot is enough to supply three L.A. households of four for a year.) A modest drop more, below 6,377 feet, and the utility will have to stop exporting any water at all.

THE MONO LAKE COMMITTEE, a science-driven nonprofit, runs a bookstore in the lakeshore community of Lee Vining. Behind it, a small staff inhabits a rabbit's warren of offices lined with court documents and reports. The committee formed nearly 40 years ago, after a dozen university students conducted an ecological study of Mono Lake, then in steep decline. Their report constituted the first warning shot fired toward the L.A. Department of Water and Power.

Today, the committee continues to watch over the lake, working closely with the utility to implement the Water Board's directives, including restoring the creeks damaged by the diversions. Along the way, a relationship that began as antagonistic has become increasingly collaborative. "I have a lot of sympathy for the LADWP. They are stuck with facilities that are old and that weren't designed to do

what we're asking them to do," says Geoffrey McQuilken, who joined the Mono Lake Committee as a fifth-grader in Pasadena, and is currently its executive director.

The gravity-fed system designed to take water from the lake's feeder creeks and send it to Los Angeles is now required to put water back in. That has entailed re-engineering: A \$20 million retrofit of the spillway for the Grant Lake reservoir above lower Rush Creek, the largest tributary, is on the department's to-do list. When complete, it will allow the utility to dial up the springtime flows needed to restore the creek more fully. Stream scientists have specified how high these flows must be to perform ecologically important work, like scouring deep pools that provide hiding places for trout.

McQuilken and I stand for a while along the edge of the creek, savoring the sound of water rushing from the reservoir, the central collection point for the aqueduct. The reservoir itself is barely a quarter full. High above us, mere traces of snow linger on Mount Lyell, the highest point in Yosemite National Park. At winter's end, California's snowpack was just 5 percent of normal.

It wasn't supposed to be this way. By now, it was hoped, Mono Lake would have risen to 6,392 feet, the Water Board's objective. From then on, the twin goals of providing water for both people and the environment might be stably managed. Had the climate cooperated, Los Angeles could today be drawing in excess of 30,000 acre-feet of water, many times its present allotment.

Fortunately, the L.A. Department of Water and Power has come a long way in the last 20 years. For a time, says McQuilken, managers balked at the idea that conservation and recycling could replace the Mono Basin losses. But since then, the utility has become one of the country's most progressive. Take water conservation. Simple measures like encouraging customers to rip out lawns and install low-flow toilets have made a stunning difference. Despite the addition of a million residents, Los Angeles uses less water today than it did nearly half a century ago.

By 2025, Los Angeles hopes to drive water use still lower, saving an additional 60,000 acre-feet each year. It's planning to expand the use of non-potable water for purposes such as irrigation, and to recapture water from winter storms. Even more ambitious is its plan to clean up the San Fernando Valley's polluted aquifer and recharge it with purified recycled water. The goal: To make the city much less dependent on the resource that fueled its early growth — water imported from afar.

Los Angeles proves that transformation is possible, says Martha Davis, manager of policy development at Southern California's Inland Empire Utilities Agency. It's what she dreamed of in the 1980s and 1990s, when, as McQuilken's predecessor, she helped lead the Mono Lake Committee through court battles and Water Board hearings. As she puts it, "Anyone who has watched water gushing down the street from someone's overactive sprinkler system knows we can do better — *must* do better — if the price tag is the extinction of a species or of an entire ecosystem."

TRACES OF CLIMATES PAST weave through the landscape here, disquieting reminders of how far our planet can stray from what we consider normal. Hundreds of feet above my head

Gull nesting colony on Little Tahiti Islet, east of Negit Island, Mono Lake.



stretches a long scar that marks Mono Lake's Pleistocene shoreline, when glacial meltwater surged into its creeks. But in the context of the present, the most evocative of all these traces are the stumps that mark two droughts of mind-bending duration — “megadroughts,” as they're sometimes called.

Geomorphologist Stine found the stumps more than three decades ago, still rooted in place along shorelands exposed by the diversions. He found more relicts in the Walker River and Yosemite's Tenaya Lake. By dating the wood, Stine was able to assign ages to the stumps and, thus, to the dry spells that forced the lake to recede, allowing woody vegetation to take root and flourish. The later of the dry spells ended in the 14th century after lasting nearly 200 years.

Stine bends over what looks like a log. Encrusted with tufa, it's all that remains of a tree that grew in medieval times, when the lake fell as low as 6,368 feet. In 1982, the lake came within four feet of that point; had Los Angeles' diversions continued unchecked, it would have plunged well past it. “All the chips are in place legally to protect Mono Lake,” Stine reflects. “The problem is, Mother Nature is no longer Mother Nature. You know, it's amazing to consider all the damage we humans have done to the planet, but only recently have we upset the underpinnings of the whole thing. That's where we are with the climate.”

As greenhouse-gas driven warming accelerates, many scientists, including Stine, fear that the climate system could switch to a very different state, one in which droughts of punishing duration become more likely. They need not last for 100 years to put excruciating pressure on ecosystems. At the very least, rising temperatures will accelerate water losses from plants, soils and reservoirs, intensifying even short dry spells. In Mono Lake and its creeks, higher temperatures alone are sure to stress everything from brine shrimp to trout adapted to cooler waters.

But deeper droughts are not the only possibility. Periods of extreme precipitation have also become more likely. That's because the warmer the atmosphere, the more moisture the air can hold. Stir in an unsettled zone of low pressure and unprecedented warmth in the ocean, and you get the powerful storms that have hit Southern California recently, triggering landslides and floods. This spring and summer, Lee Vining, on the edge of Mono Lake, received nearly three times more precipitation than average. If the turn to wet persists — most of California's snow and rain falls between October and March — the lake could soon rise.

Sharp climate swings are nothing new here. Between the medieval megadroughts, for example, came a five-decade wet period during which Mono Lake rose to 6,433 feet — more than 50 feet above its current level. There have



Scott Stine, geomorphologist and paleoclimatologist, near some of the iconic tufa formations exposed when water was diverted from Mono Lake.

been shorter-term swings as well. As recently as the 1990s — thanks, in part, to a powerful El Niño — Mono Lake rose more than 10 feet. Now another El Niño is tantalizing Californians with the prospect of winter storms.

The Mono Lake Committee's McQuilken, for one, remains optimistic that the lake will eventually reach the level the Water Board envisioned. “It will just take longer,” he says. In the midst of drought, maybe it's too easy to become pessimistic. Outside McQuilken's office hangs a framed passage from John Steinbeck's *East of Eden*: “And it never failed that during the dry years the people forgot about the rich years, and during the wet years they lost all memory of the dry years. It was always that way.” Before leaving, I cast a last, lingering look at the lake, which gleams like molten nickel under darkening skies. Lightning sizzles in the distance. Never has the path to a sustainable future seemed more uncertain; never have the stakes seemed higher. □

This story was funded with reader donations to the High Country News Research Fund.



J. Madeleine Nash is a San Francisco-based science writer who frequently covers climate issues. A former senior correspondent at *Time Magazine*, she often works with her photographer husband, Thomas Nash/Nashpix.com.



