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For people who care about the West

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BEAR ESSENTIALS

At Alaska's McNeil River Sanctuary, ursine immersion is the cure for what ails

By Christopher Solomon

Eggs squirt from a salmon snagged by a brown bear in Alaska's McNeil River State Game Sanctuary.

On the cover

A brown bear runs to shore with its catch at the McNeil River Falls, in Alaska's McNeil River State Game Sanctuary.
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Editor's note

'Eater as well as eaten'

On a rainy February day in 1985, Valerie Plumwood, an environmental philosopher and feminist, took a solo canoe excursion through Australia's Kakadu National Park. Near the end of her day on the water, still far from civilization, she was attacked by a crocodile. As she tried to jump out of the canoe and scramble up the nearest tree, the crocodile seized her by her legs, held her in its jaws, and began a series of death rolls — what Plumwood later described as "a centrifuge of boiling blackness."

When the crocodile took a momentary break, Plumwood scrambled up a muddy bank and escaped. She bound her wounds with torn pieces of clothing and staggered out of the bush. When she was finally found, she begged her rescuers not to carry out their plan to find and kill the crocodile. "I was the intruder," she later wrote, "and no good purpose could be served by random revenge."

Plumwood became a leading environmental thinker who railed against the dangers of the "human supremacist culture" of Western civilization and its dualistic approach to nature, one that puts humans somehow above and beyond nature. During the crocodile attack, she wrote, "I glimpsed the world for the first time 'from the outside,' as a world no longer my own, an unrecognizable bleak landscape composed of raw necessity, indifferent to my life or death."

Large predators, she said, "present a test of our acceptance of our ecological identity ... as part of the food chain, eater as well as eaten." They also teach us lessons "lost to the technological culture that now dominates the Earth."

In this issue's cover story, writer Chris Solomon helps us review those lessons in depth. Fortunately, he does this not by being attacked by predators, but by spending time with them. Solomon goes to Alaska's McNeil River State Game Sanctuary, where visitors walk — carefully and with great respect — near throngs of wild brown bears, who have come to accept humans as part of the landscape. At the sanctuary, humans are subordinate, resuming a role we must have played long ago. Such places are increasingly rare, but the lessons they hold are invaluable. They allow us to question the human relationship to the non-human world, and to acknowledge the precariousness of all things.

As Plumwood wrote after her attack, we have failed to realize "how misguided we are to view ourselves as masters of a tamed and malleable nature." More simply, we have failed to understand the "vulnerability of mankind." Like any trip into the wilds of the world, Solomon's journey to McNeil is a gentle reminder of something Plumwood nearly gave her life to learn, that nothing in this universe is guaranteed, not even the survival of our species.

—Brian Calvert, editor-in-chief

Interior's Climate Centers persevere

The eight Climate Science Centers set up by the Obama administration are surviving the Trump administration budget cuts aimed at other Obama-era climate change initiatives. The key to their resilience seems to be that they don't focus on the kinds of climate science that the Trump administration dislikes — research into the human role in climate change and how to reduce greenhouse gas emissions.

Instead, the centers study how public-land managers and tribal nations adapt and react to climate change. That translates to understanding how to manage for problems such as longer wildfire seasons, more frequent droughts and rising sea levels. "Climate change is not something in the distant future," says Scott Rupp, a University of Alaska Fairbanks professor who helps direct the Alaska Climate Science Center. "It's something occurring right now." **ELIZABETH SHOGREN**
MORE: hcne.ws/science-perseveres

Photos

DANIEL LOMBARDI

"Tonight I stood out in Glacier National Park's first big storm of the summer, enjoying the wildness of it. In addition to rain, the storm dropped 150 lightning strikes across the park. One of them ignited the Sprague Fire." See a journal and time-lapse photos and videos of the fire from park ranger Daniel Lombardi.
hcne.ws/sprague-fire

Audio

"There's plenty of uncomfortable truths about the realities of mining in (Belle Turnbull's) work. … She's deeply aware of all the financial chicanery ... the violence that mining does in people's lives and to the landscape. … She brings it all, and she fuses it very, very, very powerfully."

—David Rothman, head of Western State Colorado University's creative writing program, and co-editor of *Belle Turnbull: On the Life and Work of an American Master*, speaking with Brian Calvert, *HCN* editor-in-chief, and John Hausdoerffer, head of the university's environmental studies program, on our *West Obsessed* podcast.

BRIAN CALVERT LISTEN: hcne.ws/alpine-sublime

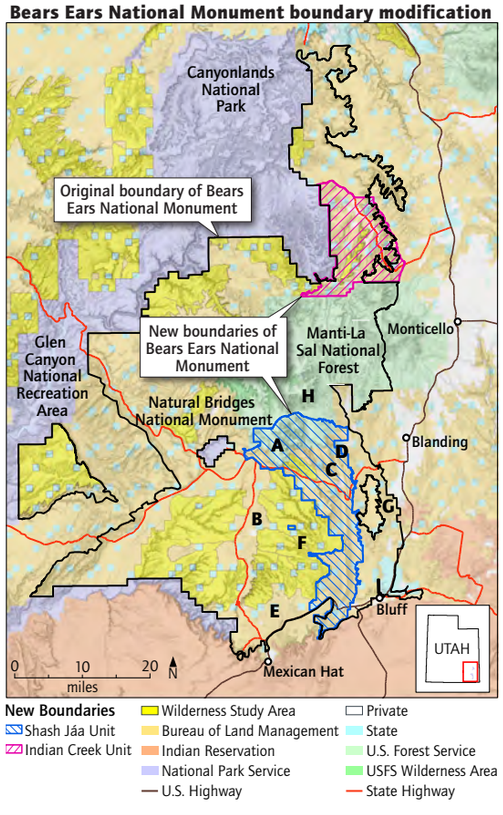
The Bears Ears as seen from a ruin on Cedar Mesa. While the monument's namesake buttes fall within the reduced monument boundaries, Cedar Mesa, with its many archaeological sites, does not. JOSH EWING/COURTESY OF FIVE TRIBES DEFENDING BEARS EARS

How to make sense of Trump's changes to Bears Ears

The first thing noticeable about the map showing President Donald Trump's new boundaries for Bears Ears National Monument is the vast amount of land taken out. But take a closer look, and the strangeness of the boundaries stands out. Even the most anti-monument Utahns will find them peculiar. Cedar Mesa — the true heart of the monument — is left out completely. Meanwhile, places that locals have fought to retain motorized access to for years were included in the new monument. And while some have said that the lands left out of the monument have no "developable minerals," the history of extraction in the West is one of commodity prices and innovation, turning yesterday's dry wells into today's bonanzas.

It's clear that Trump's motive with this, as in so much of his policy, is to erase as much as possible of former President Barack Obama's legacy. But when it comes to legacies, someone might want to remind Trump that a president is remembered not for what he destroys, but for what he creates. **JONATHAN THOMPSON**
MORE: hcne.ws/puzzling-boundaries

Bears Ears National Monument boundary modification



SOURCE: DEPARTMENT OF INTERIOR

A The Bears Ears buttes are in, just barely.

B Cedar Mesa has always been at the center of efforts to protect the landscapes of southeastern Utah. It's out of the new boundaries altogether.

C Arch Canyon contains a number of archaeological sites as well as one of the only perennial streams in the area. It's also a popular route for motorized vehicles, making its inclusion in the shrunken monument somewhat surprising.

D Upper Comb Ridge's inclusion is also a surprise, since it was pointedly left out of a locally formed proposal for national conservation areas, in part because of its motorized routes.

E Valley of the Gods is out, in part because it is already "protected by existing administratively designated Areas of Critical Environmental Concern." Ironically, Interior Secretary Ryan Zinke has included that land-use designation on a list of his department's actions that are to be reviewed and possibly axed.

F The administration also justifies excluding wilderness study areas from the monument because they are already protected at a fairly high level. But these areas aren't permanently protected; they are just being "studied" for potential wilderness designation. Congress may at any time make them into bona fide wilderness areas, or rescind their WSA status altogether.

G The original monument included most of Cottonwood and Butler washes, which are rich in archaeology and other assets.

H An astounding 1.15 million acres, covering mountains, canyons, mesas and swaths of slickrock, have lost protection under the shrunken boundaries.

Trending

Monuments face drastic cuts

In early December, President Donald Trump announced major reductions to two of Utah's national monuments. In front of an audience of monument opponents at the Utah State Capitol, Trump signed executive orders scaling back Grand Staircase-Escalante by nearly 50 percent and Bears Ears by 85 percent. Thousands protested the reductions. No president has modified the boundaries of a monument in the last 50 years, and local tribes as well as conservation and science organizations have already filed several lawsuits fighting the changes. **REBECCA WORBY**

You say

WAYNE JOHNSTON: "Contrary to locals' assertions, the monuments are not Utah's property; they belong to ALL Americans."

JIM EGNEW: "Bears Ears in particular exemplified proper use of the Antiquities Act. I worked there (Forest Service) for several years. There are cultural resources — potsherds, water management structures, pueblos, granaries, kivas, rock art — literally everywhere. It's a remarkable landscape."

LAURA FERGUSON: "That's disgusting. Colorado Plateau (tribal) nations have been working for decades to protect this area and it contains some of the most intact, significant, spectacular archaeological and cultural history in the US. This is an attack on Indigenous people and the environment."

MORE: hcne.ws/monument-cuts and Facebook.com/highcountrynews

Send letters to editor@hcn.org or
Editor, HCN, P.O. Box 1090, Paonia, CO 81428.

FIRE FUNDING NEEDS LONG-TERM SOLUTION

The situation with wildfire is more complex than captured in this short story ("Proper fire funding continues to elude Congress," *HCN*, 12/6/17). This issue warrants much fuller treatment. Housing and infrastructure are expanding into untenable fire-prone settings in part because more people need housing and too many of them are attracted to or allowed to build in unsafe settings, while the nearby municipalities benefit from the property tax. At the same time, the Forest Service is in transition, we hope, from a fire-suppression organization into a managed-fire organization. At the moment, society expects the agency to do the impossible — put fires out so homes and infrastructure are protected, and also keep the fires burning, because if we don't, there is a general worry that the fires will get even worse. We just don't have a good plan in place that deals with all the parts that must be dealt with to warrant increasing funding to one agency when the real issue involved is a larger societal problem. The proposed solutions do not deal with the whole problem. Rather, they would enable the agency to continue to put fires out, alter forests, and spend more money without a plan that gets to a long-term solution.

William L. Baker
Laramie, Wyoming

SPEAKING FOR THE TREES

Cally Carswell has given a voice to rare plants. I thoroughly enjoyed her article "Threatened plants on state lands have few protections" (*HCN*, 11/27/17). Thank you for dedicating a feature article to the plight of rare plants. "Plant blindness" is a widespread malady that can only be cured by repeated exposure to the sublime world of plants in their wild habitats. While I wholeheartedly support the efforts to protect endangered animals, rare plants deserve more attention and resources. Consider the gypsum wild buckwheat, which blooms in exceptionally harsh conditions. Such plants not only teach us about the evolution and ecology of stress-tolerant organisms, they serve as a model for humanity in these troubling times. Be staunch, be steadfast, but don't succumb to baser instincts; rather radiate compassion to extinguish the darkness.

Daniel Laughlin
Laramie, Wyoming

MARKFIORE.COM AND KQED.ORG

SOUL AND CONSCIENCE

Reader responses to Linda Hasselstrom's awfully honest poem about her father's command to take care of the kittens reveal how little some of those readers understood her words, and how little they know about ranch life ("Heard Around the West," *HCN*, 10/30/17). All too often it is urbanites, beleaguered by kittens they are too lazy to deal with, who cause the very issue Hasselstrom must deal with. Ranchers don't have the time or resources to round up each batch of bewildered, abandoned cats and kittens that have sought refuge in their barnyard. One batch of fixed cats gets followed by a fresh new batch of unfixed cats, and then come yet more kittens, an endless cycle. Ranchers can and do deal with livestock fertility, but they do not have the means for taking care of cat fertility on the farm. Trips to the vet are expensive and time-consuming. The poem expresses the hard choices that are required in an unforgiving landscape — not just regarding kittens, but with livestock injured by predators, poisonous plants, careless hunters, and the myriad other maladies that afflict them. The poem drips with Hasselstrom's soul and conscience.

