

High Country News

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LAND-GRAB UNIVERSITIES

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The Village of Kivalina on the Chukchi Sea, 83 miles above the Arctic Circle, where coastal villages are working to adapt to the changing climate. **Joe Raedle / Getty Images**

Know the West.

High Country News is a nonprofit 501(c)(3) independent media organization that covers the important issues and stories that define the Western U.S. Our mission is to inform and inspire people – through in-depth journalism – to act on behalf of the West's diverse natural and human communities. High Country News (ISSN/0191/5657) publishes regular issues monthly, in addition to one "special issue" per quarter, for a total of 16 issues per year, from 119 Grand Ave., Paonia, CO 81428. Periodicals, postage paid at Paonia, CO, and other post offices. POSTMASTER: Send address changes to High Country News, Box 1090, Paonia, CO 81428. All rights to publication of articles in this issue are reserved. See hcn.org for submission guidelines. Subscriptions to HCN are \$37 a year, \$47 for institutions: 800-905-1155, hcn.org. For editorial comments or questions, write High Country News, P.O. Box 1090, Paonia, CO 81428 or editor@hcn.org, or call 970-527-4898.





Lost and found

TO UNDERSTAND THE POWERFUL MYTHOLOGY underlying some of the country's biggest universities, you could do worse than take a trip to West Lafayette, Indiana, and the Humanities, Social Sciences and Education Library at Purdue University. That's where you'll find the 1961 panoramic mural *The Spirit of the Land Grant University*. At nearly 60 feet long and almost 12 feet high, its panels tell the story of the nation's land-grant universities — educational institutions founded, in part, through the sale of public land.

In the mural, the threadbare children of farmers prepare to cross a bridge. Education — dressed all in white and carrying a torch — pushes back the curtain of ignorance so the laborers can pass through. In the foreground, President Abraham Lincoln signs the Morrill Act of 1862, which created the nation's original land-grant universities.

On the other side of the bridge, the farmhands appear as graduates and leaders in agriculture, engineering, science and the arts. The fruits of their labor are loaded onto the ship *Abundance*, for distribution to the rest of the world. Above the scene, Truth in the form of a nude woman emerges from a cloud to crush the mask of Falsehood. The mural does not depict how these endeavors were paid for, nor at what cost.

This month's feature, "Land-Grab Universities," is the result of a comprehensive investigation, one that reveals how land taken from tribal nations was turned into seed money for higher education in the United States.

High Country News, in partnership with the Pulitzer Center and the Fund for Investigative Journalism, spent two years tracking almost 11 million acres of land taken from nearly 250 tribes, bands and communities in order to help fund fledgling land-grant colleges.

Our investigation has created an unprecedented database, essential for understanding the source of many institutions' wealth. It also raises questions about modern institutions' responsibilities — and debts — to Indigenous communities. Recognizing its importance, we have made all of our research — from spatial files to tabular data — available for download. Tribal governments, reporters, researchers, universities, policy makers, state agencies and others can download, examine and explore all of it at hcn.org/landgrabu.

In this issue, we are reminded of the power of story, of national mythologies disguised as pleasant yarns and the facts and evidence rejected, or forgotten, in favor of kinder, more agreeable tales. But beyond story, we are also reminded of the power of journalism, and how in-depth, fact-based reporting can challenge such mythologies and, ideally, help us chart new courses.

Tristan Ahtone, associate editor

FEATURED CONTRIBUTORS



Kalen Goodluck is a Diné, Mandan, Hidatsa and Tsimshian journalist and photographer covering Indigenous affairs, hate and extremism, and wildlife conservation. He is a *High Country News* editorial fellow working at the Indigenous Affairs desk.



Katherine Lanpher is a writer, editor and broadcaster based in New York; she is the former features editor for *Al Jazeera America*.



Robert Lee is a lecturer in American History at the University of Cambridge, a fellow of Selwyn College, and a junior fellow at the Harvard Society of Fellows. He earned his Ph.D. at the University of California, Berkeley, a land-grant university.



Margaret Pearce is a cartographer, geographer, and writer, and enrolled Citizen Band Potawatomi. She grew up on Seneca territory at Ga'sgöhsagö (Rochester, New York) and these days is grateful to be a guest on Penobscot territory at Catawamkeag (Rockland, Maine). Her first cartography class was in Morrill Hall at the University of Massachusetts.



Private residence in Merced, California.
PARCEL ID: CA210070S0130E0SN250ANEMA
INDIGENOUS CARETAKERS: Ko-ya-te; New-chow-we; Pal-wis-ha; Po-ken-well; Wack-sa-che; Wo-la-si; Ya-wil-chine
OWNERSHIP TRANSFER METHOD: Seized by unratified treaty, May 30, 1851
GRANTED TO: State of Massachusetts
FOR THE BENEFIT OF: University of Massachusetts and MIT
AMOUNT PAID FOR INDIGENOUS TITLE: \$0
AMOUNT RAISED FOR UNIVERSITY: \$103.09

Kalen Goodluck / HCN

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A Carl's Jr. commercial for its plant-based Beyond Famous Star® with Cheese (*right*) offers a glimpse into how stories of cowboys, conquest and manliness shape American food culture.
Beyond Meat / YouTube video capture

ON THE COVER
Original illustration by Marty Two Bulls Jr.

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LETTERS

High Country News is dedicated to independent journalism, informed debate and discourse in the public interest. We welcome letters through digital media and the post. Send us a letter, find us on social, or email us at editor@hcn.org.

VOTING FOR WOLVES

In “Colorado Throws Wolves to the Vote” (March 2020) Ethan Linck maintains that whether to reintroduce wolves to Colorado is a philosophical question not answerable by science. Putting wolf reintroduction to a vote is the right way to go. After all, why should Colorado Parks and Wildlife scientists enjoy privileged status when it comes to saying what is good for the citizens and the wilds of Colorado? And since when have state wildlife agencies been free from political influence?

That said, I think Linck is wrong to suggest that science has little or no bearing on the issue. While it is true that science cannot dictate what we ought to do, it often helps us come to an informed decision about what it would be best to do. For example, science teaches us that a rapidly changing climate will be bad for many humans and many species of plant and animal. We know this even though we can’t predict the future in precise detail. It is no argument against this to say that “bad” is a value term, not a term of science.

Kirk Robinson, via email

ADDED PERSPECTIVES

I was recently immersed in an interview in *The Sun*, “Blind Hate: Randy Blazak on Why White Supremacy Persists.” One of Blazak’s points is how changing American demographics

are affecting white males who grew up in a country dominated by “straight, white, able-bodied males.” In their hearts, they feel safe and important in settings of America’s mythic past, and they feel threatened by emasculation and loss of power in today’s America.

Synchronicity is amazing. When my March issue of *High Country News* arrived, I noted a sea change of diverse and youthful writers. I pondered how *HCN* founder Tom Bell would respond to this and chuckled to think that he would probably smile and rest easy. Then I read Mark Sterkel’s letter (March 2020) in which he complains that *HCN*’s recent issues stray too far from its roots and readers’ interests. He finds the diversity issues a waste. He doesn’t even want to think about the changing demographic of the West. He expects science, not social issues. He concludes that *HCN* is making a big mistake.

I suggest that perhaps Sterkel

is making a big mistake by not opening his mind and his heart to the issues of all the people in his community. *HCN* should be applauded for giving voice to long-muzzled Indigenous populations, as well as to the diversity embraced and represented by young readers. I read *The Sun* to learn. I read *HCN* to learn. The issues that affect the West affect all its residents. The only way to stay relevant to that diverse population is to include their input and perspectives. Without those voices, *HCN* will lose readers as we old white farts die off. And then who will be left to protect these magnificent spaces we so love?

Linda Paul, via email

I can’t remember a time when we didn’t have *High Country News* in our household. I still get excited every time I see one of your stories pop up online in other platforms, even as that happens more and more regularly. I don’t know if I would have solidified myself as a Westerner as strongly without your publication. Part of that was the shock and delight of seeing myself and my concerns in the magazine, over and over: gender discrimination, LGBTQ+ issues, combining classic conservation with human needs. *HCN* was the first place I really learned about Native concerns, and it provided an in-depth understanding of the unnecessary suffering of migrants.

I came into my 20s at the beginning of a climate crisis, with far-right racist groups in power and politicians trying to maintain

capitalism as the solution to our problems; the stereotypical picture of the West doesn’t have room for me, or for the people I care about. But *High Country News* has reminded me again and again that this isn’t the only picture. Thank you for openly embracing reportage on those people most affected by policies, the climate and violence. You may lose some longtime supporters, but I know I’ll be telling my community about the publication that speaks frankly and truthfully about the place we call home. We need you.

Martha Geier, via email

ELECTRIC VEHICLES

In “The Elon Musk dilemma” (March 2020), Brian Calvert gets a number of facts wrong about climate change, electric vehicles, and renewable energy. He starts the column by highlighting Americans’ “beliefs” in climate change. As a climate scientist, I would like to point out that the climate doesn’t care about people’s beliefs. It doesn’t care if CO₂ emissions come from the tailpipe of a liberal’s Prius or the exhaust of a conservative’s F150. Currently, the transportation sector is responsible for the United States’ largest share of CO₂ emissions, having overtaken the power-generation sector. Electric vehicles (such as Elon Musk’s Teslas), powered by an increasingly low-carbon energy grid, are a fantastic tool to address climate change. Studies by the Union of Concerned Scientists have shown that, on average, driving an electric car produces CO₂ emissions equivalent to a

“While it is true that science cannot dictate what we ought to do, it often helps us come to an informed decision about what it would be best to do.”

gas-powered car getting 80 miles per gallon, and these numbers are getting better.

In addition, renewable energy does not, as Calvert asserts, require “plastering open spaces with solar panels, wind turbines and hydro-dams.” Nor does it require excessive water use or mining abuses compared with fossil fuels. Done right, renewable energy projects can provide income for farmers and ranchers who lease their land. There is growing interest in integrating solar installations with farmland, as certain crops can benefit from the shading provided by solar panels. Notice that I said electric cars and renewable energy are “a” solution. There are several other more impactful solutions, especially in regenerative agriculture and the energy efficiency of buildings. I agree with Calvert that we don’t necessarily need leaders who promise to create backup colonies on Mars. However, I wholeheartedly disagree that we need leaders (or writers) who make renewable energy or electric vehicles sound scary, or leaders (or writers) who obfuscate the dominant cause of climate change: CO2 emissions from the burning of fossil fuels.

David Schneider, via email

PUBLIC TRANSPORTATION

How could you publish an article about public transportation in the Northwest without mentioning Amtrak once (“Mass transit West” January 2020)? The *Coast Starlight* train runs daily from Seattle to Los Angeles. The *Empire Builder* runs from Portland and Seattle connecting to Spokane and Chicago and has coach and sleeper car options. Amtrak Cascades offers coach and business class between Eugene Oregon and Vancouver, British Columbia. Your article sounded like an advertorial for some private sector bus services.

William Edward Gretz, via email

RELOCATING THE BLM

I retired from a career with the Bureau of Land Management in 2009. From over 33 years of public-lands stewardship “in the trenches,” I was gifted with many things, the best of which was a deep understanding of the power of the land and those who are connected to it and, of course, the natural and social consciousness that we gain from interacting with wild places. But day-to-day operations and management decisions were always dictated by the rule of law.

The appointment of William Perry Pendley as interim director of the BLM is a blatant act on the part of our president to sever the ties of the agency with its regulatory authority (“Agency displacement,” January 2020). This will make it more malleable to the special interests of Donald Trump and his cronies. It undermines our public lands in the most despicable and underhanded way.

The BLM manages one-eighth of the landmass of this country. It is a regulatory agency with the added responsibility of enabling wise and sustainable use of public land resources. It is mandated to implement the will of the U.S. Congress, your representatives. The role of the D.C. office of the BLM is to provide consistent, fair, clear guidance and policies that implement congressional legislation in concert with other federal agencies, both within the Department of Interior (such as the National Park Service, the USGS and the Fish and Wildlife Service), and within other departments (such as the Forest Service and the EPA).

These are all *your* public lands! And I believe it is here that we can find our most effective avenues for clean renewable energy. Moving these people out of Washington disrespects and encumbers the role of the BLM leadership in connecting and cooperating with other dedicated and powerful stewards for America’s public lands and in finding

“If my presence as a fashion mistake makes it easier for others to get outside, awesome.”

sustainable energy solutions in the face of climate change.

Congressional legislation is one of the most important of the checks and balances against tyranny afforded by our Constitution. It is the right of all Americans, and one that assures that our public lands can remain at the core of this country’s greatness. The wise and sustainable use of our public lands has inspired our global community as well. The legislated open-to-all sharing of public lands on this planet is rare and something Americans can be proud of across the globe. We can come together on this issue by getting out there and being responsible visitors to (and users of) our public lands, by knowing the rules and complying with federal regulations, and by getting involved respectfully with local BLM employees and managers and lastly and largely with our congressional representatives. Your views about our public lands are more important now than ever, and they do make a difference. Stand up for your public lands! And while you’re at it, let them know that you value the BLM leadership in their critical role in close concert with Congress and other federal agencies in Washington.

Kristie Arrington, via email

OVER-GENERALIZING

Does one person of a certain identity represent all people of that identity? Of course not (“Conservation justice,” February 2020). In his interview, Sergio Avila affirms that truth when he describes the misstep of generalizing about

people. Unfortunately, Avila went on to generalize repeatedly about “white people.” What about those of us who seek knowledge (not necessarily science)? What about those of us who seek a better understanding of ourselves? Or of friendship? Or of beauty? Or of God? I’m sure Avila is doing good work for the Sierra Club. But I hope he meets more kinds of people, more kinds of environmentalists, and more kinds of conservationists, so he can do less generalizing. The stakes are so very high, and we all need to work — and walk — side by side

Steve Paulson, via email

BACKCOUNTRY SNOBBERY

For years, I have gotten grief for hiking and backpacking in jeans and T-shirts instead of lightweight zippered shorts/pants and sweat-wicking shirts; eating M&Ms and PB&J sandwiches, rather than custom gorp or Clif Bars; and for cross-country skiing in the same jeans and T-shirt with old 75-mm three-pin bindings. As a white guy, I let this kind of derision roll off my back, but the interview with Sergio Avila makes clear that gear snobbery is harmful in ways I wouldn’t have expected. I am grateful to him for giving me the perfect rejoinder the next time somebody sneers at my clothes or gear: What you wear doesn’t make you more or less entitled to visit natural places. And if my presence as a fashion mistake makes it easier for others to get outside, awesome.

Craig Jones, via email

A new voting system for our fractured democracy?

A county in Oregon decides to rank its voters' choices.

BY HELEN SANTORO

JAMES MORALES' JOB is to make sure people know how to vote. Recently, that task has become harder than simply reminding them to use the right pen to fill in the bubble for their favorite candidate. That's because Morales, the county clerk of Benton County, Oregon, is setting up an entirely new election system: ranked-choice voting, where individuals rank candidates in order of preference. This summer, Morales will help host community events at local libraries and the county fair to teach residents how to fill out the new ballots. "We want everybody to get some practice before November," he said.

For proponents of ranked-choice voting, which passed in the county in 2016, it's been well worth the four-year wait. "Voters aren't stuck choosing what feels like the lesser of two evils," said Kate Titus, executive director of Common Cause Oregon, a public interest group that promotes ranked choice. Titus and other supporters argue that the current practice of plurality voting, in which voters can only choose one candidate, limits voter choice, increases polarization and results in poor political representation.

Oregonians are not the only Americans frustrated by the current democratic process. Across the nation, counties, cities and states are turning to ranked-choice voting.

Benton County voters approved it in an attempt to improve the electoral process, but political scientists are still trying to understand how the method impacts voting issues.

Benton County lies between the bustling cities of Portland and Eugene in Oregon's verdant Willamette Valley. The majority of its residents live in Corvallis, a university town of wide tree-lined streets. "Benton County is known for its innovation and progressive change," said Blair Bobier, a Corvallis local who campaigned for the voting measure. "People recognized the need to change our dysfunctional election system."

Other states, including Nevada, have already implemented ranked-choice voting in some elections. This February, early voters in the Democratic caucus filled out ranked-choice ballots, providing an example of how the system works. (In-person voters attended caucuses on Election Day.) If a voter's first-choice candidate did not receive more than 15% of the precinct's votes and was therefore not considered "viable," the vote would be transferred to the next highest-ranking candidate. For example, if a person's first choice was Elizabeth Warren and Warren did not meet the viability threshold, that vote would be counted for the voter's next highest-ranked viable candidate — Bernie Sanders, say.

This system proved popular throughout the state. Altogether, around 75,000 early ranked-choice ballots were cast, possibly contributing to the high voter turnout, which surpassed 2016's by around 20,000 votes. After early votes and in-person votes were counted, Sanders won a landslide victory and 46.83% of the total votes, 26 percentage points more than runner-up Joe Biden.

In Benton County, ranked-choice voting will elect county positions, including the sheriff and county commissioners. The sheriff's race is off the ballot until 2022, but two county commission seats will be up for election this November, opening up the possibility to see ranked-choice voting in action.

Both the benefits and drawbacks are still unclear, however. Supporters say the voting system encourages more civil discourse between candidates, according to FairVote, a nonprofit organization that advocates for electoral reform. A 2016 study, which surveyed voters from 10 ranked-choice and plurality cities across a range of states, including Massachusetts, Minnesota and Washington — all of which have majority white voters — substantiated this claim. It found that voters in ranked-choice cities saw local campaigns as being less negative and divisive than those in

plurality cities.

Another possible advantage — that ranked-choice voting increases voter turnout — is still up for debate. A 2016 study out of San Francisco State University found that turnout declined among Black and Asian voters in the San Francisco ranked-choice mayoral election, further exacerbating racial disparities in voter participation.

Still, the voting method is gaining ground across the country. Nine states, including Colorado and New Mexico, have implemented ranked-choice voting at state or local levels. This year, Alaska, Hawai'i, Kansas and Wyoming plan to use it in the 2020 Democratic primaries, and Maine, which has used ranked-choice voting since 2016, will be the first state to use it in a presidential election.

Whether the new system is the best remedy for voters' feelings of frustration remains unknown. Oregon residents have long experimented with electoral reform: The state was the first in the nation to implement vote-by-mail for all statewide elections and automatic voter registration, both of which have increased voter participation. "Oregon has a history of adapting new tools to make elections more accessible," said Titus. "I think the people of Oregon and of this country have been working to realize the full promise of democracy." ✨



Promising proteins designed on a computer are tested in the lab at the University of Washington's Institute for Protein Design. The coronavirus vaccine will consist of a nanoparticle, formed from many interlocking proteins.

Ian C Haydon / Institute for Protein Design

REPORTAGE

A vaccine for COVID-19

'We've put a lot of projects on hold so that we can focus on this.'

BY HELEN SANTORO

IN A TALL BUILDING on the outskirts of downtown Seattle, a group of scientists from the University of Washington's Institute for Protein Design huddle in front of computers, concentrating on their screens. Using a special program, they're tinkering with building blocks of proteins, taking the first of many steps to develop a vaccine for the new coronavirus, SARS-CoV-2.

Creating a working vaccine is challenging and will likely take over a year, at best. But with Seattle at the heart of the coronavirus outbreak in the U.S. — as of March 13, the state had seen 568 cases and 37 deaths, numbers almost certain to rise as more people are tested — this task is the top priority for the scientists. "We've put a lot of projects on hold so that we can focus on this," said Brooke Fiala, a vaccine researcher who leads the institute's nanoparticle laboratory.

In order to fight the coronavirus, scientists from universities and drug companies around the world are developing vaccines, using a variety of methods. Some labs are manipulating the early stages of protein development, while others are working with dead versions of the virus. Fiala and her colleagues are taking a

different approach: manufacturing nanoparticles to create a more efficient vaccine.

Vaccines expose the body to an antigen, which is a small dose of a virus or bacteria parts. The antigens trigger an immune response: The body's immune cells produce antibodies, which combat the invader and protect against further infection. There are several ways to create a vaccine. In one common method, for example, scientists weaken the virus so that it reproduces very poorly once inside the body, giving the immune system time to make antibodies.

In Fiala's lab, scientists are instead attempting to form what is called a nanoparticle. The shape of this microscopic particle must allow for an antigen called a spike protein — the part of the SARS-CoV-2 virus that allows it to infect human cells — to fuse to the outside. If all the pieces fit together properly, the resulting molecule should look like a spiky ball, with the nanoparticle at the core and the spike proteins protruding outward. Once perfected, this spiky ball can become a vehicle for introducing the viral proteins to human cells and stimulating the immune system.

The first step in making a nanoparticle

vaccine involves designing a promising nanoparticle model using a computer, manufacturing the DNA that codes for its shape, and then transferring that DNA into *E. coli* bacteria. The bacteria follow the DNA's instructions to form the correct protein. Researchers then burst open the bacteria and extract the newly made protein, which spontaneously folds into the desired nanoparticle — each piece of the molecule exactly where it should be. Finally, multiple spike proteins are attached to the outside of the nanoparticle, creating the spiky ball. The immune system reads repetitive arrangements like this as a sign of peril and responds by rapidly creating antibodies.

This type of vaccine is thought to be more powerful than other varieties; the nanoparticle is highly effective at stabilizing the spike proteins and inducing an immune response. And while it's been in use since around the 1980s, engineering a nanoparticle on a computer is a big step forward. "The use of computational models to predict and design self-assembling proteins is a recent breakthrough in nanoparticle vaccine design," said Emma Kate Loveday, a virologist at Montana State University.

It's a complicated process, but after a recent success in generating a nanoparticle vaccine for respiratory syncytial virus, a contagious respiratory infection, Fiala is hopeful. "We've become quite practiced," she said. "We're very used to this process of taking those antigens and putting them on nanoparticles." So far, they have ordered 18 different nanoparticle DNA sequences and are confident that one of these variations will eventually lead to a successful vaccine.

In the upcoming months, the team hopes to get a vaccine to animal trials. If all goes well, the vaccine will then be tested in humans. Making sure it's safe and effective enough for widespread use could take a year or longer, though. Science often appears to move at a frustratingly slow rate, especially when something as serious as COVID-19 is spreading so quickly, said Ian Haydon, the scientific communications manager for the Institute of Protein Design. "But science like this needs to move slowly in order to make the proper drugs to save lives." ✨

WHAT YOU CAN DO TO HELP PREVENT THE SPREAD OF CORONAVIRUS:

- ▶ Wash your hands often with soap and water for at least 20 seconds
- ▶ Avoid touching your eyes, nose and mouth with unwashed hands
- ▶ Cover your coughs and sneezes
- ▶ Clean surfaces with disinfectant
- ▶ Stay home when you are sick
- ▶ Avoid close contact with others who are sick

All hat, no cattle

Plant-based burgers, cowboy myths and the industrial food culture.

BY CARL SEGERSTROM

IN A RECENT TV COMMERCIAL, cowboy hats and neon lights fill a honky-tonk. Diners munch on juicy burgers wrapped in paper ads for Burger King's classic Whopper. A blond man with a handlebar mustache looks into the camera and says, "You can't imitate beef; it just tastes better." Another man, in a tall cowboy hat and blue button-up shirt, declares, "I'm a damn fool."

