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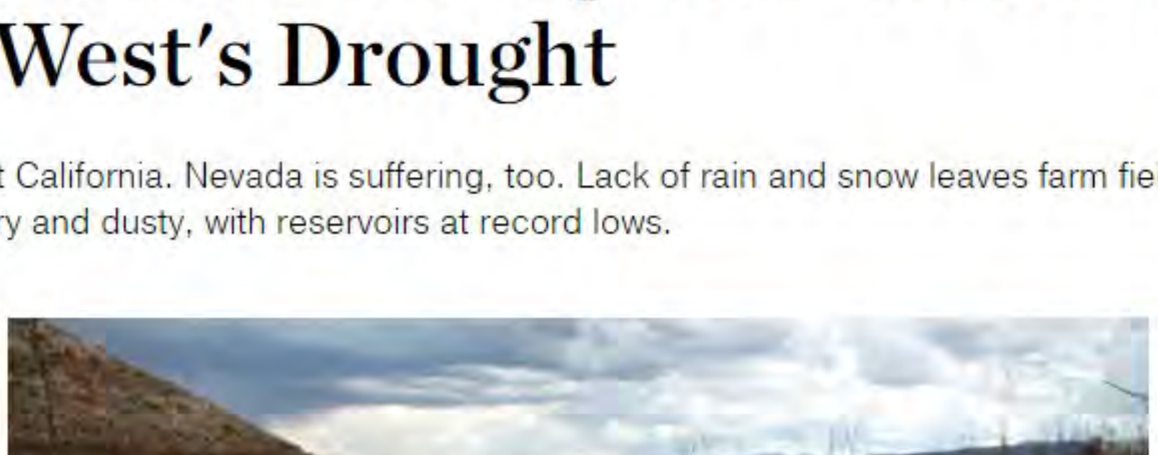
These Are the Forgotten Victims of the West's Drought

It's not just California. Nevada is suffering, too. Lack of rain and snow leaves farm fields and ranches dry and dusty, with reservoirs at record lows.



Plants grow out of dry ground that was once underwater near Boulder Beach in Nevada's Lake Mead National Recreation Area. If the levels of the lake continue to drop because of low snowmelt flowing into the Colorado River, the federal government could force cutbacks in water delivered to Nevada and Arizona cities.
PHOTOGRAPH BY JOHN LOCHER, AP

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By **Justin Nobel**

PUBLISHED SEPTEMBER 16, 2016

YOMBA INDIAN RESERVATION, NEVADA—Last summer Nevada was so dry that rancher Darryl Brady grabbed a shovel and hacked into a dusty pit, once a lush spring that gurgled onto fields thick with wild hay. The snows hadn't come to the mountains and the river was dry, so Brady was desperately trying to tap into the earth's watery veins to save his herd of about 85 cattle. But it was a failure; the earth had no water to give.

"I remember when I was a kid it would rain and we used to have puddles out here," Brady said wistfully. "These underground frogs would pop up. *Shlurp, shlurp, shlurp*, frogs everywhere. Now look at it, it's all dead, there's nothing here. The drought is killing everything."

Thanks to hefty snowfall last winter, the water is back this summer. Still Darryl Brady, a Native American rancher on the tiny Yomba Indian Reservation, located in a remote river valley between Reno and Las Vegas, faces tremendous challenges.

Much of the world thinks that only California has been devastated by the West's record-breaking drought. But in Nevada, the nation's driest state, a much less publicized but equally devastating water crisis has been playing out over the last five years.

Nevada rivers such as the Carson and the Humboldt have dwindled. Massive lakes, such as Walker Lake, at the edge of the Walker River Indian Reservation in western Nevada, have nearly disappeared. Levels of reservoirs such as Rye Patch in northern Nevada have plummeted. Lake Mead, the water source for Las Vegas, dropped to an elevation of 1,073 feet above sea level, the lowest level since the lake was formed by the Hoover Dam in the 1930s. This has forced the desert city's water supplier to buy up land and groundwater rights in eastern Nevada's fertile valleys.

Meanwhile, gold mines and industrialized farming are all tapping the state's aquifers. Not far from Yomba, energy companies have even purchased land to mine for low-quality crude oil, using, among other methods, the water-intensive technique of fracking. And if the situation doesn't already sound apocalyptic, consider that several years ago a multinational corporation—The Carlyle Group—bought up the city of Missoula, Montana's water supply, and there is a concern that this practice could become more prevalent.

Here in the West, water is gold.

Yomba in the Dust

If Nevada has been mostly forgotten in the West's drought, Brady's tiny homeland of Yomba has been completely left in the dust.

His tribe is part of the greater Western Shoshone Nation, whose ancestral homeland, Newe Sogobia, once occupied much of Nevada—and, according to some tribal advocates who cite an 1863 treaty with the United States government, it still does. The Yomba Reservation is about five times the size of New York City's Central Park, and with a resident population of about 60, many rush-hour New York subway cars contain more people. Yomba lies within the spectacular Reese River valley, framed by wild brown mountains rising to nearly 12,000 feet. There are no hospitals, cafés, or grocery stores—no stores period. There is a single police officer who was just hired, and for a long time there was no one. A traveling judge visits once a month. The nearest town with significant services, Fallon, Nevada, is 117 miles away, much of it on dirt roads. The closest major highway is U.S. 50, whose route across Nevada has been nicknamed "the loneliest highway in America."