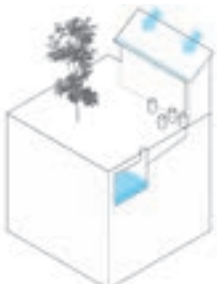
The city as sponge

Could Los Angeles design its way to water independence?

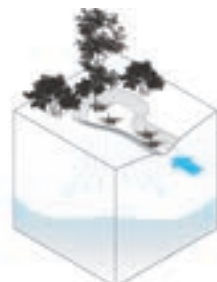


Architects
Peter and
Hadley
Arnold

Strategies for capturing and infiltrating urban stormwater



On-site detention



Dry ponds



Infiltration basin



Urban forest

The San Fernando Valley is a sprawling concrete metropolis of stucco-encrusted apartment buildings and chain stores — a sun-baked suburb with freeways “running through the yard,” as songwriter Tom Petty aptly put it. To Peter Arnold, an architect in Los Angeles, the maze of cul-de-sacs and identical houses represents a failure of vision: a city that relies on a water system that is invisible, and therefore undervalued. “You just turn on a tap,” he says, “and there it is.”

For the past 17 years, Arnold and his wife, Hadley, who is also an architect, have worked to change that attitude. Through a small nonprofit research and design firm called the Arid Lands Institute, the Arnolds are creating a massive hydrologic model of Greater Los Angeles, part of a broad urban design initiative they hope will fundamentally change the way Western cities deal with water.

Raised in the outskirts of Denver, Peter Arnold first became fascinated by water through the lens of his large-format camera. Flying over the sweep of deserts and mountains from the Pacific Coast to the High Plains, he saw how landscapes are shaped by the capture of water.

He married Hadley, a New Englander, and the two began visiting rural New Mexico to learn about the ancient *acequia* systems, introduced by early Spanish settlers and still in use today. These communally managed irrigation ditches not only distribute water democratically among farmers, they include plans for water scarcity. In the *acequias*, the Arnolds saw equality, visibility, and local participation — everything modern water systems are not.

Today’s systems — massive, opaque, bureaucratic infrastructure projects — are under stress. Like many Western cities, L.A. relies on snowmelt and a vast system of reservoirs, canals and pipelines for much of its water. But climate change is disrupting the system, bringing earlier spring melts, or rain instead of snow, or no precipitation at all. This year, for the first time, the manual measurement of the Sierra Nevada snowpack was conducted on bare grass. Meanwhile, in any given rainstorm, millions of gallons of unused rainwater gush straight into the Pacific.

That’s a lot of water, even for Los Angeles, a city on the edge of a desert. In 2013, the driest year in L.A.’s recorded history, it rained 3.6 inches, more than 12 billion gallons of water, and enough to supply more than 250,000 people annually. A well-designed L.A. could provide 82 percent of the city’s water needs locally, keeping 350,000 acre-feet of water in the Colorado River, says Arnold, citing a study commissioned by the Metropolitan Water District of Southern California.

As California lawmakers scramble to deal with the drought, imposing mandatory water restrictions and pushing big new storage projects, the Arnolds envision an entirely different approach, something more local — and more sponge-like. The key to their plan is a digital mapping tool they dubbed Hazel, after the wood used in traditional divining rods. Using geospatial data, Hazel exposes the landscape’s hidden hydrology. Right now, it’s looking at the San Fernando Valley, showing precisely — street by street, lot by lot — where 92,000 acre-feet of stormwater could best be captured, stored and treated, to offset the city’s dependence on piped-in water.

Hazel tries to make water sense of the city, identifying contaminated areas

where water might best be captured in rooftop cisterns, or where, just a few blocks away, underground storage via permeable pavement might be a better bet. This detailed mapping could change the way planners and architects work, transforming every surface into a mini watershed. A well-placed urban forest might help absorb rainwater, for example, funneling it beneath Ventura Boulevard, or cisterns could be placed over the buildings lining Mulholland Drive.

Right now, the Arnolds are fine-tuning Hazel’s software so that they can begin figuring out how, exactly, 10,000 pieces of stormwater capture infrastructure might work in the San Fernando Valley.

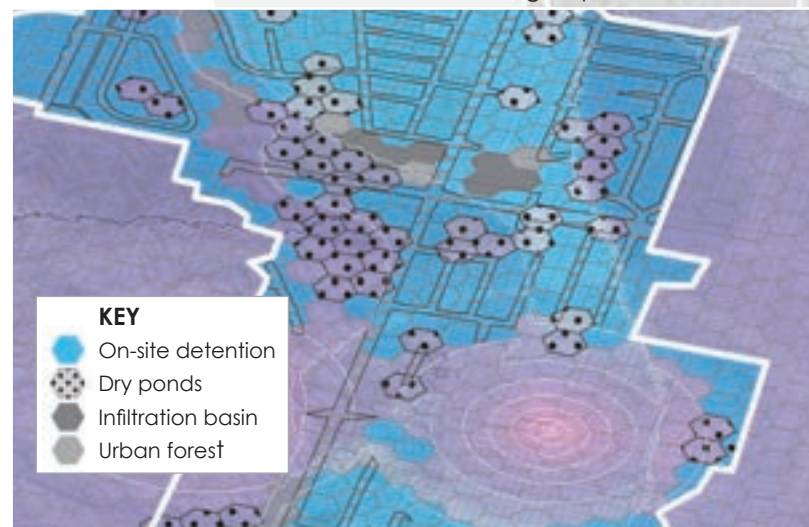
But really, the model works best as a teacher. “What we’re trying to do with Hazel is to give neighborhoods information they need to design the right system,” Hadley Arnold says. The right system would build the knowledge of water into the design, much as New Mexico’s *acequia* communities have done. The goal, she adds, is more than just wringing water from the sky. It’s to make water visible — and therefore valuable.

“Every day, the built environment should tell you how you’re doing with your water supply,” she says. In a water-savvy L.A., metering systems could be public art installations at the local bus stop, or a sculpture that swells and shimmers to show water supply. The idea is actually an old one, perfected by the Romans thousands of years ago in places like Hadrian’s Villa, outside Rome — where the Arnolds first met. “We like to think beautiful space and incredible water infrastructure are part of our DNA as a couple,” Hadley says. The same could be said of L.A. We just can’t see it yet.

SARAH TORY

Where is the water, and how can we re-use it?

A geospatial model for the San Fernando Valley Basin



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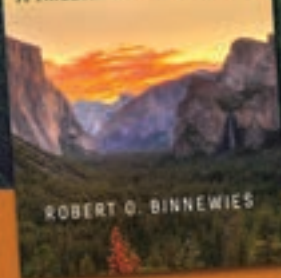


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"We have more attrition than we have growth, that should be a wakeup call."

—Rancher Steve Wooten

Heritage *continued from page 6*

private and state grants and money to support historic preservation, conservation, recreation and tourism.

The South Park National Heritage Area in Park County, Colorado, for instance, encompasses a 1,700-square-mile, mountain-ringed basin with a mining history and the headwaters of the South Platte River. Since its 2009 designation, South Park's recreational and heritage tourism has increased, says Linda Balough, the heritage area's executive director, while roughly \$900,000 from the Park Service has leveraged \$3 million total for historic preservation, tourism and related programs.