Linda Paul
Boise, Idaho

THE INSANITY OF WILD HORSE MANAGEMENT

Blaming wild horses alone for overgrazing of public lands fails to comprehend they are victims of "management" as are taxpayers ("The Navajo Nation has a wild horse problem," *HCN*, 10/6/17). It is also clear that in the remaining areas on public lands where wild horses and burros are allowed to exist at all, they share those lands with grazing livestock, making it next to impossible to establish a baseline of impact that separates these species in those ecosystems. Even removing livestock for a few years solves nothing, as state and transition models gaining favor today point to systemic shifts, which are still occurring as a result of the mass introduction of grazing livestock in the Free Range Era. We are in largely unknown territory, and accommodating the conflicting needs of public, private and natural systems stakeholders has few blueprints, especially in times of drought and larger climatic disruptions.

Any ungulates confined in a fixed space and kept there while their predators are killed off will — of course — overuse the resource base. How is this their problem, not ours? We are the supposedly sentient beings tasked with their ethical and intelligent management. Allowing populations to overshoot resources and then using that as justification for mass killing seems pretty primitive. Surely there are interim approaches (some already known but not being given a fair trial) that can and should be encouraged. Among these would be removing domestic livestock from the remaining horse areas, incentivizing grazing-permit holders to manage some number of wild horses within their permit areas, and perhaps providing the public with a way to vote with their pocketbooks to support keeping wild horses in the wild, by buying an annual habitat stamp — with those funds used for habitat improvements, careful genetic analysis, and selected contraceptive and limited adoption strategies.

I think we all know that the definition of insanity is doing the same things over and over again, expecting a different result. We can and must get off this path, together, and soon.

Nancie McCormish
Steamboat Springs, Colorado

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Natural gas pipeline leaks

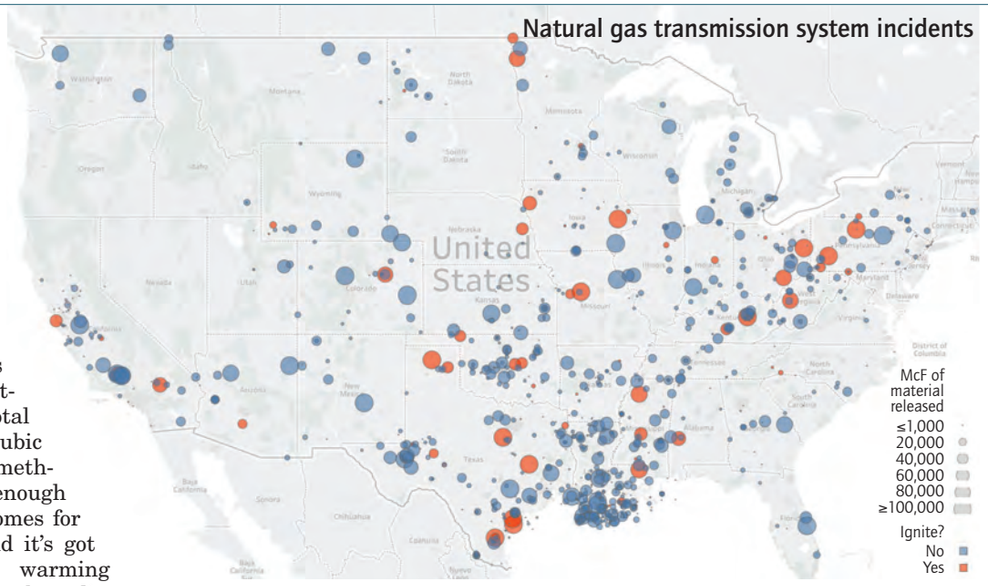
Lost gas could heat 233,000 homes

BY JONATHAN THOMPSON

When a crude oil pipeline is ruptured, it's bad news, particularly if the oil gets into water, where it's likely to impact wildlife or drinking water supplies. But when a natural gas pipeline bursts, it can be far worse because of the volatility of the fuel, which is made up mostly of methane. Leaked natural gas can't be recovered, it can build up in enclosed spaces and explode, and it is a potent greenhouse gas, with at least 30 times the warming potential of carbon dioxide over the long term.

Between January 2010 and November 2017, the nation's natural gas transportation network leaked a total of 17.55 billion cubic feet of mostly methane gas. That's enough to heat 233,000 homes for an entire year, and it's got the same global warming potential as the carbon dioxide emitted from a large coal-fired power plant over the course of a year. During that time, pipeline incidents also took nearly 100 lives, injured close to 500 people and forced the evacuation of thousands, while costing about $1.1 billion. □

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



Since 2010, ruptures, leaks and breaches in the U.S. natural gas transmission system (or long-distance pipelines) have resulted in the loss of more than 17 billion cubic feet of natural gas. For maps of distribution system incidents, casualties and causes of transmission incidents in an interactive format, see hcne.ws/gas-incidents

SOURCE: PIPELINE AND HAZARDOUS MATERIAL SAFETY ADMINISTRATION

As the West warms, birds shift nesting times

Some songbird species are raising their young earlier

BY MAYA L. KAPOOR

For years, researchers have carefully documented how Western songbirds move their range in response to climate change. About 40 percent of Northern California's birds have not shifted, though, and a new study suggests that many species are responding to climate change, not by altering their range, but by nesting and raising young much earlier in the year.

"Bird nestlings are featherless, naked, need to be incubated — which is to say, they are basically cold-blooded," says Jacob Socolar, a postdoctoral research fellow at the University of Connecticut. "They are at the mercy of whatever temperatures they are experiencing." And they need a high-protein diet, in the form of the beetles, grasshoppers and worms that harried parents stuff down their endlessly gaping beaks. This makes baby birds temperature-sensitive in another way, too: They can't thrive if it's too hot for their food to survive.

Socolar analyzed the nesting behavior of more than 300 birds in California's Sierra Nevada and Coast Range. On average, these birds have begun nesting five to 12 days earlier than they did a century ago. Many of the birds have shifted their nesting locations as well. But by nesting about a week early, the ones that haven't — 37 percent — still manage to raise their babies at about the same temperatures as they would have a century ago.

Socolar used data from the citizen science program NestWatch to compare nest temperature and nestling survival. As predicted, nestlings in cold areas fared poorly in colder years and did much better in warmer years. Nests in warm areas had the opposite fate, suggesting that temperatures matter for baby bird survival.

Scientists are unsure what motivates these birds to nest earlier. "Is the main reason finding a good temperature to nest under? Or tracking insect emergence, and the temperature story is a happy side effect?" Socolar asks. Either way, the birds benefit. If some can cope with climate change by shifting nesting times, then this research challenges a fundamental assumption about how species respond to climate change, which is that they will relocate to cooler regions as temperatures warm.

Socolar is quick to note other possible explanations for why these birds remain homebodies: Maybe some species can tolerate wider temperature ranges than others, for example. As temperatures continue to rise, the future of many songbirds may depend on that answer. □

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

The Wilson's warbler is one of the songbirds found in both the Sierra Nevada and Coast Range that is helping scientists understand how species respond to climate change.

DOUG GREENBERG; CC VIA FLICKR

THE LATEST

Backstory

Until the 1970s, hardrock mines were rarely expected to clean up their own messes and often left toxic tailings that polluted streams and groundwater. **Western states finally began passing reclamation laws, but most lacked teeth, enabling mine owners to foist cleanup costs onto taxpayers.** The Mineral Policy Center estimated reclaiming the nation's abandoned metals mines would cost $35 billion ("Closing the wounds," *HCN*, 12/3/01).

Followup

In early December, **the Environmental Protection Agency announced that it would not act on a proposal requiring hardrock mining facilities to prove they can pay for cleanup under the Superfund program.** The Obama-era proposal, developed with input from industry, environmental groups and state government, would have required companies to calculate the cost of remediation and then guarantee they could cover it through bonds, insurance or credit. The National Mining Association welcomed the decision, which it said relieved companies from unnecessary financial and regulatory burdens.

JODI PETERSON

The Gold King Mine portal, which leaked in 2015, resulting in millions of dollars in cleanup costs and reimbursements. USGS

Ryan Bundy, center, walks out of federal court with his wife, Angela Bundy, in Las Vegas. He is accused of leading an armed standoff in 2014 in a cattle grazing dispute and is representing himself in the trial. JOHN LOCHER/AP PHOTO

Ryan Bundy's West

The Bunkerville trial highlights clashing visions of public lands, federal government

BY TAY WILES

Ryan Bundy walked to the podium in the Las Vegas courtroom on Nov. 15, wearing a black suit and tie and holding a yellow legal pad. "I feel that it's important if you're here to judge me," that you first get to know me, he told the jury, before an emotional monologue about his life story and the U.S. Constitution that lasted over an hour.

Bundy is representing himself in a federal trial related to the 2014 armed standoff with the Bureau of Land Management and National Park Service near Bunkerville, Nevada, in which the prospect of violence forced the government to abandon attempts to gather Bundy cattle illegally grazing public land. Ryan Bundy, his father Cliven, brother Ammon, and Montana militiaman Ryan Payne all face charges ranging from conspiring against the United States to threatening federal officers.

In Ryan Bundy's speech to the jury, he described a romantic vision of the American West, a 19th century land of rugged individualists who created an ideal society without help from the federal government. His statements, and the trial, pit clashing visions of the region against each other. The Bundy trial reflects "two poles upon which the West, and by extension public-lands management, have been operating between this entire time," says University of Northern Iowa historian Leisl Carr Childers. She points out that Western states in fact depended heavily on federal government to develop natural resources, and continue to do so today.

Ryan Bundy's statements reflect a long-standing movement to wrest public lands from federal control. "(Prosecutors) want to say the government owns the land," he said. "Right there is the crux of the issue." The Bundys, who believe that public land should be administered by the state of Nevada, say the 2014 standoff was a protest against federal control.

For Bundy, this trial is about property rights, not the alleged threats of violence. "(The government) wants to say it's only a privilege to graze (livestock)," he said in court. With this, Bundy referenced an age-old Western debate over how grazing permits should be defined: whether they are inalienable rights, or privileges that can be legally curtailed. Part of the argument for equating public-land grazing permits to property rights is that for decades, ranchers have used permits as collateral for loans and improving the value of real estate. Proponents say that makes them similar to personal property, rather than a license that can be revoked. When the BLM cancelled the Bundys' grazing permit, that was an affront to the defendants' worldview. "These (grazing) rights are real property," Bundy argued. "They belong to us."

Mainstream scholars disagree. "The Taylor Grazing Act of 1934 (which regulates grazing on public lands) doesn't support their interpretation," says Matthew Pearce, a University of Oklahoma historian who specializes in natural resources and the West. Simon Fraser University history professor Joseph E. Taylor says: "All of the congressional hearings on the question were clear and consistent that they were not bestowing rights and that these were privileges that the government could take back under specified conditions."

And yet the Bundy defense team has masterfully created a picture of a West in which the United States government lacks authority to own or manage land, or even to administer grazing permits.

In opening statements, Bundy reiterated his belief that state and local law enforcement should reign supreme in the West. This stance is part practicality and part ideology, emerging from a Western tradition that places county sheriffs above federal law. Mark Potok, a pre-eminent expert on the radical right, says this viewpoint is linked to the 2011 national rise of the "Constitutional sheriffs," which is rooted in past county supremacy movements. "These ideas are very much alive in the West," Potok says. When federal officers arrested Ryan Bundy's brother Dave days before the 2014 standoff, he called the county sheriff for help. Bundy explained in court that, for decades, "we've turned to local law enforcement … to protect our liberty."

In opening arguments last month, U.S. prosecutors presented a starkly different reality, involving a time-honored system of law and order. "Our American judicial system is comprised of the courts," said Steven Myhre, acting U.S. attorney for the District of Nevada. "That's how we maintain peace. … If the (court) order is not followed, you can expect law enforcement will get involved." Federal court orders in 1998 and 2013 required Cliven Bundy to remove his cattle from public land; he ignored them.