On the Yomba Reservation a number of ranchers have been forced to sell off their herds and leave the business. The tribe is so small it can barely field a government, let alone a cohesive response to the drought and the even greater specter of climate change, which may indeed be amplifying the dry spell.

Recent climate research suggests past droughts in Nevada and the U.S. Southwest have lasted for not just years but decades, and even well over a century. These "megadroughts," according to a 2015 research article published in the journal *Science Advances,* fall "far outside the contemporary experience of natural and human systems in Western North America."

A partially submerged tire sits along the shore of Lake Mead in Nevada. The reservoir, which supplies water to Las Vegas, reached historic lows in May after a prolonged drought.
PHOTOGRAPH BY JOHN LOCHER, AP

No Grass, No Water

While most Americans probably couldn't find the tiny Yomba Reservation on a map, Ohio-born ecologist Susan Jamerson fled suburbia and skyscrapers just for this sort of isolation, taking a job as the tribe's environmental director. The position has given her a unique window into understanding what a drier Nevada might look like for remote tribes.

"Here is a field that has been completely overgrazed," said Jamerson during the height of the drought last summer, pointing at a dusty corral where several horses poked about. "Normally these horses would drink out of the river and have plenty of grass. Now there's no grass, no water in the river, and this plot can't even reseed itself because it has been so overgrazed."

Jamerson explained how this one problem has initiated a chain of new ones. Overgrazing leads to erosion, which puts more sediment into the Reese River, which silts up the channel and can cause water to flow underground, making it unavailable for ranchers and farmers, who rely on surface diversions and springs rather than wells. A thinner river flows slower and is warmer, which attracts algal blooms. The blooms deplete the river's available oxygen, making it uninhabitable for creatures such as the trout Darryl Brady used to catch as a boy. And thus, a once gurgling highway that fed diverse aquatic life and farmers' fields becomes an algae-choked trickle. "Unless he goes and buys hay, this guy will have to sell his horses," sighed Jamerson, gazing again into the dust-swirled corral. "For Shoshone to sell their horses, that's a big deal."

For Native Americans, the effects of the drought are not just ecological and economic, but also sociological and psychological. A sense of apathy and displacement results from having to abandon one's livelihood. "Everything has been a struggle," Yomba social services eligibility worker Josh Lumsden told me, in his small sparse office. He listed problems the drought has exacerbated: domestic violence, substance abuse, child neglect. "As you can see out here, there's really a whole lot of nothing," said Lumsden. "There has been talk of the tribe getting blinked out, which is kind of scary."

For now at least, the Yomba do not seem to be in immediate jeopardy of disappearing although it is clear the culture has changed. At 86, Verna Brady, in a flannel shirt and dusty Marines cap, is one of the tribe's oldest members. Over a lunch of meatloaf, vegetables, and canned pears in the small tribal office, which also serves as a cafeteria, she fondly recalled her childhood, riding horses through a much greener valley beneath mountains that had more snow. While many Yomba elders speak of the importance of their Shoshone culture, Brady has gone in a different direction. "I'd rather go to church than go to powwows. I'd rather go forward than go backwards, you know what I mean."

Her comments reveal a larger point. The drought is eroding an already withered native culture. Historically the Yomba were not ranchers; they were nomadic hunter-gatherers. And in times of drought their ability to move and follow the food aided in their survival. "The native tribes that lived in Nevada and the desert Southwest before Western settlement had the ability to migrate," said Maureen McCarthy, environmental science research director at the University of Nevada in Reno and at the Desert Research Institute. "Now confined to reservations, that option is not available to them."

McCarthy directs a project called Native Waters on Arid Lands, a partnership between academic researchers, government agencies, and tribal communities funded by a $4.5 million grant from the U.S. Department of Agriculture. By facilitating an exchange of agricultural and environmental information between native tribes and academia and government, the project aims to help enable the tribe's continued survival. "Historically, the needs of the tribal communities have been ignored," said McCarthy. The Native Waters project aims to change that. "We are moving toward a point," she said, "where we have a cultural and an ecological appreciation of the landscape."

But that landscape has changed dramatically. One example is an exotic plant called cheat grass, introduced to the North American continent more than a hundred years ago. This quick-growing plant is now common across Nevada, and it grows more densely than native plants. That means it contains more fuel than native vegetation, making it vulnerable to fires. One blazed just several weeks ago, not far from Yomba, and additional cheat grass-fueled fires are burning in western Nevada. Once a landscape has been torched in a hot-burning cheat grass fire, cheat grass and other nonnative species, not native sagebrush, are more likely to grow back, said Dan Mosley, an environmental consultant, and member of Nevada's Walker River Paiute tribe. "Sagebrush is essential habitat for native animals like mule deer, sage hen, and cottontails," said Mosley. "Without it, it is a pretty barren landscape out there."

Hoping for Rain and Snow

It is 2 p.m. on a recent July afternoon back on Darryl Brady's ranch. A hot wind rattles the wind chimes, and dust devils emerge like apparitions on the valley floor. Brady sits on his porch drinking a Sprite. He wasn't always a rancher. For many years Brady worked construction in Southern California and across Nevada. But when his father died in 2002, he returned to the reservation to take over the family ranch. At first he regretted having to abandon what he calls "the real world." Attending a powwow in Elko, his first, he was inspired to learn more about his Native culture. "It really hit me kind of hard," he said, "to see what I was missing."

Earlier this year, Brady became the Yomba tribal chairman. He aims to navigate the tribe through the tough times ahead. But more than anything, he hopes for rain on the fields and snow in the mountains.

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