That sounded ideal for southeastern Colorado, which, with its sprawling ranches and smattering of small towns, is a region apart: Its fewer than 50,000 people tend to be older, poorer and less educated than those in other parts of the state. The Lower Arkansas Valley, which includes the Purgatoire country, has lost 1,557 residents since 2010 and 698 jobs since 2011, both more than 1 percent declines.

Drought often dries up stretches of the Purgatoire, and wells that once reliably pumped snowpack-fed groundwater have dwindled to a trickle. Wooten's rela-

tives survived the Dust Bowl, but he says the last 15 years have been "way worse" for southeastern Colorado. "Drought" — pronounced "drouth" — "has everybody's herd reduced," he says.

Local farms, which raise corn, melons and beans using Arkansas River water, have also dwindled as water brokers stealthily buy up agricultural water rights to supply the Denver area's fast-growing communities. The process, known as buy-and-dry, has virtually ended farming in nearby Crowley County, which now depends on feedlots and state prisons for jobs and local revenue.

Yet the area has unique cultural treasures. The Park Service manages the Sand Creek Massacre National Historic Site, where a Colorado Territory militia infamously slaughtered Arapaho and Cheyenne families in 1864, and Bent's Old Fort, a 19th century trading post where volunteers dress as trappers and mountain men. There are fossilized dinosaur tracks in Picketwire Canyonlands, part of the Comanche National Grassland. Other attractions include Boggsville, a stagecoach stop on the Santa Fe Trail and the last residence of Kit Carson, outside Las Animas in Bent County, and Camp Amache, a World War II-era Japanese American internment camp, near Lamar

in Prowers County.

Tourism is sluggish and services are modest, though. The Park Service reported just over 28,000 visitors to the two sites it manages there in 2013 — about a week's worth of visits to Mesa Verde National Park — generating \$1.54 million for nearby towns and supporting an estimated 21 jobs. Creating a national heritage area seemed one way to boost those anemic numbers while respecting local culture and land rights.

A regional nonprofit heritage-tourism task force, Canyons & Plains of Southeast Colorado, led the way, pulling together some key landowners, including Wooten, The Nature Conservancy, local land trusts and the Denver-based Gates Family Foundation, which offered funding for a feasibility study. But when Canyons & Plains announced the study at a February 2013 meeting, the response caught them completely off-guard.

When his job as a writer-researcher for the electronic information database LexisNexis was outsource in 2008, Norman Kincaide left Colorado Springs and moved to the small town of Rocky Ford, in Otero County, where he had bought four property lots in the depressed housing market. An articulate, meticu-




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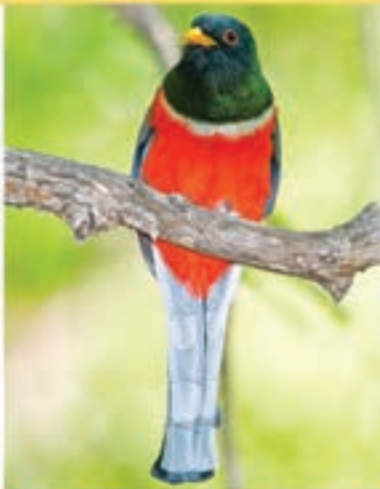
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John “Duke” Frazier handles a musket in the trade room at Bent’s Old Fort. The national historic site sends tourists back in time to the 1840s, with park interpreters who dress in period clothing.

BROOKE WARREN

lous man, he became active in the county historical commission and began attending Canyons & Plains meetings. When he heard about the proposed heritage area, he had a visceral reaction.

“I thought there was a hidden agenda,” Kincaide says. He began writing letters to local newspapers depicting heritage tourism as a charade to keep grant money flowing to Canyons & Plains, and facilitate a federal takeover. Heritage areas are a “mechanism to expand the power and influence of the NPS without ... having to buy any more park land,” he wrote in the *Pueblo Chieftain* and other regional newspapers. A February 2014 column in the *Rocky Ford Daily Gazette* claimed that “eventually 300 million Americans will live in (national heritage areas) so the Chinese can spend their vacations visiting the human zoo that once was the United States of America.”

His writing attracted like-minded skeptics, including Barbara Leininger, a former teacher whose family runs cattle on 35,000 acres of public and private ranchlands. Leininger sees the shuttered downtown storefronts as part of a necessary transition in an area that grew around horse-and-wagon travel; she says livestock auctions remain steady economic contributors, while heritage tourism is “a pipe dream” built around a fickle tourism economy.

Leininger and Kincaide helped create the Southeast Colorado Private Property Rights Council and began holding meetings. Misinformation about heritage areas quickly spread. Opponents said the designation would permit the Park Service to seize private property and prohibit ranching and energy development. The Park Service occasionally has acquired land and created management rules that affect pri-

vate property, but the 2009 Omnibus Public Land Management Act, which created 10 new heritage areas, including South Park and two others in Colorado, specifically barred the feds from buying private land or imposing local zoning changes.

The facts were drowned out by the noise, including rumors that locals would be forced to wear 19th century-style clothing. Some suggested the proposal was part of Agenda 21, a United Nations initiative for sustainable development, which right-wing commentators regard as a global land-grab conspiracy. Ultimately, every county commission in the Lower Arkansas passed a resolution opposing the effort.

“It just snowballed and came to the point that people were really fearful that their lands could be taken away,” says Pam Denahy, Canyons & Plains board member and La Junta’s tourism director. “No matter what we said and what facts we presented, they weren’t listening.”

By summer 2014, the heritage-tourism partners surrendered and tabled the feasibility study. “We said to the anti-NHA side, ‘The ball’s in your court. Put something on the table. We know what you don’t like. Give this community an idea for economic development,’” Wooten says. “It has been absolutely silent.”

There has been some new activity in the region, though. Wooten takes me on a 45-minute, dirt-road drive from his ranch to the tiny town of Kim, population 74. It’s an hour’s ride from the next nearest town in every direction, and “almost lost in time,” says R.C. Patterson, who ranches just outside the community. The town’s only gas pump is at the general store, but there’s no diesel for truckers and no apparent local industry. And yet on the

eastern edge of town rises a brand-new, cavernous, 80,000-square-foot covered rodeo arena, with 24 hookups for trailers and RVs and 40 horse stalls. “As far as competition-sized arenas, there’s nothing this big under a roof for hundreds of miles around,” says Patterson, a former champion bareback bronc rider.

The Mustang Pavilion seems like an unlikely economic game-changer, but it’s the sort of project that can find local and outside support and help increase area visits and spending. Funding came through \$1.1 million from Great Outdoors Colorado, a state lottery-supported grant program, and from the Gates Family Foundation and local donors. The pavilion was “a different strategy and totally driven by the folks there,” says Thomas Gougeon, president of the Gates Family Foundation, which more typically funds land and water conservation projects.

