

# Raising Questions

*An OU anthropologist's reckoning with family history leads to being named a National Book Award finalist and impacting environmental change.*

BY ANNA ANDERSEN





Calli Ta'Nous

**F**rom the embattled forests of South America to the dwindling aquifer beneath his family farm in southwestern Kansas, OU Professor of Anthropology Lucas Bessire has spent his career studying the ways in which human cultures create, inhabit and resist environmental destruction. In the process, he's found deep, complex connections between places separated by thousands of miles but similarly threatened by unsustainable industry.

It was his mother's stories of Argentina, where she lived as a child, that first interested him in South America, Bessire says. "Visions of the Pampas, Patagonia and the Andes were enticing to a western Kansas boy." Those interests were encouraged by Dutch anthropologist and Native rights specialist Harald Prins, who became his undergraduate adviser at Kansas State University. Bessire earned degrees in Spanish and anthropology, and when Prins suggested studying abroad, he jumped at the chance.

A Fulbright scholarship took him to a sustainable forestry project in southeastern Bolivia's Gran Chaco region, and he began traveling and learning about Indigenous issues in the area. There, he made his first connections with Ayoreo people, a cross-border ethnic group whose roughly 6,000 members were divided into several communities linked by language, cosmology and a two-way radio network used to communicate across national borders. At the same time, several small bands of Ayoreo holdouts remained in voluntary isolation, refusing all direct contact with outsiders and surviving as nomadic foragers in the thick forests.

The Gran Chaco, a Texas-sized lowland area spanning parts of Paraguay, Bolivia, Argentina and Brazil, is "an ecological transition zone between the Amazon and the Pampas," says Bessire. While it lacks the name recognition of the Amazon rainforest, the Gran Chaco is similarly rich in wildlife and biodiversity, with over 3,000 plant species and more species of armadillo than anywhere else in the world.

Unfortunately, like the Amazon, the Gran Chaco's unique habitats are suffering from agricultural development. Over the past two decades, the area has had one of the world's highest rates of deforestation; a World Wildlife Fund analysis found that 26% of the Gran Chaco's forest area was lost between 2004 and 2017. Driven by genetically modified soy production and large-scale cattle

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◀OU anthropology professor Lucas Bessire's work has led him to ask hard questions in worlds as different, yet oddly similar, as remote communities in South America and his own family farm on the plains of Kansas.

ranching, deforestation has devastated not only flora and fauna, but also the traditional territories of many Indigenous peoples who call the area home—including the Ayoreo.

In 2004, Bessire learned that a band of Ayoreo had emerged from the forest, so terrified of ranchers' bulldozers that they willingly broke their isolation from the rest of the world. After this "first contact," Bessire spent four and a half years with that group, his personal relationships deepening "into immersive fieldwork and becoming a long-term involvement with Totobiegosode-Ayoreo communities. By now, those relationships are part of my life and part of who I am."

Bessire's 2014 book, *Behold the Black Caiman: A Chronicle of Ayoreo Life*, relates how the Totobiegosode-Ayoreo "struggle to survive and make sense of a New World seemingly bent on their eradication," he says. "One major aim of my work is to prove that changes to Ayoreo worlds and lives after contact are not just losses, but are also sophisticated, creative responses to environmental destruction in the Chaco."

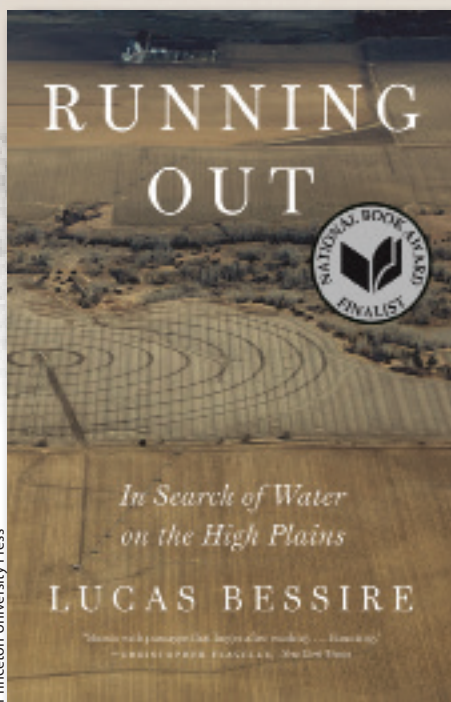
Among these creative responses is the Ayoreo Video Project. "Early on, I was struck by Ayoreo enthusiasm for electronic media," he says. "A video project seemed a good and fun way for them to speak back to outsiders' ideas about their humanity."

Funded by an OU Arts and Humanities Faculty Fellowship and several national grants, Bessire and his collaborators created a partnership between the Totobiegosode communities and the Brazilian Indigenous media collective Video Nas Aldeias, which has been training Amazonian peoples to make their own films since the 1980s.

"We assembled an international team, brought together 14 Ayoreo participants from three tribal groups and both sides of the Bolivia-Paraguay border, donated equipment and cameras, held workshops, taught Ayoreo crews the basics of digital video and managed a collective editing process. By 2017, the Ayoreo Video Project resulted in the first four films ever made by Ayoreo people.

"My time in the Gran Chaco witnessed how people create inhabitable futures in the face of ecological change," Bessire says, "but it also raised questions about these same dynamics closer to home."