He's been duped. Just like a woman in a jean jacket and wide-brimmed felt hat, who, in amazement, says, "That's an Impossible Whopper?"

It is. Twenty-one ingredients make up a plant-based patty designed by Impossible Foods to imitate meat, sans the animal slaughter and environmental impacts. As the Impossible Whopper and other fake meats add new links to the industrial food chain, advertisers are leaning into the cultural currency of the modern carnivore. The message behind Burger King's ad is clear: You can be an American, even a rugged modern-day cowboy, have your burger *and* eat plants instead of beef. This embrace of Old West iconography shows how large stories loom in American food culture — often masking the consequences of how that food is produced.

FROM LOUIS L'AMOUR TO JOHN WAYNE to the Marlboro Man, cowboys have long been used to sell the story of an imaginary West, whose violent, racist history has been rewritten while its rugged independence is lionized. "The cowboy as a pure white Westerner is a 20th century manifestation of cultural racism," said Rich Slatta, a professor emeritus at North Carolina State University, who has studied and published books on cowboy culture over four decades. Slatta attributes the myth's endurance to society's preference for entertainment over education. Remaining ignorant of the history of Western expansion and focusing on that era's mythical hero helps American culture normalize

and erase Indigenous genocide and colonization, hiding a shameful history underneath a wide-brimmed hat.

At the dawn of the 20th century, trading on the icon of the cowboy helped normalize something else, too — a brand-new food system, one that was increasingly disconnected from local or even regional production. Before Western beef took a prominent place on American dinner plates, people relied on local farms and ranches. But as railroads began to crisscross the continent, refrigerated rail cars brought carcasses from the West and Great Plains to Midwestern slaughterhouses and Eastern Seaboard butcher shops. Selling consumers on the then-novel idea of meat from a thousand miles away required a potent cultural story, as Joshua Specht, a University of Notre Dame professor, describes in his recent book *Red Meat Republic: A Hoof-to-Table History of How Beef Changed America*. "In places like Chicago, the meatpackers were already figuring out ways to tie into a romantic vision of where the food comes from," Specht said.

The image of the cowboy lent a familiar face to a food culture that was increasingly spider-webbed across the continent. Even as the open range was enclosed by barbed wire and the beef industry consolidated onto feedlots, cowboys remained a staple of the corporate food industry. "The West is not only a source of beef, it's a source of American selfhood," said Mike Wise, a historian at the University of North Texas. "Its iconography is tied strongly to corporate food systems, like the Arby's cowboy hat, Western burgers and ranch dressing."

To drive burgers off the table, new meat-substitute companies must contend with those powerful culinary associations, targeting the motivations behind purchases, explained Kit Yarrow, a consumer psychologist and Golden Gate University professor. Beyond low costs, hungry buyers seek familiarity, pleasing taste

and perceived health benefits. One promising way to market imitation meat involves presenting it as indistinguishable from real meat — in other words, just as tasty as the juicy hamburgers the commercial cowboys rave about.

But meat producers aren't taking kindly to the new purveyors stepping onto their turf. A handful of states, including Wyoming and Montana in the Western U.S., have passed laws to prevent plant-based or lab-created products from using meaty phrases like "hamburger" or "steak" on their packaging. Industry groups like the National Cattlemen's Beef Association argue such laws are necessary "to take action against products that use misleading labels to confuse consumers about the true nature of their product."

Whether or not the labeling laws will have an impact is an open question. Yarrow said the packaging requirements are a foolhardy attempt to push out competition and insult consumers' intelligence: "Nobody's being duped; people are looking for plant-based alternatives." Still, the meat-labeling campaign could make it harder for new, alternative products to cash in on meat's reputation, said Specht. "It's an attempt to say, 'You can't tap into that story,'" he said.

"YEAH, I'VE SEEN A LOT out here in the West," says the star of a different commercial, a grizzled man who resembles Yosemite Sam, as the bass line and rattle of a classic Western song plays in the background. Then the camera pans out, and as he extolls the tastiness of the Carl's Jr. plant-based Beyond Burger, the cowboy — with waves gently lapping on an ocean shore behind him — moves through a series of contortionist yoga poses. "When the wagon of change comes, you ride along with it," he says.

The tongue-in-cheek ad illustrates the intersection of the cowboy narrative with a message aimed at changing behavior. After all, if a crusty cowboy can ditch his saddle for a yoga



class, why can't meat eaters exchange meat for a more planet-healthy alternative? Touting the environmental benefits of veggie-based meat alternatives is a central strategy for both Beyond Meats and Impossible Foods. (Impossible Foods' website, for example, keeps it concise: "Eat meat. Save Earth.") But their pitch — that industrial meat is bad for the environment and highly processed imitations are the answer — overlooks existing alternatives: ones that require minimal processing and are better for the environment, albeit a bit boring.

Dutch researchers tackling the question of how to replace protein and other nutrients from meat with environmentally friendly alternatives found that focusing on processed substitutions misses the point. As they reported last year in

Trends in Food Science & Technology, alternatives like Beyond Burgers and Impossible Whoppers and other "breakthrough" technologies like lab-grown meat create a high-tech solution where a low-tech one would do: They point to pulse crops, like garbanzo beans and lentils, as alternatives that can fill dietary needs while using fewer resources than meat imitations.

But food choices aren't driven by the logic of living within environmental limits. They're largely driven by cultural stories sold by the handful of corporations that dominate the American food-scape. "Industrial food markets with a romantic vision that makes people feel comfortable," said Specht. This system — designed to maximize convenience for consumers and profit for processors and

A Carl's Jr. advertisement for their plant-based Beyond Famous Star® with Cheese. Take it from an old Western cowboy turned yoga master: "When the wagon of change comes, you ride along with it," he says.

Beyond Meat / YouTube video capture

distributors — sidesteps a reckoning with the many problems that plague industrial agriculture, including farm and slaughterhouse worker exploitation and environmental degradation. Images like the honky-tonk full of cowboys shocked to find out they're eating veggie burgers reinforce the idea that food choices are about what a product means, not what it is or how it came to be. "In a perfect universe for industrial food companies," Specht said, "food doesn't have a backstory." ☀

THE LATEST

Fighting PFAS

Backstory

Polyfluoroalkyl chemicals, or PFAS — dubbed "forever chemicals" for their toxic longevity — are found in countless items, including non-stick cookware, firefighting foam and even popcorn bags. They're also linked to cancer. But because they're not regulated by the Environmental Protection Agency, it's up to states to track and monitor them — and Western states are lagging. Water contamination has been confirmed in at least 10 Western states, yet only Colorado, California, Oregon and Washington regulate the chemicals ("See where PFAS pollution has been confirmed in the American West," 5/20/19).

Followup

According to *E&E Daily*, a Senate panel urged the U.S. Air Force to find an alternative to its firefighting foam, which contains PFAS. Air bases have also been asked to work with nearby communities affected by contamination, such as Clovis, New Mexico, whose drinking water supply has been tainted by Cannon Air Force Base. According to Air Force Secretary Barbara Barrett, the base is cleaning up PFAS pollution and no longer uses the toxic foam during training exercises. However, it has yet to find a suitable alternative. — *Kalen Goodluck*

Tribal nations demand response to climate relocation

Five Indigenous communities have asked the U.N. to investigate the United States' failure to live up to legal obligations.

BY ANNA V. SMITH

THE ALASKA NATIVE VILLAGE OF KIVALINA

sits on a barrier reef island in the Chukchi Sea 100 miles north of the Arctic Circle, accessible only by plane or boat. In 1992, Kivalina — a federally recognized tribe — voted to relocate due to the threat of erosion and storms, but the community's attempts to move were blocked by the U.S. government. The U.S. Army Corps of Engineers twice rejected proposed relocation sites, saying they would be too expensive to bolster against future erosion. By 2003, the island had lost roughly half its livable space. Today, the community of 400 is still seeking relocation assistance from federal and Alaska agencies — and time is short. Some reports suggest that the island could be uninhabitable as soon as 2025, due to land loss, melting permafrost and increased storm threats.

In January, the Alaska Institute for Justice filed a complaint with the United Nations on behalf of Kivalina and four coastal tribes in Louisiana, asking for an investigation into the United States' handling of tribal nations affected by climate change. The complaint emphasized the failure of the U.S. government to provide adequate resettlement resources to Indigenous communities, violating their human rights through repeated negligence. It cites the government's failure to relocate tribes, provide thorough consultation, to protect tribal cultural sites and to recognize tribal sovereignty. "By failing to act," the complaint reads, "the U.S. government has placed these tribes at existential risk."

The complaint seeks to "highlight a systemic injustice that we're seeing across the nation," said Michael Givens, spokesman for the Unitarian Universalist Service Committee, a human rights advocacy group that worked in partnership on the complaint.

Climate-forced displacement is a reality for tribal nations in the Pacific Northwest, as

well: The Hoh Tribe, the Quileute Tribe and the Quinault Nation have been working on moving to higher ground for more than a decade, as they face increased erosion, flooding and storm damage. The Pacific Northwest could see up to 2 feet of sea-level rise by 2050, as well as higher tides, a hazardous prospect for low-lying coastal communities.

This is the first complaint to the U.N. about a government's responsibility to its own citizens should they experience displacement from climate change, says Ama Francis, climate law fellow at the Sabin Center for Climate Change Law. "Something that this complaint really helpfully does is point to the ways that the federal and state governments can support Indigenous people in adapting to climate change in ways that tribal communities themselves have determined."

One way is through a "relocation governance framework" first put forward by the Obama administration in 2013, which recognized the lack of progress agencies had made in assisting Alaska villages in their response to climate change. Currently, tribal nations seeking to relocate have to work with at least a half-dozen different federal agencies — in addition to state agencies — for housing, transportation, disaster recovery and infrastructure needs. But climate change requires a coordinated response. In 2013, a White House task force called climate-driven relocation of coastal communities "an unprecedented need" — one that agencies lacked the "technical, organizational and financial means" to address. The relocation framework recommends establishing a lead federal agency to coordinate funding and decision-making to help communities move.

The U.N. complaint also highlights the difficulties faced by the many non-federally recognized tribes grappling with climate change: Four communities in the Southern U.S.

included in the complaint do not have federal recognition and do not have the same government-to-government relationship and access to resources that the 574 federally recognized tribes have. The Isle de Jean Charles Band of Biloxi-Chitimacha-Choctaw Indians of Louisiana, the Pointe-au-Chien Indian Tribe and the Grand Caillou/Dulac Band of Biloxi-Chitimacha-Choctaw each have state recognition and have been seeking federal recognition since the 1990s, while the Atakapa-Ishak Chawasha Tribe of Grand Bayou Village has neither. According to the complaint, the resulting failure to recognize tribal sovereignty has led to a lack of resources to adequately address land loss and natural disasters. Meanwhile, the multifaceted impacts this has on cultural rights, food sovereignty and more are ignored.

As the climate crisis deepens, advocates say the same state actors behind land dispossession and climate change are now failing to respond responsibly to either. "Climate change has a lot to do with local capacity to coordinate," says Kyle Whyte (Citizen Potawatomi Nation), a professor of philosophy and community sustainability at Michigan State University. For the state to ignore the sovereignty of, and its responsibilities to, tribal communities, "that's just really unethical," he said.

"We are at a crossroads," said Whyte, "and the decisions that we're being forced to make today and with insufficient support are ones that are going to have a lasting impact on future generations." 🌱

The island housing the Village of Kivalina has lost roughly half of its livable space. More robust sea walls and an exit roadway are being constructed, but the community is fighting to relocate entirely. **Joe Raedle / Getty Images**





Activists in Ciudad Juárez, Mexico, hold photos of migrant children, including Jakelin Caal Maquin, second from right, who died while trying to cross the U.S.-Mexico border.

Mario Tama / Getty Images

Carlos Gregorio Hernández Va



REPORTAGE

Certainly cruel and possibly illegal

The roots of immigration deterrence.

BY RUXANDRA GUIDI

IN NOVEMBER 2018, A YOUNG GIRL from the Indigenous village of San Antonio Secortez in Guatemala got her very first pair of shoes. Her father, 29-year-old Nery Gilberto Caal, bought them for a special occasion: the 2,000-mile-long trek they planned to make across two borders to the United States.

A week later, a U.S. Border Patrol spokesperson announced that a Guatemalan girl had died in its custody. She and her father were arrested near the Antelope Wells port of entry in New Mexico, and, within a day, she'd fallen ill. The two were flown to a hospital in El Paso, Texas, where, according to the Border Patrol, she "was revived."

But the next day, she died as a result of a serious bacterial infection. Had the Border Patrol given her a physical examination when they found her, they probably could have done something about her high fever. Neither her name nor the news of her death were made public by the Border Patrol until the *Washington Post* broke the story a week later. A family photo taken shortly before the ill-fated journey shows a pint-sized Jakelin Caal Maquin standing awkwardly, looking straight into the camera, wearing her new pink shoes. She would celebrate her 7th birthday on the journey north.

Border Patrol agents took more than 160 migrants, including the Caals, into custody that December day; that month, they apprehended a record 25,172 so-called "family unit members" — parents with their kids, or kids traveling alone. In years past, such especially vulnerable migrants would have been considered for asylum, depending on their particular case and the situation they faced in their home countries. According to U.S. law, anyone is eligible to apply for asylum, and all asylum-seekers should be able to stay in the country without fear of deportation while they wait for a hearing. Yet today, people like the Caals are portrayed as criminals, regarded by some as a mass of people trying to game the system — "undesirables" who should be prevented from coming here in the first place.

Evidence has shown that tough barriers to immigration do not work and often have tragic consequences. Migrants

will scale border walls, sneak in through underground tunnels, pay expensive smuggling fees and traverse dangerous terrain to get to the U.S. Yet regardless of the evidence, current U.S. immigration policy centers around establishing barriers and enforcing them to the extreme. And it is being carried out at an increasingly unbearable human and moral cost.

Such draconian practices didn't come out of nowhere. They can be explained by our society's long-running binary view of the rule of law: You either follow it, or you're a criminal. In an effort to deter illegal immigration, however, the federal government could itself be breaking U.S. law. But more importantly: What's being done to migrants and asylum-seekers in the name of national security is certainly, under global human rights principles, both wrong and intentionally cruel.

DETERRENCE THEORY is embedded in American thinking. It started out as a military and criminal doctrine, designed to discourage people from committing crimes out of fear of punishment. Now, however, for more than two decades, deterrence has been used to shape the way Americans see migrants and how those migrants are treated by law enforcement. This theory assumes that the punishment will prevent the crime: The bigger the infraction, the more severe the punishment will be. The theory also assumes that the potential perpetrators understand the rules.

Criminal justice experts, including Kevin C. Kennedy of Michigan State University's College of Law, say deterrence theory is intrinsically flawed: In order to "secure obedience to the law, the public evil of punishment must be accepted." But deterrence fails to instill fear among most people because they have no idea how law enforcement and criminal justice systems work.

U.S. authorities haven't always viewed migration through a criminal lens. Yet the Trump administration has not only done so, it has chosen to apply

“(The Border Patrol) intends to end people’s desire to unlawfully enter the United States. It’s a form of social and psychological engineering.”

deterrence theory to an extreme degree. Whether a person is an undocumented migrant, or a child seeking to reunite with her parents, or an asylum-seeker with credible persecution claims makes no difference to our current administration, which considers them all “illegal.”

The harder it is to enter the country, the harder it becomes to request asylum. This has forced an estimated 60,000 people back to dangerous cities along the U.S.-Mexico border, where they are vulnerable to extortion, rape, robbery and kidnapping. Desperate families follow dangerous smuggling corridors from Central America to the U.S. Southwest. Once here, they are separated and sent to overcrowded, inhumane border facilities that have little to no oversight. Caal Maquin was one of six children who died in Border Patrol custody in 2018 due to insufficient medical care or neglect. Yet when news of her death became public, then-Homeland Security Secretary Kirstjen Nielsen defended the government's harsh border policies, blaming Caal's father for the death instead.

As the driving force of our current immigration enforcement, deterrence has been tweaked by policymakers for years. According to Geoff Boyce, academic director of the Border Studies Program at Earlham College, a critical turning point came in 1994, when the Border Patrol laid out its first national strategy and established what's known as “prevention through deterrence” — the idea that the border “can be controlled if you increase the stress, harm and suffering that unauthorized migrants are exposed to, so it reaches a point where it has a deterrent effect.”

Deterrence has grown since 1994, Boyce says, when the U.S. saw a buildup of enforcement in the Southwest, including surveillance towers and checkpoints along the U.S.-Mexico border. “This pushed some people to travel further into the desert, shifting the geography of their travel so that they can't enter as easily,” he says. By 2012, the Border

Patrol introduced the wonky-sounding “Consequence Delivery System,” which basically punishes repeat border-crossers — thereby punishing working-class migrants for wanting to enter and stay in the U.S.

“(The Border Patrol) intends to end people's desire to unlawfully enter the United States,” Boyce says. “It's a form of social and psychological engineering.”

IN 2010, DURING President Barack Obama's first term in office, I covered the San Diego-Tijuana border as a reporter for public radio. Deterrence was not a commonly heard term in those years, but it was standard practice.

At least once a month, I'd cross into Tijuana to visit the migrant shelters just south of the border. There, I'd talk to people who'd recently been deported to Mexico, or who were planning their journey north. I recognized a common trend: Deported immigrant mothers of American children were filling the shelters while their kids stayed in the U.S. That year, Immigration and Customs Enforcement (ICE) carried out almost 400,000 deportations under Obama — a record that separated countless families.

“We're seeing a lot more women who have been in the States for more than 20 to 30 years,” Mary Galvan, a social worker at the Tijuana shelter, told me. “Once they're deported, the only thing that interests them is finding a way to get back to be with their children again.” Most of the dozen mothers I met during one of my visits to the shelter had previously been deported and were trying to save up the thousands of dollars necessary to pay a coyote — a smuggler who takes migrants across the border — to help them cross illegally again. Some said they would cross illegally as many times as necessary in order to be reunited with their kids.

Back in 2010, I reached out to Robin Baker, then-ICE field office director for detention and removal operations in San Diego, to under ... (continued on page 46)

A new home for historic mud

Researchers at Oregon State University hope the collection helps scientists uncover stories of the Earth's past, and its potential future.

BY HELEN SANTORO

INSIDE A LARGE STORAGE room at Oregon State University, Valerie Stanley opened the door to a massive refrigerated area, releasing a blast of cold air. Shelves 20 feet high towered overhead, loaded with tubes and boxes. Stanley paused for a moment, chose a plastic tube with an orange lid and held it out so I could look through the clear siding. It was filled by a cylinder, more than a foot long, of light-brown mud: layers of sediment collected from the ocean floor. Inside the cracked dirt of the sediment core were microscopic bits of shells, rocks and fossils, all clues to how the ocean looked millennia ago.

Many of these cores, now housed at OSU in Corvallis, Oregon, were dredged up from the bottom of the Antarctic Ocean by researchers at Florida State University in Tallahassee. They form a set called the Antarctic Core Collection, which FSU oversaw for more than 50 years. Four years ago, however, faced with numerous staff retirements and limited lab space, administrators decided the cores needed to be relocated.

But handing off this muddy baton was no small feat. Stanley, one of the Antarctic core curators at OSU, helped spearhead the effort to ship the cores almost 3,000 miles across country. It was a monumental undertaking, but worth it, said

Joseph Stoner, co-director of the repository at OSU. Preserving the collection means saving a record that can help researchers uncover stories about the planet's past, and its potential future.

The Antarctic Core Collection is the world's largest stockpile of seafloor sediment from the Southern Ocean. Established in 1963, it includes material from 7,370 Antarctic sites. Scientists would lower a piston corer, a long tube with a heavy weight on top, from the side of the ship into the icy Antarctic water. After dropping deep into the ocean, the weighted tube would be released, allowing it to free-fall into the soft clay of the seafloor. A valve at the end of the tube would then close, and scientists would haul the sediment-filled container back to the surface. The resulting samples contain a detailed timeline of Earth's history, with each layer of sediment revealing new information about nearby glaciers and sea temperatures. The longer the core, the more history it has to offer.

But by 2016, Florida State University could no longer host the collection, and the National Science Foundation, the facility's funder, began seeking a new home. Oregon State University, with its eager students and researchers — plus a newly built repository with storage rooms, walk-in freezers and



OSU Marine and Geology Repository co-directors Anthony Koppers, left, and Joe Stoner look at a pair of sediment samples. **Andy Cripe / Mid-Valley Media**

laboratory space — was a good fit. In 2017, the agency awarded OSU just over \$800,000 to relocate the collection.

Last August, Stanley and three co-workers spent several weeks moving almost 17,000 containers of sediment from FSU's lab into 13 refrigerated semi-trucks. For 10 hours each day, they navigated cylinders through the lab's narrow hallways until every shelf was empty. Once the cores arrived in Oregon, the team spent another two days unloading them. "This whole room was full of boxes," Stanley said, her breath visible as she gestured around the refrigerated room, over twice the size of a professional basketball court. When OSU's previous collections are factored in, the university now houses around 22 miles' worth of sediment.

Today, researchers are using more advanced technologies to reanalyze the old cores. Modern CT scans, for example, allow scientists to take high-resolution 3D images of the pebbles in each of the core's layers. This helps them map when icebergs broke off Antarctica's ice sheet: More pebbles means an iceberg calved and transported that debris. By examining iceberg movements 3 to 4 million years ago, when temperatures were warmer than today, scientists can study how iceberg calving impacted

sea-level rise then, offering insight into what may happen along the coasts now, as the climate warms. "The science people are doing here is really relevant to local problems," said Maureen Walczak, an assistant professor in oceanography at OSU and advisor for students working with the sediment cores.

While researchers across the country can request sediment core samples from the repository to study, one of OSU's long-term goals is to digitize all the information — photos, physical properties, where the cores were collected — and make it available on a public database. That way, curious people worldwide can access parts of the Earth they might otherwise never see.

Some of those samples were on display in late January, when OSU held an open house to mark the grand opening of the new collection. About 275 people, many with "OSU Alum" printed on their nametags, filled a laboratory. Some squinted into microscopes to inspect rock and sediment particles smeared onto glass slides, while others hovered around tables, looking at half-cylinders of cores. (The cylinders' other halves are preserved indefinitely in the collection's archive.) "We aren't just an island," said Stanley. "We're passing these sediments down for future researchers." ☀



REPORTAGE

Agricultural extension

On the Hopi Reservation, one agent is helping her community grow food. But for how long?

BY IRINA ZHOVOROV

SUSAN SEKAQUAPTEWA made five trips from Kykotsmobi Village on the Hopi Reservation to the Home Depot in Flagstaff, Arizona — a total of nearly 1,000 miles — to buy supplies. She hired a few young local workers, who poured concrete and bent metal tubes until a hoop house,

a simplified greenhouse, rose like a ribcage from the desert floor. Then a cold snap blew in, and they framed the walls in 27-degree weather.