Last year, the grounds hosted junior rodeos, 4-H workshops, and rodeo clinics, and Patterson says a few families have moved into town because of the arena. He says there is talk of bringing in a Western wear store, and credits the pavilion with tripling available motel lodging — from one to three rooms, he laughs. Best of all, in 2013, locals approved a bond to match state funds to renovate and expand the New Deal-era school. Under the bond, every family will pay about \$3,000 over time to support the construction — a significant investment that will be matched by grants. Both Wooten and Patterson believe the pavilion development won over many people’s support.

More than a year after suspending work on the heritage area, Canyons & Plains and its partners have refocused on more modest efforts: developing farmers markets, promoting locally grown food and agri-tourism, and installing signs that direct visitors to nearby attractions. But they haven’t entirely abandoned the idea of the heritage proposal. “We still think it could be the right thing for this region,” says Alexa Roberts, superintendent for the two Park Service historic sites and a Canyons & Plains board member. “Clearly, we have the heritage here.” After all, even Norman Kincaide was attracted to the area by its unique cultural and natural resources. The opposition remains active, though: In October, it won a court ruling, preventing a vote to organize the Bent County Metropolitan District, which would have been empowered by a new property tax to fund the local historical society and recreation programs.

Back in the Mustang Pavilion, Patterson looks up at a wall lined with flagstones engraved with local livestock brands. He offers what sounds like a bit of cowboy wisdom: “You can be in a pretty tough spot, but what direction you’re going is maybe more important than where you are.” □

Heritage areas are a “mechanism to expand the power and influence of the NPS without ... having to buy any more park land.”

—Norman Kincaide,
Southeast Colorado Private
Property Rights Council

ATT JENKINS
ILLUSTRATIONS BY GRAHAM SMITH







THE BIG SWAP

For reasons that are still unclear, and that lie at the crux of the upcoming trial, the state engineer's office quickly reversed its intent to deny Lonetti's application. More than a year would pass before the permit was formally issued, yet even before Lonetti had the water right in hand — and despite his claim that he needed it for his farm — he began looking for a buyer.

One proposed deal with a housing developer fell through. But there was another, much bigger, prospect: The Southern Nevada Water Authority. The agency faced dwindling reservoirs but, thanks to the housing bubble, it was awash in cash. The Water Authority had recently spent nearly \$80 million buying big ranches with water rights in northern Nevada, and it was looking for more.

And “everybody knew,” Johnson would later testify, “who had the deepest pockets in southern Nevada.”

About that same time, an important change occurred on the Virgin River. For decades, arcane interstate legal disagreements had prevented the Authority from legally taking any water from the Virgin. But in late 2007, an agreement backed by then-Interior Secretary Dirk Kempthorne ended that prohibition.

Which is where Michael Johnson came in. Johnson was a familiar face to managers at the Authority; he had worked there for more than six years during the 1990s, before moving to the Virgin Valley Water District. Once the Virgin River opened up to Vegas, Johnson would later testify, he talked with Authority executives about buying Lonetti's Virgin River water rights, which had just become very valuable. In January 2008, Johnson met with top Authority managers and was soon negotiating the sale of two water rights with John Entsminger, the attorney who now runs the agency.

“We were going to get

Water bosses tend to prize one attribute of a water right above all else: its vintage, or “priority date.” Typically, the older a water right, the more coveted it is, because it takes priority over so-called junior rights during drought. And while the 2007 agreement finally allowed the Southern Nevada Water Authority to take water from the Virgin River, the Authority could still only use water with a priority date earlier than 1929.

Lonetti's older water right had originally been filed by S.W. Darling, a mine superintendent and county commissioner, back in 1914. That made it one of the oldest, and therefore most reliable and valuable, rights on the Virgin. But Lonetti's newly approved water permit — the one Johnson helped him argue for — carried a priority date of only 1990, the year Lonetti originally applied for it. To the Water Authority, a recent-vintage water right like that was basically useless.

So Johnson allegedly proposed a swap. The Authority could buy the 1990 water right but not use it. Then Johnson's employer, the Virgin Valley Water District, would take *that* water in exchange for some of its own higher-value, pre-1929 water. From Virgin Valley's point of view, it would essentially mean trading a smaller block of relatively more-reliable water for a bigger block of less-reliable water — and giving the Authority access to a source of water it otherwise would have been unable to touch.

Entsminger readily agreed to the proposal. But Johnson apparently neglected to mention that he was negotiating not for the Virgin Valley Water District, but rather as Lonetti's agent. “I definitely thought he was acting on behalf of the Virgin Valley Water District,” Entsminger later testified.

After meeting with Entsminger, Johnson returned to Mesquite. On March 18, 2008, he and Mike Winters, Virgin Valley's general manager, convinced the district's board members to approve the trade. The heart of Johnson and Winter's pitch to the board, one board member would later say in a deposition, was that “we were going to get a whole bunch more water than what we were going to give (Southern Nevada Water Authority), I mean, a huge amount.”

On May 20, the Authority wired \$8.4 million to Lonetti for the water. Lonetti had hit the jackpot. The Southern Nevada Water Authority paid him \$5.2 million for the older, S.W. Darling water right that had originally come with his farm. But the sale of the 1990 water permit was the real bonanza. Lonetti had paid just \$2,750 in fees to the state engineer's office for that permit. Less than a year after it was finally approved, he flipped it to the Authority for more than \$3.2 million.

BRING IN THE LAW

It soon became clear that there was much more to the transaction than first appeared. Early in 2010, rumors began circulating that Johnson had a vested interest in the deal. That February, based on allegations of improper conduct related to other issues, Virgin Valley's board fired Winters, the general manager. In August, following an internal investigation, several board members confronted Johnson with similar allegations of misconduct — specifically of taking a kickback for the Lonetti water deal. Johnson resigned on the spot.

Two months later, Virgin Valley's general manager, attorney and two board members met with the Clark County district attorney. They accused Johnson of deceiving the board into trading valuable water rights to the Authority for millions of dollars less than they were worth, and tricking the board into overpaying at least \$2.9 million for another water right that Lonetti sold in 2005.

Because of the statute of limitations, the district attorney's office couldn't bring criminal charges related to the 2005 deal. Instead, the DA focused on the 2008 deal — the one in which

a whole bunch more water than what we were going to give (Southern Nevada Water Authority), I mean, a huge amount.”

—Virgin Valley Water District board member, testifying in a deposition about the water swap

Johnson helped Lonetti sell his water to the Authority, which it then traded to Virgin Valley.

The job of investigating the case fell to Las Vegas police detective Nate Chio, a then-38-year-old Philippines-born specialist in organized crime and public corruption, and a police financial analyst named Colin Haynes. The two men soon uncovered an agreement in which Lonetti had granted a 10 percent interest in the 1914 water right and a 25 percent interest in the 1990 water right to a limited liability company called Rio Virgin — which was represented by Michael Johnson.

When Chio and Haynes subpoenaed bank records, they learned that the day after Lonetti received the \$8.4 million from the Authority, he deposited more than \$1.3 million into Rio Virgin's Wells Fargo account. And Johnson, it turned out, wasn't the only authorized signer on the account. The other was Bob Coache, the state water regulator.