By early December, U.S. District Court Judge Gloria Navarro had released all four defendants from jail, along with four others being held for a related trial planned for 2018. All will remain under house arrest or curfew until their trials are over. Cliven Bundy declined to be released. His attorney, Bret Whipple, explained: "He's not willing to take a deal with the government when he hasn't done anything wrong to begin with." □

Tay Wiles is an associate editor with *High Country News*. @taywiles

What Trump's Supreme Court pick could mean for Indian Country

With a background in Indian law and the West, Neil Gorsuch could prove useful to tribal litigation

BY ANNA V. SMITH

During the Senate hearings that put Neil Gorsuch on the Supreme Court this year, Democrats made it clear they were leery of his conservative judicial record. Gorsuch was confirmed in April along party lines, and no Western Democrat voted in his favor. But Gorsuch has a strong background in Indian law and a record of recognizing tribal sovereignty and self-determination, and, those concerns notwithstanding, his nomination may well represent a potential positive development on big cases for Indian Country.

In a court dominated by East Coast justices, Gorsuch is from the West, the source of many Indian law cases. He grew up in Denver, where he later spent 11 years as a circuit court judge. His mother, Anne Gorsuch Burford, headed the Environmental Protection Agency under Ronald Reagan, and his stepfather, Robert Burford, directed the Bureau of Land Management during the 1980s. "Western experience is lacking in the current makeup of the court," Native American Rights Fund attorney Richard Guest wrote of Gorsuch's nomination, "and is a vitally important perspective."

Gorsuch is also well acquainted with Indian case law. On the 10th Circuit Court of Appeals, the Harvard-educated Gorsuch presided as a judge over five Western states and 76 tribal nations. According to the Native American Rights Fund, which supported his nomination, Gorsuch ruled favorably for tribes 57 percent of the time on cases ranging from jurisdiction and religious freedom to tribal sovereignty. His opinions show an appreciation of history and context, important tenets of Indian law, says John Dossett, general counsel of the National Congress of American Indians, who first met Gorsuch at an NCAI function 10 years ago.

Gorsuch's opinions often read like a primer on the history of the tribe in question and are firmly couched in an understanding that, as he has written, "ambiguities in the field of trust relations must be construed for, not against, Native Americans." This is well understood in federal Indian law. However, the field is not at the forefront of law education; just three states require knowledge of it to pass the bar exam, and no current Supreme Court justice is well versed in it. Gorsuch values historical context and often delves into the exact words of treaties. That "textualist" approach involves looking at the objective meaning of the text, rather than interpreting its intent. In Indian law, "if you go back to the original text, the tribes come out pretty good," Dossett says.

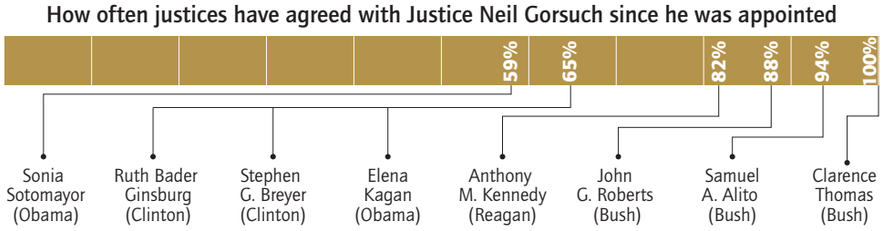
Justice Neil Gorsuch.
ZACH GIBSON/AFP/GETTY IMAGES

Not all have such a positive view of Gorsuch. Robert Anderson, law professor at University of Washington, says that many of Gorsuch's past rulings on tribal affairs were "open and shut" cases. Gorsuch may receive such glowing reviews, Anderson says, because people compare him to Antonin Scalia, the justice he replaced. (According to an analysis by the Native American Rights Fund, Scalia voted against tribes 86 percent of the time.) Anderson points to a case involving the Navajo Nation, in which Gorsuch's written opinion determined that disputed lands were not considered Indian Country. "My assessment is that in the one case where things were really contested, in a matter regarding sovereignty, he went with the anti-tribal view," Anderson says. This is important because the Supreme Court produces precedent-setting decisions that guide lower courts.

Still, Gorsuch's experiences as a Westerner and his understanding of Indian law and history could prove advantageous for Indian Country. In early December, the Supreme Court had yet to decide whether to hear or decline 12 Indian law cases — substantial cases, including fishing rights, the Indian Child Welfare Act and sovereign immunity. The court has already turned down a case about the groundwater rights of the Agua Caliente Band of Cahuilla Indians in California. That is seen as a win for the tribe because it means the 9th Circuit Court's last decision stands. The tribe's chairman, Jeff Grubbe, applauded the decision, saying it made the tribe's water rights a matter of "settled law."

In the past, tribal litigants have avoided bringing cases to the Supreme Court because of its record of deciding against them; in the last three decades, tribal interests have lost nearly three-quarters of their cases. While having Gorsuch on the bench may not change that entirely, he may bring some depth and breadth to tribal affairs and pull other justices in his direction.

Of course, this all depends on whether he sticks to his track record and apparent principles. Despite the partisan politics overshadowing his confirmation, Gorsuch pushed back against the notion that judges are "politicians in robes," and should instead "apply the law impartially." As more cases come before the Supreme Court, legal experts in Indian Country will be watching closely for opportunities. "Nobody really knows how he's going to decide cases in the future," Dossett says. "But we also know that he's a justice with his own mind." □



Anna V. Smith is an assistant editor for *High Country News.* @annavtoriasmith

A Mexican wolf.
LARRY LAMSA/CC FLICKR

THE LATEST

Backstory

In 1998, the U.S. Fish and Wildlife Service reintroduced 11 Mexican wolves in Arizona and New Mexico. The population reached 100 in 2015, but **administrative missteps, poaching, removal of livestock-killing wolves, and New Mexico's ban on further releases caused severe inbreeding** ("Line of descent," *HCN*, 8/8/16). In 2016, Fish and Wildlife proposed more reintroductions, but the state balked, saying the required federal recovery plan was incomplete.

Followup

In early December, **the Fish and Wildlife Service finalized a $178 million recovery plan designed to increase wolf numbers** to about 320 in Arizona and New Mexico, plus 200 in northern Mexico, improving genetic diversity **so wolves can be delisted.** Environmental groups, arguing that the states' demands are trumping sound science, support the 2012 goal of 750 in the U.S. Biologist David Parsons, the first recovery coordinator, told the *Arizona Daily Star* that the new plan "is more likely to cause the second extinction of Mexican gray wolves in the wild than to secure their recovery."

JODI PETERSON

Who should pay for public lands?

A proposed national park fee hike re-ignites old questions about how to fund the West's open spaces

BY KRISTA LANGLOIS

When Kitty Benzar bought her house on an inholding in Colorado's San Juan National Forest 30 years ago, federal law prohibited land-management agencies from charging people to use undeveloped public lands, like those in her backyard. Fees for developed campsites, public cabins, and access to certain national parks and monuments were legal and widely accepted. But if a trailhead or backcountry site offered only a toilet, a picnic table or drinking water, the 1965 Land and Water Conservation Act required that it be free.

That changed with the Recreation Fee Demonstration program in 1996, which allowed agencies to start charging for day use. But the new regulations didn't hit home for Benzar until five years later, when the U.S. Forest Service began charging $5 to access a trailhead in Yankee Boy Basin, a high-alpine bowl not far from her house. Benzar and about 35 others protested the fee — not because they couldn't afford it, but because, Benzar says, they felt it was part of a broader effort to "monetize our public land and turn recreation into a product to sell us."

Today, access to Yankee Boy Basin is free, but Benzar hasn't stopped fighting. As president of the Western Slope No-Fee Coalition, she battles other fee hikes that she believes are contrary to the spirit of public lands.

Few such proposals have troubled Benzar more than the U.S. Department of the Interior's Oct. 24 call to dramatically raise entrance fees at 17 popular national parks — in some cases from $25 to $70 per car.

The National Park Service says the hike could raise $70 million a year to chip away at a $12 billion backlog of deferred maintenance on roads and buildings. Proponents claim it's a necessary step toward ensuring the future of chronically underfunded public lands. But fee watchdogs and many conservation groups see it as simply another example of a dangerous trend: federal lands run less like a public resource and more like a commercial enterprise.

The debate over how to fund the West's sprawling public lands dates back to the Park Service's founding, according to Barry Mackintosh, author of *Visitor Fees in the National Park System: A Legislative and Administrative History*. Because the nation's earliest parks received little or no congressional appropriations, outsourcing food and beverage services to private businesses and passing costs on to visitors made sense. In 1915 — the first year Yellowstone allowed cars in and charged an entrance fee — the park's revenue

Please see **Park fees**, *page 22*

Correspondent Krista Langlois lives in Durango, Colorado. @cestmoiLanglois

A biker exits Joshua Tree National Park at the west entrance fee station. It currently costs $25 per vehicle and $12 for a bicycle to enter the park.
BRAD SUTTON/NPS

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Strutting sage grouse males do not wait for spring to begin their ritual dance. This male begins his performance in February in Wyoming's snow and ice.
NOPPADOL PAOTHONG

SAGE GROUSE: ICON OF THE WEST
Photos by Noppadol Paothong, text by Kathy Love
180 pages, hardcover: $45. Laguna Wilderness Press, 2017.

Sage grouse live only in the arid Intermountain West. Vast and austere, this "Sagebrush Sea" is often seen as empty, but it's actually full of life, and the sage grouse is well adapted to existence there. Still, the species is threatened, and fewer than 400,000 grouse remain.

In this vibrant collection, *Sage Grouse: Icon of the West* photographer Noppadol Paothong captures these creatures in their full glory. Spanning the bird's life cycle, the images highlight its flamboyant courtship dance while revealing aspects of grouse life never before documented. The accompanying text by natural history writer Kathy Love explores the sagebrush ecosystem, the grouse's history and the perils it faces. Love also describes the conservation efforts supporters are fighting for. The birds' famous mating display doesn't just perpetuate the species, she notes: It "may also perpetuate grouse populations by leading humans to care enough to conserve them." **REBECCA WORBY**

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Celebrating the season, and 'neighboring' one another

The calendar date suggests that winter is upon us at *High Country News*' headquarters in Paonia, Colorado. Unfortunately, the lack of snow says otherwise, with the bare dirt on our local ski trails and snowshoe routes indicating that we'll have to wait a bit longer to enjoy a real Colorado winter. Luckily, we've had some holiday cheer to tide us over.

In early December, we welcomed more than 100 guests to our office for our annual winter holiday shindig. Staff, readers and community members caught up with friends old and new as they enjoyed smoked turkey sausages, crab toast, three kinds of cake and other tasty snacks — and a lucky few walked away with snazzy door prizes, including *HCN* socks and hats.

In his remarks that night, Editor-in-Chief **Brian Calvert** reminded us that *HCN* is more than just a magazine; it's also a community of readers with a shared love for the place we call the West. "In the West, we have a verb that maybe other people don't have — neighboring," he said. By keeping folks informed about what's going on in our region, and how it fits into a wider context, we hope to help everyone do a better job of neighboring.

The day before the party, **Rose Chilcoat** and **Mark Franklin** of Durango, Colorado, came by. Rose was associate director of Great Old Broads for Wilderness for 15 years, and is a founding board member of Torrey House Press and Friends of Cedar Mesa. Mark owns a graphics company that designs exhibits, brochures and interpretive plans. The couple is facing a lawsuit from Utah's San Juan County for allegedly trespassing and endangering livestock, so they were drawing strength from visiting other public-lands proponents on a trip through western Colorado.

We were saddened to learn that longtime reader and subscriber **Samuel P. Hays**, the great-uncle of *HCN*'s associate photo editor, **Brooke Warren**, recently passed away at the age of 96 in Boulder, Colorado. Brooke tells us that he was an avid reader of *HCN*, and even as he gave up other reading, maintained his subscription till the end. You'll be missed, Sam.