Sekaquaptewa is a Federally Recognized Tribes Extension Program (FRTEP) agent, hired to support Indigenous agriculturalists

on tribal land. The program works to develop youth leadership, strengthen agriculture and support tribal communities to become more self-reliant. When Sekaquaptewa started in 2017, she asked locals around Hopi what would advance those goals. Workshops on growing food topped the list: information on pest control, starter seeds, soil fertility. A hoop house, she thought, would be a good teaching tool. She picked a spot behind a local school building overlooked by a silver Chinese elm and a protective rim of golden mesas and got to work.

But even as the structure rose, its future was uncertain: The FRTEP program is underfunded, with what little money it has distributed through competitive grants. That creates instability — and agriculture initiatives need constancy for success.

IN 1914, the federal government created the Cooperative Extension Service, a network of educators tasked with disseminating the agricultural research and technology developed at land-grant universities to farmers in need of it. The extension agents answered to the universities but were embedded in nearly every U.S. county, helping to increase farm productivity and spur rural economic development. Yet they rarely made it to Indigenous communities.

Even though agricultural assistance is often guaranteed by treaty, few agricultural programs existed in Indian Country by the mid-1900s. In the 1980s, tribal advocates asked Congress to level the playing field. The 1990 Farm Bill created what would become the Federally Recognized Tribes Extension Program, a parallel

program specifically for Native farmers.

In the first year, Congress allocated \$1 million to fund 12 offices. An average grant — about \$80,000 — covers agents' salaries and benefits, but leaves little for programming. Since its inception, FRTEP's budget has risen to about \$3 million per year, supporting 36 offices, mostly in the West. Despite the progress, an analysis from 2016 found that, on average, each reservation has just 0.1 agents, compared to three extension agents for every county. Though some communities find other ways to secure an agent — perhaps through their tribal colleges or universities, which receive separate funding — many lack agents altogether.

Yet Indian Country clearly needs extension agents. On average, Native-led farms are twice the size of other farms in the U.S., but their sales are three times smaller.

ERIN EUSTACE, 21, SAWED two-by-fours for the hoop house walls, undaunted by the cold snap's frigid temperatures. Jacketless, with wind-whipped hair, she seemed warmed solely by her enthusiasm for the day's work. During a short break, she said that having Sekaquaptewa as the local agent has been transformative, because she is able to navigate Hopi norms and polity.

All extension agents, county or tribal, respond to local needs — everything from teaching ranchers to deal with invasive weeds on large commercial operations to helping families grow backyard vegetables. But the program only works when communities trust agents. An agent might need to advise clients to change some long-held habits, whether planting practices, chemical use or financial recordkeeping.

"If I don't trust you, why would I change everything based on your word, when it's my business and my home that's at stake?" as Janie Simms Hipp, CEO of the Native American Agriculture Fund, put it.

Sekaquaptewa is Hopi, from Kykotsmobi Village. The Hopi Tribe's long agricultural history is

"Building this community trust is so doggone important that losing a program means, by my estimation, you're not ever gonna get it back."

Erin Eustace, right, and another worker place a beam while constructing a hoop house on the Hopi Reservation. **Irina Zhorov**

grounded in desert-adapted dry farming, so instead of challenging well-established practices, Sekaquaptewa has worked to "honor and support what's here," she said. At the same time, she was eager to "bring in other information that might be relevant in a good way." She started teaching irrigated organic gardening, for example.

"I feel like if a stranger comes and tries to teach things like this, it's not going to be taken too well," said Eustace.

But people listened to Sekaquaptewa, Eustace said. She recalled a workshop in which Sekaquaptewa, speaking Hopi, compared seeds to a woman, something that resonated with attendees, because women are traditionally Hopi seed keepers. A county agent unfamiliar with the tribe would likely not be as effective, Eustace said.

Still, county agents have one advantage Sekaquaptewa lacks: They are funded by a relatively stable mix of federal, state and local monies, while FRTEP agents like Sekaquaptewa have to reapply for competitive federal grants every four years. "We've had to fight for everything that we currently still have: land-base recognition, resources that they promised tribal people," Sekaquaptewa said. "We also have to fight each other for that pot of money." And in the last grant cycle, 20% of projects lost funding.

"Indian Country has been carpet-bagged to death," said Joe Hiller, who previously oversaw Arizona's tribal extension programs. "So building this community trust is so doggone important that losing a program means, by my estimation, you're not ever gonna get it back."

Tribal nations in Arizona, which receive the largest chunk of FRTEP funding, are comparatively lucky: They have seven offices, many of which have been winning grants for decades. The University of Arizona, which manages the agents, also has a novel hierarchy that makes it easier for the director of tribal extension programs, Trent Teegerstrom, to advance agents'

and tribes' interests. In other states, tribal agents can be isolated, both geographically and in terms of resources.

Jurisdictional and tax issues have also long complicated the matter between tribal and local governments. "(States and counties) don't feel an obligation to take care of it," said Hipp.

In its own documents, the USDA has called FRTEP funding levels "not sufficient," noting that the competitive grant cycle created "instability and inconsistency in marginalized, impoverished and underrepresented communities." Teegerstrom says some tribal leaders have told him they don't apply for FRTEP funding for fear of potentially defunding others tribes' meaningful initiatives. "The competitive cycle is definitely shortsighted," he said.

In 2018, Hipp asked Congress to reconsider the grant system and increase program support to \$10 million, as originally envisioned in the 1980s. Instead, the 2018 Farm Bill opened FRTEP monies to tribal colleges and universities.

Ross Racine, who helped establish FRTEP and retired after years with the Intertribal Agriculture Council, says the move further weakened the program. "A pie can only be divided up so much, and if you're going to invite more people to come eat pie, then the pie needs to be bigger. And they haven't done that."

Sekaquaptewa has not yet gone through a grant cycle. She holds the thought of it at bay, focusing instead on the work at hand. For now, she's building more garden beds, planning more workshops and rebuilding youth programs like 4H. She's trying to position Hopi within a broader push for food sovereignty. And the community has responded: When Eustace started attending Sekaquaptewa's workshops, in 2017, she was the only young person there. Now, more are getting involved. The youth show older attendees new techniques, while elders share dry-farming protocols.

"It's cool to see that," Eustace said. 🌸



Daryl Vigil, water administrator for the Jicarilla Apache Nation.
Courtesy of Bob Conrad

Q&A

‘This system cannot be sustained’

This year, tribal nations enter negotiations over Colorado River water.

BY ANNA V. SMITH

The Colorado River Basin is the setting for some of the most drawn-out and complex water issues in the Western U.S. In 2019, the Colorado River Drought Contingency Plan — a water-conservation agreement between states, tribal nations and the federal government for the basin, now in

its 20th year of drought — passed Congress. This year, it goes into effect.

2020 will also see the start of the renegotiation of the Colorado River Interim Guidelines. The guidelines, which regulate the flow of water to users, were created in 2007 without tribal consul-

tation and are set to expire in 2026. The 29 tribal nations in the upper and lower basins hold some of the river’s most senior water rights and control around 20% of its annual flow. But the tribes have often been excluded from water policymaking; around a dozen have yet to quantify their water rights, while others have yet to make full use of them. Most of the tribal nations anticipate fully developing their established water rights by 2040 — whether for agriculture, development, leasing or other uses. Drought and climate change are still causing shortages and uncertainty, however. Already, the Colorado River has dropped by about 20%; by the end of this century, it could drop by more than half.

High Country News spoke with Daryl Vigil (Jicarilla Apache, Jemez Pueblo and Zia Pueblo), water administrator for the Jicarilla Apache Nation. Vigil, the interim executive director of the Ten Tribes Partnership, helped co-facilitate the Water and Tribes Initiative, coalitions focused on getting increased tribal participation on Colorado River discussions. Those efforts are critical, Vigil says, “because left to the states and the federal government, they’ve already proven that they will leave us out every time.”

HCN and Vigil spoke about “the law of the river” — the colloquial term for the roughly 100 years of court cases, treaties, agreements and water settlements that govern the Colorado — as well as tribal consultation and climate change.

This interview has been edited and condensed for length and clarity.

Sometimes it can be hard to really understand the core value of water, because it gets so caught up in things like policies and laws and bureaucratic language. Could you boil it down a bit and explain what’s so important about this?

Through the Water and Tribes Initiative (in 2018), we did over a hundred interviews of all the major stakeholders in the basin: states, water providers, tribes, NGOs, conservation groups. And it was pretty amazing, to find out that when you talk to all these folks, almost universally they’re all committed; they have a personal relationship to the river as a living entity that needs to be sustained. And so there’s two different mind-sets looking at ’07 guidelines and some of the policy that’s been created around the river. One really looks at the Colorado River as a plumbing system, getting water to people who need it, versus the other end of the spectrum — when you start to look at tribes and others who have similar values, who look at it as a living entity, who look at it as an entity that provides life. And so we started to try to articulate traditional, cultural values and integrate that into current policy so that people can understand. Because we know

most people want to see a healthy, sustainable Colorado River, but they also have their constituencies that they protect. And so, how is it that we bridge that divide? Because people really do care about the basin, and they really do want healthy environments and healthy ecosystems. And so that's proven part of the conversation that we were having — that the next set of guidelines absolutely needs to be able to capture not only the water-delivery issues that already are at the forefront, but really start to address the cultural, environmental, traditional values of the Colorado River and integrate that into the next set of planning. Because if we don't, this system cannot be sustained.

How does climate change enter the discussion?

We're already seeing the impacts. And I think that's something that absolutely has to be considered in the planning of the future, because right now — with 41 million people in the basin — as of 2010, the imbalance between supply and demand is already a million acre-feet. It's projected, according to the basin study, to be 3 million acre-feet by 2060. We continue to act surprised when something new comes about in terms of a fire or a flood or an incredible drought. We're making an impact on this planet, and it's not a good one. That's where, with the Ten Tribes Partnership, (we're) really trying to make sure that we integrate those traditional, cultural values and spiritual values that the tribes have for the river as we move forward. Because if we're not going to address it, it looks pretty catastrophic to us. And so I think, when we start talking about climate change, absolutely pushing to make sure that we're thinking about a mindset of how we fit into nature, rather than nature fitting into us.

These kinds of discussions, compromises and negotiations can often, especially around water in the West, go on for decades. What gives you momentum to keep working at it and putting so much energy into it?

A few different things. You know, those hundred-plus interviews that we did, we got to know people on a real personal basis. We got to know who they are and their commitment — many of these people have had decades working in the Colorado River Basin and doing the best that they could, given the structure. And everybody understands and agrees that the current system is not sustainable, and it doesn't work; it's not inclusive of the voices that need to be included into this process. And so that gives me great hope. And then you see things like the pulse flow, where they got water all the way to the Sea of Cortez. And to look at the faces of those Mexican

kids who had never seen water in the Colorado River in their whole life come out, and just the wonder and the magic in their eyes of seeing what water does.

And then we just recently had our second basin-wide workshop and gathering up in Phoenix. We had a hundred-plus of the major stakeholders: states, feds, water providers, tribes and four tribal chairman present at this particular meeting, which is just huge, a bunch of people all in this room all talking about their joint commitment to the river. It's moving to me because, I mean, I think that's what it's going to take.

Every tribal nation is different, but how might a tribal nation view water similarly or differently than a city or a state or the federal government in terms of water and management?

That's the thing that we're really trying to create awareness of. Because in the Colorado River Basin alone, you have 29 distinct sovereign entities — geographically, culturally, languages, and mindsets and traditions and culture in terms of how they think about the river. A lot of it's really about the same, but in terms of the reverence and the spiritual connection that most tribes have, they look at it in different ways. For instance, invasive species of fish: You get tribes who are really aggressive about wanting to remove them because they're not part of the natural environment that was always there. Then you get other tribes who are just like, "Eh, who cares," and it's not on their radar. And that's why it's important that a conversation about the next set of guidelines for the Colorado River has to include all 29 tribes — in terms of at least the opportunity to participate and at least having the information to determine whether they want to or not.

What are some big things that you would like people to better understand about the discussions around water in the Colorado River Basin?

I would like them to understand, from a tribal perspective, the incredible role that tribal water already plays in the basin. The other thing I would like people to understand is that this current law of the river is not sustainable. At some point in time, there's collapse. And I think if we don't address it quickly, that collapse could happen sooner than later. I really would like to have them understand that the way that the law of the river is structured — upper, lower basins, and how they're managed differently, and how there's different requirements and how states are engaged — it's really complex and doesn't make any sense, and, ultimately, I don't think it's going to get us where the broader consensus wants us to go in terms of a healthy, sustainable river, and still provide water to all living creatures and plants in the basin.

“We know most people want to see a healthy, sustainable Colorado River, but they also have their constituencies that they protect.”

What are tribal nations bringing to the conversation that was lacking in the 2007 agreements?

I think absolutely a point of view about the sacredness of the river that most people really do share, whether they're tribal or not. And then the other thing is the unique role that tribes are going to continue to play in the West — the large land areas and our resource development and how we move forward. It creates this mindset, in my mind, of building a pathway of who we want to be in the future. But a huge thing, too, is tribes bring certainty to the table. You know, it's like, wow, what if we negotiated together about being able to move water where it needs to move, and work from a standpoint of collaboration and need rather than protect, defend and win, lose.

That's a good point. Because that's how water is so often talked about, as somebody versus somebody.

And I think that's what the law of the river does. It's contentious, and it automatically puts you in a position to protect and defend. And if that's the foundation we're operating from, what does that get us? It's just going to get us this recurring, vicious cycle that we've been stuck in. The work that we're doing at the partnership and Water and Tribes Initiative hopefully has broader implications in terms of tribal sovereignty, and looking at tribal sovereignty from the standpoint of an opportunity to create your future. ✨

As temperatures rise, Arizona sinks

Climate change and unregulated wells are depleting the West's groundwater reserves.

BY JONATHAN THOMPSON

ARIZONA IS SINKING. The combination of groundwater pumping and warmer temperatures is shrinking aquifers and lowering water tables. And as the land subsides, fissures open, 2-mile wounds that devour infrastructure and swallow livestock. Four of Arizona's five economic pillars — cattle, cotton, citrus and copper — use huge amounts of water, while the fifth, the state's climate, is changing, making water scarcer. Development and growth are intensifying the problem, despite relief from state laws and the existence of the Central Arizona Project, which began delivering Colorado River water to Phoenix and Tucson in the 1980s.

Today, where subsidence is worst, groundwater pumping isn't even monitored, and big agricultural and anti-regulatory ideologues try to stymie any efforts to keep tabs on how much water is being pumped. Big corporate farms are sprouting in areas without CAP water and virtually no regulation on groundwater pumping. More and more farms produce alfalfa, one of the thirstiest crops on Earth; the number of acres in hay production more than doubled between 1987 and 2017, and tonnage nearly tripled. Meanwhile, Arizona is getting even hotter.

That kind of heat, according to a recent study published in *Nature Communications*, strains groundwater reserves, too. The study "Evapotranspiration depletes groundwater under warming over the contiguous United States" found that warming also stresses plants, forcing them to suck up more groundwater and further

lowering water tables. "These changes show that even the most moderate warming projection can shift groundwater surface water exchanges and lead to substantial and persistent storage losses," the study notes, adding that with just 1.5 Celsius (2.7 Fahrenheit) warming, the nation's groundwater reservoirs collectively will lose about four times the total volume of Lake Powell over four years.

Warming stresses plants in the same way in the arid West, Laura Condon, an assistant professor of hydrology at the University of Arizona and one of the study's authors, said. Since the water tables here are deeper, however, the effect on groundwater is less pronounced — at least under natural conditions. But when crops are stressed by warming, more groundwater pumping is needed. "Humans are short-circuiting the natural system," Condon said.

In other words, Arizona is sinking, getting hotter and getting thirstier. Groundwater pumping is increasing, water tables are plummeting, and many rural residents are watching their wells go dry, according to a recent investigation by Rob O'Dell and Ian James for the *Arizona Republic*. Not long ago, the football field at western Arizona's Salome High School was reduced to dust thanks to water restrictions at the groundwater-dependent town, which has a number of large corporate alfalfa farms nearby.

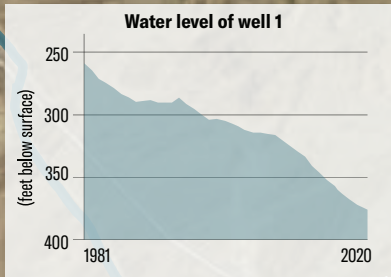
What does all this look like on the ground? The graphic shows one farming area and its subsidence zone, southwest of Salome. ☀

In 2014, Fondomonte Farms purchased 10,000 acres in rural La Paz County, including many of these fields, for \$47.5 million. Fondomonte is a wholly owned subsidiary of the Saudi Arabian food and beverage giant Almarai, which boasts that it imports 100% of the feed for its livestock from abroad

"to preserve the local water supply."

Fondomonte converted all its fields to alfalfa, which it cuts and bales, loads into shipping containers, and sends to Saudi Arabia to feed 100,000 dairy cows. Fondomonte says it uses "a combination of highly efficient subsurface drip and pivot irrigation" at its Arizona farms. But what that means in terms of water use is a mystery, since groundwater pumping in that part of Arizona is unmonitored and virtually unregulated.

Water-level depletion case study in La Paz County, Arizona



Total subsidence, 2010-2018

0 - 0.4 inches

0.4 - 0.8 inches

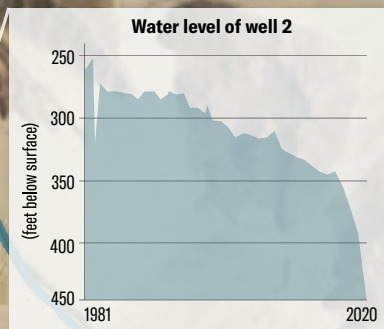
0.8 - 1.6 inches

1.6 - 2.4 inches

2.4 - 3.9 inches

3.9 - 5.9 inches

No data



Water tables in this area are dropping rapidly — and have been since before Fondomonte arrived. Hydrographs on Arizona Department of Water Resources monitoring wells show that

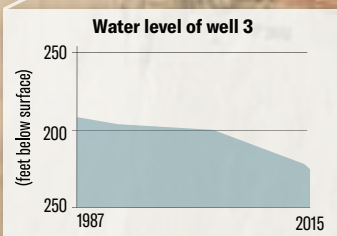
groundwater levels have plummeted by 100 feet or more since the 1980s.

The farm also sits in the center of a known subsidence area, parts of which have sunk approximately 14.5 inches since 1993, according to state data.

The 336-mile Central Arizona Project canal, carrying water from the Colorado River, passes near the Fondomonte alfalfa fields, but the farm does not get any of its water. The canal runs to the Phoenix and Tucson metro areas, where its water helps reduce groundwater pumping. The canal loses approximately 16,000 acre-feet (5.2 billion gallons) of water each year to evaporation, a figure that will only increase as temperatures rise. It loses about 9,000 acre-feet (2.9 billion gallons) annually from water seeping or leaking through the concrete.

It may seem strange that a Saudi company would ship hay all the way from Arizona. But it doesn't have much choice: The Saudi government banned alfalfa-growing in its own nation because farms had sucked its groundwater reserves dry. Doing the same in Arizona is, according to a company press release announcing the sale, "in line with the Saudi government direction toward conserving local resources."

Sources; Arizona Department of Water Resources, La Paz County Property Records, U.S. Department of Agriculture, Arizona Geological Survey, Central Arizona Project.



ON THE ROAD TO 50

Dramatic changes, and how to cover them

BY GREG HANSCOM



Hundreds of youth climate activists demonstrate outside of BlackRock's offices in San Francisco, California, as part of a nationwide strike coinciding with the United Nations climate summit.
Justin Sullivan / Getty Images

“The establishment is hell-bent on holding them back, but one wonders how long the dam will hold.”

It was June 28, 1983, and things had gone seriously sideways at Glen Canyon Dam. Spring thaw had sent torrents of meltwater into the Colorado River, and the Bureau of Reclamation was desperately trying to get that water through the works before Lake Powell spilled over.

The 710-foot engineering wonder “was shaking, vibrating madly,” T.J. Wolf wrote in this publication in December of 1983. Then he conjured the scene one might have witnessed from the bridge just downriver from the dam:

“You would have seen the steady sweep of the spillway mouths suddenly waver, choke, cough, and then vomit forth half-digested gobbets of steel reinforced concrete (bad, very bad), spew out blood-red water (My God, it’s into bedrock), and finally disgorge great red chunks of sandstone into the frothy chaos below the dam.”

Wolf imagined dams downstream toppling like dominoes, wreaking watery havoc and dooming the Bureau itself. The son of a Bureau engineer, he was aghast at the prospect, though he knew that some would cheer the destruction.

These days, throughout the West, there are new rumblings. They’re coming from a rising generation and resurgent tribal nations and communities of color, demanding justice and political reform. The establishment is hell-bent on holding them back, but one wonders how long the dam will hold.

All this is on my mind as I return to *High Country News* after 14 years. I got my start here, under Ed and Betsy Marston. Now I’m back to take the publisher’s seat as Paul Larmer concentrates on raising \$10 million for *HCN*’s 50th anniversary campaign.

The Old West has retrenched in the past few years. A sagebrush rebel runs the Bureau of Land Management. Environmental policies have been rolled back. Ammon Bundy is on a revival tour, and there’s talk of putting cows back on the Escalante.

But there’s no denying the rumbling. We heard it at the protests against the Dakota Access Pipeline, and we see it in cities from Seattle to Salt Lake City, where residents are demanding action on climate change. As I write, I see it in the surge of support for a democratic socialist who is vying for the White House, buoyed by primary voters from Colorado to California.

A new, diverse, justice-minded generation is rising, and the political edifice is beginning to rattle. There’s a feeling of inevitability to it — it’s a simple question of demographics, right? But we’ve seen the inevitable halted before.

In 1983, Glen Canyon Dam held fast. Its demise will come, but slowly, as Lake Powell fills with sediment. It will be decades before the hydroelectric turbines whirl to a stop and the river again has its way.

I hope that *High Country News* will still be here to tell the story. We’re 50 years in, thanks to you, dear readers. May there be 50 more. 🌸

“We decided to donate monthly to HCN because we value the diverse perspectives, excellent reporting and writing, and the focus on the complex issues facing the Western U.S. Thanks!”

— Naomi & John Bishop, Portland, Oregon, Sustainers’ Club members

Happy 50th anniversary, High Country News! Thanks to the Sustainers Club for their help in reaching this milestone. Readers, please join the club. Your support will carry the magazine into the future. Visit hcn.org/support/monthly-giving.

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By Rena Priest

A captive orca and a chance for our redemption

O

n Aug. 8, 1970, Tokitae was one of six juvenile orcas abducted from the waters off Washington state. Boats, planes and bombs were used in the hunt and resulting capture, and five orcas died. Juveniles were separated from their pods and netted off to await transport into captivity at amusement parks. During those weeks between capture and transport, the adult orcas never left the abduction site, and the sound of their grief-filled keening rang through the cove.