A SETTLEMENT, AND A NEW CASE

Coache was a Las Vegas native who had started working for the state engineer's office in 1981. He became deputy state engineer for Southern Nevada in 2006. That made him the top regulator in the region, and gave him responsibility for recommending approval or denial of water rights applications. Coache held the position until he retired in April 2010, two-and-a-half years after Rio Virgin was formed and about a year before he was arrested.

Coache and Johnson were the sole beneficiaries of Rio Virgin, but neither man's name appears anywhere on the company's corporate filings with the Nevada secretary of State. That's because Coache enlisted a friend named Rick Templeton to act as the company's registered agent.

“Rio Virgin LLC appears that it was pretty much created as a shell company,” Chio said in a deposition. “Its whole purpose was to take this money, the \$1.3 million from Lonetti, and disguise that it was going to Johnson and Coache.”

Chio interviewed Templeton on May 5, 2010, just days before Coache and Johnson were arrested. During that interview, Chio would later tell a grand jury, Templeton said that Rio Virgin was created “for water speculation, which is basically buying water rights and trying to flip them for a profit.”

Four days later, Chio interviewed Templeton again. He learned that Templeton — despite being explicitly instructed not to do so — told Coache that the detective had come calling. And this time, Templeton told Chio a different story: Rio Virgin had been created not for water speculation but for “commercial and retail development.” (When the SWAT team finally located and arrested Coache later that day, he was at Templeton's house.)

Prosecutors assert that Coache received \$600,000 of the alleged kickback, while Johnson took the remaining \$727,500. The two men subsequently used most of the money to purchase three houses in Las Vegas and invest in a Texas oil and gas company. Coache allegedly gave \$48,000 to his sister. Johnson also wrote a \$15,000 check to Mike Winters, his boss, allegedly as compensation for his help in convincing the board to agree to swap water with the Authority. (Johnson says it was a loan to Winters.) Prosecutors also allege that Johnson and Coache used roughly \$202,000 to pay federal taxes, in an attempt to launder the kickback by disguising it as a real estate transaction.

Johnson has admitted that when he recommended that Virgin Valley approve the swap with the Authority, he did not disclose his personal financial interest in the deal. When he was asked, under oath, why not, Johnson simply replied: “Nobody asked.”

In an effort to recover the money Virgin Valley claims it lost through the swap, as well as through its 2005 purchase of groundwater from Lonetti, the district filed a separate civil lawsuit against Johnson, Winters, Coache and Lonetti in 2011. The

criminal case was put on hold until the civil case was resolved. (The DA had elected not to bring charges against Lonetti in the criminal case, and while Winters was initially named in that case, the DA later dropped its criminal charges against him.)

Last year, the four defendants agreed to settle the civil case, though neither Coache nor Winters admitted guilt. Johnson agreed to pay back the money he made from the transactions. Lonetti agreed to buy back most of his water rights. And Winters paid the Virgin Valley Water District the \$15,000 he received from Johnson. If the DA's office wins its criminal case against Coache, Virgin Valley will receive the \$600,000 in assets Coache purchased with his alleged cut from the deal.

WHO KNEW WHAT, AND WHEN

With the civil case finished, the DA's office can finally move forward in its bid for criminal convictions of Coache and Johnson. Hearings against them are scheduled to begin on April 18 in Clark County District Court in downtown Las Vegas. Marc DiGiacomo, the chief deputy district attorney in charge of the case, won't comment before it goes to trial. But given Coache's high-level position, the trial is likely to center on one key question: What role — if any — did Coache have in ensuring that Lonetti's 1990 water application was approved?

The permit wasn't issued until the summer of 2007. But it was apparently approved sometime between March 7, 2006, when Johnson and Lonetti sent their appeal to the state engineer, and July 21 of that year, when the state engineer's office billed Lonetti for permitting fees. Illuminating what happened within the state engineer's Carson City and Las Vegas offices during that four-and-a-



The case against Coache is far from airtight.

“There’s no direct evidence. It’s all circumstantial.”

—Detective Nate Chio, Las Vegas Police Department, testifying in a 2013 deposition

half month period will be the key challenge for prosecutors.

They have a big job on their hands. Several former and current officials in the state engineer’s office have testified that they were swamped with a backlog of as many as 4,000 water right applications at the time and have little recollection about any particular permit. Several also testified that, because Southern Nevada Water Authority’s junior applications on the Virgin River had been approved back in 1994, the state engineer’s office — regardless of who was actually involved — was legally bound to approve Lonetti’s senior application.

In addition, key documents are missing from the state engineer’s official file for Lonetti’s application, further complicating the effort to reconstruct exactly what happened. (Some have hinted, privately, that this is further evidence of Coache’s hidden hand.) But probably the most exasperating problem facing prosecutors is that no one in the state engineer’s office has testified that Coache improperly influenced the approval of Lonetti’s permit.

In a deposition taken in late 2013, Detective Chio admitted that the case against Coache is far from airtight. “There’s no

direct evidence,” he said. “It’s all circumstantial.”

Still, Coache will have to refute three big pieces of evidence. The first is Lonetti’s contract with Rio Virgin, and the fact that Coache was one of two people who controlled the company’s bank account. Second is the \$1.3 million deposit that Lonetti made into that account the day after the Authority paid him for the water. Finally, detectives discovered a copy of the state engineer’s file for the 1990 water right in Coache’s basement home office. It was the only permit file from the state engineer’s office that was found in Coache’s house, Chio told the grand jury.

Coache, meanwhile, says that Chio simply botched his detective work. “I think everything he did in the investigation was wrong,” Coache said during his deposition. “He had no understanding of water rights ... and he fabricated testimony to the grand jury.”

Coache is adamant that he had nothing to do with the water deal. He called Chio’s testimony about the permit file “an outright bullshit lie,” and says he had thousands of pages of state engineer’s files in his home office. Coache also maintains that he was only ever involved in approving groundwater rights, not surface water rights like the Virgin River permit that Johnson helped Lonetti argue for.

Coache’s defense will likely hinge on an assertion that the \$600,000 he allegedly received from the water deal was actually a buyout from Johnson for a jointly owned parcel of desert some 50 miles outside Las Vegas, at a place called Halfway Wash. Yet Coache’s explanation, at least as conveyed through court documents, is founded upon one extremely questionable premise. Coache paid \$70,000 for that land when he originally purchased it, in 2004. Yet he claims that when he subsequently sold his share to Johnson, just four years later, the two men based the sale price on a mutually agreed property value of \$1 million.

WINNERS AND LOSERS

So far, the case has received little publicity outside Mesquite, though Coache and Johnson’s arrests merited a smattering of coverage in the Vegas papers. But if the charges are proven true, the case could be a bigger harbinger of things to come.

It has become academically fashionable to attempt to sort the winners of climate change from the losers. When it comes to water, that cast has usually been very traditionally defined: large urban water agencies and powerful irrigation districts versus Indian tribes, poor farming communities and the environment. But the scarcity that will come with climate change could shake things up in unexpected ways. And it may well draw another player into the fray: a new breed of speculator and profiteer that smells profit in crisis.

As the case finally nears trial, Coache spends his days running a one-man consulting business from the basement of his home. Johnson has survived by doing odd jobs, like yard work and changing locks at foreclosed houses in Las Vegas. The legal cases against him, he said in a deposition, have made him “politically somewhat sensitive” as a hydrologist, and he apparently hasn’t been anywhere near a drill rig since he resigned in 2010.