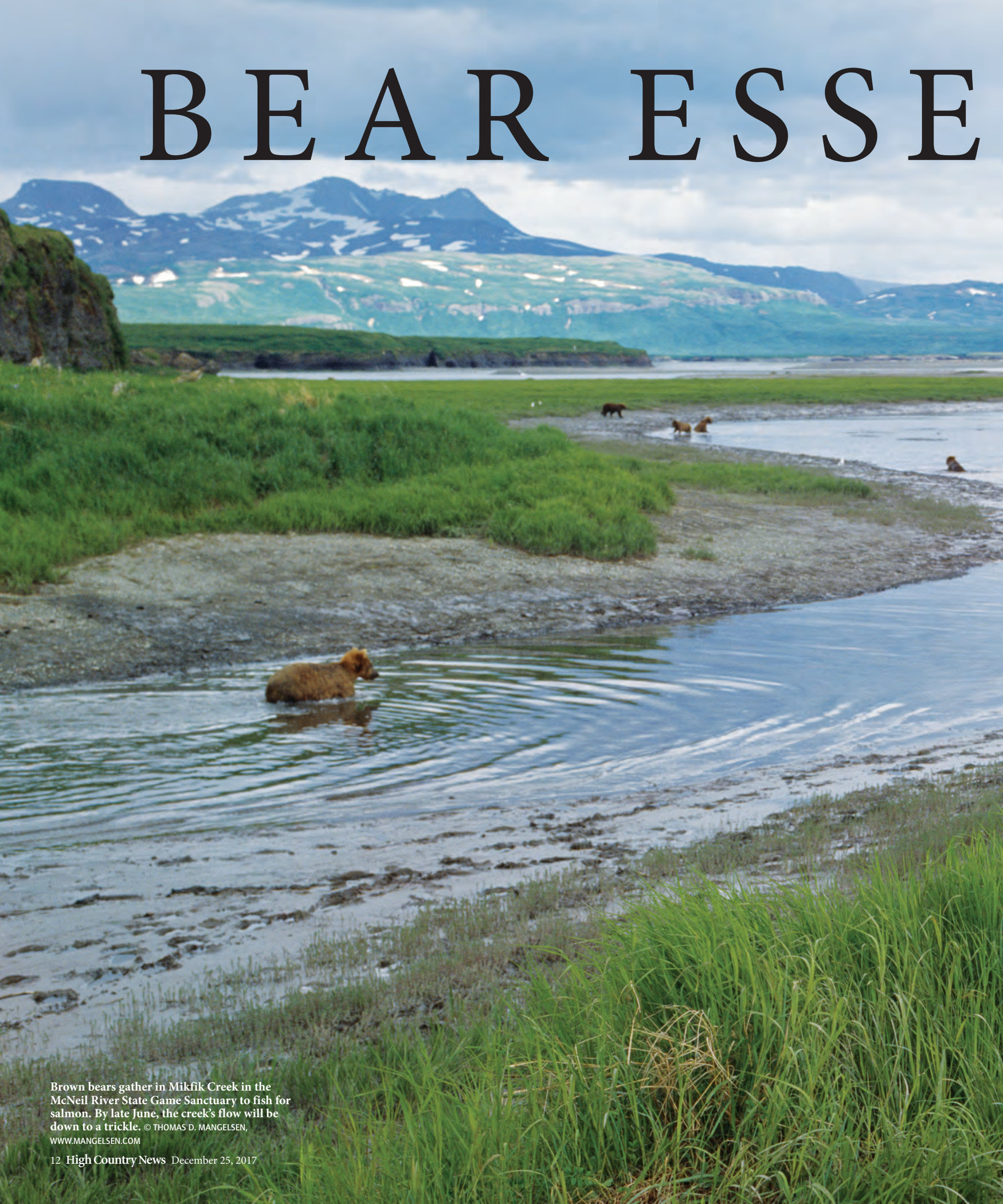
We have a small correction to make: In Craig Childs' tribute to his friend, a renowned environmentalist and singer ("Remembering Katie Lee" *HCN*, 11/27/17), we underestimated how old he was when he and Lee first met. "I think I was 38 when my wife and I dipped in her and Joey's famous wooden tub for the first time," he says, not 18.

Finally, we'll be taking our quarterly publication break after this issue, our final for 2017. Thank you for a great year, and look for the next issue of the magazine to hit your mailbox around Jan. 22. In the meantime, please enjoy celebrating the season with one another. Happy holidays!

—Emily Benson, for the staff

Gretchen King, our director of engagement, and Rebecca Worby, our editorial fellow who is moving back to New York this month, hand out raffle tickets at our annual holiday party. BROOKE WARREN

BEAR ESSE



Brown bears gather in Mikfik Creek in the McNeil River State Game Sanctuary to fish for salmon. By late June, the creek's flow will be down to a trickle. © THOMAS D. MANGELSEN, WWW.MANGELSEN.COM

NTIALS

At Alaska's McNeil River Sanctuary, ursine immersion is the cure for what ails

FEATURE BY CHRISTOPHER SOLOMON

Behold the Great Outdoorsman, bravely stalking the north bush for his quarry. He has come to observe, up-close and in the unmitigated wild, the ferocious Alaskan brown bear. See him push from his mind the niggling fact that in his fraught quest he carries neither rifle nor shotgun nor bear spray — indeed, is armed with nothing more protective than a spray-can of mosquito repellent — and that his most technical piece of bear-stalking apparel is a pair of caution-light-yellow clamming boots, which at this moment are being sucked from his feet by a vengeful tidal goop. Before him, Alaska is a broad baize beneath weeping clouds. He lifts his powerful and overpriced binoculars to his eyes and scans the horizon.

There, in the distance! A brown hulk squats, unmoving, on the tidal flat. Even from here he can see its dark ursine mass rippling with potential energy, waiting for the moment to burst toward his group with merciless velocity.

"Mud bear," dismisses his guide, walking onward.

Ah.

Truth to tell, the Great Outdoorsman is a bit jumpy, and also is growing near-sighted. He is not feeling altogether great at the moment. He has come to the McNeil River State Game Sanctuary to see why, each summer, this place claims the crown as the beariest place on earth. But the rain has made him shivery, and he thinks he has forgotten his pocketknife at home.

For 20 years he has lived in Seattle, which not long ago felt like a big mountain town, but now is the fastest-growing metropolis in the nation. His life mirrors that of his city, further removed from nature by the day. The three-hour rush hours that lead out of town discourage him. So do the 200 cars he sometimes finds at the trailhead. He feels stuck in the traffic jam of the Anthropocene. Instead, he spends long hours at his desk, and on the telephone, trying to do big things, and to be big.

Sometimes the Great Outdoorsman — my better, former self — stops striving long enough to wonder, *Is this all there is? Must we spend our days trying to control the world around us, even as things spin out of control?* When those questions become too much, he knows it's time to escape from behind the bars of his cellphone and get beyond the reach of other humans. Way out here, in places like this, he likes to think, a person can better see how the world fits together, and perhaps see where he, too, fits in.

Sanctuary Manager Tom Griffin and a group of visitors, top, return to camp after a day of close-up brown bear viewing at the McNeil River State Game Sanctuary on the Kenai Peninsula in Alaska. Above, the camp, where a hedge is all that separates visitors from the free-ranging bears. RICHARD ELLIS / ALAMY STOCK PHOTO

YOU HAVE SEEN THE POSTER hanging in the harshly lit purgatory of a dentist's office or strip-mall DMV: a bear standing at the top of a foamy cataract about to devour a leaping salmon. Beneath the bear, a single sentiment: PERSISTENCE. These photographs are mostly taken at Brooks Camp of southwest Alaska's Katmai National Park where, on a busy day, a squadron of floatplanes shuttle hundreds of tourists to gawk at a handful of bears on the river. It's impressive, and also crowded.

Northeast of Katmai at McNeil River, by contrast, 75 bears have shared the falls of the river. On the same day. At once. "That's more bears than there are in France!" Larry Aumiller, a former manager of the sanctuary, said upon witnessing the scene in 2011. When the salmon are running thickest in the McNeil River in mid-July, it's normal to watch 40 bears fish together.

The numbers are all the more remarkable when one considers that perhaps only 1,800 grizzly bears roam the Lower 48 today. They occupy about 2 percent of their historic range. In the Greater Yellowstone Area, lawyers sue

over whether one grizzly per 58 or so square miles is enough to consider the bears recovered. Alaska, on the other hand, has 32,000 brown bears, which are basically grizzlies that enjoy coastal living. Their numbers may be most dense of all on the Alaska Peninsula of southwest Alaska. Here, on average, there's roughly one brown bear every square mile.

While nearby Kodiak Island likes to brag that it's home to the biggest browns on earth, the Alaska Peninsula grows 'em just as big — up to 1,500 pounds for the truly colossal males. To conjure the falls at McNeil in midsummer, imagine 40 bears standing in a space a bit larger than half the size of a football field, with each bear weighing as much as two NFL defensive tackles. It's the largest seasonal gathering of the biggest brown bears on earth.

These bears don't live behind a zoo's high walls. They are free-range, completely wild, and they largely go where they want. Here, a bear will catch a salmon, step out of the river and eat its dinner, just a fish-stick toss away from the unfenced, ground-level pad where stunned humans sit and watch. A few years ago, an IMAX cameraman found himself frustrated: The bears were too close for his lens to focus on.

"This place is not a park," Tom Griffin, who has worked at the sanctuary for more than 18 years and managed it since 2010, says. "With the exception of human safety, that world out there belongs to the bears. When we leave camp every day, we have to control our behavior."

Unlike Brooks Camp, access to the McNeil Sanctuary is strictly limited, to only 10 visitors at once, four days at a time, 200 visitors a season. To come here, you must win the lottery, literally: There's a drawing each spring for spots, with preference given to Alaskan residents. Finally — a good reason to persist for hours at the Nome DMV.

IN JUNE, HAVING WON a coveted out-of-state lottery spot, I stand on a dock in Homer as a young pilot named Jimmy stows my duffel in his ancient, reliable de Havilland Otter. Two couples arrive to share the ride. Soon we're up and arrowing west toward the Alaska Peninsula, leaving behind house and highway and the halibut charters that split the waters of Cook Inlet. Clouds smudge the horizon like a finger run across a chalk line. The clouds push the plane low. None of this seems to faze Jimmy, who navigates by iPad, texting as he flies. Having stowed my technology for the next several days, I look out the porthole, though, and feel a geographic vertigo set in. Past and future erased, all that remains is a not-unpleasant feeling of going — that, and the sea below, the color of flea-market jade.

In time, a rocky island appears, then another, followed by steep headlands and small bays that reach back into a delirium of grass and alder, a world painted in approximately 26 shades of green. Like eyes adjusting to the dark, it takes a few seconds to see what's not there, which is nearly anything that says humankind. I do spy a brown dot among the green. Then a second one. Jimmy sets the floatplane down on the high tide and cuts the engine. "I saw 10," he says, unbuckling, with the matter-of-factness that steered us here.

The human footprint at McNeil consists of a clutch of old cabins and tent pads huddled at one end of a parenthesis of sand and driftwood. On one side of the sand is a tidal cove. On the other, beyond Kamishak Bay and Cook Inlet, lies the North Pacific. Encircling camp is a low hedge of Sitka alder. This hedge isn't so high that I can't look across it and watch bears munching grass. As barricades go, the hedge is risible. Except that it works, mostly. This small patch belongs to humans. The rest of the 200-square-mile sanctuary is for the bears.

We unload the floatplanes and haul gear down the beach, led by Beth Rosenberg, the sanctuary's assistant manager. Rosenberg is a friendly, caffeinated presence with dark hair and cheeks ripened by the brisk Alaskan summer. Before she's friendly, though, she's a martinet. She orders our group of 10 to purge gear immediately of anything that has an odor. Food, toothpaste, mouthwash, deodorant: all marched into the cook shack instead of the tents.

Rosenberg chases this order with more camp rules, simple and inviolable: *When you walk to the outhouse, which sits among tall grass some distance away — clap. Do not walk alone outside the hedge. Do not leave the hedge without permission.* She doesn't have to ask twice. Bears are everywhere. Bears clamming on the mudflats. Bear cubs rough-housing on the beach. A mother bear eating sea pea, two feet from the hedge. Where there are no bears, there are signs of them: Inside the cook shack is a cast of a paw print. It is the size of a garden rake. Chew marks scar the door of the wood-fired sauna down the path from my tent.