For five generations, Bessire's paternal family has farmed



*Running Out*, OU Professor Lucas Bessire's examination into aquifer depletion in southwest Kansas and his family's own contribution to the problem, was a finalist for the National Book Award.

in southwest Kansas, relying on deep wells tapping the Ogallala Aquifer for irrigation. During a 2016 visit, he learned his father was concerned about the dropping water table. Rather than the inexhaustible underground ocean Bessire pictured as a child, the aquifer lying beneath eight U.S. states is buried between layers of sand and gravel that traps water like a giant sponge. While one of the largest in the world, the Ogallala Aquifer also has some of the world's highest rates of groundwater loss.

Bessire's subsequent research showed an alarming situation: southwest Kansas ranks near the top of groundwater depletion within the Ogallala region—and the losses near "the Little Rock House," once his

great-grandfather's cattle camp, are among the area's worst.

"The place that nurtured five generations of my family was an epicenter of global aquifer depletion," he says. The experience led Bessire to write his latest book, *Running Out: In Search of Water on the High Plains*.

Bessire was stunned to realize that the Kansas Plains were "a mirror image" of the Gran Chaco and argues that some of the same agribusinesses deforesting the Chaco are driving the Ogallala's depletion. He recognized that cultural anthropology could provide a framework for studying the complex problem of aquifer depletion, just as it was useful for addressing deforestation a continent away.

"That framework helped me see how an environmental problem like aquifer depletion is actually connected to a vast range of other relationships and dynamics. It cannot be addressed as an isolated phenomenon."

Accompanied by his father, Bessire spent two years interviewing farmers, ranchers and water officials. He discovered that while some resist the idea of any restrictions on their water use, others are interested in conservation but hampered by policies and attitudes that make it difficult to use less water. For instance, the Southwest Kansas Groundwater Management District, or Southwest GMD—which covers 8,400 square miles of the region—had a "use it or lose it" policy before 2012, requiring farmers to use their full allotments of groundwater every year or risk losing water rights in the future. At the same time, Southwest GMD continued to grant additional water rights, resulting in farmers being legally per-

mitted to pump more water from the Ogallala Aquifer than exists.

Irrigation farming on Southwest GMD land is responsible for almost half the groundwater use in Kansas and provides a third of the state's agricultural economy, Bessire says. Grappling with this complexity, he found that his background in cultural anthropology helped him create insights through the distinct method of ethnographic fieldwork.

"This is an approach that doesn't try to just illustrate fancy theories. Instead, it stays close to real people's lives and takes their perspectives seriously," he says. "Ethnographic fieldwork can allow us to understand problems and solutions in new ways."

Using this approach, Bessire discovered that aquifer depletion is enabled by big corporate interests that own much of the area's farmland and are responsible for extracting large amounts of the irreplaceable groundwater. "They reap profits while many small family farmers struggle to make ends meet," he says.

One of the biggest surprises, Bessire says, was realizing that only a privileged few who own large amounts of land or water rights have a voice in regional groundwater management.

"That means the vast majority of residents in southwest Kansas, including most townspeople and members of a large, diverse Hispanic population, are excluded from the processes that will determine the long-term futures of their families and communities."

Further complicating Bessire's work was reckoning with his own family's complicity in aquifer depletion. "I discovered that my great-grandfather was partly to blame, as he helped to initiate the deep-well irrigation that gave Plains farmers a second chance after the Dust Bowl." By positioning himself and his family in such wider contexts, Bessire hopes to show how personal histories are tied to changes in the land

The Lower Springs of the Cimarron River once lay two miles east of where the Little Rock House stands now. The springs were the only permanent source of water in 50 miles. For thousands of years, they were used by Indigenous peoples and travelers along the Santa Fe Trail, but a single decade of deep-well pumping dropped the water table 30 feet. By the 1950s, the springs and that portion of the river were gone.

"I am struck by how the present aquifer crisis seems to

resonate with past events like the eradication of bison, the dispossession of Native peoples and the unsustainable practices that led to the Dust Bowl," Bessire says.

*Running Out's* mix of ethnography and memoir was noted in glowing reviews from multiple outlets, including *The New York Times*. The book earned five literary prizes and was selected as a finalist for the 2021 National Book Award in non-fiction. Outweighing these accolades, however, may be the book's real-world, positive influence.

"There is certainly a wider conversation underway in Kansas about how to correct course and save part of the Ogallala Aquifer that remains," says Bessire. "I am very grateful and honored that the book has been a part of that conversation."

According to Connie Owen, director of the Kansas Water Office, "It is not an exaggeration to say *Running Out* helped ignite the courage required for Kansas policymakers to finally insist that depletion of the Ogallala Aquifer must stop.

"For water officials like me who have been frustrated for decades by the pervasive 'head in the sand' approach to depletion, Lucas' clear and unvarnished reveal felt like a champion had

dropped into our midst. It gave a boost to the coalescing efforts among policymakers to risk political and traditional resistance by refusing to accept the inevitability of Ogallala depletion."

In December, the Kansas Water Authority took an important first step. Previously committed to a "situation of controlled decline," the advisory board voted almost unanimously to change tactics, acknowledging that the problem of aquifer depletion exists and must be addressed quickly to prevent total destruction.

"It seems like we may be reaching a tipping point of sorts," says Bessire. "The bad news is that we do not have much time left to fix it. The good news is that there are a lot of great and courageous people involved, that the ultimate solution is obvious to everyone, and that we have the mechanisms in place to make sustainable groundwater use possible. We just have to use them."



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