There is one undisputed winner in the saga: Vegas. The Southern Nevada Water Authority won’t attempt to recover the \$1.3 million worth of homes, oil leases and cash that originated with the alleged kickback and were seized by Las Vegas police. Those assets technically derived from money that Lonetti received from the Water Authority, but they will instead go to Virgin Valley Water District. That deal allows the Water Authority to keep what it was after from the start: Lonetti’s prized 1914 Darling right, plus the high-value pre-1929 water it got in trade from Virgin Valley. In the new reality of high-stakes deals on the Colorado, \$1.3 million may be just an incidental cost of doing business. □



Matt Jenkins has covered water for *High Country News* for more than a decade. He currently writes from New Delhi.

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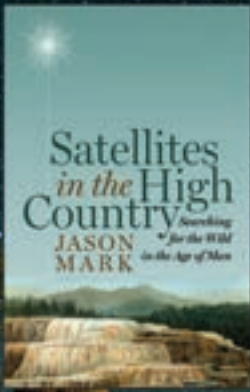
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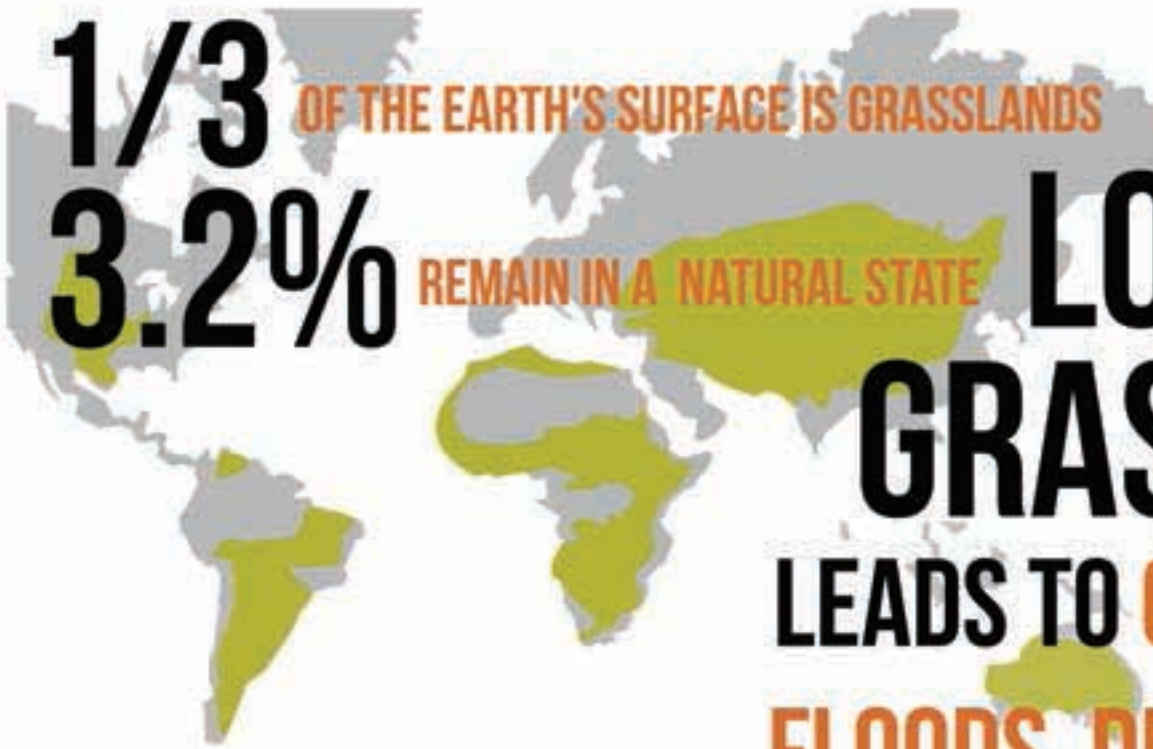
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The view from the top



OPINION BY
PEPPER TRAIL

WEB EXTRA

To see all the current Writers on the Range columns, and archives, visit HCN's Web site, hcn.org

Today I hiked along a forest trail near my home. Squirrels scolded, a raven croaked. I moved steadily on. Startled at my approach, a deer bounded away, labored up the loose soil of the steep little canyon, and disappeared. I barely paused. There was nothing there for me to fear, nothing for me to attend to other than what I chose.

Such as this late afternoon light, striking golden against the eastern slope of the canyon, bringing the polished trunks of the madrones to a fine glow. I stop to savor the aesthetic thrill of a harmonious landscape. How wonderful to be carefree in nature!

Around the end of a log hops a small bird. It does not react to my motionless form, less than 20 feet away. I cautiously raise binoculars to satisfy my curiosity, and see it is a young hermit thrush in ragged late-summer plumage, its patchy face wearing the naive and slightly desperate expression of a college freshman trying to make his way across an unfamiliar campus.

Obscurely moved by the bird, I impulsively decide to renounce, for this

one encounter, my position as the dominant species. I will wait, motionless and silent, for the thrush to do what it wishes until it leaves the scene on its own terms, and in its own time. It is 5:59 p.m.

White, male, American, and by any rational standard rich, I perch atop a global pinnacle of privilege. It is both very comfortable and very uncomfortable, though mostly comfortable. The privilege I enjoy, though, is just in relation to my fellow humans. Beyond white privilege, male privilege, or the privilege inherent in being born in America, is an even deeper and less acknowledged boon — human privilege.

The thrush hops about in the scurf of Douglas-fir needles and dust at the edge of the trail, scratching with both feet and twice lunging forward to seize something I can't see. At 6:04, it crosses the path, and settles beneath the arching cover of a snowberry bush. It fluffs its feathers for comfort and falls into motionlessness. The canyon is silent but for a slight trickle of water from the drying creek and the sighing of wind through the trees.

Time passes.

At 6:08, the thrush gives a small shake and leaps up into the snowberry. It gives its first call, a single *chup*, and then at 6:10 flies back to the path, where it resumes its quiet foraging. It finds nothing, and at 6:12 flies about 20 feet upslope into a small dogwood, where it gives a series of calls, accompanied by wing-flips. I risk a look with my binoculars; the thrush shows no reaction to my slight movement, but continues to call and flip his wings. The motions resemble food begging by a fledgling. Perhaps this youth, hungry and alone, is calling to his parents, nowhere to be found.

At 6:14, the thrush flies to the path behind me, less than 15 feet away. It shows no awareness of my presence, and after a minute of foraging, flies out of sight down the creek. For 16 minutes, I had put aside human privilege. It felt like a long time. It wasn't. But it gave me a more intimate encounter with another species than I have had for a very long time.

Years ago, I lived in the South American rainforest, doing graduate research.



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The remote reserve was still home to all its wild beasts, including jaguars. Attacks by jaguars on humans are almost unheard-of, and yet jaguars are definitely capable of killing a person. I encountered the animals eight times. One of those encounters was face-to-face. For those few seconds I lived utterly without human privilege, forever changing my place in the world.