After we pitch camp, Rosenberg guides several of us outside the perimeter to a creek to fill jerry cans of water. Heavy whorls depress the tall grass around us, as if an engine block had recently arisen from a nap. I've never been so attuned to every sough of wind, every rustle of leaf. I take stock of my situation: Four hours earlier I was a white, middle-aged, white-collar American male. Statistically speaking, I straddled the world. Now, I'm on the menu — in theory, anyway. The skin prickles as if in the moment before the lightning strikes. Nothing focuses the mind like the realization that you no longer stand atop the food chain. It is exhausting, and exhilarating. Back at camp I unzip my tent flap and send a bank vole skittering for cover. "I feel you," I say. At bedtime I give myself a standing "O" on the walk to the privy, then lie awake and listen to a golden-crowned sparrow sing its three-note song: *Oh poor me, oh poor me.*

Sleep that night takes the long road around the mountain.

"It's a Kamishak-y day — 50 shades of gray," Rosenberg greets us the next morning in the cook shack. The one-room shack serves as our kitchen and living room. It holds a few tables, a crackling woodstove and shelves that sag with field guides, all of it secured behind a heavy door. On another shelf sit a dozen air horns, and a note: "Toot twice if a bear in camp."

We bundle up and walk outside, single-file, into perfect brown bear country. Low tidal flats yield to sedge prairie, which gives way to low, humping hills bearded with low alder. On the horizon stands a single poplar tree. The air smells of grass and mud and bear shit — a green, horsey smell of ripe decay and the beginnings of the world. Rosenberg leads the way. She walks with the deliberation of someone entering the house of a neighbor who she's not sure is home. "Hey, bear," she says, in a tone that's almost conversational. "Hey, bear." Slung over her shoulder, and also over the shoulder of state research biologist Dave Saalfeld, at the rear of the group, is a Remington .870 shotgun filled with slugs.

The guns remind me of the letter that arrived in the mail with notice of my lottery win. The letter encouraged visitors to bring neither pepper spray nor weapons to the sanctuary, invoking its excellent safety record. No one has been injured or killed by a bear in more than four decades since the permit system began, and no bears killed by visitors. The implication is clear: Who are you to disturb the universe by being the first?

We splash across Mikfik Creek, a salmon stream that by late June is a trickle. Rosenberg halts mid-stream. On a small rise about 60 yards away, half-hidden among the tall grass, is a brown hump to loosen a hiker's bowels. The sanctuary's managers know more than 100 bears by sight that return here year after year. But Rosenberg doesn't recognize this one. Ankle-deep in the water, we pause and watch the stranger.

"Let's just walk like this — in a blob is great," she says after a few moments.

We splash forward.

The bear comes more into view. He's an adult male, his great head resting on his great paws. He raises his head. Considers the air. Yawns.

Boredom! I think. *This seems propitious.*

It isn't propitious. "Animal signals are not the same as human signals," Rosenberg says. "A yawn usually signals mild concern."

Our blob pauses again. The bear lowers his head. We splash forward, slowly. He raises his head. We stop. So it goes, with permission, until we have passed him, a humbling Simon Says with North America's apex predator.

Rosenberg walks us farther upstream on what appear to be hiking trails.

On a shelf sit a dozen air horns, and a note: "Toot twice if a bear in camp."

A brown bear sow known as Bearded Lady watches over her spring cubs within a few yards of a visitor at the McNeil River State Game Sanctuary.
RICHARD ELLIS / ALAMY STOCK PHOTO

They're not hiking trails. Look closer. "These are all bear trails," she says. "We just happen to use 'em." Sometimes, the roads are so worn into the earth from decades of use we walk nearly knee-deep to the surrounding land. Turf runs down the middle of the paths where the gap-legged bruins saunter: Bear highways complete with bear medians. Bald eagles lift, pterodactyl-like, from a cliff above our heads.

In time, Mikfik Creek enters the hills. There we sit on a grassy knoll above the trickle. It is the waning days of salmon-fishing for the year on Mikfik. An aging bear named Rocky with a necklace of scars lies on a patch of grass beside the creek. He watches a female named Queen Bee fish at a small spillover where the red salmon bunch as they try to make it upstream to spawn and perish.

Adult females like Queen Bee may become receptive to a male's advances for only a short period in the late spring. Rocky is biding his time. (Managers use names here for bears instead of numbers because it makes easier to remember the scores that return annually, not because they consider them pets. When an animal has a bite-force greater than an African lion, "Hot Lips" isn't an endearment.)

Another big male enters, stage right. He's the color of a $4 chocolate bar. Rocky stands and walks almost wearily toward Queen Bee, to show his ownership. The newcomer cuts high on the slope above the creek to approach Queen Bee from another direction. Rocky checks him coming around a willow. It's the age-old drama in a different playhouse — love and war and what's for dinner.

A brown bear will never earn the word "graceful." Consider Rocky: His gait is pigeon-toed. His back is hunched with muscles for grubbing roots and grabbing rodents from their dens. From a distance his face seems as wide and flat as a hubcap. When he walks, his rear legs saw, arthritically, resisting forward motion and one another — one-two, one-two. Watching Rocky lumber toward his rival, my abiding impression is of an articulated bus coming into service.

This is deceptive. The final regret to pass through a human brain is having misjudged the speed and agility of a brown bear. At track distances, an adult brown bear can run down Secretariat.

While I'm mulling the velocity of large carnivores, Queen Bee suddenly appears on the hill just 40 yards away from where we sit. The dark suitor follows immediately behind her. She lets him draw close. He stands and mounts her, biting her behind the right ear and holding tight. For 45 minutes. We make embarrassed jokes, but still take snapshots. Rocky, outflanked, lies down beside the stream, his head on his folded paws.

He may yet get his shot at immortality. A female normally mates with a few males in June and then, in a practice called delayed implantation, holds the blastocysts for several months in her uterine horn. If she's sufficiently fed in summer, the pregnancies take hold in the fall. In January, she will give birth in the den to possibly several cubs — pink, hairless, one pound, premature — who will suckle for months in hibernation. They may all have different fathers.

One day as we walk to McNeil Falls with Griffin, the sanctuary's manager, we meet a nougat-colored bear named Quinoa and her yearling. We pause at a respectful distance for a few minutes, then Quinoa lets us pass within about 25 feet of the two — close enough to hear her tear sedge from the earth. Afterward, Griffin turns to us. "What we just did," he

says, "you would not do almost anywhere else on earth."

At McNeil, though, humans have found a way to abide with the bears. It's been a crooked journey. The territorial government of Alaska first recognized the unique congregations of bears here and closed off the McNeil drainage to hunting in 1955. A dozen years later, the state Legislature created the sanctuary, with a far-sighted mandate to place the welfare of the bears first and human appreciation and research second. As word got out, flocks of people showed up to see the bears, until the falls were overrun with people, Jeff Fair writes in *In Wild Trust*, his excellent 2017 book about the sanctuary.

Confrontations sometimes led to the killing of bears, until area biologist Jim Faro, in 1973, successfully lobbied for a permit program to limit the number of visitors.

The longtime sanctuary manager under Faro, Larry Aumiller, spent three decades studying how humans could live in harmony with *Ursus arctos* on the landscape. Perhaps no one in modern history had ever done anything quite like it. Aumiller made rookie mistakes — walking heedlessly through thick brush, staying all night at the falls, alone ("Bears own the night," he told Fair) — but over time, he learned how humans and bears could reside together.

And what works? First of all, restraint — not bulling into the landscape. Bears don't like surprises. Moving slow and being predictable are good starts. That's why humans walk the same trails, about the same times every day, and in the same group size. Over decades of such long and careful practice, the bears here have learned to see humans as another presence on the landscape — neither the source of a meal, nor the cause of pain or fear. They are "neutrally habituated," in the argot of this place.

Watching Quinoa and her offspring, it occurs to this still-fidgety Outdoorsman that, should mama grow angry, she would cover the ground that separates us before Griffin could unshoulder his Remington. But Quinoa never looks up, and never stops eating. She's aware of us. But as long as we remain predictable, and respectful, she remains comfortable.

And if the managers do need to alter a bear's behavior — to keep a bear outside of that hedge, say — they rarely need anything as persuasive as that shotgun, or even a firecracker. As little as a sharply spoken word, or a shake of a saucepan filled with rocks, is almost always enough to dissuade a neutrally habituated bear.

All this helps create a memorable human experience. "When bears are comfortable, they stick around and we can watch them," Aumiller told author Fair. "And when they are comfortable, unstressed, they are safer in general to be around. So, it turns out, safety leads also to proximity."

Unfortunately, McNeil remains the exception. "Don't try this at home," Griffin reminds us one day after another close encounter. When he's not at McNeil — for a hike near Anchorage, say — and he thinks a bear is near, even Griffin heads in the other direction. Almost everywhere else, the ability for humans and bears to move easily among each other has been lost. What is different at McNeil is that humans don't try to dominate. We listen. We adjust. We find out how it all fits together, and where we fit in. "Here we learn that we can live among the great bears," Fair writes. "Here we learn the human behaviors that allow this." In more than 70,000 encounters with bears over 30 years at McNeil, Aumiller was charged just 14 times — one-fiftieth of 1 percent of meetings — and not one of them resulted in injury. All those bears, it turns out, were newcomers to McNeil.

There's one more reason McNeil works: There's still enough elbow room here, and food, for a bear to be a bear. We haven't diced up the land, dammed the river, paved the mudflat, or shot the residents. At McNeil there are clams and young sedges in spring, when other food is scarce. The reds run up Mikfik in early June, followed by the main course, the chum salmon, in late June and July. The feast concludes with crowberries, low-bush cranberries and blueberries for dessert in late summer and fall. The McNeil Sanctuary remains an intact, groaning buffet table. And it brings in the crowds. As if to underscore that point, one morning even before we head out, we can count 12 bears from the door of the cook shack — bears clamming, bears scanning the tide for fish, bears gorging on sedge. "It's habitat, with a capital H," says Rosenberg.

Something good is happening to me. My once-fearful "Hey, bear!" has turned interrogative. I pull on the fleece and slickers, anxious to get out among them.

THE FIRST BLOOM OF THE WILD IRIS coincides each year with the arrival of McNeil River's chum salmon run. Whether the brown bears of the Alaska Peninsula are observant botanists remains an open question, but somehow they know to come. On our second morning we follow Griffin past bouquets of iris and head into the spitting rain. Walking at the speed of a funeral cortege, we cross the wide sedge flats, pass beneath bluffs and their hanging gardens of Kamchatka rhododendron, then angle across tundra sprinkled with heather flowers.

We hear the McNeil River before we see it. The falls consist of about 100 yards of sluice-y whitewater located about one mile upstream of where the river spills into the ocean. The falls are neither wide nor steep. They are obstacle enough, though, to give pause to tens of thousands of chum salmon that each year try to return to the hills, and the waters of their birth. Chum salmon are poor jumpers, so the fish gather themselves at the base of the rapids to think things over before tossing themselves into the rapids. The bears are waiting.

It's quite a thing to breast a green rise to the sound of smashing water and come upon a dozen bears, or three dozen, standing in a cataract, fishing. Some point downstream. Some point upstream. Some stare into the cappuccino foam of eddies as if all the answers are held there. Still others "snorkel," shoving their snouts into deep pools and then diving, rumps skyward, like fat children diving for pennies. Sated bears catnap on rocks in the river. Every few minutes a new bear materializes from the alder and descends to join the group.

At two gravel pads — room-sized, unfenced, just a few feet above the river — Griffin hands out more rules: *Do not leave the pads. Do not stand quickly. Do not move between the pads without permission.* We settle in on folding chairs to watch a show with more players than a soap opera. A bear named Aardvark charges Hot Lips over his prime fishing spot. They rise and slam into one another. They bite each other on the neck, hard. The fight is over quickly. Hot Lips reluctantly backs away. Aardvark takes the spot and soon has a fish.

Early in the salmon run on the big river is the time for sorting out of the pecking order. In nature, though, fighting is expensive. Bears avoid it if they can. Instead, they try to intimidate. They swagger. They huff and salivate. On bowed legs, they walk slowly, stiffly toward an adversary — cowboy in the front, sumo in the rear — to see who veers first. Bears that don't want any trouble move crab-wise around one another with the no-sudden-movements of gunslingers who just rode in for a sarsaparilla. Ironically, says Griffin, by the time 40 or more bears fish together later in July, there will be fewer scuffles.