When Tokitae arrived at the Miami Seaquarium on Sept. 23, 1970, she'd already been named by the veterinarian who oversaw her capture and transport. In Chinook jargon, Tokitae means, "Bright day, pretty colors." But in the 1960s, Miami began rebranding itself, marketing itself as a destination with "subtle sex appeal," and Tokitae was given a new stage name: Lolita.

It's believed that the character Lolita in Vladimir Nabokov's notorious novel of that name was inspired in part by the story of a real girl — 11-year-old Sally Horner — who was abducted in 1948 and driven across the country to be exploited and abused by her captor. Horner's nightmare ended with her escape after 21 months in captivity. She died in a car accident two years later, but I imagine she was happy to have those years of freedom — a chance to live as a normal teenager.

The scientific name for the orca is *Orcinus orca*. In Latin, orcinus means, "kingdom of the dead," or "belonging to Orcus," god of the underworld. In the Lummi language, orcas are called *Qwe lhol mech ten*, "Our relations under the waves." To my tribe, the Lhaq' te'mish of the Salish Sea, they are people. In our stories, they have societies and a culture similar to our own.

They are the first harvesters of salmon, and, like Coast Salish tribes, they are matriarchal. Most remain by their mothers' sides for their entire lives. The matriarchs are the keepers of the wisdom — the decision-makers, the leaders on whom the survival of their

pods depend. Lolita's mother is presumed to be a 91-year-old L-pod matriarch known as "Ocean Sun."

Serious observation of orcas only began in the 1960s. In 1971, as head of marine mammal research at the Canadian Department of Fisheries and Oceans, Michael Bigg, a Canadian marine biologist, conducted a census, which ultimately found that, at most, there were only 350 orcas left. Previously, it had been assumed that regional orcas numbered in the thousands. The census was prompted by the increased interest in orca capture for display in marine parks. Between 1962 and 1973, 47 orcas were harvested from the British Columbia and Washington coasts; at least 12 orcas died.

Since then, scientists have broken Salish Sea orcas into distinct types: residents (fish and squid eaters), transients (mammal eaters), and offshore (gray whale eaters). Lolita is from the L pod — the largest of the southern resident sub-pods, though only 35 L-pod orcas survive in the wild. The endangered status

Illustration by Corey Brickley / HCN



of the southern resident killer whales has placed them at the center of a fight to restore health and habitability to the Salish Sea bioregion. Their world is a mirror for our own: What happens to them happens to us, and today, they are facing extinction.

I arrived at the Miami Seaquarium on a sunny Saturday in December, during peak tourist season. I wanted to see for myself the whale I'd read so much about, and the place where she has spent the last 49 years.

I surrendered \$51.35 for a ticket and made my way toward the orca arena. The area was shuttered by metal roll-up doors, and the wide concrete hallway was devoid of other patrons. A walk through the rest of the park revealed that it was just as sparsely populated: Vendors stood idle at concession counters, waiting to sell dipping dots or French fries. Grade-schoolers on a class trip splashed about at the underwater touch tank. At the penguin exhibit, an elderly couple stared into the display window, viewing penguins that stood listlessly in the 80 degree heat. Nearby, two children, completely oblivious of the penguins, played with their stroller.

At the edge of a concrete ditch, I leaned against a rail. When I looked down, I noticed two giant sea turtles swimming in the shallow water. One of the turtles swam toward me, bumped into the wall, turned and swam away. When he reached the other side, he bumped into the wall and turned back again. Swim. Bump. Swim. Bump. I wondered if he had been swimming in circles and bumping into walls all day. Or maybe all day, every day, for decades.

As I wandered through the park, I realized the most astonishing thing about the place wasn't the captive wildlife. It was that on this beautiful waterfront, in this coveted real estate market, in this era of enlightened consumers, Seaquarium continues to exist at all.

Miami tourism has come a long way since Lolita's arrival

“If orcas are my relations under the waves, and if Tokitae dies alone, 34,000 miles from home, and if her body is quietly disposed of after a lifetime of exploitation for profit, are kidnapping, enslavement and murder the crimes that have been committed?”

at Seaquarium in 1970. As the world's busiest launch point for cruise ships, the port of Miami is undergoing a \$1.5 billion-dollar upgrade, designed to create a lush new experience for visitors. The weekend of my Seaquarium visit, the port welcomed 52,000 visitors in a single day. Meanwhile, a few miles away at the Convention Center, Miami Art Basel drew an estimated 83,000. Hundreds of galleries there paid upwards of \$12,000 for a booth. Chic parties and elegant artist's receptions continued deep into the night in stylish Miami Beach hotels and nightclubs.

The bustle of well-heeled world travelers in a shining seaport, the haughty glamour and celebrity of high art — it all stands in stark contrast to this relic of entertainment: an aging whale in a crumbling theme park.

For the first 10 years of her captivity, Lolita shared a tank with a male orca named Hugo. Hugo exhibited what scientists call “stereotypy,” a kind of compulsive behavior induced by confinement. He repeatedly bashed his head into the side of the tank until he eventually died of a brain aneurism. The pool where Lolita has spent most of her life — where she watched Hugo die — is 80 feet long by 35 feet wide, with a depth of 20 feet. Lolita herself is 22 feet long. In the wild, orcas dive to depths of several hundred feet.

If I wanted to understand Lolita's world in an objective way, I needed help. At a conference for college mathematics teachers, workshop participants were given the tank's dimensions and asked to measure it to human scale. Answers ranged from 130² feet to 170² feet.

How big is that? Think of an area rug 13 feet long by 10 feet wide. Now imagine spending 10 years there, with another person. Then 39 more years there alone.

“This is just making me horribly sad,” said one participant. “Is there anything that's in place to try and get her a bigger home? Or is this just her life forever?”

“What's the standard captive killer

whale tank size?” asked another.

“It's supposed to be at least 48 feet wide,” I explained. Minimum standards require that a captive whale must be able to swim twice its length in any direction. “So it's not even legal,” said another participant.

Debate about Tokitae's tank has been ongoing for more than a quarter of a century. In the 1990s, Washington Gov. Mike Lowry and Secretary of State Ralph Munro launched the “Free Lolita!” campaign. In 2003, animal rights activist Russ Rector called on officials to issue code violations against the park.

In 2005, due to their rapidly dwindling numbers, southern resident orcas were granted protection under the Endangered Species Act. In 2015, the act's protection was specifically extended to Tokitae. It was hoped that the law would mandate her release. Instead, her endangered status worked against her, with some claiming that freeing her would make her vulnerable to “serious harm.” In September of 2017, Hurricane Irma struck Miami, forcing the evacuation of 6.5 million people. Seventy-five people died. Lolita was left behind.

An orca's brain has the tissue and structure necessary to support high-order thinking and complex processes such as language, self-awareness and consciousness of visceral feelings, like empathy, embarrassment and loneliness. Orcas are highly social with unique cultures and languages. Tokitae's group, the southern resident killer whales, eat only salmon and squid and live in the waters off the southern tip of Vancouver Island. There are three subpods — J, K and L — and Tokitae is from L pod. Each pod has a distinct set of shared vocalizations — a pod song. It's not inherent; it's learned. Tokitae still sings her pod song. After 49 years, she hasn't forgotten.

Pat Sykes, a former Seaquarium employee, remembered Lolita's early days at the aquarium, when she was still just a baby. “The skin

on her back cracked and bled from the sun and wind exposure,” Sykes said. “She wouldn’t eat the diet of frozen herring. ... At night, she cried.”

Throughout history, captivity has been a major U.S. industry. According to Justice Department Statistics, since 1970, the year Tokitae was captured, the national incarceration rate increased by 700%. As of November 2018, more than 14,000 immigrant children are incarcerated in camps operated by the federal government. Since 2017, at least six children have died in custody, or immediately upon release.

In 1925, more than 60,000 Native American children were removed from their homes and placed in boarding schools. Many experienced treatment tantamount to torture. Many ran away. Some died, trying to find their way home. Between 1879 and 1918, nearly 200 children were buried at Carlisle Indian Industrial School in Pennsylvania. There were at least 150 other such schools in operation during the same period.

A disproportionate number of Indigenous women go missing every year, enough to spark international outcry from tribal communities across the United States and Canada. Many of the women are never found, and some are found murdered. The movement to raise awareness of this horror is referred to as the crisis of Missing and Murdered Indigenous Women. At a recent Lummi Nation gathering, women sang and danced in honor of our lost sisters. Little Lummi girls held signs saying, “MMIW — I’m not next.”

If vulnerable people are taken from their families against their will, and they die, the charges against the perpetrators are kidnapping, and murder. If orcas are my relations under the waves, and if Tokitae dies alone, 34,000 miles from home, and if her body is quietly disposed of after a lifetime of exploitation for profit, are kidnapping, enslavement and murder the crimes that have been committed?

Because poisons accumulate

in their blubber, orcas are more vulnerable than most animals to environmental toxins. Problems associated with chronic exposure to toxins intensify when orcas go hungry and blubber is metabolized into their bloodstream. Toxins are also passed through the mother’s milk, but approximately 70% of southern resident orca pregnancies are lost due to nutritional stress. There simply aren’t enough fish anymore.

On Sept. 25, 2019, the United Nations released a report by its Intergovernmental Panel on Climate Change, which presented the stark truth about rising temperatures, ocean acidification, declining oxygen levels and threats to crucial marine ecosystems. The impact of all these changes, the report noted, will be felt in increased weather disasters, rising sea levels, the proliferation of pathogens and threats to human food security.

This grim assessment by the U.N. Panel on Climate Change has one major purpose: It is supposed to influence the decisions of the world’s leaders. But those leaders don’t seem convinced. Across the Western Hemisphere, Indigenous communities fight to protect our homelands against destructive practices by governments and corporations. But we consistently come up against a different world view: one that has no interest in protecting salmon or our relations under the waves, doesn’t believe in the interconnection of all things, and stands apart from the rest of nature, insisting that humans “have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth.”

As a species, humans have followed this biblical directive to the exclusion of all reason. There are environmental protection laws, but those continue to place the health of the planet below the health of the bottom line.

Last fall, I went fishing with a Lummi elder — a fisherman with more than 40 years of experience on the water. The boat broke down

20 minutes from shore. As we waited for a tow, a skiff made its way toward us. It was another pair of fishermen — a father and son out since daybreak.

“We’re starving out here,” said the man. “We only caught one fish.”

After accounting for fuel, their take-home pay would be .08 cents. In Lummi culture, a fisherman is esteemed as someone who feeds the people. But this has become increasingly difficult.

After the boy and his father motored away, the elder fisherman sat back in a folding chair and gave a heavy sigh, “‘Stick and stay and make her pay,’ is what we say. ... ‘Be one of the first ones on the water and one of the last to leave.’ Live by those rules and sooner or later you’re going to catch ‘em. I guess not anymore.”

This story was recorded at Klallam in 1925:

“These people were blackfish (orcas). They invited him in and gave him something to eat. One day he fell asleep and when he woke he heard people outside the house as though they were lifting something heavy. Then they were quiet. He went out for he thought they had a whale. He saw nothing but a diver. He asked what they were trying to move. They said they wanted to move the whale, but it was nothing but a diver duck. He took the duck by the leg and moved it. They thought he was a great man to be able to move such a monster. They asked him what power he wanted.”

This story says two things: First, nature is reciprocal. It will nourish us and give us opportunities to return the favor. Second, if the blackfish want their whale moved, and we move her, they will grant us power.

When I entered the orca arena, I walked up to the edge of Tokitae’s tank. She swam close — right up against the wall — and stayed there, suspended at the surface. A couple of Seaquarium employees stood watch, but aside from them, I was alone with her. I sang her a song, and she made vocalizations back to me. Eventually, a noisy school group

and other people trickled in. I took a seat to watch the show. Rock ‘n’ roll blared through the loudspeakers, a young woman in a wetsuit tossed fish into Tokitae’s mouth, a video on a Jumbotron talked about how Tokitae was loved and cared for while her wild relatives were going extinct. I felt horribly sad.

Then, there was a new feeling. Seeing Tokitae there in that tiny pool, knowing she’d spent nearly five decades there, raised doubts. What if returning her to the Salish Sea was the wrong thing to do? Even with the sea sanctuary proposed for her retirement, how would she adjust? I stayed until the young employees told me to leave, but on the way to my hotel, the question split me in two. It was wrong that she was there to begin with, but what if we were wrong on all sides on what to do with her?

I drove out to the lighthouse on Key Biscayne. I rolled up my pants and waded in the ocean. I looked out to the water and asked for an answer. As rarely ever happens, an answer came: In 1970, when Tokitae was taken, the courts didn’t see her abduction as a crime. But if the capture was carried out today, the perpetrators would be arrested and prosecuted, and the whales would be released.

We have ended the practice of orca abduction because it is brutal. Now it’s time to take another step. If the blackfish want their whale moved, and we move her, they will grant us power; the power to heal our relationship with the natural world. ✨

Rena Priest is a poet and a member of the Lhaq’temish (Lummi) Nation. Her literary debut, Patriarchy Blues, was honored with a 2018 American Book Award. Her most recent collection, Sublime Subliminal, was selected as the finalist for the Floating Bridge Press Chapbook Award. She holds an MFA from Sarah Lawrence College.

This article was written with the support of the National Geographic Explorers program.



Cornfields, Adams, Nebraska.

PARCEL ID: NE060050N0080E0SN290ANE0H

INDIGENOUS CARETAKERS: Kansas (Kaw Nation)

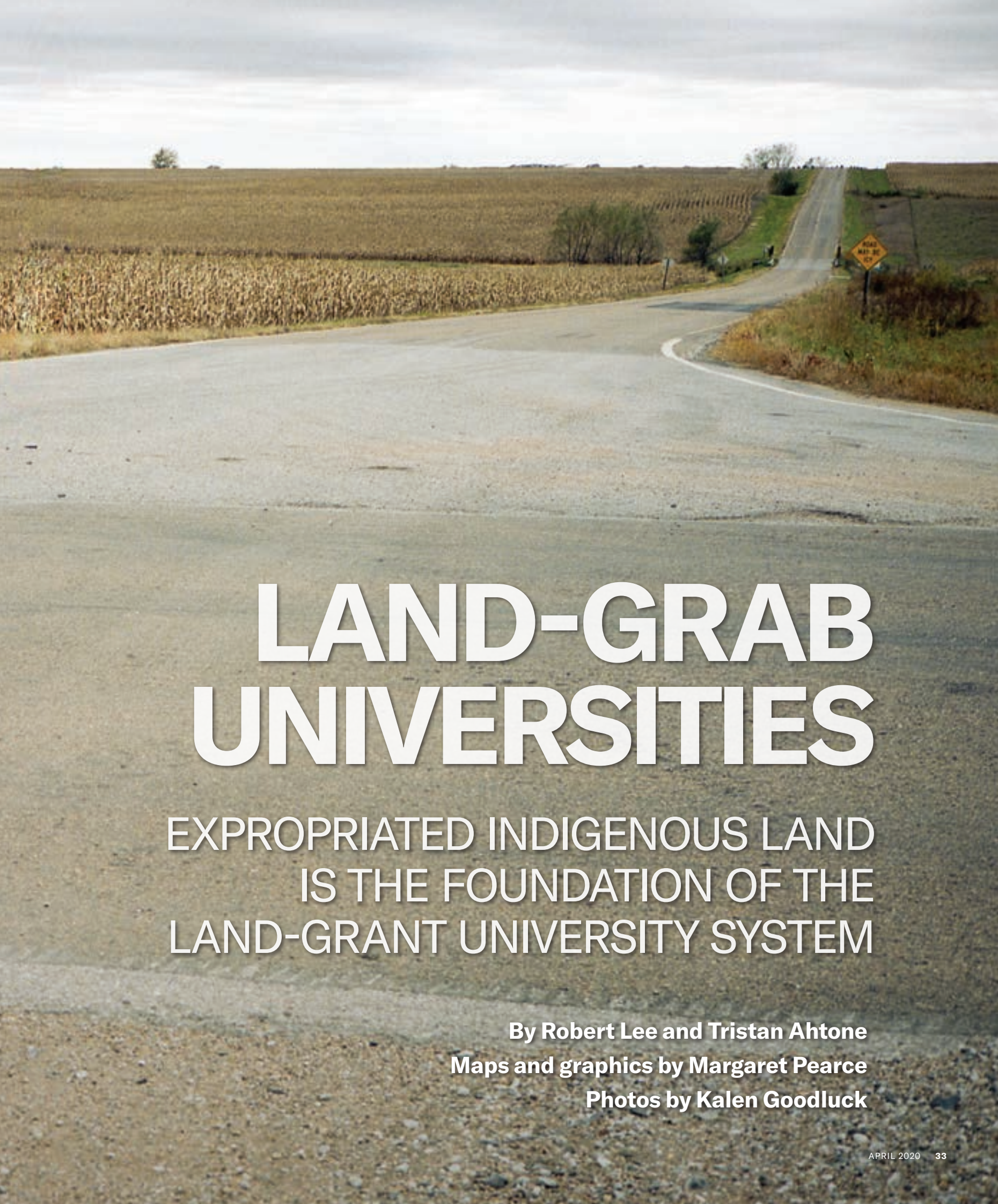
OWNERSHIP TRANSFER METHOD: Ceded by treaty, June 3, 1825

GRANTED TO: State of Ohio

FOR THE BENEFIT OF: Ohio State University

AMOUNT PAID FOR INDIGENOUS TITLE: \$0.93

AMOUNT RAISED FOR UNIVERSITY: \$88.79

A photograph of a paved road curving through a rural landscape. The road is light gray and curves from the foreground towards the right. On the left side of the road, there are fields of mature corn. On the right side, there is a grassy shoulder and a yellow diamond-shaped road sign that reads "ROAD MAY BE ICY". The background shows a flat horizon under a cloudy sky.

LAND-GRAB UNIVERSITIES

EXPROPRIATED INDIGENOUS LAND
IS THE FOUNDATION OF THE
LAND-GRANT UNIVERSITY SYSTEM

By Robert Lee and Tristan Ahtone
Maps and graphics by Margaret Pearce
Photos by Kalen Goodluck

On August 29, 1911, a Yahi man known as Ishi came out of hiding near Oroville, California. He had spent decades evading settlers after the massacre of his community in the 1860s and had recently lost the last of his family. Whisked off to the University of California’s anthropology museum, he was described by the press as the “last wild Indian.” Ishi spent his final years living at the museum. When

he wasn’t explaining his language to researchers or making arrow points for visitors, he swept the floors with a straw broom as a janitor’s assistant. In return, he was paid \$25 a month by the same university that sold thousands of acres of his people’s land out from under him while he hid out in forests and river canyons.

Ishi may be known in Indian Country and to California public school students, but his story remains mostly obscure — though considerably less so than that of the millions of acres of Indigenous land sold to endow the land-grant universities of the United States.

In 1862, President Abraham Lincoln signed the Morrill Act, which distributed public domain lands to raise funds for fledgling colleges across the nation. Now thriving, the institutions seldom ask who paid for their good fortune. Their students sit in halls named after the act’s sponsor, Vermont Rep. Justin Morrill, and stroll past panoramic murals that embody creation stories that start with gifts of free land.

Behind that myth lies a massive wealth transfer masquerading as a donation. The Morrill Act worked by turning land expropriated from tribal nations into seed money for higher education. In all, the act redistributed nearly 11 million acres — an area larger than Massachusetts and Connecticut combined. But with a footprint broken up into almost 80,000 parcels of land, scattered mostly across 24 Western states, its place in the violent history of North America’s colonization has remained comfortably inaccessible.

Over the past two years, *High Country News* has located more than 99% of all Morrill Act acres, identified their original Indigenous inhabitants and caretakers, and researched the principal raised from their sale in the late 19th and early 20th centuries. We reconstructed approximately 10.7 million acres taken from nearly 250 tribes, bands and communities through over 160 violence-backed

land cessions, a legal term for the giving up of territory.

Our data shows how the Morrill Act turned Indigenous land into college endowments. It reveals two open secrets: First, according to the Morrill Act, all money made from land sales must be used in perpetuity, meaning those funds still remain on university ledgers to this day. And secondly, at least 12 states are still in possession of unsold Morrill acres as well as associated mineral rights, which continue to produce revenue for their designated institutions.

The returns were stunning: To extinguish Indigenous title to land siphoned through the Morrill Act, the United States paid less than \$400,000. But in truth, it often paid nothing at all. Not a single dollar was paid for more than a quarter of the parcels that supplied the grants — land confiscated through outright seizure or by treaties that were never ratified by the federal government. From the University of Florida to Washington State University, from the Massachusetts Institute of Technology to the University of Arizona, the grants of land raised endowment principal for 52 institutions across the United States.

By the early 20th century, the grants had raised \$17.7 million for university endowments, with unsold lands valued at an additional \$5.1 million. If those sums sound paltry today, bear in mind that places like the University of Nebraska-Lincoln matriculated just 20 students to its first class in 1869. Contemporaries not only welcomed the grants as “a very munificent endowment,” they competed to acquire them to found new colleges or stabilize existing institutions. The money provided interest income, inspired gifts and boosted local economies, which is why a 2014 study called it “the gift that keeps on giving.”

Altogether, the grants, when adjusted for inflation, were worth about half a billion dollars.

Chances are you have heard land acknowledgements recited at

To extinguish Indigenous title to land siphoned through the Morrill Act, the United States paid less than \$400,000. But in truth, it often paid nothing at all.



Niles Canyon Railway, Sunol, California.