Most of us have never lived in a landscape with large predators. Most have never experienced nature as anything worse than an inconvenient blizzard, a drought that killed the landscaping, a windstorm that knocked out the power. We have lived like kings, and like kings, we never questioned the justice of our privileges.

Monarchies are overthrown, and empires fall. No single species can forever appropriate all the resources of the world for its own. It is likely that climate chaos, acting through epidemics, agricultural collapse, or migration-fueled wars, will end human privilege, if not planetary domination, by the end of this century.

As individuals, there is only so much we can do to prepare.

But here's one thing I'm going to try — to practice living without human privi-



A hermit thrush resting on a branch.
CHRISTINA SPANN

lege for a few minutes a week. Let the world be. Watch what happens. Repeat.

Pepper Trail lives and writes in Oregon.

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.





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Into the woods



The Harder They Come
By T.C. Boyle
384 pages, hardcover:
\$27.99.
Ecco, 2015.

Extreme behavior inspires Santa Barbara-based novelist T.C. Boyle, whether it's the megalomania evinced by brilliant men such as Frank Lloyd Wright (*The Women*) and Alfred Kinsey (*The Circle*), or humanity's dismaying readiness to revert to animalistic behavior (*When The Killing's Done*). In his 25th book, *The Harder They Come*, Boyle finds hard-charging drama in the lives of Westerners whose beliefs and delusions push them toward destructive actions.

Two real-life news events sparked Boyle's imagination. In 2007, a 70-year-old Vietnam veteran on vacation in Costa Rica killed a would-be robber with his bare hands. Then, in 2014, authorities captured a California fugitive who'd been surviving in the Utah wilderness for years, robbing cabins and hunting animals.

In *The Harder They Come*, Sten

Stenson is the strapping veteran and retired school principal who saves his fellow elderly tourists during a stickup. He's treated as a hero after the incident, but the killing makes him uneasy, as do his constant worries about his mentally ill grown son, Adam.

Adam is living in his deceased grandmother's house in Mendocino County, California, training as a survivalist and raising poppies in the woods for an opium harvest. Obsessed by the exploits of the legendary mountain man John Colter, he is spinning out into what seem to be schizophrenic delusions.

Out hitchhiking one day, Adam is picked up by Sara, a middle-aged farrier who is vehemently anti-government. She initiates a fling with Adam that culminates in a spate of law-breaking.

Writing in close third-person that

switches between the three characters' perspectives, Boyle captures the runaway train of their thoughts. "Seatbelt laws were just another contrivance of the U.S. Illegitimate Government of America the Corporate that had given up the gold standard back in 1933 and pledged its citizens as collateral so it could borrow and keep on borrowing," Sarah rails.

The reader is carried along on the rushing stream of their perverse logic and intermittently feels sympathy for them. *The Harder They Come* reminds us of an uncomfortable truth: As much as we might want to dismiss violent people who hold extreme beliefs as isolated, deranged kooks, they're as human as the rest of us. They're also living among us, and some of them might be ready to blow at any moment.

BY JENNY SHANK



BROOKE WARREN

A subtle love in small-town Colorado



Our Souls at Night
Kent Haruf
179 pages, hardcover:
\$24.
Alfred A. Knopf, 2015.

Heading into his sunset years, Louis Waters doesn't ask for much. "Hell," he says, "I just want to live simply and pay attention to what's happening each day." He quit teaching years ago. Cancer killed his wife, and his daughter has moved away. He's resigned himself to a lonely end in small-town Holt, Colorado, the fictional setting of all of the late Kent Haruf's quietly sweeping novels. But Louis' neighbor, Addie Moore, has a different idea.

"I wonder if you would consider coming to my house sometimes to sleep with me," she asks him. "I'm lonely. I think you might be too."

She's not talking about sex, but about companionship: a hand to hold, a body to warm, and, most of all, someone to share her thoughts with. "The nights are the

worst," she says. "Don't you think?" After dinner, Louis takes the alley to Addie's house, where he changes into his pajamas and slips into bed beside her. They ask each other questions in the dark, questions about their children, their previous marriages, the sins of their past and the regrets of their present. As this pocket-sized yet profound novel unfolds, Louis and Addie reach for a second chance at companionship, something neither has known for decades.

"Who does ever get what they want?" Addie asks. "It's always two people bumping against each other blindly, acting out of old ideas and dreams and mistaken understandings."

Tension arises when the town starts gossiping, especially when the grownup

children disapprove. But the real emotional tightrope is strung between Addie and Louis' newfound happiness and the unpredictable clock of a human life. How long can this last? Who or what will step in the way? And how much happiness does a person deserve?

For a book so filled with heart, *Our Souls at Night* appears little interested in love — at least not in the traditional sense. At this stage in their lives, Addie and Louis seem to know better. In fact, the word "love" is used sparingly in this novel, if at all. What forms between these two lonely people transcends any abstract term; it is, instead, a simple understanding, the acceptance of two flawed souls and the fate that awaits us all.

BY CARSON VAUGHAN

Thief of my heart

I found him in an outhouse in April 2004. I opened the door and there he was, eager to exploit his unexpected good fortune. A tour of the campground produced no owners, only theories. “He barked all night, tied up to a tree. Someone must have cut him free.” “He chewed his way out. See that mangled rope around his neck.” The campground was within earshot of the highway. Perhaps somebody put him in the latrine so he wouldn’t get run over.

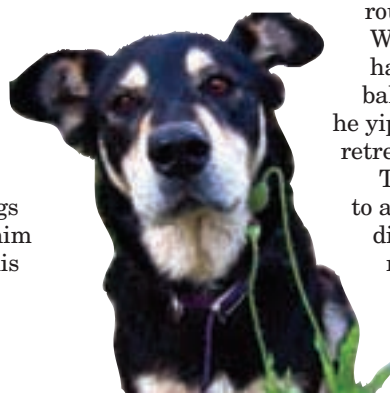
He followed me up the trail, though from a safe distance. When we returned to the parking lot, he watched me warily, retreating to the other side of the creek when I got too close. Two men in a pickup helped me catch him and wrestle him into the car.

“A rock chewer,” the vet surmised. “At least a year old.” Those chipped teeth demonstrated impressive survival skills. Was he a runaway, an abandoned pup, or did he tumble out of the back of a pickup — a common occurrence, the vet said. I named him Beast, hoping to transform him into a Beauty.

On one of our first hikes together, in 90 degree heat, he disappeared. I shouted until my voice gave out. His frantic barking finally reached me from the dense scrub oak hundreds of feet below the trail. Afraid he had caught his collar on a branch, I searched for him. It was sunset when I got back to the car, bloodied from shoulders to shins. I would never find him, I thought. He would die up there of dehydration or predation, trapped and invisible in the treacherous jungle. He was probably unconscious by now, or half-eaten. Weeping, I reached behind the rear tire for my key. A wet nose grazed my hand; he had found me.

Since then, we’ve climbed nearly 200 mountains. He always makes the summit first. In his youth, he would grow bored with my pace and take off, turning into a dark speck on a distant ridge. He could bash through anything: willows so thick we needed machetes, marshes the size of golf courses. As we both age, we have to remember our joints. Now he stays in sight, looking back occasionally to gauge the distance between us, then waiting for me to catch up.