At high season, with enough fish running for everyone, the bears will gorge and grow fat. During the peak of such salmon runs a coastal brown bear may eat 90 pounds of salmon per day and pack on 3 to 6 pounds of fat. An adult male like Rocky might pack on 25 to 30 percent of his body weight and waddle away to a winter's den weighing 1,300 pounds. When fish are most plentiful, bears will "high-grade" — eating only fatty skin or brains. Some McNeil bears get so full and so selective, they've been known to hold a salmon in their mouths and gum it for eggs, or drop a male fish without taking a bite, writes biologist Thomas Bledsoe in his book about McNeil, *Brown Bear Summer*.

As we sit and watch, a big male comes up the bank with a wriggling hunk of sashimi and settles into the tall grass within 25 feet of the pad. His muzzle is smeared with blood. We stare at each other. I feel an almost overpowering urge to reach out and touch him. I want to connect with something so wild, of such terrible power and beauty. I have felt that feeling once before, exiting a helicopter,

Visiting McNeil River State Game Sanctuary

The viewing season at McNeil runs from early June to about the end of August. Permits are limited, and you have to enter a lottery to win one. Applications are due by end of the business day on March 1. Application fee is $25, nonrefundable.

A four-day guided permit costs $350 for non-Alaska residents, $150 for residents. There is also a standby program, which has a reduced fee. Warning: Standby visitors sometimes spend hours sitting inside each day, waiting for the chance to be taken on a bear walk. Visitors should expect to walk a few miles per day.

Applicants can select when they want to try to visit. And the sanctuary has three "seasons," each with its own flavor: June is the salmon run on Mikfik Creek — more intimate, not as many bears, but a lot of different bear behavior, including mating. July is the most bears, on the McNeil River. August is more walking again, as bears fish for exhausted salmon at the mouth of the river and the lagoon.

An extensive website and online application is at: www.adfg.alaska.gov/index.cfm?adfg=mcneilriver.main

—Christopher Solomon

An Alaskan brown bear stops for a snack of wild salmon amid the rushing water of the falls at McNeil River State Game Sanctuary in Alaska. © HARRY M. WALKER

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when I felt an overwhelming desire to put my hand to the spinning rotor blades.

The result would be roughly the same.

I don't reach for the bear.

This is another of McNeil's lessons. Let nature draw near, if it wants to. Close your eyes and let the moment burn behind your eyelids. Do not, however, mistake proximity for mystical connection. Do that, and you'll end up the subject of a Werner Herzog film. People will remember you, but only as a cautionary tale.

The barometer plunges. Thirty-mile-an-hour winds sweep the peninsula, driving the kind of rain that finds the weak spots in your waders. Each morning we leave the camaraderie of the woodstove and venture into the gale, past a yellowing note tacked to the shack's door: "Bad weather always looks worse through the window."

The note knows. We sit at the falls in our lawn chairs for hours, soaked but transfixed. More bears arrive by the day. In the air is an odor that recalls an old bathmat — eau de wet fur. How many bears have I seen? Counting seems irrelevant now. Counting is what the old me thought was important. Instead, I try to pay attention, reminded of Simone Weil. "Attention, taken to its highest degree, is the same thing as prayer," Weil said. "It presupposes faith and love."

I watch a bear called Revlon install himself in a Class III rapid. His legs could be the pilings of the Triborough Bridge. He stares at the water with mineral patience. Finally he lunges, pins a 20-inch chum to the bottom. He eats it where he stands. A female named Ivory Girl with gorgeous, bone-colored meathooks works her way among the males, begging for food. I watch a lone wolf — soaked, yellow-eyed — appear on the far shore, slinking among the bears and sneaking scraps.

One afternoon as we sit at the falls with Rosenberg while the day's variety show plays out and the wind howls its approval, one bear begins to chase another over some beary slight. The first bear races out of the water, headed for the near shore. In about two seconds, he's up on the bank, the other bear in fevered pursuit — right toward us.

My amygdala is throwing off sparks. Immediately I'm on my feet, breaking the rule. If there were time, I would break more of the rules. But there's not time. The lead bear is now 20 feet away. The electric prickle returns and races up the spine and across the scalp, the feel of lightning about to strike. Everything slows. The world shrinks until it is seen through a pinhole camera. Einstein needn't have looked to the heavens to contemplate space-time collapse. He could have stood before a charging bear.

Rosenberg stands slowly. The lead bear is close enough now for us to see pearls of slobber arc from his mouth. Rosenberg doesn't retreat. Instead, she steps toward the advancing bears. "Hey," she says. The word is as short and sharp as two stones clacked together.

The lead bear lifts his head and looks directly at Rosenberg. The look isn't angry. Instead, it's one of surprise, and recognition. *Oh,* the look says. *Yeah.* Then, without breaking stride, the bear pivots left, toward the tall grass.

Exit, pursued by a bear.

WEEKS LATER, BACK IN SEATTLE, the Great Outdoorsman tells himself that, in the moment when the bears charged, he felt privileged to witness such a thing. This, of course, is revisionist hooey. When a Hyundai's worth of meat is bearing down, "privileged" doesn't make the emotional Top Ten.

Only upon reflecting in Wordsworthian tranquility does he think, Yes, precisely, that's exactly what I needed: not any great lessons, but simply to brush against nature, where it still exists in all its humming electric-dynamo bigness. And to be reminded of my smallness, and how good it feels to revel in this smallness, and find again where I fit. And then to come home, thinking small again.

Thus re-baptized, the Great Outdoorsman resolves to get outside again soon, traffic or not. Next time, he swears he will remember his pocketknife. □

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Park fees *continued from page 8*
exceeded its spending. Administrators believed that the burgeoning popularity of automobiles could make all parks self-sustaining.

But as the 20th century progressed, this became increasingly unrealistic. Some popular parks, like Mount Rushmore, were forbidden by Congress to charge for entry. Others, such as Alaska's Lake Clark, are so rarely visited that relying on entrance fees to maintain trails and infrastructure isn't practical.

Philosophical hostility to fees also emerged. In the 1930s, Utah Republican Reed Smoot led a growing group of lawmakers in opposition to the idea that Americans should pay anything to access lands that belonged to them. A 1932 Park Service policy barred the agency from seeking "financial gain" and asserted that parks should "be free to the people without vexatious admission charges and other fees."

Yet entrance and camping fees remained part of public-land management. Although revenue generated by user fees has risen sharply since 1996, it still makes up roughly the same portion of the Park Service's budget that it did decades ago. In 1947, 11 percent of the agency's budget was generated by user fees. In 2016, 9 percent was, with the remainder coming from donations and congressional appropriations.

Political opinions, on the other hand, have changed drastically. Today, some conservatives find the very idea of public lands antithetical to their ideology. As Steve Hanke, a Johns Hopkins University economist, wrote in a June *Forbes* op-ed, public lands "represent a huge socialist anomaly in America's capitalist system." Republicans in Congress are increasingly reluctant to dole out money for public-land management, and appropriations in recent years have been far less than agencies need to manage an ever-growing numbers of visitors.

That's why Shawn Regan, a former backcountry ranger in Olympic National Park and a research fellow with the Montana-based free-market think tank Property and Environment Research Center, thinks that raising user fees is the best way for public lands to maintain a "direct, consistent stream of revenue."

Many GOP lawmakers agree with Regan, arguing that only Americans who actually use these lands should pay for them, or that public lands would be more efficient if they were managed like private businesses. It's this perspective that underlies the Interior Department's proposal to raise entrance fees at 17 national parks during the peak season.

Yet John Garder of the National Parks Conservation Association says the fee increase "couldn't possibly cover anywhere close to the actual amount of funding needed to address the maintenance backlog." Eighty percent of the fees collected at any given park remain there, while the rest goes to a general fund split by the hundreds of national parks and monuments that don't collect entrance fees. Garder says that 80 percent of the revenue from the fee hike would cover only 2 percent of the maintenance backlog at the 17 affected parks.

Forty-nine percent of visitors earning less than $30,000 a year responded to a $5 fee increase by reducing their public-land use or going elsewhere, compared to 33 percent of more well-off users.

Plus, he and others worry that a $70 entrance fee will simply drive more people to purchase an $80 annual pass, which covers entrance at any national park. If a vacationing family buys an $80 pass at Grand Canyon National Park and later visits Zion and Arches, for instance, those parks won't get extra money despite shouldering the cost of the extra visitors. Plus, if a yearlong pass costs just $10 more than visiting a single park, it's likely that the cost of an all-parks pass will also go up before long.

Kitty Benzar has yet another concern. Under the new pricing structure, national parks will be able to charge higher rates during the summer months, when the most visitors come. If prices go up during peak season, visitors who can't handle the $70 price tag may be more likely to visit during quieter times of year. And that, says Benzar, is exactly what private hotel and campground operators have wanted for decades: to fill more hotel beds and campsites in May and October, while turning away fewer paying customers in June and July.

In other words, she explains, "Rich people can see wildflowers in Rocky Mountain National Park at the best time of year, and poor people can't see them at all."

The question of how user fees impact public access is at the heart of the debate over their role in land management. And there are no easy answers. In one Forest Service study, 49 percent of visitors earning less than $30,000 a year responded to a $5 fee increase by reducing their public-land use or going elsewhere, compared to 33 percent of more well-off users. Another peer-reviewed study from 2017 found that low-income recreationists were willing to travel over three times as far to reach fee-free parks, something that could shift socioeconomic diversity on public lands.

Research by the National Park Service, however, shows that visitor fees make up just 3 percent of the average family's budget on a visit to Yellowstone; the rest goes to expenses like gas, food and lodging. Shawn Regan of PERC believes it's possible to maintain socioeconomic diversity while still raising fees — perhaps by lowering prices for local families who just want to visit for a day, or by allowing individual parks to set their own pricing. Although he supports the latest proposal in theory, he considers it an experiment with a number of unanswered questions.

The public review period for the fee increase ended Dec. 22. At this point, no one knows what it will cost to visit certain parks next summer.

Meanwhile, Interior Secretary Ryan Zinke's push to bring more free-market capitalism to public-land management may be just getting started. Last summer he told an RV industry group that he'd like to outsource more campgrounds to private operators, who almost always charge more than campgrounds run by public agencies. And an Oct. 25 leaked copy of the Interior Department's five-year strategic plan revealed that Zinke also plans to "review" other fees on public lands, which could include the prices charged for camping, parking and backcountry permits. This month, the Park Service announced it would offer only four fee-free days in 2018, down from 10 in 2017.

As Benzar sees it, raising one fee opens the door for more fee hikes, and ultimately greater commercialization of public lands. With each turn of the screw, she says, "We lose more of our ownership stake and concede it to private companies there to make a profit." □

A history of violence

In *Idaho*, the elegant, contemplative debut novel by Idaho-raised, Boise State assistant professor Emily Ruskovich, two sisters play a game in a meadow. If you "hold a buttercup under someone's chin" and it "makes a yellow glow," that indicates the person has a secret. "The chins always glow yellow," Ruskovich writes. "That's the trick: There's always a secret. Everyone has something she doesn't want told."

That's certainly true of the characters in Ruskovich's novel, as well as in Jon Raymond's *Freebird*. Both books are set in the West and explore the aftermath of violence, though they do so in very different families. In *Idaho*, Ann, a piano teacher in the northern part of the state, tries to unravel the mystery behind her husband Wade's first wife, Jenny, who had killed her youngest daughter nine years earlier. Her older daughter then fled into the woods, never to be found. Wade suffers from early onset dementia, an affliction that is causing his personality to disintegrate even as it erodes the painful memories Ann is so keen to unearth.

Violence and forgetting are also at the heart of *Freebird*, the engaging fourth book by Portland, Oregon-based novelist and screenwriter Jon Raymond. The Singer family patriarch, Grandpa Sam, is a Jewish Holocaust survivor who immigrated to Oakland from Poland after his traumatic youth, about which he never speaks. Sam's daughter, Anne, wants to settle him in a nursing home, but frugal Sam resists, so until a better option appears, Aaron, Anne's teenage son, looks after him.

Aaron, who lacks direction, is considering eschewing college to bum around Mexico with a buddy. At the same time, he's touchingly focused on learning about his grandfather's mysterious past. Meanwhile, Anne, a single mom who works for the Los Angeles Office of Sustainability, uncharacteristically steps into a shady business venture in the hopes of funding Aaron's education. Her brother, Ben, is an ex-Navy SEAL struggling to reintegrate in society after decades as a soldier, a career he chose partly in response to his father's awful history.