PARCEL ID: CA210040S0010WOSN020AE½SWAL

INDIGENOUS CARETAKERS: Chap-pah-sim; Co-to-plan-e-nee; I-o-no-hum-ne; Sage-womnee; Su-ca-ah; We-chil-la

OWNERSHIP TRANSFER METHOD: Seized by unratified treaty, May 28, 1851

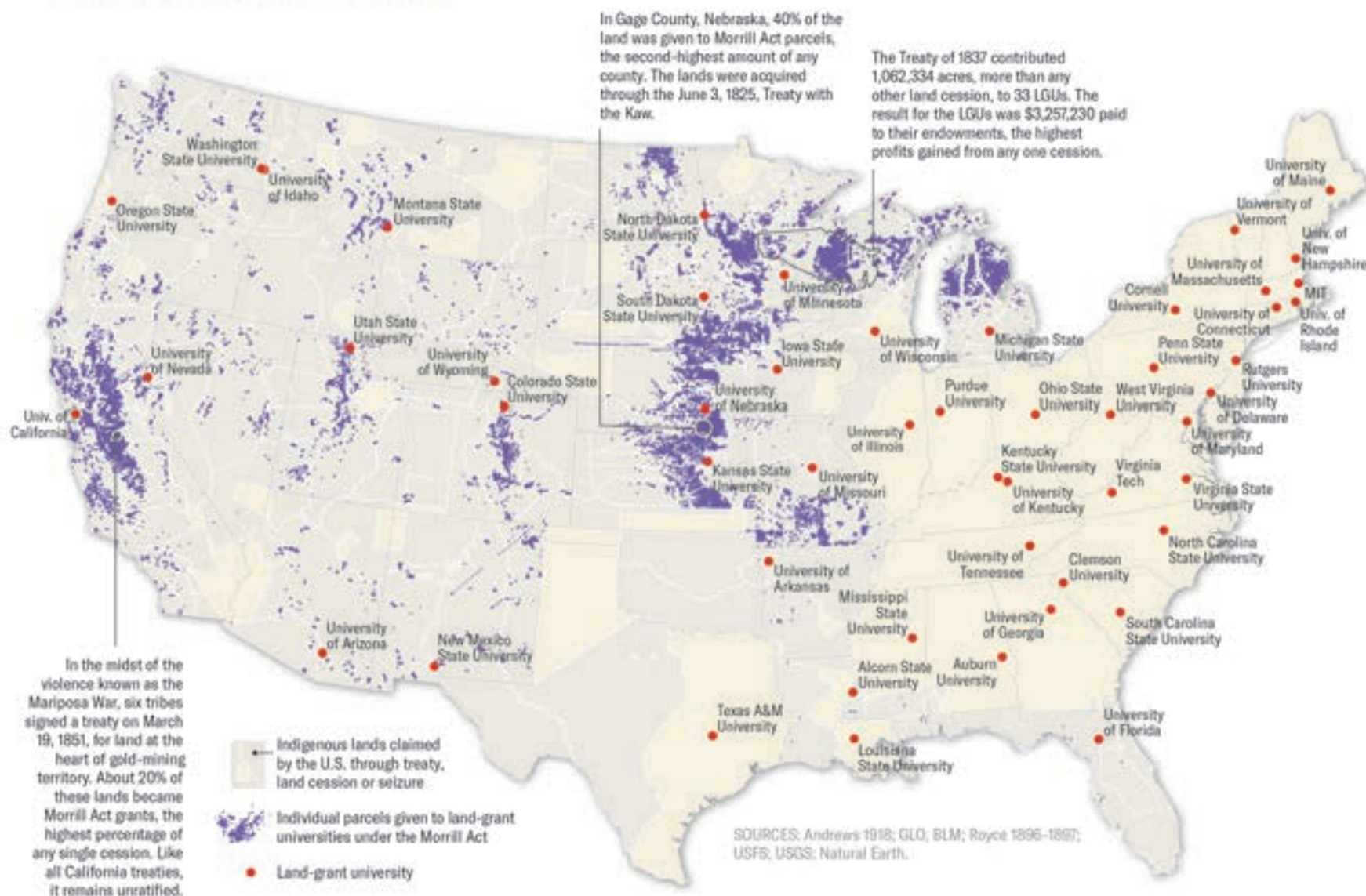
GRANTED TO: State of Alabama

FOR THE BENEFIT OF: Auburn University

AMOUNT PAID FOR INDIGENOUS TITLE: \$0

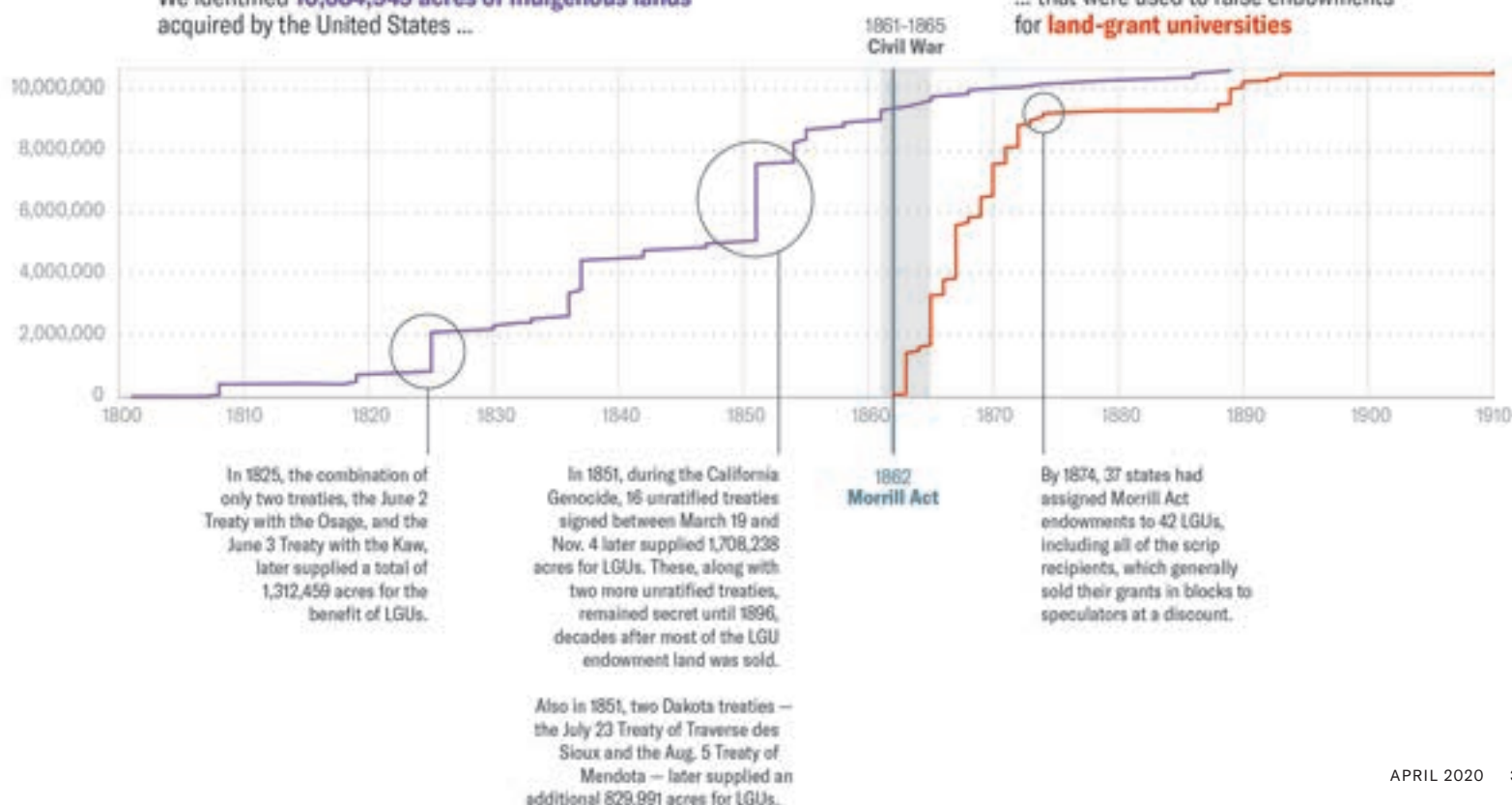
AMOUNT RAISED FOR UNIVERSITY: \$72.01

The Morrill Act gave **79,461 parcels of Indigenous lands**, totaling about **10,700,000 acres**, to **52 land-grant universities (LGUs)** to fund their endowments.



We identified **10,684,949 acres of Indigenous lands** acquired by the United States ...

... that were used to raise endowments for **land-grant universities**



“You can point to every treaty where there’s some kind of fraud, where there’s some kind of coercion going on, or they’re taking advantage of some extreme poverty.”



Fort Lawton Post Cemetery, Seattle, Washington.

PARCEL ID: WA330250N0030E0SN150AN½NESC
INDIGENOUS CARETAKERS: Duwamish; Suquamish
OWNERSHIP TRANSFER METHOD: Ceded by treaty, Jan. 22, 1855
GRANTED TO: State of South Carolina
FOR THE BENEFIT OF: Clemson University and South Carolina State University
AMOUNT PAID FOR INDIGENOUS TITLE: \$3.91
AMOUNT RAISED FOR UNIVERSITY: \$58.06

many of these universities, formal statements that recognize the Indigenous peoples who formerly possessed the lands those colleges now stand on. What many of these statements miss is that land-grant universities were built not just on Indigenous land, but with Indigenous land. It’s a common misconception, for instance, that the Morrill Act grants were used only for campuses. In fact, the grants were as big or bigger than major cities, and were often located hundreds or even thousands of miles away from their beneficiaries.

Today, these acres form the landscape of the United States. On Morrill Act lands there now stand churches, schools, bars, baseball diamonds, parking lots, hiking trails, billboards, restaurants, vineyards, cabarets, hayfields, gas stations, airports and residential neighborhoods. In California, land seized from the Chumash, Yokuts and Kitanemuk tribes by unratified treaty in 1851 became the property of the University of California and is now home to the Directors Guild of America. In Missoula, Montana, a Walmart Supercenter sits on land originally ceded by the Colville, Salish and Kootenai to fund Texas A&M. In Washington, Duwamish land transferred by treaty benefited Clemson University and is now home to the Fort Lawton Post military cemetery. Meanwhile, the Duwamish remain unrecognized by the federal government, despite

signing a treaty with the United States.

Recent investigations into universities’ ties to slavery provide blueprints for institutions to reconsider their histories. Land acknowledgements furnish mechanisms to recognize connections to Indigenous dispossession. Our data challenges universities to re-evaluate the foundations of their success by identifying nearly every acre obtained and sold, every land seizure or treaty made with the land’s Indigenous caretakers, and every dollar endowed with profits from dispossession.

“Unquestionably, the history of land-grant universities intersects with that of Native Americans and the taking of their lands,” said the Association of Public and Land-Grant Universities in a written statement. “While we cannot change the past, land-grant universities have and will continue to be focused on building a better future for everyone.”

A SIMPLE IDEA

Few years have mattered more in the history of U.S. real estate than 1862. In May, Abraham Lincoln signed the Homestead Act, which offered farmland to settlers willing to occupy it for five years. Six weeks later came the Pacific Railway Act, which subsidized the Transcontinental Railroad with checkerboard-shaped grants.

The Morrill Act of 1862 STEP-BY-STEP

1

Congress offers thousands of acres of Indigenous lands to each state for free as capital for endowing agricultural colleges, now known as land-grant universities (LGUs).

2

Some of the land is taken from Indigenous lands already claimed by the U.S. through treaty, land cession or seizure.

Other Indigenous land is claimed by the U.S. through further treaties, cessions and seizures after the Morrill Act becomes law, and subsequently becomes available to Morrill Act grantees.

3

The grants range from 90,000 to 990,000 acres, offered roughly in proportion to the size of a state’s non-Indigenous population.



These acres are granted in parcels ranging in size from 0.1 acres to 776 acres.

4



Western states select parcels from within their own borders, guided to profitable acreage by land agents.

SOURCES: Andrews 1918; GLO, BLM; Royce 1896-1897; Idaho Department of Lands; Office of Communications, University of Missouri; South Dakota School & Public Lands; Utah Trust Lands Administration.

The very next day, on July 2, 1862, Lincoln signed “An Act donating Public Lands to the several States and Territories which may provide Colleges for the Benefit of Agriculture and the Mechanic Arts.” Contemporaries called it the Agricultural College Act. Historians prefer the Morrill Act, after the law’s sponsor.

The legislation marked the federal government’s first major foray into funding for higher education. The key building blocks were already there; a few agricultural and mechanical colleges existed, as did several universities with federal land grants. But the Morrill Act combined the two on a national scale. The idea was simple: Aid economic development by broadening access to higher education for the nation’s farmhands and industrial classes.

“In the North, we are at the heyday of industrialization and the maturing of American capitalism, and the land grant, like other kind of acts — the Homestead Act or the creation of the Department of Agriculture — any of these type of activities that happen during this time, are really part of an effort in creating this modern apparatus for the state,” said Nathan Sorber, author of the book *Land-Grant Colleges and Popular Revolt*. “Land-grant institutions can be understood as part of an effort to modernize the economy.”

The original mission was to

teach the latest in agricultural science and mechanical arts, “so it had this kind of applied utilitarian vibe to it,” said Sorber. But the act’s wording was flexible enough to allow classical studies and basic science, too. With the nation in the midst of the Civil War, it also called for instruction in military tactics.

The act promised states between 90,000 and 990,000 acres, based on the size of their congressional delegation. In order to claim a share, they had to agree to conserve and invest the principal. Eastern states that had no land in the public domain, as well as Southern and some Midwestern states, received vouchers — known at the time as scrip — for the selection of Western land. Western states chose parcels inside their borders, as did territories when they achieved statehood. The funds raised were either entrusted to universities or held by states.

Like so many other U.S. land laws, the text of the Morrill Act left out something important: the fact that these grants depended on dispossession. That went without saying: Dubiously acquired Indigenous land was the engine driving the growing nation’s land economy.

“You can point to every treaty where there’s some kind of fraud, where there’s some kind of coercion going on, or they’re taking advantage of some extreme poverty or something like that so they can



Directors Guild of America, West Hollywood, Los Angeles, California.

PARCEL ID: CA270010S0140W0SN080ASECA

INDIGENOUS CARETAKERS: Buena Vista; Car-l-se; Cas-take; Hol-mi-uk; Ho-lo-cla-me; Se-na-hu-ow; So-ho-nut; Te-jon; To-ci-a; Uva

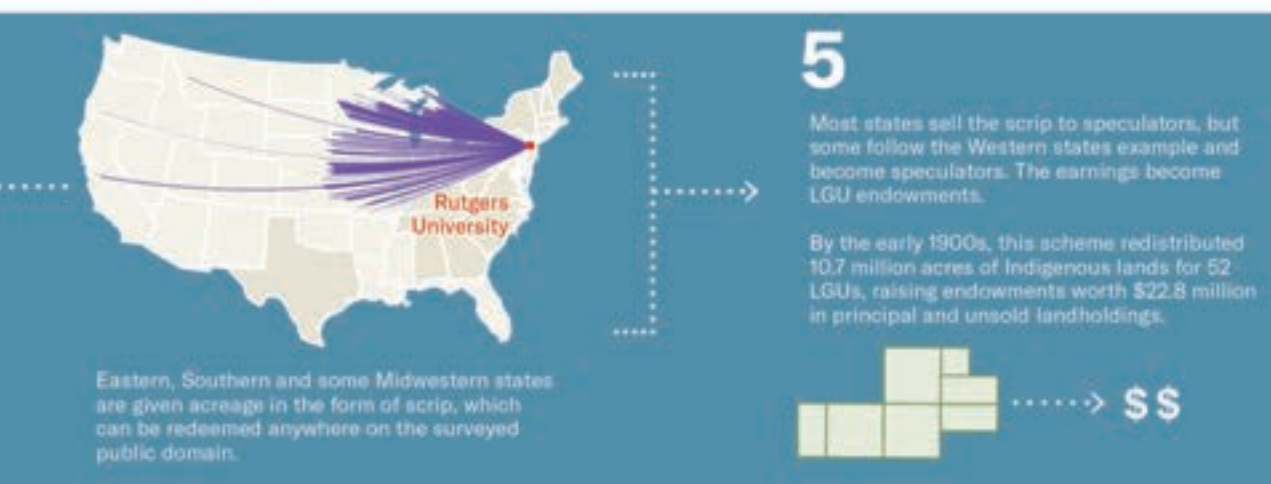
OWNERSHIP TRANSFER METHOD: Seized by unratified treaty, June 10, 1851

GRANTED TO: State of California

FOR THE BENEFIT OF: University of California

AMOUNT PAID FOR INDIGENOUS TITLE: \$0

AMOUNT RAISED FOR UNIVERSITY: \$786.74



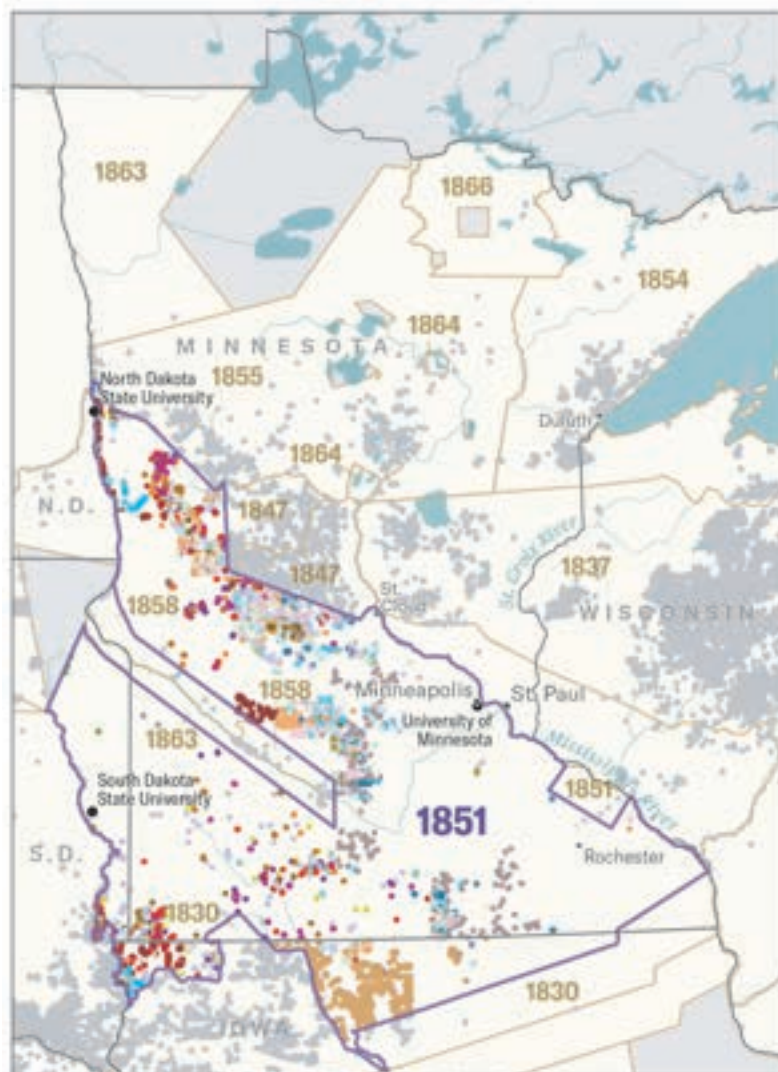
Were all of the parcels sold?

No. South Dakota State University, the University of Missouri, Utah State University, the University of Idaho and many other LGUs have retained portions of either the surface acreage, the mineral rights, or both, for royalties that continue to this day.



“There would be no higher education as we know it in the United States without the original and ongoing colonization of Indigenous peoples and lands, just like there would be no United States.”

The Sisseton, Wahpeton, Mdewakanton and Wahpekute Dakota cession of 1851 benefited the endowments of **more land-grant universities** than any other treaty or cession.



The **35 land-grant universities** benefiting from the 1851 Treaty of Traverse de Sioux and Treaty of Mendota:

- | | |
|---|-------------------------------|
| ● Alcorn University | ● University of Connecticut |
| ● Auburn University | ● University of Delaware |
| ● Clemson University | ● University of Florida |
| ● Cornell University | ● University of Georgia |
| ● Iowa State University | ● University of Illinois |
| ● Kentucky State University | ● University of Kentucky |
| ● Louisiana State University | ● University of Maine |
| ● Massachusetts Institute of Technology | ● University of Maryland |
| ● Mississippi State University | ● University of Massachusetts |
| ● North Carolina State University | ● University of Minnesota |
| ● Ohio State University | ● University of New Hampshire |
| ● Pennsylvania State University | ● University of Rhode Island |
| ● Purdue University | ● University of Tennessee |
| ● Rutgers University | ● University of Vermont |
| ● South Carolina State University | ● Virginia Tech |
| ● South Dakota State University | ● Virginia State University |
| ● Texas A&M University | ● West Virginia University |
| ● University of Arkansas | |

● Parcels on other treaty lands Treaty boundary 1837 Treaty year

SOURCES: Andrews 1918; Royce 1896-1897; GLO; BLM; USFS; USGS; Natural Earth.

purchase the land at rock bottom prices,” said Jameson Sweet (Lakota/Dakota), assistant professor in the Department of American Studies at Rutgers University. “That kind of coercion and fraud was always present in every treaty.”

Hundreds of treaties, agreements and seizures bulked up the U.S. public domain. After surveyors carved it up into tidy tracts of real estate, settlers, speculators, corporations and states could step in as buyers or grantees, grabbing pieces according to various federal laws.

The first to sign on for a share of the Morrill Act’s bounty was Iowa in 1862, assigning the land to what later became Iowa State University. Another 33 states followed during that decade, and 13 more did so by 1910. Five states split the endowment, mostly in the South, where several historically Black colleges became partial beneficiaries. Demonstrating its commitment to the separate but equal doctrine, Kentucky allocated 87% of its endowment to white students at the University of Kentucky and 13% to Black students at Kentucky State University.

Not every state received land linked to the Morrill Act of 1862. Oklahoma received an agricultural college grant through other laws, located primarily on Osage and Quapaw land cessions. Alaska got some agricultural college land via pre-statehood laws, while Hawai’i received a cash endowment for a land-grant college.

HCN tracked down and mapped all of the grants tied to the Morrill Act and overlaid them on Indigenous land-cession areas in a geographic information system. The results reveal the violence of dispossession on land-grant university ledgers.

MINNESOTA’S WINDFALL

Consider the Dakota cession of 1851. Four Dakota bands signed treaties at Mendota and Traverse des Sioux, Minnesota, in the summer of 1851, relinquishing nearly all Dakota

territory in Mni Sota Makoce, “The Land Where the Waters Reflect the Clouds.” They did so in response to the withholding of rations, the threat of violence, enforced starvation, the killing of game and the destruction of agriculture. Call it coercion.

In the following years, Congress unilaterally altered the agreements and delayed annuity payments. Faced with crop failures and widespread graft by white traders, a Dakota faction fought back in 1862. In response, Gov. Alexander Ramsey called for the extermination or exile of the Dakotas and deployed U.S. Army and militia units to end the so-called “Dakota War.” Congress would go on to abrogate Dakota treaties and expel the bands from the state, but before it did, Lincoln authorized the largest mass execution in U.S. history: In December 1862, the U.S. Army hanged 38 Dakota men for their participation in the insurrection.

Less than five weeks later, Gov. Ramsay claimed Minnesota’s Morrill Act windfall.

State land agents soon selected over 98% of Minnesota’s grant in territory ceded by the Dakota in 1851. The selections covered 145 square miles, broken up into more than 300 parcels, scattered across 18 counties. It was a valuable sliver of the Dakota cession. Appraisals pegged the land’s value at between \$5 and \$10 per acre. By the early 20th century, sales and leases raised nearly \$580,000, equivalent to more than \$10.5 million today. Through the cession of 1851, the Dakota were paid less than 2.4¢ per acre for the same land.

The state assigned the endowment to the University of Minnesota in 1868. Founded as a preparatory school in 1851, the college shuttered due to debt during the Civil War. But Dakota land brought it back to life, while the Morrill Act got the credit “as the determining cause for the permanent establishment of the State university.” For every dollar the United States claims to have

spent to purchase Dakota title, the Morrill Act heaped \$250 into the University of Minnesota’s coffers — a return of 250 to 1. As a result of exile and war, many Dakota live today in communities in South Dakota, North Dakota, Nebraska, Manitoba, Saskatchewan, Montana and Minnesota. In fiscal year 2019, the University of Minnesota’s endowment was valued at \$2.5 billion.