Beaver-like, Beast used to collect fallen aspens. Since losing three teeth, he has downsized to sticks. His Husky genes proved indispensable when we went cross-country skiing. Until the stiff hind legs of senior citizenship slowed him down, he could haul me, by his



The author and her dog, Beast, on a hike to Grizzly Peak in the San Juan Mountains near Durango, Colorado, this summer. Below, Beast in his youth, in Buena Vista, Colorado.

COURTESY JANE KOERNER

end of the leash, more than a mile uphill.

As the most successful toy thief in the county’s history, he accumulated a yard full of pockmarked Frisbees and deflated balls for his favorite pastime, Toss the Toy Until Mistress Can’t Take It Anymore. At the first sign of fatigue — I’m human, after all — he switches to a different ball, booting it with his nose perilously close to the patio door.

The pyramid of miniature plastic chairs and de-limbed dolls next to my garbage can testified to his larceny. One afternoon, a neighbor sent his 8-year-old son over to retrieve his missing toys. “Why do you take our toys?” he demanded, looking at me.

“Don’t ask me,” I mumbled, pointing at the dog. “Ask him.”

At age 13, my best estimate, Beast limps for days after a round of Toss the Toy.

Within 10 minutes I have to hide the football, then the Frisbee, as he yips in frustration at my retreating heels.

This summer, we had to adjust to the recently diagnosed arthritis in my right knee and his

hips. If we overdo it, I recline on the sofa afterward, icing my swollen knee while he snores like a locomotive at my feet. I have to shake him sometimes to wake him up. His eyes open, and in their mirrors my face is tender as I help him up.

We’ve also adapted our bedtime routine. I call him until a *thunk* announces his awkward exit from the living room chair. Like my sideways steps on staircases to spare my knee, he has to accommodate the undeniable limitations of aging. His cataracts are probably worse than mine. Nuzzling my calf so he won’t lose me in the dim light, he follows me upstairs to the bedroom and his cushion on the floor. His nest on the bed is out of reach now.

One of these days, one of us might not wake up. I’ll probably outlive him, but it’s best to take nothing for granted. This realization has inspired another new routine; before switching off the lamp, I listen to the lullaby of his snorts, sneezes and sighs, its melody steeped in 11 years’ worth of memories. And I think: I should have named him Heart Thief. □

Jane Koerner and Beast of Fairplay, Colorado, are confining their walks to gentle trails until she gets her kneecap replaced.



HEARD AROUND THE WEST | BY BETSY MARSTON

THE WORLD

"With more than 7 billion people, we're crowding wildlife off the planet," warns the Tucson, Arizona-based Center for Biological Diversity. So Leigh Moyer, the center's population organizer, came up with a little something that American men could do to help wildlife — while also ending unplanned pregnancies. Guys were asked to make a pledge on Nov. 13 to go to a doctor and get a vasectomy, a simple surgical procedure that involves cutting the two tubes called the vas deferens. This keeps sperm from getting into semen and thereby prevents conception. The promised reward was better than a lollypop; vasectomy-getters received free T-shirts ballyhooing their brass. The shirt's front features a picture of a polar bear wielding a giant pair of scissors, and on the back there's some no-nonsense advice: "Get whacked for wildlife."

THE NORTHERN ROCKIES

One of the profoundest statements about character that we've ever read comes from Rick McIntyre, the "alpha wolf watcher" of Yellowstone National Park. Every day for the last 15 years, McIntyre, a biological technician for the park foundation's Yellowstone Wolf Project, has gone to Yellowstone's Lamar Valley to train his telescope on the ridges where wolves down elk and raise their families. What he learned, he told Carl Safina, author of the new book *Beyond Words: What Animals Think and Feel*, was that some wolves "were better at being a wolf than I've been at being a person." McIntyre, 61, justifies his provocative conclusion by telling the saga of a "perfect wolf" called Twenty-one, who was "like a fictional character, but he was real." Fearless and huge, Twenty-one twice defended himself against six attacking wolves, routing them all. Watching those battles was "like watching Muhammad Ali or Michael Jordan — a one-of-a-kind talent at the top of his game." Twenty-one was just a 2-and-a-half-year-old when he took over the Druid pack after its alpha male was shot. Over the years, McIntyre watched Twenty-one play-fight with his many pups, always pretending to lose, falling "on his back with his paws in the air." Twenty-one also



ARIZONA Back to drivers' school for you!

GREG WOODALL

showed an unusual magnanimity, sparing the lives of any wolves that attacked him, and caring for a "sickly little pup" that the other wolves had been avoiding. McIntyre especially loved how Twenty-one singled out a weak pup for special attention. "Strength impresses us. But what we remember is kindness," points out Safina, whose book was excerpted in part in *The Week* magazine. Wolves rarely die of old age; humans, other wolves or starvation usually kills them. But when Twenty-one reached the ripe age of 9, he left his pack, climbed a high mountain ridge, curled up in the shade of a tree and died peacefully, alone.

WASHINGTON

Some people may find it disconcerting to learn that some animals "talk" to each other about death, spreading the news, showing alarm, and in some species, apparently experiencing intense grief. Now, years of research on the streets of Seattle reveal that crows join animals such as

dolphins, chimpanzees and elephants in the club of "cognitive complexity," says *The New York Times*. As part of her doctoral research at the University of Washington, Kaeli N. Swift has studied how the corvids react to a human who routinely delivers food to a particular spot. If the human held a dead crow, Swift says, "Almost every time, the crows mobbed the corpse-bearing volunteers." That's no picnic, Swift adds: "If you've ever been dive-bombed by a crow, it's really terrifying." But the birds failed to react this way when a dead pigeon was brought, while if the visitors were empty-handed, the crows just moved away for a while before returning to their meal. "It's amazing to think a crow — a bird — is doing something like this that so few other animals are doing that we know," Swift says.

THE NATION

Hats off to 94-year-old Betty Reid Soskin, the "star attraction" at the Rosie the Riveter/World War II Home Front National Historical Park in Richmond, California. Soskin is the oldest park ranger still on the job, and she enthalls visitors to the San Francisco Bay park with her stories about working nearby in 1942 as a file clerk for the segregated Boilermakers Union, getting involved in the Black Panther movement, and later on, working for local politicians until 2007, when, at 85, she became a National Park Service ranger. A wonderful moment in her long life came in 2009, she says, when she attended the inauguration of President Barack Obama, reports Vanessa Hua for *National Parks Magazine*, the publication of the National Parks Conservation Association. Soskin stood in the shadow of the Lincoln Memorial with a picture of her great-grandmother, who had been a slave, in her breast pocket. "So much history, so much change in four generations," Soskin says. "That's how fast the time goes."

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

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“My oldest granddaughter qualified for her driver's license this summer. ... and I will spend the next 10 years aware that my phone might ring at 4 a.m. some morning, changing my world forever.”

Wendy Beye, in her essay, "The tragedy of the young 'invincibles,'" from *Writers on the Range*, hcn.org/wotr