The novels couldn't be more different in tone — *Idaho* is mournful and oblique, while *Freebird* is forceful and direct, by turns comic and angry. *Idaho* takes place largely on one remote mountain, while *Freebird* roams the urban West, often set amid the tangle of California's highways. *Idaho* is lulling in its rhythms and gorgeous imagery, while *Freebird* throws a glass of cold water in its readers' faces, alerting them to government-sponsored violence and graft. Ben thinks, "This placid American life is not what it seems. It is in fact as fragile as a soap bubble, an aberration of history, and all these people … exist in their comfort only because their world is ringed with far-off sentries."

As distinct as the two novels are, they both explore how people go on living when their pasts are shadowed by unspeakable violence.

In Ann, Ruskovich has created a striking, open-hearted protagonist, a woman who was not even present during the murder the book cycles around. She first got to know Wade when he started taking piano lessons from her several months before his family tragedy. Their mutual affection grows, and Ann insists on marrying Wade despite his dementia, the same disease that killed his father.

"I could take care of you," she offers. As Wade's condition deteriorates, he disciplines Ann as he would one of the dogs he trains for a living, pushing her head down and shouting, "No!" whenever one of her inadvertent actions stirs up a memory connected to his lost family.

Ruskovich's depiction of Wade's dementia is the strongest aspect of the book. "Together, Ann and Wade sit on the piano bench," she writes. "She turns the pages, which every week grow simpler and simpler. One week, he's playing both hands together. The next week, he struggles on a children's song, with only his right hand. Slowly, as the weeks go by and the weather turns cold, she turns the pages backward."

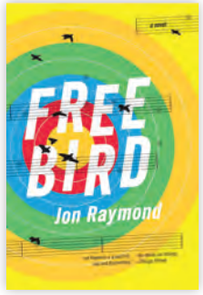
As Ruskovich switches perspectives and jumps around in time, the motivations of some of the characters remain frustratingly murky. There's never a clear explanation of why Jenny deliberately murdered her child, nor is it clear why everyone in the book walks on eggshells around the now-incarcerated woman, careful not to speak of her crime. When a person does something so horrific, her own feelings are usually the last concern. Which perhaps is Ruskovich's point — in *Idaho*, she has concerned herself with the kind of person that society would typically toss away and never think of again. Through her characterization of Ann, Ruskovich has embodied radical love and forgiveness.

Raymond, too, forces us to bear witness to people like Ben, the off-kilter veteran turned soldier-of-fortune, as his actions begin to defy morality and the law. He makes us contemplate the role we've all played in creating such damaged veterans.

Both *Idaho* and *Freebird* will awaken readers to the painful idea that our lives are shaped by a legacy of violence, no matter who we are. This is a difficult truth to face, but if we want to survive as a society, we need to confront it head-on.

BY JENNY SHANK

Idaho
Emily Ruskovich
309 pages, hardcover: $27.
Random House, 2017.



Freebird
Jon Raymond
325 pages, hardcover: $26.
Graywolf Press, 2017.

BROOKE WARREN

An F-22 Raptor backs away after refueling during a training mission over central New Mexico. Flights out of Holloman Air Force Base in New Mexico could increase by 10,000 a year under a proposed new plan.
U.S. AIR FORCE PHOTO/AIRMAN 1ST CLASS JOHN LINZMEIER

In military matters, neighbors should get a say

OPINION BY SHARMAN APT RUSSELL

On Sept. 27, 1956, my father piloted the tricky, experimental X-2 on one of its first flights of well over 1,000 miles per hour. That day, the rocket plane performed exceptionally well and set a new speed record. Then it spun wildly out of control. I was only 2 years old when Captain Milburn Apt crashed and died in the Mojave Desert at Edwards Air Force Base, California. I have always admired my father's courage and service to this country, as I admire the courage and service of so many American pilots.

Yet I do not admire what the Air Force plans to do where I live. In 2018, Holloman Air Force Base in New Mexico will decide whether to create a new Military Operations Area for F-16 fighter jets above the Gila River watershed in Grant County, New Mexico.

There would be potentially 10,000 "sorties" a year, with a sortie defined as a plane leaving and returning to the Air Force base. Ten percent of those flights will be Mach 1, faster than the speed of sound at 768 mph, and 10 percent will take place at night. Many of the fighter jets will be flying at high speed just 500 feet above the ground. Others will be dropping flares and a radar-deflecting metal material called chaff from above 2,000 feet. These maneuvers, designed to test new pilots, will take place over the Gila National Forest and Gila and Aldo Leopold wilderness areas, skirting the vibrant arts-and-culture town of Silver City.

How did local people react to these plans? They weren't asked. A 30-day "scoping process" to inform the environmental impact statement required by this plan took place this last fall. To help assess the environmental and social impacts of the flights, the Air Force held three town meetings, but not one was in the affected area of Grant County, New Mexico, with a population of 30,000.

Not a single voice from the farmers and ranchers of Grant County was heard. Nor from Silver City, a community that largely depends on tourism, recreation and retirement. And not a single voice was heard from the many people who value the heritage of this country's oldest wilderness and the peaceful beauty of New Mexico's last free-flowing river.

The Air Force made no serious attempt to inform the citizens of Grant County about the new Military Operations Area. At a special county commission meeting that was organized after the military's scoping process had closed, Air Force representatives said that they had sent a letter to one county commissioner and another letter to a regional newspaper that was not the newspaper of record. The Air Force apologized for any misunderstanding and agreed to allow further public comment up to the completion of their draft EIS this spring. More public hearings will then follow.

Those comments can be submitted online or mailed to an address on that website. Among two options, Alternative Two creates a new testing area.

Here in Grant County, we have the next few months to help shape that draft environmental impact statement. Some of us will explain how bursts of extreme noise — sonic booms — many times an hour will affect our health and well-being, as well as our sleeping patterns. Others will talk about the effect of sporadic booms on deer and other wildlife, horses, hikers, hunters, children and the elderly and sick, as well as on property values. We can point to the values of silence and solitude that are embedded in the Wilderness Act itself. We can explore the potential hazards to wildlife and people of falling chaff.

Ken Ladner, the mayor of Silver City, has already written a letter to Holloman Air Force Base opposing the plan, citing the town's dependence on tourism but also noting potential damage to Native American sites from sound vibrations. He also cited the impacts to the "vast scientific laboratory" of the Gila National Forest and the role of this area as a gateway to the Continental Divide Trail system. The mayor invited Air Force officials to visit Silver City before making a decision and concluded, "I would be happy to be your personal guide."

My friends and neighbors in the Gila Valley are not anti-military. But the way the Air Force initially pushed this plan through without consulting those most affected by it was flat wrong. The scale of training being proposed for this new Military Operations Area is extreme. Holloman Air Force Base has other options, including dividing these 10,000 flights among multiple training areas and the nearby White Sands Missile Range.

Preserving the unique character of rural New Mexico is more than a self-interested, not-in-my-backyard stance. Our national forests and wilderness areas deserve protection because they are legacies that belong to everyone. □

Sharman Apt Russell is a writer in New Mexico.

WEB EXTRA
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Interior's return to the 'Crazy Years'

Secretary Zinke will be known better for cynicism than conservationism

ANALYSIS BY JONATHAN THOMPSON

In 1921, President Warren G. Harding, R, at the behest of the oil barons who financed his election, appointed Albert Bacon Fall to be his secretary of the Interior. Fall had vowed not only to transfer all public lands to private interests, but also to abolish the Interior Department altogether. As a Cabinet member, he set out to dismantle the conservation ethos that Republican President Theodore Roosevelt had brought to Washington and to open federal fossil fuels and other resources to unfettered development, effectively handing the keys to Interior to his oil buddies. "All natural resources should be made as easy of access as possible to the present generation," he once said.

Ryan Zinke, the current Interior secretary, likes to compare himself to Roosevelt. Yet he far more closely resembles Fall. Fall's easy-access creed is reflected in Zinke's systematic evisceration of environmental protections, a crusade clearly laid out in the Interior Department's recently leaked four-year strategic plan, and in its "review" of department actions that allegedly "burden domestic energy." The former, from which all mentions of the "climate" have been stricken, provides a blueprint for private exploitation of public lands, while the latter provides an extensive list of the energy-specific rules now on the chopping block.

The extent of the planned rollbacks is overwhelming, affecting every agency under Interior, from the Bureau of Indian Affairs to the Office of Surface Mining Reclamation and Enforcement. Within the Bureau of Land Management alone, Zinke is working to abolish, delay or weaken 10 rules and land-use guidance policies, including:

- The new methane waste prevention rule, which attempts to rein in the loss of natural gas in the oil and gas fields. If enforced, it would increase royalty revenues to the federal government, reduce emissions of methane — a potent greenhouse gas — and slash the discharge of compounds such as benzene and hydrogen sulfide, which can have both chronic and acute health effects;
- Master leasing plans, which increased public input and brought a more holistic approach to "sight unseen" oil and gas leasing. A master leasing plan currently underway in Colorado, which would steer development away from a popular mountain biking trail system and the edges of Mesa Verde National Park, will likely perish under Zinke;
- Special land-use designations, such as "areas of environmental concern," and conditions on drilling permits. Ironically, opponents say these provisions make both master leasing plans and landscape-scale national monument designations unnecessary because they already require the BLM to steer development away from sensitive areas;

Interior Secretary Ryan Zinke speaks with Secretary of Energy Rick Perry, Environmental Protection Agency Administrator Scott Pruitt and Director of National Economic Council Gary Cohn at a roundtable discussion on "Energy Dominance: Policy Framework for the Future" in June. SIMON EDELMAN/U.S. DEPARTMENT OF ENERGY

- Other hindrances to leasing land for energy production. In August, the BLM announced that — "in accordance with the President's policy of Making America Safe through Energy Independence" — it would lease 26 parcels covering nearly 4,800 acres of federal land within the Navajo Nation in the Chaco region in New Mexico. That defies calls from the Navajo Nation's president, archaeologists, local residents and the All Pueblo Council of Governors to hold off on new leasing and drilling until a new environmental analysis is complete.

"For too long America has been held back by burdensome regulations on our energy industry," Zinke said in the secretarial order, which ostensibly will help the fossil fuel industry achieve "American energy dominance." As is often the case with this administration, a yawning abyss exists between the rhetoric and reality.

The United States achieved energy dominance under the Obama administration, when a drilling and mining frenzy — fueled by decades of federal tax credits and regulatory exemptions — made it the planet's leading oil and gas producer, among the top five for natural gas, and one of the largest exporters of refined petroleum products. The U.S. continues to import millions of barrels of oil per day, not because production is stifled — more than 36,000 drilling permits were issued over the last eight years — but because Americans are reckless, carbon-spewing oil gluttons. If this is what being "held back" looks like, it's chilling to imagine how an unfettered hunger for energy could play out under Zinke's cynical watch.

What Zinke has failed to realize is that every "burden" removed from industry ends up falling on the back of something else: the country's land, air, water, wildlife — and people. Albert Fall — a product of the "Crazy Years" of the 1920s — never quite figured that out, either. Like Zinke, Fall didn't hesitate to accept gifts from oil tycoons in exchange for regulatory handouts. Back then, however, this was called bribery, and Fall ultimately went to jail for his role in the Teapot Dome Scandal. His legacy is equally tarnished by his efforts to yank oil, land and water away from tribal nations. Harding, meanwhile, died before his first term was up and is widely considered the worst president in history. At least so far. □

In Grand Staircase-Escalante,

Unearthing conflict in the Late Cretaceous

BY REBECCA WORBY

Deep time is hard to get your head around if you can't hold its evidence in your hands.

On a rainy July day in 2014, Grand Staircase-Escalante National Monument paleontologist Alan Titus made an unexpected find on the Kaiparowits Plateau. He'd been over this area — a flat gray expanse interrupted by scraggly piñon and juniper — at least five times before. But the recent heavy rains had exposed new bone: part of a tyrannosaur skull. "I just got goose bumps," Titus said. As he and his team started digging at the site, which they nicknamed "Rainbows and Unicorns," they discovered the fossilized remains of an entire tyrannosaur family.