But consider the wider significance of the cession of 1851, and its grim aftermath, to the national land-grant university system: No other Indigenous cession provided land to more universities. Nearly 830,000 acres from this treaty — an area almost three times the size of Los Angeles — would help fund the endowment of 35 land-grant universities. Mni Sota Makoce furnished one out of every 13 acres redistributed under the Morrill Act.

A TRAIL OF DISPOSSESSION

Profiting from dispossession permeates Morrill Act grants. Colorado, for instance, located nearly half of Colorado State University’s grant on land taken from the Arapaho and Cheyenne less than a year after the Sand Creek Massacre of 1864, in which U.S. forces brutally murdered more than 200 members of those tribes.

The 150,000 acres selected for the University of Arizona — once the home of the Pima, Yuman, Tohono O’odham, Navajo and Apache — were nearly all seized without payment at the end of the Apache War and the arrest of Geronimo. While UArizona benefited from tracts in the Grand Canyon State, portions of grants assigned to Auburn University and Pennsylvania State University were redeemed from expropriated Apache lands in Arizona.

“There would be no higher education as we know it in the United States without the original and ongoing colonization of Indigenous peoples and lands, just like there would be no United States,” said Sharon Stein, an



Scrap yard off 3rd Ave. in Elrosa, Minnesota.

PARCEL ID: MN051240N0340W05N090ASEMN

INDIGENOUS CARETAKERS: Sioux (Wahpeton and Sisseton Bands); Sioux (Medewakanton and Wahpekuta)

OWNERSHIP TRANSFER METHOD: Ceded by treaty, July 23 and Aug. 5, 1851

GRANTED TO: State of Minnesota

FOR THE BENEFIT OF: University of Minnesota

AMOUNT PAID FOR INDIGENOUS TITLE: \$3.78

AMOUNT RAISED FOR UNIVERSITY: \$979.69



Tree by trailer home communities, Tucson, Arizona.

PARCEL ID: AZ140150S0140E05N100AAZ

INDIGENOUS CARETAKERS: Apache (Western Bands)

OWNERSHIP TRANSFER METHOD: Seized by congressional act, Oct. 1, 1886

GRANTED TO: State of Arizona

FOR THE BENEFIT OF: University of Arizona

AMOUNT PAID FOR INDIGENOUS TITLE: \$0

AMOUNT RAISED FOR UNIVERSITY: \$2,004.39

“The reason (the land-grant universities are) here, the reason they were able to weather the difficult financial times of the 19th century, was because of that initial land.”



Kingdom Hall of Jehovah's Witnesses, Tucson, Arizona.
PARCEL ID: AZ140150S0140E0SN100AAZ
INDIGENOUS CARETAKERS: Apache (Western Bands)
OWNERSHIP TRANSFER METHOD: Seized by congressional act, Oct. 1, 1886
GRANTED TO: State of Arizona
FOR THE BENEFIT OF: University of Arizona
AMOUNT PAID FOR INDIGENOUS TITLE: \$0
AMOUNT RAISED FOR UNIVERSITY: \$2,004.39

assistant professor at the University of British Columbia. “There is no moment or time or place or institution that is not deeply entangled with the violence of colonialism.”

By integrating data on money paid, or not, for Indigenous title, and money raised for university endowments, it becomes possible to gain a sense of the wealth transfer filtered through the Morrill Act.

Sometimes this could be relatively straightforward. All of the lands funding the University of Missouri, Columbia, for instance, came from just two Osage treaties in 1808 and 1825. Meriwether Lewis offered the 1808 treaty to the Osage as an alternative to their extermination, while in 1825 William Clark demanded Osage land to create reservations for Eastern tribes. Granted an area more than twice the size of Chicago, by the early 20th century the University of Missouri had raised over \$363,000 from land that was strong-armed from the Osage for less than \$700. Today, the school still benefits from nearly 15,000 acres of unsold Morrill lands.

Other instances were far more complex. Pennsylvania State University’s 780,000-acre grant, for instance, came from the homelands of more than 112 tribes, including the Yakama, Menominee, Apache, Cheyenne-Arapaho, Pomo, Ho-Chunk, Sac

A closer look at a Morrill Act parcel on the ground in Tucson, Arizona



— Morrill Act parcels selected for the University of Arizona's endowment.
Lands: Seized from the Apache (Western Bands), Oct. 1, 1886



Parcel: Township 15S, Range 14E, Section 10
Parcel ID: AZ140150S0140E0SN100AAZ
Size: 640 acres
Apache people paid: \$0
LGU endowment principal raised: \$2,004.39



The Apache Tears Motel was once a historic roadside stop for motorists off Benson Highway in Tucson, which featured a kitschy statue of a cross-legged Indian donning a headdress. Today, the motel offers weekly and monthly stays and is a stone's throw away from the sprawling Apache Village RV Park.

SOURCES: Andrews 1918; Royce 1896-1897; GLO, BLM; OpenStreetmap; USGS.

and Fox Nation and Klamath. The land was acquired by the United States for approximately \$38,000 and included land seizures without compensation. The windfall netted Penn State more than \$439,000 — about \$7.8 million, when adjusted for inflation. Penn State’s grant is connected to 50 land cessions cast across 16 states.

“As far as the modern institutions that you know, obviously, that funding is kind of a drop in the bucket of the operation of these institutions,” said Nathan Sorber. “But at the time, the reason they’re here, the reason they were able to weather the difficult financial times of the 19th century, was because of that initial land.”

LOST GRANTS OF THE IVY LEAGUE

Financial returns could be lucrative even if states reassigned endowments from one university to another. This was the case with Brown and Yale universities, which received land-grant endowments in the 1860s but lost them to state universities in the 1890s.

Brown illustrates the impressive low end of the potential benefit of expropriated Indigenous lands. Assigned Rhode Island’s grant in 1863, administrators at Brown first flirted with a scheme to speculate with the scrip before changing course and dumping it for 42¢ per acre in 1866. The sale brought approximately \$50,000, making it the single smallest Morrill Act endowment.

Still, the take was more than 10 times the amount paid to the 20 tribal nations forced from the land where the scrip was redeemed, most importantly the Kaw Nation, which had received \$179 for what became a third of the 120,000-acre grant. In 1892, the state reassigned the grant to the University of Rhode Island, but Brown clawed back the value by taking the state to court. Two years later, amid one of the country’s worst depressions, Brown won a settlement worth about \$1.2 million, adjusted for inflation.

When Brown released its 2006 study of its debt to slavery,

it found it impossible to measure the financial implications the slave trade had for the institution. Here, the opposite is true. Brown’s Treasurer’s Report, April 15, 1895, noted a credit of \$40,000 for the lost grant, boosting the university’s total funds by 3.5%. To increase the university’s endowment by a similar percentage today would require a gift of \$150 million.

Yale was assigned the benefit of 180,000 acres of Morrill Act scrip, eventually redeemed from the former homelands of 53 tribal nations. That land was transferred to the United States through 33 ratified and unratified treaties made between 1808 and 1858. Connecticut sold the entire lot in a block in 1863 for \$135,000, raised primarily at the expense of the Ojibwe and Odawa, whose lopsided land cessions contained more than 70% of what became the state’s grant.

Interest from the fund provided scholarships for in-state students until Connecticut reassigned the endowment to the University of Connecticut (then known as Storrs Agricultural College) in 1893. Yale went to court and later received a settlement for the full \$135,000 plus interest, worth about \$4.8 million in today’s dollars.

CALIFORNIA’S BOUNTY

In many places, the return for Indigenous title is incalculable because nothing was paid for the land. Often, however, the extraordinary boon to universities remains clear: Morrill Act funds were the entire endowment of more than a third of land-grant colleges a half-century after the law’s passage.

Such was the case for the University of Arkansas. Founded as Arkansas Industrial University in 1871, the institution benefited from almost 150,000 acres of scrip sold for \$135,000 in 1872. More than 140 tribal nations had received just \$966 for the same land. Behind the stark disparity lie hundreds of pieces of scrip redeemed in California, where Indigenous



View of Morro Bay, California, from the basketball court.

PARCEL ID: CA210290S0100E0SN360L3SC

INDIGENOUS CARETAKERS: Chu-nute; Co-ye-tie; Wo-wol; Yo-lum-ne

OWNERSHIP TRANSFER METHOD: Seized by unratified treaty, June 3, 1851

GRANTED TO: State of South Carolina

FOR THE BENEFIT OF: Clemson University and South Carolina State University

AMOUNT PAID FOR INDIGENOUS TITLE: \$0

AMOUNT RAISED FOR UNIVERSITY: \$17.77



Playground, Blackhawk, California.

PARCEL ID: CA210020S0010W0SN010L2NEDE

INDIGENOUS CARETAKERS: Chap-pah-sim; Co-to-plan-e-nee; I-o-no-hum-ne; Sage-womnee; Su-ca-ah; We-chil-la

OWNERSHIP TRANSFER METHOD: Seized by unratified treaty, May 28, 1851

GRANTED TO: State of Delaware

FOR THE BENEFIT OF: University of Delaware

AMOUNT PAID FOR INDIGENOUS TITLE: \$0

AMOUNT RAISED FOR UNIVERSITY: \$72.41

communities were hunted and exterminated.

Bounties for Indigenous heads and scalps, paid by the state and reimbursed by the federal government, encouraged the carving up of traditional territories without any compensation. Meanwhile, 18 treaties made to secure land cessions were rejected by the Senate and kept secret for a half-century by Congress.

“It’s called genocide,” admitted California Gov. Gavin Newsom, D, last year when he issued a formal apology for the “dispossession and the attempted destruction of tribal communities.”

Thirty-two land-grant universities got a share of California Indian land, raising approximately \$3.6 million from over 1.7 million acres. Among them one finds far-flung scrip schools like Virginia Tech, Louisiana State University and the University of Maine.

The University of California located all of its grant among these stolen lands. To capitalize on its 150,000 acres, the university ran a real estate operation that sold plots on installment plans, generating a lucrative combination of principal and interest payments. In the late 19th century, income from the fund — traceable to the lands of the Miwok, Yokuts, Gabrieleño, Maidu, Pomo and many more — covered as much as a third of the University of California’s annual operating expenses.

By the time Ishi died in 1916, the university had sold all but 1,402 acres of its grant and the fund was fading in relevance. “From simple beginnings,” one visitor marveled at the school’s 50th jubilee in 1918, “it has grown as if by magic.”

CORNELL, SCRIP KING

Despite its careful management, the University of California was not the greatest land-grant beneficiary in California. More than a quarter-million acres of Cornell University’s scrip were redeemed in California, most of it in the San Joaquin Valley, one of the most fertile parts of the most agriculturally productive

state in the nation.

Ezra Cornell founded the university with a quid pro quo: The state would kick in the land grant if he would donate \$500,000 to the school. It worked, and the university’s namesake lost little time supercharging the returns. He purchased most of the nearly 990,000 acres of scrip himself, speculated with it, and folded the profits back into the university.

In all, Cornell raised nearly \$6 million, a significantly higher profit than its nearest rivals. It would have been a bit higher, but 14 pieces of scrip were lost in the mail.

The land was taken from the

Ojibwe, Miwok, Yokuts, Dakota and other parties through 63 treaties or seizures. Funds were often generated so quickly that the university could not keep track of the interest it was earning. Within 20 years of its founding, Cornell had the third-largest university endowment in the United States. A report to alumni noted in 1884 that the endowment afforded them “every thing that the pursuit of knowledge requires and money can buy.”

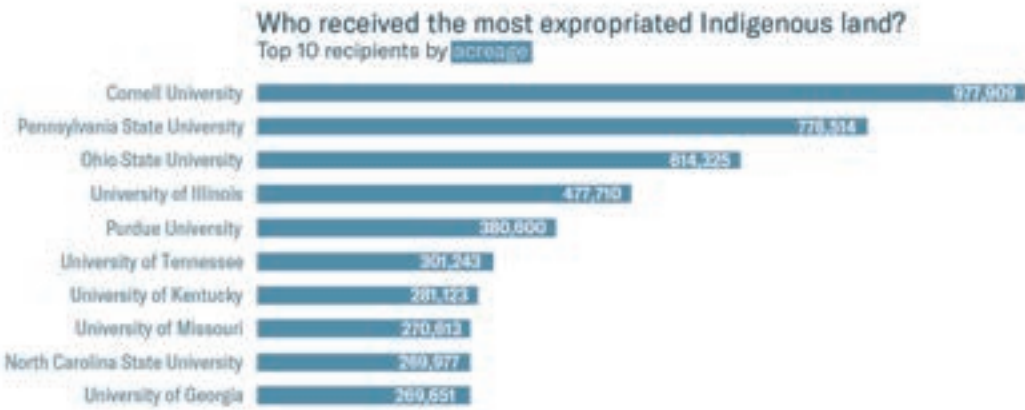
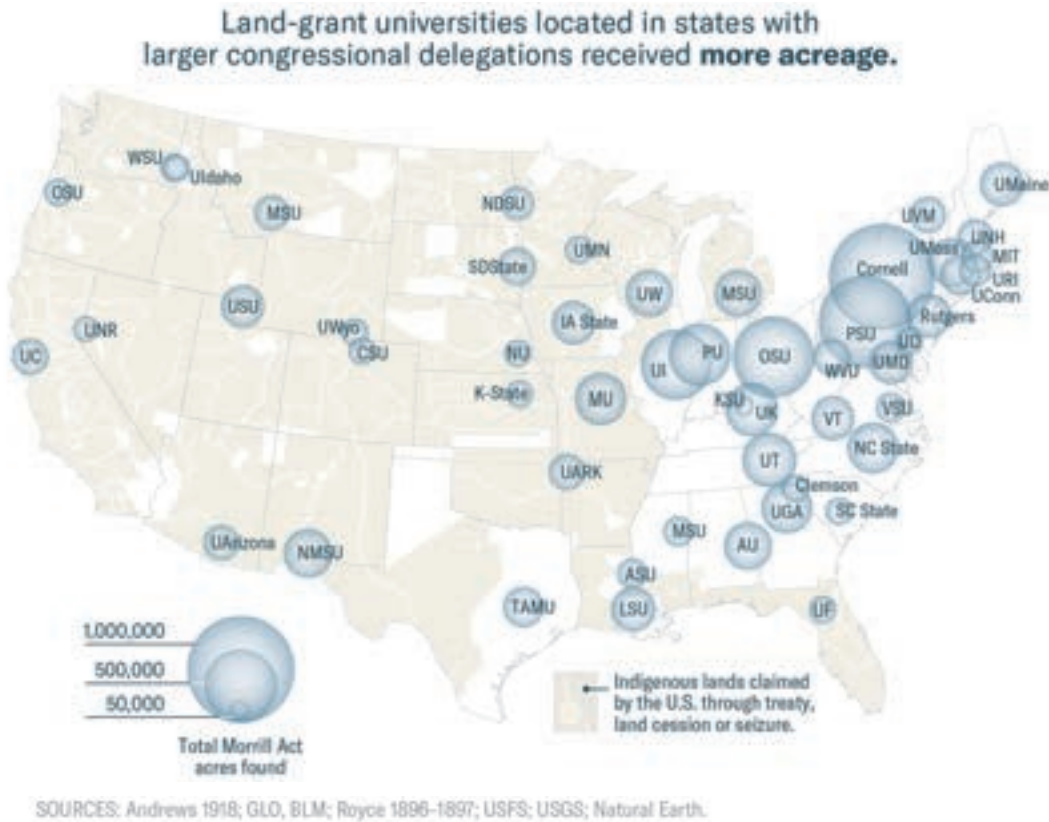
Except, apparently, any recognition of the origins of the endowment. “Thank you for reaching out to us on this issue,”

wrote a Cornell spokesperson in response to comment for this story. “Unfortunately, I have no information to share on this issue at this time.”

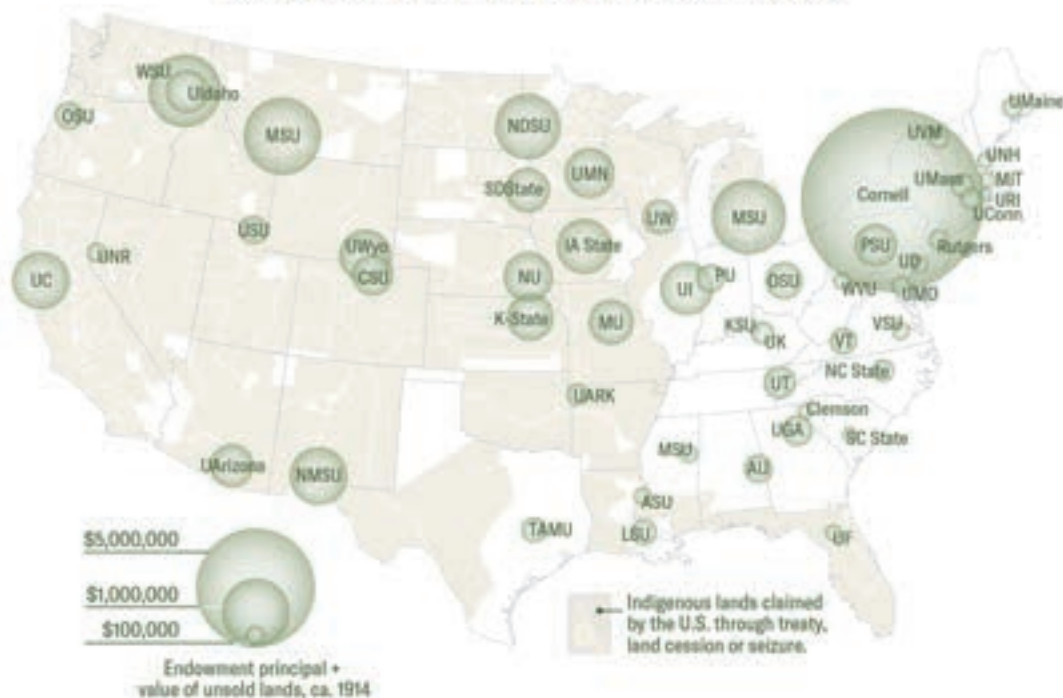
STILL CASHING IN

It remains impossible to determine who raised the largest endowment principal from the Morrill lands, because not all those lands have been sold. While most scrip-states offloaded their land quickly, Western states tended to hold on to it longer, generating higher returns. There was never a deadline to sell.

Idaho, for instance, still



Land-grant university endowments benefited when their acreages were sold and the proceeds invested.



SOURCES: U.S. Office of Education 1906; Andrews 1918; GLO, BLM; Royce 1896–1897; USFS; USGS; Natural Earth.

Whose endowment raised the most from Indigenous land?

Top 10 beneficiaries by principal and value of unsold lands, ca. 1914



manages an area larger than Manhattan — claimed by the United States through an 1863 treaty rejected then, and now, by the Nez Perce — for the benefit of the University of Idaho. With over 33,000 acres of its 90,000-acre grant left unsold, as well as another 70,000 acres of mineral rights, the university generated more than \$359,000 in revenue in fiscal year 2019 alone.

Montana State University still owns almost twice as much land as Idaho does, taken from the Blackfeet, Crow, Salish and Kootenai, Nez Perce, Colville and Ojibwe. In fiscal year 2019, MSU made more than

\$630,000 from its approximately 63,000 remaining Morrill Act acres.

Meanwhile, Washington has retained nearly 80% of the original grant to fund Washington State University. No money was paid by the federal government to the Coeur d'Alene, Colville, Shoalwater Bay and Chehalis tribes for land supporting WSU. The Makah, Puget Sound Salish, Chemakuan, S'Klallam, Umatilla and Yakama received a combined \$2,700 for their land cessions. In fiscal year 2019, the remaining lands generated \$4.5 million for WSU, mostly from timber harvests.

Today, more than 500,000

acres unwillingly donated by tribal nations to land-grant colleges remain held in trust for at least 12 universities. In fiscal year 2019 alone, those lands produced more than \$5.4 million in revenue for colleges.

A DIFFICULT CONVERSATION

A century after Ishi arrived at the University of California, a Lincoln impersonator hired for the Morrill Act's 150th anniversary explained how the act secured students' "right to rise" — Lincoln's creed. When Montana State University erected an 8-foot-tall stainless-steel statue of Lincoln in 2018, the crowd fist-

pumped and chanted, "Go, Cats, Go!" With no shortage of land-grant anniversaries on the horizon, the celebrations show no sign of stopping.

To be sure, land-grant universities have accomplishments to celebrate: Their researchers developed the measles vaccine and helped us get a glimpse of a black hole, and they're currently working to improve fresh water supplies for the planet. They've graduated millions of students. If it's hard to deny that the Morrill Act expanded access to higher education, promoted economic development, and improved quality of life, it's just as hard to believe that it all happened without cost.

"There's a basic, underlying need for settlers in settler colonial states to have these kinds of mythological narratives about the benevolence of their own governments and about the progress that they supposedly brought to this place," said Sharon Stein. "Having a conversation about the colonial foundations of those nation states really complicates those narratives, and it starts to bring into question our very right to be here and our right to make claims on this place and on the institutions that we are generally so attached to."

So how do you steer the conversation to the facts and not the myth?

This is what we know: Hundreds of violence-backed treaties and seizures extinguished Indigenous title to over 2 billion acres of the United States. Nearly 11 million of those acres were used to launch 52 land-grant institutions. The money has been on the books ever since, earning interest, while a dozen or more of those universities still generate revenue from unsold lands. Meanwhile, Indigenous people remain largely absent from student populations, staff, faculty and even curriculum.

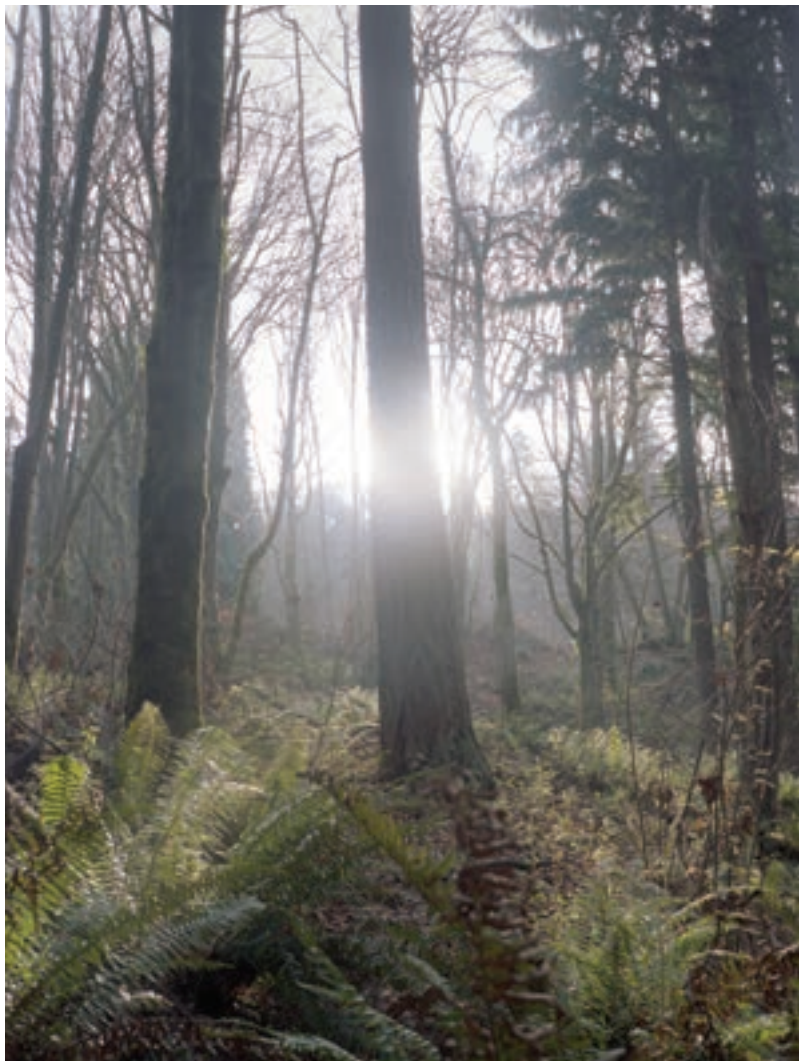
In this context, Indigenous people are an inconvenient truth. If you look at the law and the treaties, then you raise an existential question about the United States

*“The more work that we do
with decolonization and
reconciliation, the more you
start to realize there is no
reconciliation without the
return of stolen land.
It doesn’t work otherwise.”*



Private residences in Cienega, Los Angeles, California.