"These badlands are just loaded with bones," Titus noted as he showed me the metatarsal of a duck-billed *Gryposaurus monumentensis*, one of 12 dinosaur species discovered on the 1,600-square mile Kaiparowits Plateau since the monument's designation in 1996. One of those species was named for Titus himself in 2013: *Nasutoceratops titusi*. "Most people would find this boring or ugly," he said, "but there's no more beautiful place in the world to a paleontologist."

Beneath the dry, drab earth of the Kaiparowits lies a wealth of fossils, a continuous record of more than 20 million years that paleontologists have only just begun to explore. But this landscape also holds coal, a huge untapped deposit. The door to mining closed when the monument was established two decades ago, outraging many locals and Utah legislators, who hoped that coal would fuel the local economy. Now, President Donald Trump's executive order to downsize the monument has revived the possibility of mining the Kaiparowits, unearthing a conflict both decades and millions of years in the making.

During the Cretaceous period, 65 to 100 million years ago, conditions were ideal for fossil preservation on the plateau. Nearby, colliding terranes — geologic blocks and fragments typically bounded by faults — thrust the continental crust upward, building mountains. Rivers choked with mud and sand ran through the landscape. A huge body of water known as the Cretaceous Interior Seaway lay just to the east. Low-pressure systems drifted up from the seaway, dumping heavy storms over what is now the Kaiparowits. "What we see testifies to the violence of these storm events," Titus explained. Lots of sediment rapidly buried plants and animal skeletons, fixing fossils in place — and in time. "The Kaiparowits," Titus told me, "is one of the last untapped dinosaur graveyards in the world."

Lush swamplands lay just inland of the seaway's shoreline. Over millennia, the seas flowed in and out, trapping layers of accumulated plant matter — the remnants of those swamplands, eventually pressurized into coal — between other layers rich with dinosaur fossils. The two resources are inherently mixed up together, both geologically and politically.

The once-proposed Smoky Hollow Mine holds 62 billon tons of coal, though estimates of the recoverable amount vary widely and are all much lower than that: maybe 11 billion tons, maybe 5 billion. The nearby town of Kanab had long anticipated the development of the mine by Andalex Resources, a Dutch company, and the jobs and tax dollars it would provide.

When President Bill Clinton designated Grand Staircase-Escalante National Monument, many locals felt blindsided and betrayed. Though lumping the Smoky Hollow site into a monument did not technically kill the mining proposal, it would have made developing a coal mine much more complicated, if not impossible. The federal government ended up buying out Andalex's leases for $14 million. Opponents argued that the monument designation had lacked public involvement, and with Clinton soon to be up for re-election, accusations flew that it was a campaign stunt. Sen. Orrin Hatch, R-Utah, called the designation "the mother of all land grabs."

And when President Donald Trump called for a review of monuments of a certain size designated starting in 1996, the timeframe was clearly calculated to include this monument that many in Utah still fervently oppose. It's also no coincidence that White House Staff Secretary Rob Porter — one of the two individuals who personally vet all documents that reach Trump's desk — previously served as Hatch's chief of staff.

Interior Secretary Ryan Zinke visited the still-smoldering coal seam during his Utah monuments "listening tour" last May. In his monuments memorandum, which leaked to the press in September, he noted that an estimated "several billion tons" of coal lie within Grand Staircase-Escalante, and recommended redrawing the monument's boundaries. On Dec. 5, Trump traveled to Salt Lake City to announce huge reductions to both Bears Ears and Grand Staircase-Escalante national monuments. He had reportedly promised Hatch he'd open up the Kaiparowits to mining. The redrawn Grand Staircase map cuts out nearly half the monument's acreage — including the part of the Kaiparowits that contains the most coal.

The questions surrounding coal development are complex, deeply interwoven with the U.S. economy and the mythology that propels it. In the western Colorado valley where I live, coal has long provided the economic engine. Two out of three mines have closed since 2013, and the sting of lost jobs reverberates through the community. Every day on my way to work I pass a church sign that reads "Pray for our miners' families."

But there's a difference between long-running coal mines that communities have relied on for decades and an untapped deposit that currently lacks road or rail links — especially one that shares space with a well-preserved fossil record spanning tens of millions of years. "Implicit in the withdrawal for this monument," said then-Interior Secretary Bruce Babbitt at a 1997 hearing about Grand Staircase-Escalante, "is a decision that mining is incompatible with the other values that the proclamation seeks to protect." And the communities surrounding the monument have since fared reasonably well. According to Headwaters Economics, Kane and Garfield counties have experienced strong growth since the designation: From 2001 to 2015, the counties saw a 24 percent increase in jobs, and personal income rose by 32 percent.

With the local economies intact and the market for coal diminishing, cutting a swath of the Kaiparowits out of the monument is clearly a political and symbolic move, not a practical one. Though Trump has swiftly done away with Obama-era measures that inhibited the growth of coal production, including lifting a temporary ban on new coal leases, his administration cannot stop coal's decline. As competing natural gas gluts the market, more and more coal power plants are announcing plans to shut down, including Utah's largest coal-fired plant, the Intermountain Power Project. Any new mining endeavor would face a steep uphill fight.

dinosaur fossils fuel a fight

Every place I've been in Grand Staircase-Escalante has evoked in me a deep, almost embarrassing sense of wonder. I felt it when I wandered alone across colossal, wind-whipped sandstone buttes and when I sank knee-deep in mud in a Paria River box canyon. I felt it when I accompanied an archaeologist several miles into Hackberry Canyon, creek pebbles filling my shoes, to reach a hundred-year-old cabin surrounded by cottonwoods and red rock.

And I felt it on the Kaiparowits with Titus as he recounted the geological story written into the spare landscape, while I tried to grasp the sprawling prehistory the rocks exposed. At one point, he showed me where oyster beds deposited at sea level had been lifted up thousands of feet. A hundred million years ago, this stretch of rocky desert would've looked and felt like southern Louisiana today, Titus said. We cracked open chunks of gray rock, exposing oysters and ammonites, clams and snails. Deep time is hard to get your head around if you can't hold its evidence in your hands. Touching fossilized oysters, holding bits of dinosaur bone — if it sticks when you lick it, Titus told me, it's bone — made these far-off former worlds real to me.

In his 1996 designation speech, Clinton said that Grand Staircase-Escalante offered "world-class paleontological sites." At the time, as Titus says, that might have been a bit of a stretch, but it has since proven true: The Kaiparowits Plateau is the richest fossil trove of the Late Cretaceous period in the world. It's hard to fathom how many stories it might hold, especially considering that only 6 percent of the monument has been surveyed. The Cretaceous period ended with the global extinction that wiped out the dinosaurs. The Kaiparowits might hold clues to unlocking the big "why."

Finding three tyrannosaurs buried together means "something unusual happened here," Titus told me at the "Rainbows and Unicorns" site. When his team started finding charcoal, they thought: forest fire. Eventually a story began to form: Fleeing a fire, the dinosaurs retreated into a lake, where the fire's heat killed them. The bones were buried, unearthed by a river flood, and then buried again. Fossils show that fish, turtles, raptors and hadrosaurs perished, too. An entire narrative reconstructed from the fossil record — all this, unearthed from one small piece of the plateau's rugged expanse. □

Jeanette Bonnell, left, Tylor Birthisel, center, and Alan Titus, second from right, work to reposition a plaster-encased piece of a tyrannosaur fossil. The nearly complete fossilized remains of a tyrannosaur found in southern Utah's Grand Staircase-Escalante National Monument were airlifted to the Natural History Museum of Utah in October.
SCOTT SOMMERDORF/THE SALT LAKE TRIBUNE VIA AP

U.S. $5 | Canada $6

HEARD AROUND THE WEST | BY BETSY MARSTON

COLORADO

The military has long complained that many young recruits are too fat to fight. Now a new study finds that even Colorado — generally ranked as the least obese state — is becoming increasingly portly: More than 27 percent of the state's children are considered overweight. "Low levels of physical activity and the obesity epidemic are contributing to an unprecedented readiness problem for our armed forces," said the nonprofit Council for a Strong America. Military recruiters already face a myriad of problems presented by potential recruits, including drug habits, facial tattoos and criminal records. If you add obesity, "a full 70 percent of Colorado teens are ineligible for military service," reports the Colorado Springs *Gazette.* There are definite rewards for young people who qualify as battle-ready: To meet its 2017 target of bringing in 69,000 recruits, "the command doled out enlistment bonuses for as much as $40,000, with an average bonus of $12,800 for 33,000 recipients to attract the best-quality candidates for service." To help the military find fitter recruits, the Council for a Strong America supports state-mandated physical education classes in public schools (Colorado is one of three states without a mandate), more bicycle lanes, and more programs providing healthy food to the poor. Retired Air Force Gen. Gene Renuart said families can also help: "Parents need to turn off the television and send kids outside more."

MONTANA

"You couldn't make this place up if you tried," said Gayle Nafziger, a teacher on a summertime road trip, describing the Sip 'n Dip bar in Great Falls, Montana. Tucked into the O'Haire Motor Inn, the Sip 'n Dip features an enormous drink called the Fish Bowl that holds 10 shots of alcohol, and three nights a week it showcases the singing of 85-year-old Pat Spoonheim, known as Piano Pat. For 54 years, she's been belting out rock 'n' roll and other old favorites from a triple-decker electric keyboard festooned with Christmas lights. But it's the mermaids who really transform the "kitsch-tastic" place, as *The New York Times* reported. Starting at Happy Hour six nights a week, women sporting long tails and flowing hair materialize in the darkened room, swimming in a pool behind a glass wall. Two at a time sway, turn flips, blow bubbles and rise to the surface outside every 20 seconds or so to take a breath. Twelve women work the four-hour shifts as mermaids, but with three out on maternity leave, Sip 'n Dip manager Sandra Johnson-Thares is hiring. "Do you know anybody?" she said. "I'm desperate." Any special skills needed? "They've got to be comfortable in a bikini top and a tail." Online, Johnson-Thares also advertised recently for a merman, thinking the Ladies Night crowd on Tuesday might enjoy a change of pace. The posting went viral, leading politicians such as Montana Gov. Steve Bullock to Twitter: "Dang, I'm overbooked." Tim Fox, the state's attorney general, also demurred because his "Speedo is @ the dry cleaners." Mermaiding can get tedious toward the end of an underwater shift, a swimmer named Claudia acknowledged. She declined to reveal her last name to protect her day job: "I don't know how corporate would react if they knew I was moonlighting as a mermaid."

COLORADO **Moooooove over.**
BROOKE WARREN

THE WEST

A six-hour Delta flight from New York to Seattle made an unscheduled stop in Billings, Montana, after the plane's toilets stopped working and passengers said they couldn't hold out any longer, reports the *Associated Press*. The plane flew hundreds of miles out of its way to accommodate passengers, who, as Delta explained delicately, needed "to find relief of built-up pressures."

THE WEST

***Redrock Wilderness*, the magazine of the Southern Utah Wilderness Association**, recently listed "10 unbelievable things Interior Secretary Ryan Zinke has actually done (for real)." Notable items included his comparing the Department of the Interior "to a pirate ship," complaining that he can't fill open positions because of what he called "the resistance," criticizing 30 percent of Interior employees for not being "loyal to the flag," and wasting "$12,000 of taxpayer money on a private jet so he could meet with rich donors and the Las Vegas hockey team."

NEW MEXICO

Pie Town, population 186 in a remote part of Catron County in western New Mexico, proudly lives up to its name, according to *Atlas Obscura*. The Pie-O-Neer and the Good Pie Café serve up charm as well as desserts. Seriouseats.com especially recommends the "New Mexican Apple Pie, which includes the state's famed green chile and is scented with piñon." Resident Nita Larronde said townsfolk have always had a bite to them: After the U.S. Post Office asked locals in 1927 to suggest other names besides Pie Town for their settlement, Larronde said, "The people of Pie decided: 'No, we're Pie Town. You can take your post office and go to hell.' "

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

Tips and photos of Western oddities are appreciated and often shared in this column. Write betsym@hcn.org or tag photos #heardaroundthewest on Instagram.

"Secretary Zinke's military career is impressive, but it did not provide him with the broad array of skills his current job demands. **The secretary is not at war. He needs to retreat.**"

Rep. Raúl M. Grijalva, D-Ariz., in his essay "An 'existential crisis' at the Interior Department," from Writers on the Range, hcn.org/wotr