PARCEL ID: CA270020S0140W0SN010ASWCA
INDIGENOUS CARETAKERS: Buena Vista; Car-l-se; Cas-take; Hol-mi-uk; Ho-lo-cla-me; Se-na-hu-ow; So-ho-nut; Te-jon; To-ci-a; Uva
OWNERSHIP TRANSFER METHOD: Seized by unratified treaty, June 10, 1851
GRANTED TO: State of California
FOR THE BENEFIT OF: University of California
AMOUNT PAID FOR INDIGENOUS TITLE: \$0
AMOUNT RAISED FOR UNIVERSITY: \$786.74



Discovery Park, Seattle, Washington.

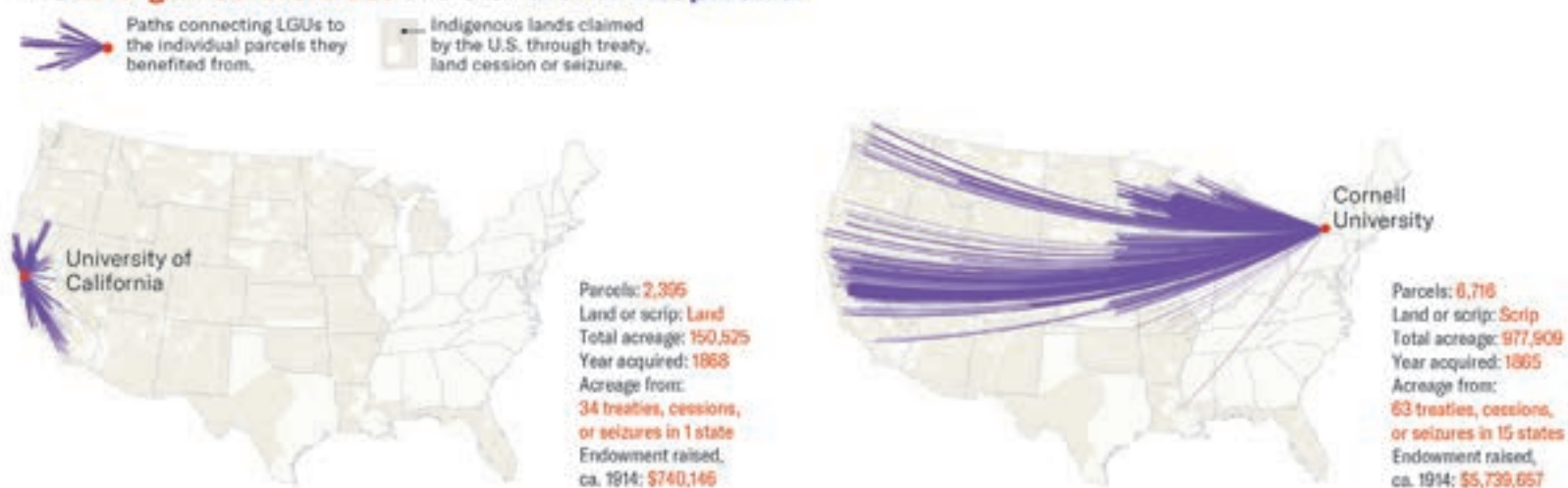
PARCEL ID: WA330250N0030E0SN100ASESWSC
INDIGENOUS CARETAKERS: Duwamish; Suquamish
OWNERSHIP TRANSFER METHOD: Ceded by treaty, Jan. 22, 1855
GRANTED TO: State of South Carolina
FOR THE BENEFIT OF: Clemson University and South Carolina State University
AMOUNT PAID FOR INDIGENOUS TITLE: \$1.95
AMOUNT RAISED FOR UNIVERSITY: \$29.03



View from hill in Morro Bay, California.

PARCEL ID: CA210290S0100E0SN360L3SC
INDIGENOUS CARETAKERS: Chu-nute; Co-ye-tie; Wo-wol; Yo-lum-ne
OWNERSHIP TRANSFER METHOD: Seized by unratified treaty, June 3, 1851
GRANTED TO: State of South Carolina
FOR THE BENEFIT OF: Clemson University and South Carolina State University
AMOUNT PAID FOR INDIGENOUS TITLE: \$0
AMOUNT RAISED FOR UNIVERSITY: \$17.77

Two land-grant universities and their Morrill Act parcels.



SOURCES: Andrews 1918; GLO, BLM; Royce 1896-1897; USFS; USGS; Natural Earth.

and its very right to be here. It's a question most people would rather ignore.

Try this scenario, devised by Cutcha Risling Baldy (Hupa/Yurok/Karuk) as a way for her students to better envision the dilemma. She's the department chair of Native American studies at Humboldt State University in California.

Imagine this: Your roommate's boyfriend comes in one day and steals your computer. He uses it in front of you, and when you point out it's your computer, not his, he disagrees. He found it. You weren't using it. It's his.

"How long until you can let that go?" she said. "How long until you're like, 'Never mind, I guess that's your computer now.'"

Now imagine that's what happened to your land.

"How long are we supposed to not say, 'This is the land that you stole, so you don't get to claim ownership of it, and then feel really proud of yourself that you're using it for education?'" Baldy said.

In fact, the evidence of Indigenous dispossession and the role of land-grant universities in that expropriation has been hiding in plain sight.

"Whether they realize it or not, every person who's ever gone through 4-H in America owes that experience to the benefits of the

land-grant system," said Barry Dunn (Rosebud Sioux), president of South Dakota State University. "And the land-grant system has, at its core, the land that was provided."

Less than half of the universities we contacted about this story responded, many citing their COVID-19 preparations as the reason for delay. But some were ready for the conversation. At the University of Connecticut, the Native American Cultural Programs have begun to look into the question of where the institution got its land.

"The topics you raised are of great interest to us here at UConn, so your timing is excellent in asking," a spokesperson said. "But we have not yet taken actions to explicitly acknowledge the impact on tribal nations and communities whose lands were the source of financial resources."

Let's return to Cutcha Baldy and her scenario. Now the boyfriend of your roommate feels bad about taking your computer. He has an idea: What if he put a plaque on it that says it belonged to you? That way every time he uses it, everyone will know that it used to be your computer. It will be his formal acknowledgement that it used to be yours.

How would you feel about that?

Here's Baldy's take: "The more work that we do with decolonization and reconciliation, the more you start to realize there is no reconciliation without the return of stolen land. It doesn't work otherwise."

But how would that work? There's the question of the legality of broken treaties, but a bigger question is: Why aren't we trying?

"We have to start with this discussion of what could that look like," said Baldy.

There are some hints. The American Indian and Indigenous Studies Department at Michigan State University, for instance, has incorporated language on the Morrill Act's relationship to expropriation and genocide in its extended land acknowledgment. But perhaps most strikingly, the Wokini Initiative at South Dakota State University has recently redirected income from its remaining Morrill acres into programming and support for Native students hoping to attend SDSU.

"The first step is understanding and acknowledging your history, and then the second step is committing yourself to the principles on which the land-grant system was founded," said Dunn, president of SDSU. "And if you do those things, then the answers emerge."

In fiscal year 2019, Morrill lands still held by South Dakota produced nearly \$636,000 in revenue. Through the Wokini Initiative, that money now goes to Indigenous students.

"You can't go back and change the beginning," Dunn said. "But you can start today and change the ending." ✨

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In partnership with the Pulitzer Center and Fund for Investigative Journalism.

The Land-Grab Universities team gratefully acknowledges the Wabanaki, Massachusetts, Lenape, Piscataway, Nanticoke, Powhatan, Kickapoo, Wichita, Nʌmənən, Cáuigú, Núu-aghá-tən-tə-pɛ, Pueblo of Sandia, Nimiipuu, Palus, Tongva, Ktunaxa, Schitsu'umsh, and Dxʷdəwʔabš peoples, on whose homelands this story was created.

Explore data, maps and other features: hcn.org/landgrabu.

... (continued from page 16)

stand the reasons behind the increasingly aggressive deportation policies. “We always give them the opportunity to make the decision on their own: ‘Do you want to take the kids with you, or what do you want to do?’” Baker told me. “But we are not taking sole caregivers or both a mother and a father and leaving kids in an empty house. It does not happen.”

And yet, even in those years, it did happen. I met deported mothers and fathers in Tijuana who were desperate to be reunited with their children, who said their kids had been left alone at home and had no idea how they would manage without them. Kids were ending up in the U.S. foster care system even as their parents navigated a Kafkaesque system to try to get them back.

I TRIED TO SPEAK TO ICE and the Border Patrol for this story, but neither agency responded to multiple requests. Immigration enforcement agencies have become increasingly secretive in response to public criticism as their deterrence policy grows harsher; recently, there have been calls to abolish them altogether.

Last year, in response to outcry over a series of ICE raids that targeted migrant families, acting ICE Director Mark Morgan said the agency was simply following the law. “My duty is not to look at the political optics or the will of the American people; that’s for the politicians to decide,” Morgan told NPR. “What the American people should want us to do as law enforcement officials is to enforce the rule of law and maintain the integrity of that system.”

“Immigrants must follow the law” is a common refrain today. It implies that unlawful immigration itself is a crime. Yet many Americans fail to understand that immigration law is constantly changing, and that increasingly this is happening at a pace that confuses lawyers and legal scholars alike.

Take what’s widely considered one of the landmark pieces of immigration reform: the Immigration

Reform and Control Act, signed by President Ronald Reagan in 1986. It made it possible for approximately 2.7 million undocumented workers to find a path to citizenship through paying back taxes and a naturalization fee. It also established detention and raids as standard procedures for immigration enforcement.

Yet the law also made it increasingly difficult for the rest of the undocumented population, an estimated 2 million, to get a job in some of the industries — like construction, agriculture and landscaping — that rely most on immigrant labor. Policymakers believed that this segment of the immigrant population would grow frustrated and return to their home countries. But instead, employers simply began breaking the law to hire undocumented people, typically underpaid contractors and subcontractors.

“The 1986 act changed immigration from what was basically a civil issue into a criminal issue,” says Ava Benach, a partner at immigration law firm Benach Collopy LLP who specializes in the immigration consequences of criminal convictions. “That cruelty took center stage then, when the government began to see immigration more like a criminal than a social or civil problem.”

Since then, the U.S. has passed laws that make it illegal to cross the border without papers, or to return after a deportation. Today, when ICE and the Border Patrol state that 40% of the people they arrest have a criminal record, this does not mean that half of all immigrants who come into contact with law enforcement are a threat to public safety, according to Benach. Rather, it means that almost half of those arrested are immigrants whose only crime was to cross the border without proper documents. “What’s illegal has changed over time,” says Benach; 20 years ago, she says, it was much easier for migrants to fight deportation proceedings, and families were not separated at the border or detained for as long as they are today. “So, is (the current practice of) family separation child abuse? Is what they’re doing to detained

immigrants forced labor? You need a prosecutor who’s willing to say what it is.”

In March 2018, the American Civil Liberties Union, Human Rights First and the Center for Gender and Refugee Studies filed a suit against DHS regarding its use of a deterrence strategy to target asylum seekers. According to the lawsuit, DHS is violating laws that prohibit the detention of asylum seekers who pose neither a flight risk nor a danger to the community. Most importantly, however, the suit claims that DHS is violating the Due Process Clause of the Fifth Amendment, which requires the federal government to follow fair procedures.

Today, there are many lawsuits against the Trump administration seeking damages on behalf of thousands of children who were separated from their parents at the border. There are also legal challenges to policies that deny bond hearings to asylum-seekers as well as to so-called fast-track deportations, which deny immigrants a court hearing or access to an attorney, among others.

Eventually, many of these cases are likely to end up in the U.S. Supreme Court. But even then, Benach is not confident we’ll get a definitive answer on whether current extreme efforts to deter immigration are true to U.S. laws. In an era of conservative lawmakers and judges who cater to political whims, fairness has become a fuzzy concept.

“Right now, there is a Supreme Court that seems quite willing to accept the excesses of this government, and that sets a terrible precedent,” Benach says. “A lot of these rulings are going to be really hard to undo.”

Perhaps the question we should be asking is not whether what’s being done to migrants and asylum-seekers in the name of national security is legal — but whether it is *right*. After some thought, Benach says, “I imagine there’s a point when you can be sufficiently cruel to have people reconsider coming.” But she is

incapable of describing what that type of deterrence might look like.

Some years ago, most of us would never have imagined that our government would permit migrant children to suffer or die from medical neglect, or that we would be separating toddlers from their parents at the border. Yet here we are today, accepting these tragedies as the inevitable consequences of a system that has long benefited from the cheap labor of undocumented immigrants. What we are witnessing today in the name of law and order should force us to question America’s moral values and loudly demand human rights reparations, both here and abroad.

IN 2018, THE DAY after Jakelin Caal Maquin’s death was announced by the Border Patrol, a class action lawsuit was filed by the National Immigration Law Center, the American Immigration Council, the ACLU of Arizona, Morrison & Foerster LLP and the Lawyers’ Committee for Civil Rights of the San Francisco Bay Area, challenging the inhumane conditions in Border Patrol holding facilities in the Tucson Sector.

“The death of 7-year-old Jakelin Amei Rosmery Caal Maquin is a tragic reminder of a longstanding pattern of systemic cruelty and secrecy at CBP (Customs and Border Protection) and its parent agency, DHS, and underscores the stark need for greater transparency and accountability at these agencies. ... We shouldn’t have to sue our government to force it to abide by our laws and treat people with dignity,” read the statement accompanying the lawsuit.

A year later, an Inspector General report concluded that there had been “no misconduct or malfeasance” by U.S. immigration officials in Caal’s death. Her body is buried in her native village in northern Guatemala. Her dad, Nery Gilberto Caal, has opted to stay in the U.S. He’s requested a credible fear interview: the first step in the long and difficult process to obtain asylum in the U.S. ❀

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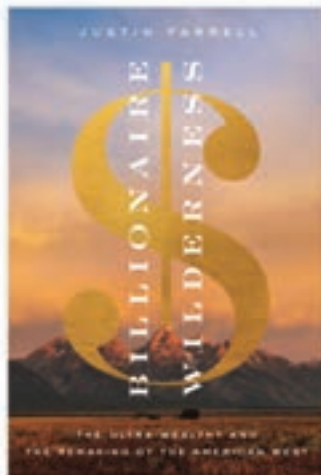
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The road to ecofascism

Why fusing nationalism and naturalism is a bad idea.

BY BRIAN CALVERT

BY THE EARLY 20TH century, many Germans believed there was something magical, or mystical, about them — and the landscape they inhabited — that infused the nation's youth with a sense of purpose. "In all German souls the German forest lives and weaves with its depth and breadth, its stillness and strength, its might and dignity, its riches and beauty — it is the same source of German inwardness, of the German soul, of German freedom," proclaimed a circular for recruitment into the League for the Protection and Consecration of the German Forest in 1923.

In the coming years, this romantic populism bolstered the Nazi Party's "blood and soil" mantra and became a strong recruitment tool through its "green wing."

In *Ecofascism Revisited*, a brief, chilling book first published in 1995 and reissued in 2011, historian Peter Staudenmaier points out that the Nazi Party's "incorporation of environmentalist themes was a crucial

factor in its rise to popularity and state power." I fear something similar is happening in the United States today, as it grapples with the dual challenges of ethno-nationalism and ecological anxiety.

In the United States, and particularly the West, naturalistic nationalism abounds. In a forward to *American Earth: Environmental Writing Since Thoreau*, for example, former Vice President Al Gore contends that environmentalism is "inherent in our national character, a fundamental part of our heritage as Americans." Gore is just one of many writers who attach natural beauty to the national character, a rhetorical step that can lead in a dark direction.

In an essay published in 1988, Edward Abbey railed against "the mass influx of even more millions of hungry, ignorant, unskilled and culturally-morally-generically impoverished people. ... because we still hope for an open, spacious, uncrowded, and beautiful — yes, beautiful! — society. ... The

alternative, in the squalor, cruelty, and corruption of Latin America, is plain for all to see." In a letter to *The New York Review of Books* in 1981, Abbey similarly denounced immigration from Mexico as something that would "degrade and cheapen American life downward to the Hispanic standard. Anyone who has made a recent visit to Mexico, or even to Miami, Florida, knows what I mean." *A beautiful society. You know what I mean.* Abbey's racism cannot be separated from his nationalism, and each informs his environmentalism.

That's just Cactus Ed, you say, writing long ago. But Abbey is Trumpier than some might admit, and echoes of his attitude can today be heard in the rants of Fox News polemicists like Tucker Carlson. In an interview with *The Atlantic* last year, Carlson claimed that the Potomac River outside Washington, D.C., "has gotten dirtier and dirtier and dirtier and dirtier" due to litter "left almost exclusively by immigrants." A local conservation group, Potomac Conservancy, quickly condemned Carlson's remarks as both factually incorrect and "racist, plain and simple." Still, millions of his viewers are being exposed to hateful reasoning: White Americans keep the country clean (pure, even); immigrants make it dirty.

These are the makings of an ecofascist stew: romantic ideas that blend national identity with natural splendor; vitriol that excludes some people as inherently

"un-American"; exceptionalism that argues for the protection of America from invaders; and the once-unthinkable: an autocratic regime that rallies the masses around the glory of a beautiful (great) ethnostate and that recruits from an impressionable green movement.

So what can a person do? Vigilance is the first defense. In these complicated times, when events seem overwhelming and the world under threat, be watchful. While environmentalism need not lead to ecofascism, the kind of rhetoric that elevates "American" landscapes above all others can open the gate to it.

A hard-headed approach is needed. To be part of the solution, check your exceptionalism and adopt a truly anti-racist approach to environmental ethics. Ask who is welcome where, and why. Work to incorporate inclusive ideas of civil and human rights into environmental discussions, and push against racism, environmental or otherwise, whenever possible. Those who blindly follow their romantic inclinations are as vulnerable to fascists as the Weimar youth. Please don't let that be you. ☀



In an example of how iconography can be co-opted, an altered National Park Service graphic supports Greenline Front, an international neo-Nazi organization. [VolknerTheLiving / Twitter](#)

While environmentalism need not lead to ecofascism, the kind of rhetoric that elevates "American" landscapes above all others can open the gate to it.



A badger and a coyote hunt prairie dogs together at Wind Cave National Park, South Dakota. **Charles G. Summers Jr.**

PERSPECTIVE

A coyote and a badger go viral

A behavioral ecologist breaks down the importance of an adorable wildlife clip.

BY JENNIFER CAMPBELL-SMITH

SOMEWHERE IN THE SOUTHERN Santa Cruz Mountains of California, a coyote playfully bows to an American badger just before both duck into a culvert under a highway, the coyote casually trotting along with the badger waddling close behind. When the Peninsula Open Space Trust and Pathways for Wildlife shared a remote video of the crossing online in early February, it went viral. The video is part of a project to help wild animals move around safely in high-traffic, dangerous areas, something critical to maintaining populations' genetic health. I greatly admire this work. However, what makes this particular crossing exceptional to me, as a behavioral ecologist, are the deeper implications of the video itself.

The first thing that excites me is that it allows the charisma of this partnership to reach a broad audience. Scientists have observed coyotes and badgers working together before; one study even demonstrated that both species have an easier time catching prey when they hunt together. But the more the general public sees the

playful, social side of two extremely persecuted carnivores, the better. I will never stop sharing videos of coyotes playing with dog toys or domestic animal companions, or scaling crab-apple trees for a snack.

The second thing that excites me is what the video means for animal research, management and behavioral ecology. There isn't a consistent "natural rule" that coyotes and badgers get along; in fact, the two species sometimes kill and eat one another. This demonstrates the flexibility in natural processes. Humans (many scientists included) are often guilty of thinking animal behavior must follow hard and fast "rules": Stimulus A elicits Behavior B, always. I see this a lot when people ask me about canine behavior or crow calls; a wagging tail doesn't always indicate a happy dog, for instance, and certain crow calls mean very different things in different circumstances, much the way the intention behind a human's use of the word "hey" varies with tone, inflection and context.

Experiments and "rules" that eliminate context often end up fram-

ing animal behavior and ecological associations as coded, robotic and inflexible. People tend to think of animal actions as simply instinctive, denying the role of thinking, plasticity and decision-making in other creature's lives.

Scientifically, we are finally emerging from a dark period of studying nature simply as a stimulus-and-instinct-driven movie that humans can observe — the kind of thinking used to justify government-funded culls and mass indiscriminate killing of native species. Recent research demonstrates the cognitive and cultural capabilities of non-human animals, as well as the importance of their proclivities and personalities, and more data keeps piling up. Some individual animals, for example, have the right combination of bold, exploratory traits to do well in human-dominated landscapes, while more cautious ones may flourish in relatively rural and wild landscapes. In fact, researchers have observed population-level genetic changes in city-dwellers compared to their country cousins of the same

species, in everything from coyotes to anoles and black widow spiders.

Different animals also hold different social statuses within an ecosystem. Much like what can happen within a human community, the death of a specific individual may have a large impact on social structure. I've watched whole regions of crows restructure their social dynamics and movements following the death of a single key individual, and I've seen how age and experience shape individuals and the behavior they pass on to others. Wildlife managers must take all of this into account rather than relying on the traditional, numbers-only management style that treats all individuals of a species as if they have equal weight in an ecosystem.

In the viral video, I see an elegant demonstration of how complex and flexible nature is. How intelligent these two animals are — not simply two animal-robots reacting solely to stimuli. How the body language and ease between them suggests that they know each other as individuals, and that those individuals matter.

While it's scientifically prudent to acknowledge only the data that exists in peer-reviewed studies, we humans must broaden our lens and see the metaphorical forest before we get lost in the trees. We must hold each other, management agencies and policymakers accountable for the broader picture that the evidence is highlighting and use it to better relate to the world we live in, and the organisms that exist alongside us.

The key struggle is getting these ideas into the zeitgeist of modern human culture, a mission that social media has greatly enhanced. So here I am, a behavioral ecologist who is grateful that a single 12-second viral video of a coyote and badger sauntering through a culvert together can help more people observe and consider what I and many in my scientific generation see: a thinking, complex, dynamic, individual nature that demands our respect and mindfulness as we move through this world. 🌱

In February, I was lucky enough to have a conversation with Louise Erdrich — one of my very favorite writers — about her newest novel, *The Night Watchman*, a beautifully rendered historic fiction based on her grandfather's life.

During the termination era of the 1950s and '60s, states and the U.S. federal government worked to end recognition of Native American tribes as sovereign entities and to force tribal citizens to assimilate, in part by taking their land. In 1953, the U.S. House passed a concurrent resolution that would immediately terminate five tribes, including Erdrich's grandfather's tribe, the Turtle Mountain Band of Chippewa Indians. In *The Night Watchman*, Erdrich fictionalizes her grandfather's fight against federal termination, which he waged as the tribe's chairman, even as he worked as the night watchman of a jewel bearing plant. There, Indigenous workers, mostly women, attached tiny slices of precious stones to drill bits for use "in Defense Department ordnance and in Bulova watches," Erdrich writes.

Erdrich is an enrolled member of the tribe. Born in 1954 in Little Falls, Minnesota, to a German father and Chippewa mother, Erdrich is the award-winning author of 16 novels, in addition to poetry, short stories, children's books and nonfiction. She also owns Birchbark Books, an independent bookstore in Minneapolis that emphasizes Indigenous writing and art. For her book tour, Erdrich said, she's focusing on visiting places where she could "be assured of talking to people who have been directly affected by a history of termination," such as New Mexico and Minnesota.

Our conversation ranged from Erdrich's creative process to the past and future of Native literature. I was particularly surprised to find out how Erdrich uses a kind of writerly instinct more than anything else to guide her work. Mostly, we talked about the many fascinating topics her newest book contains.

Erdrich was as warm and gener-



Courtesy of Louise Erdrich

Q&A

Fighting and winning with Louise Erdrich

The author opens up on family, her new novel and the third wave of Indigenous writing.

BY TOMMY ORANGE

ous and thoughtful as I hoped she'd be, and I tried my very best to not sound like an overly excited, nervous fan.

This conversation has been edited for length and clarity.

Tommy Orange: I love this book so much. Everything you approached, from the mundane, to the ghostly, to the underlying political meaning, was so seamlessly connected. What inspired you to write it?

Louise Erdrich: This book involves close communication with my grandfather. His name was Patrick Gournau, and he was the tribal chair at the Turtle Mountain Band of Chippewa all through the 1950s, into the '60s. I spent a long time in the National Archives looking up what I could find of his.

I had also been given his letters written during 1954, the year I was born, and those letters coincided with the period of time in which

termination was announced. The Turtle Mountain Band of Chippewa was on the list of the first five tribes to be terminated, so his letters also coincided with the period of time in which (the tribe) had to mount some sort of defense and go to Washington if they wanted to remain a tribe, to try to persuade Congress not to terminate them.

The book also focuses on a young woman, Patrice. How did she come into the story?

There are two main characters. The book is about a decent man, and a decent — and ambitious — young woman. I started writing Thomas Wazhashk (the main character, based on her grandfather) as a very decent person. I thought, "This is going to be a problem; he doesn't really have some kind of gigantic conflict." What do I do with a character like this, you know?

But then, as if to say, "You're not seeing the whole picture here," the next chapter started with Patrice — Pixie — Paranteau, and how she did things "perfectly when enraged." I realized: I'm really writing about two people. But my grandfather started it all into motion.

It's just so brilliant, this idea of the night watchman as a deep metaphor for your grandfather's life work, how he paid attention. When the U.S. government was trying to sneak around and do all these awful things to tribes, he was there, watching out while Congress tried to lull people to sleep with those boring phrases that were actually deeply damaging and harmful. And he was also literally working as a night watchman.

That's what just really kind of shattered me, when I realized what he was really doing. He was writing these letters to my parents at night as he worked as a night watchman (at a jewel bearing plant). And then during the day, he fought termination and supported his family with this garden that he kept — an amazing garden that's in all of the agricultural reports from the reservation at the time.

He really farmed his allotment,

deeply farmed it, and this was a huge transition for our family. My great-grandfather had been on the last buffalo hunt, so for my grandfather to settle down to farm, then teach his sons farming as well, was a huge transition.

The metaphor just really broke me: that he was awake, and he was watching out. Nobody was seeing what was happening, because the language that termination was couched in was brilliant in its Orwellian, nightmarish obfuscations. There were words like emancipate: “We will emancipate you.” Well, wait a minute — nobody’s enslaved or restrained, really, by keeping the (tribal) treaties. Or opportunities. Well, these weren’t opportunities, they were diminishment of rights. That was the gist of everything — relocation and termination.

With an eighth-grade boarding-school education, my grandfather read these words, and he saw through them to the word “termination.” And he immediately grasped that he had to persuade people around him to fight termination with him. They could have so easily been terminated, and it’s such a tiny land base — Turtle Mountain as a reservation is only two townships — that there would have been nothing after people sold their lands and dispersed.

I was chilled just reading what happened and understanding the magnitude of what he accomplished from his desk as a night watchman.

In your use of the Chippewa language in this book, there’s an intimacy and knowledge that the characters have about the language. The language towers over English in a way. Even Thomas reverts back to Chippewa. Can you talk about working with Chippewa in the book, and the role that it plays?

This is one of the things about the book, since it’s set in the ’50s. People didn’t use to say, “I’m speaking Ojibwemowin” or “Anishinaabemowin,” you know, the way the language is spoken of more correctly (today). People said, “Oh, she’s talking Indian again.”

And so you don’t see “Native American” in the book, because that’s not what people called themselves or anybody else, or the language. But I went over this with people at the Turtle Mountain Community College, and they’re still trying to get people to stop saying, “She’s talking Indian,” so I didn’t want to put that in the book, either. So a lot of times it’s, “talking Chippewa.” It’s kind of a compromise.

My grandfather spoke the Red Lake dialect of Chippewa. I didn’t understand what he was saying; my mother barely learned the language. By the end, he didn’t have a lot of people to speak with up in the Turtle Mountains; it’s a real mixture of cultures up there. He spoke with family, mostly, and deeply missed his father, because his father spoke almost only Chippewa.

My daughter, Persia, is a teacher at a Chippewa immersion school. She decided to devote herself to the language, and part of me just has to believe that my grandfather somehow knows he would have been able to speak to his great-granddaughter.

It seems like this book has been with you for a long time. People are so unaware of how much damage this government has done to Native people, and how that legacy continues. Was there anything that made you feel like this book needed to come now?

As are many other people in the country, I’m tuned into what is happening in Washington, and how it’s affecting us, in a very different way than I was to what happened in the past. We have a possible destruction of our Constitution, and with that, we have to think even of the foundational treaties, which have made possible our government-to-government relationship in our country. I think that’s why these letters suddenly became so vital to me. My realization was that this story is really speaking to these times.

I’m not sure how to parse that out exactly, but I also dread looking at everything that’s happening in Washington, and I have to make myself keep my eyes open, and I

don’t want people to become helpless. I feel like we’re already drained by this chaotic autocrat, and every day there’s something else that slashes at all we love in our country, in our home, and in the way that life is conducted.

With the story of Vera (Pixie’s sister, who disappears in Minneapolis), I can’t help but think of all the awareness that has come up around missing and murdered Indigenous women. Can you talk about why writing about that was important to you?

Yes, it’s a huge issue for me. I mean, I take it very personally, because I know that the statistics, even as appalling as they are, underrepresent the violence that Native women face, because so much is not reported. So I wanted to talk about the historical underpinnings.

People are becoming more vocal, more conscious. There’s a huge march here every Valentine’s Day for missing and murdered Indigenous women. But we know all the statistics, and if we’re relying on this administration’s Department of Justice? Nobody’s going to be prosecuted.

I wanted to talk about the fact that this has historically been happening, in part because of that relocation bringing many women into the city.

Do you have any thoughts on the future of Native literature? You’ve been through a lot of the different generations of Native writers. Is the world treating Native writers differently over time?

Well, yes, I feel like this is a time that I am rejoicing in a lot of ways. I mean, as a bookstore owner — and our bookstore, of course, is focused on Native literature and history and every kind of Native writing — I really am thrilled this is what people are calling a “third wave.” So many people are out there writing, and so many Native people of all different backgrounds, all different sensibilities, different languages coming into consciousness. It’s a very powerful time, and it makes me very grateful. ☀

“Nobody was seeing what was happening, because the language that termination was couched in was brilliant in its Orwellian, nightmarish obfuscations.”

Tommy Orange is an enrolled member of the Cheyenne and Arapaho Tribes. His first book, There There, was a 2019 winner of the American Book Awards, 2019 Pulitzer Prize finalist and a 2018 National Book Awards finalist. He lives in California.

MMIW families still need enforceable legislation

Too often, tribal, state and federal governments are slow or inadequate in cases of missing and murdered Indigenous women.

BY ANGELINA NEWSOM

On Jan. 18, Indigenous communities in Montana got the news they hoped would never come. Authorities found the body of 16-year-old Selena Not Afraid during a systematic grid search, nearly three weeks after she disappeared from a remote rest area between Billings and Hardin. Since New Year's Day, volunteers rallied around Not Afraid's family, while law enforcement drones and K-9s assisted on-the-ground searchers, but no signs of the teen were discovered. In the end, her body was found in an area that had been previously searched. Throughout the course of her disappearance, national media converged on the rest area where Not Afraid's family had gathered to camp, sharing with the rest of America the hopelessness faced by the families of missing and murdered Indigenous women and girls, or MMIWG.

Montana leadership responded to Not Afraid's case with action and advocacy. That's not always the case, however. While this particular instance received crucial state and national attention, that still isn't the norm for investigations into missing and murdered Indigenous people. Too often, it becomes the responsibility of the families to hold systems and bureaucracies accountable. That's why it's so important for the public to keep pressure on state and federal politicians to pass and enforce legislation.

In Montana's Big Horn County alone, there are currently 28 cases of missing or murdered Indigenous women or girls on the radar, the majority having occurred since 2010. Nation-

wide, over 5,000 Indigenous women and girls are currently reported missing or murdered. The crisis has received national attention, reaching the halls of Congress: In 2018, hopes were raised by Savanna's Act — named for Savanna Greywind, a murdered Native woman — but it failed to pass the U.S. House of Representatives. Last year, Rep. Deb Haaland, D-N.M. — one of the first Indigenous women elected to the House — introduced the Not Invisible Act, which strengthened provisions for Indian Country in the Violence Against Women Act.

The crisis has also reached the White House: In November 2019, President Donald Trump signed an executive order creating a task force called Operation Lady Justice aimed at addressing MMIW. However, the executive order doesn't offer any long-term solutions or even require law enforcement agencies to take any tangible action. When Selena Not Afraid, a member of the Crow Nation, disappeared, her family searched to no avail for a contact within the newly created task force. Not Afraid's aunt, Cheryl Horn, said they were instead connected with the FBI's missing children's task force.

Political leaders took steps to alert the public: Montana Sen. Jon Tester, D, released a statement urging FBI Director Christopher Wray to prioritize locating the young woman. Chairman Alvin Not Afraid of the Crow Nation — Selena's uncle — took an active role, providing continuous updates and calling on Montana Attorney General Tim Fox to get involved with the inves-

tigation. While these responses were necessary and appreciated, families of victims need something more substantial: new legislation focused on fixing systemic flaws.

Families are often left in the dark and forced to investigate on their own. Many scroll through endless social media feeds, looking for clues that may lead them to a loved one or suspect. Law enforcement agencies rarely follow up with families, as was the case when 14-year-old Henny Scott was found dead on the Northern Cheyenne Reservation in January of 2019. Foul play was not suspected; Scott's cause of death was ruled as hypothermia. But according to Scott's mother, Paula Castro-Stops, her body showed signs of violence, and she felt that investigators overlooked key evidence. Federal investigators have since announced that no one will be charged in Scott's death.

Activists within Native communities have long pushed for tangible action on how cases of missing and murdered Indigenous people are handled. The Montana Legislature passed Hanna's Act in 2019, naming it for Hanna Harris, a young Northern Cheyenne woman who disappeared in the summer of 2013. Volunteer searchers discovered the body; local law enforcement had refused to search until after the 4th of July weekend festivities were over, according to Harris' mother, Malinda Harris Limberhand. By the time Harris was discovered, her body was too decomposed to determine an exact cause of death.

Hanna's Act requires in part that missing-persons specialists "provide guidance and support to law enforcement authorities and families in the search for missing persons." But that wasn't the experience Selena Not Afraid's family had when they met with missing-persons specialists. According to Not Afraid's aunt, Cheryl Horn, employees of Montana's MMIW task force said that "they weren't at the stage to offer help to families." This conflicts with the spirit of Hanna's Act, giving the impression that the task force was created without any guidance or preparation. Ultimately, it was largely Horn's advocacy that brought national attention.

The burden of holding law enforcement accountable shouldn't fall to family members of missing or murdered Indigenous people as they search for, or grieve for, their loved ones. That's why it's vital to keep the pressure on leaders and politicians. Until states and Congress pass enforceable legislation — whether it's Savanna's Act or the Violence Against Women Act — Native communities will be left to bear the burden of faulty institutions, when they should be receiving support. Without accountability, presidential executive orders and new missing-persons jobs are just lip service. 🌸

The endless search for Charles Bowden

A longtime Bowden reader rediscovers the complicated author through two new books.

BY LAURA PASKUS

Even now, six years after Charles Bowden died, I still roam around bookstores, hoping I missed an old title of his, or wondering if an editor has unearthed a long-lost manuscript. Ever since I first encountered Bowden's dark and deeply personal reporting about the Southwestern desert and the U.S.-Mexico Borderlands almost 20 years ago, his writing has ensorcelled me.

I'm not the only one aching for more of his insights and experiences. The University of Texas Press, the Charles Clyde Bowden Literary Trust and the Lannan Foundation created the Charles Bowden Publishing Project, whose goal is threefold: re-releasing the author's out-of-print books, publishing three new manuscripts uncovered after his death, and commissioning new books about him. So when a package arrived last year — delivering *America's Most Alarming Writer: Essays on the Life and Work of Charles Bowden* and Bowden's own *Dakotah: The Return of the Future* — I spent a sleepless night, plowing through the essays and Bowden's own words.

Those pages reminded me how much words and memories matter, how complicated it is to mourn, and why we need to be honest about our heroes.

My father died the year before Bowden. Our relationship was a complicated one, and his final words to me over the phone, before going into surgery I didn't expect him to survive, were inscrutable at best, and at worst, cruel. Months after his death, I scoured his white Toyota pickup truck, which my mom had

passed along to me, convinced that a message was hidden inside, one that would set his soul to rest within my heart. I flipped up the seats and pulled out every tool and zip tie, draping his raincoat around my shoulders, checking out the double sets of Coleman camping silverware. Finally, I popped open an ancient tobacco tin, hoping it held a clue.

But it didn't — just a roll of toilet paper.

I never met Charles Bowden in person. We exchanged emails over the course of a few years — short messages about everything from writing to the bird species in his backyard. But I remember the first time I read his words. Working as a cocktail waitress in Albuquerque, I was transitioning between two careers and renting a room from a fisheries biologist. When the biologist learned I'd never heard of Bowden, he slapped *Blood Orchid: An Unnatural History of America* into my hands. Within pages, I was mad for Bowden's style. His ferocity and pace of storytelling inspired me — as it did countless other journalists — to not shy away from infusing reportage with emotion. I frequently re-watch an interview he did with radio producer Scott Carrier, in which he speaks of the moral obligation of the writer. He calls it a crime, a sin, to use that gift to write “advertising jingles” instead of the truth about the world around us.

“It's easy to make a living telling the people in control they're right,” Bowden told Carrier, adding, “Look, you have a gift, life is precious. Eventually, you die, and all you're going

to have to show for it is your work.”

In *America's Most Alarming Writer*, the best essays are those that don't idolize Bowden or indulge our compulsion to honor the dead. *Arizona Daily Star* reporter Tony Davis, for example, writes about arguing with Bowden when they were fellow reporters in the 1980s, even as he looked up to him. Davis describes him as “one part poet, one part novelist, one part conservationist, one part dirt-digger, one part bottom-feeder, scraping literary insights from the dregs of the earth.” Leslie Marmon Silko deconstructs his coverage of the border and violence, suggesting that he likely embellished some of the dangers he described, while Judy Nolte Temple writes about his frequent objectification of women's bodies. Molly Molloy, Bowden's partner, has a heartbreaking essay that will resonate with anyone who's walked behind a loved one. And both Molloy and Bowden's ex-partner Mary Martha Miles also describe editing his work, complicating the idea of his intrepid life by acknowledging their labor.

Meanwhile, *Dakotah's* chapters jump around from Bowden's reflections on his family to his ruminations on Lewis and Clark, the forced migrations of Sioux tribes across America's “heartland,” even Daniel Boone. The slim book fails to offer a full picture of any one story, and

I finished it feeling low. So I re-read his classics, like *Down by the River* and *Killing the Hidden Waters*, seeking the growling, confident voice I wanted to hear.

Trying to cast the dead as either heroes or demons often leaves one feeling empty-handed, much as I felt when I popped open my dad's old tobacco tin. Wending my way through the pile of Bowden's books reminded me that a person's final words are rarely definitive. Seeking the truth means looking for messages in the right places. And as Bowden taught his many admirers, seeking the truth also demands we open our hearts, interrogate our own assumptions — and acknowledge that people are always more complicated, terrible and lovely than the characters we craft on paper. ☀

America's Most Alarming Writer: Essays on the Life and Work of Charles Bowden

Edited by Bill Broyles and

Bruce J. Dinges

337 pages, hardcover: \$29.95

University of Texas Press, 2019

Dakotah: The Return of the Future

Charles Bowden

169 pages, hardcover: \$24.95

University of Texas Press, 2019

Bowden in his truck in Plano, Texas, 1998.

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Heard Around the West

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

BY BETSY MARSTON

WASHINGTON

Benjamin Franklin did not admire the bald eagle: “He is a bird of bad moral character (and) does not get his living honestly.” The *Seattle Times* agrees that the noble-looking birds, despite symbolizing liberty, can be sloppy scavengers. Around 200 of them hunt for juicy pickings at King County’s only land-fill, where 2,500 tons of garbage are stacked every day on a “trash mountain the size of 700 football fields.” After feasting, the birds fly off, but sometimes “their reach exceeds their grasp,” and rotting garbage slips through their talons and lands in neighbors’ yards. Noisy devices like “Screamer Sirens” and “Bird Bangers” are often used to scare away gulls, starlings and crows, but bald eagles, which made a remarkable recovery after DDT was banned, are a protected species, so fireworks can’t be used on them. Still, the county hopes the U.S Fish and Wildlife Service will allow it to start harassing the messy eagles.

ARIZONA

As Tucson’s KOLD News 13 put it, “Spend time in the Southwest and you are bound to run into a pack of javelina.” We’ve never had such a run-in ourselves, though we do know that a javelina is neither a pig nor a boar, but rather a husky collared peccary that eats cactus, fruits and seeds. Thanks to Damion Alexander’s video (<https://www.kold.com/2020/02/24/watch-javelina-caught-speeding-arizona/>), we’ve also learned that a javelina can run like a large rodent revved up on speed. On his video, Alexander urges the javelina to “Keep on going, buddy,” and that’s exactly what the



animal does, dashing through town and across streets, never once pausing for traffic. Javelinas communicate with their fellows using “a scent gland located on the top of their rump,” meaning you’re likely to smell them before you see them. Think skunks moving at the speed of light — and get out of the way.

CALIFORNIA

All it took to shut down Sacramento Executive Airport recently was a coyote sprawled on a runway, reports the *Sacramento Bee*. A police helicopter finally roused the comfortable canid, which slipped into a nearby drainage pipe, where it no doubt finished its nap. Another local coyote made news earlier in February when it was spotted in midtown chasing a cat. An even bolder animal was reported “biting a dog off its leash,” though no people have been bitten. So far.

ALASKA

In other wildlife news, a moose in south Anchorage saw a man carrying garbage to a shed and decided to follow. The bull moose, sporting just one antler, tried to “gently” push his way inside while Curtis Phelps called his wife, Amy, to explain that he was stuck in the shed for a while. The animal finally wandered off. The visit was not the couple’s first close encounter, reports the Associated Press: Two years ago, a moose gave birth to a calf in their backyard. Since then, a young moose has regularly returned, once clambering onto the porch to eat a delicious Christmas wreath.

COLORADO

The next time your beloved cat purrs in your arms or sleeps on your stomach — its toothy mouth just inches away — you might want to

think about the surprising research published by Melissa Connor of Colorado Mesa University. A forensic anthropologist, Connor works at a “body farm” in rural Whitewater, studying how human bodies decay. A recent video feed startled her: Skunks, as scavengers, are frequent visitors, but this time they were accompanied by two feral cats. Because cats are predators who prefer live prey, their scavenger behavior was unusual, Connor said. That explains why her paper attracted media attention: Newspapers wrote excitedly about feral cats eating dead people, and NPR’s quiz show, *Wait, Wait, Don’t Tell Me*, asked a contestant to guess the last line: “My dumb cat never comes up to greet me. He just glares at my chair to unseat me. And if I should die not long would I lie. For that jerk would just come up and ... eat me.” The *Grand Junction Daily Sentinel*’s headline about Connor’s research was beautifully direct: “Whatsamatter, cat got your tongue?”

CALIFORNIA

San Francisco International Airport is one of 50 in the country that can brag about its welcoming “Wag Brigade”: 22 dogs and one fashionista pig called LiLou. A 5-year-old Juliana pig with a captain’s hat and bright red hooves, she always attracts attention when she plays a toy piano. “She’s like an A-list celebrity,” says Jennifer Kazarian, the airport’s guest services manager. The brigade’s goal, reports the *Washington Post*, is to “de-stress” travelers, who are surprised and usually delighted by the petable therapists. 🌟

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A Rope Partnertechician services a wind turbine blade in the big sky above Judith Gap, Montana. **BLAKE GORDON** © 2020 Patagonia, Inc.

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#IAM THE WEST

Shelly Fyant
Confederated Salish and Kootenai
Tribal Council Chairwoman
Flathead Reservation, Montana

In the past, people have said tribal council was made up of loggers, foresters and ranchers. It's easy for men to talk about forestry, land and water. We now have five women on council, and I think a lot about gender balance and what our roles are. We as women bring different issues and perspectives to the table. We talk about the missing and murdered Indigenous women, and child protective services and the Indian Child Welfare Act. We should respect the diversity we all bring to the table. We should be able to have civil conversations, and I think that is one thing that has been lacking in the past. There is a lot of talk about a unified front, but I don't want it to be a front. I want to actually be unified.

Do you know a Westerner with a great story?
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