# RESILIENCE

*A Voice of the New Agrarianism*

*Issue 43*

## Weaving Water, Land, and People

## Resilience

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We welcome your letters, comments, questions, and compliments.

**Join and Support**

The Quivira Coalition publishes *Resilience* annually as a benefit of its membership program — becoming a member is one of the best ways to support our work. Additional copies are available for $5 shipped in the U.S. with additional shipping to international addresses.

***quiviracoalition.org/join***



# Editor's Note

Dear *Resilience* Readers,

We are so very excited to share this year's issue of *Resilience* with you. It is a rare but special space we collectively create in the pages of this magazine. One where science, practice, emotion, spirituality, and activism are all given equal precedence. A container where our diverse community can express their woes and wins on this journey of shifting deep systemic inequities and healing our planet. An expansiveness where we can weave water, land, and people together to imagine a more unified world into reality.

The work we do in the Quivira community is difficult–we have lofty goals that are not easy to attain. We strive to usher in an era where humans return to their long-lost harmony with nature; an era where our economic resilience does not come at the cost of the planet's ecological resilience, but, rather, enhances it. We are dreamers and idealists: writers, artists, scientists, and community organizers who not only imagine a different way of existing in this world, but follow through and put this new order into practice. For much of the time, such work is uncomfortable and trying, and pushing up against the old systems in place is a painful, often existential, and emotionally exhausting undertaking.

In the pages of this 43rd edition of *Resilience,* you will find the voices of community members who are living this reality through vulnerability, stark honesty, and self-evaluation. By sharing their passions and pains, they offer us intimate access to their relationships with the land. Through their messages and gifts, we are reminded of what is important in this life and what we stand to lose. As an ecological researcher, I find sanctuary in the pages of this issue of *Resilience*. After years of quantifying and objectifying biodiversity loss as numbers, figures, and facts, I feel sudden rushes of repressed sorrow and anger as I read this issue's stories and pour over its artwork.

Creating a space for the expression of emotionality around our climate and biodiversity crises is so incredibly important–our selected storytellers in *Resilience* embody this space. Their narratives and imagery welcome you into their intimate experiences with nature; emploring us to join them in revering nature's simplicity, unhurriedness, and evolved intentionality. They remind us that restoring the land means healing our relationship with it: slowing down, grounding ourselves, and fostering the interconnectedness of family, food, plants, water, and soil.

In these ways, this year's cohort of *Resilience* contributors weave together the ideal and the real, slowly moving us toward a new way of coexisting with one another, with the plants, animals, and spirits around us. We are so lucky to have such a beautifully expressive and accomplished community and hope you find solace and inspiration among these pages.

Sincerely,

Megan O'Connell, PhD

Director of Education and Outreach

Quivira Coalition

# RESILIENCE



Photo by Alexis Bonogofsky

# CONTRIBUTORS

Our contributors have generously contributed their reflections, stories, poems, drawings, and photographs out of love for this publication, organization, and community. We're extremely grateful to them for making this magazine.

***Erin Elder*** is an artist, writer, and curator guided by interests in land use, experimental collaboration, and non-traditional modes of expression. Her research-driven projects take highly participatory forms, working with a broad definition of art to bring audiences into a direct experience of particular places. Erin lives on ancestral Tiwa lands in central New Mexico, just outside the city of Albuquerque, NM.

***C. Marie Fuhrman*** is the author of *Camped Beneath the Dam: Poems* (Floodgate 2020), co-editor of Native Voices (Tupelo 2019), and the 2021-2023 Idaho Writer in Residence. She resides in the mountains of West Central Idaho

***Carly Fraysier*** Carly Fraysier received an MFA in Creative Writing/Environment and Natural Resources from the University of Wyoming. She's the recipient of a Creative Writing Fellowship from the Wyoming Arts Council. Her writing has appeared in publications including Contra Viento and Western Confluence. She lives in Montana.

***Chelsie Begoody*** is Tsenabahiłnii, born Tsénjíkiní, Áshįįh is her maternal grandfather and Tábąąh is her paternal grandfather. She is an emerging artist who has been creating acrylic art pieces for the past few years. Her art inspiration comes from all her relatives in life, in hopes of resonating with good and empowering feelings.

***Hannah Gosnell*** is a Professor of Geography in the College of Earth, Ocean, and Atmospheric Sciences at Oregon State University.

***Leeanna Torres*** is a native daughter of the American Southwest, a Nuevomexicana writer who has worked as an environmental professional throughout the West since 2001. She is currently at work on a creative-non-fiction book manuscript centered-on landscape, culture & *querencia.*

***NMCEWL interviews (p.42)*** were made possible thanks to the New Mexico Collaborative Zone Grant, a statewide initiative in which philanthropic resources are pooled to inspire creativity and foster innovation within our communities.

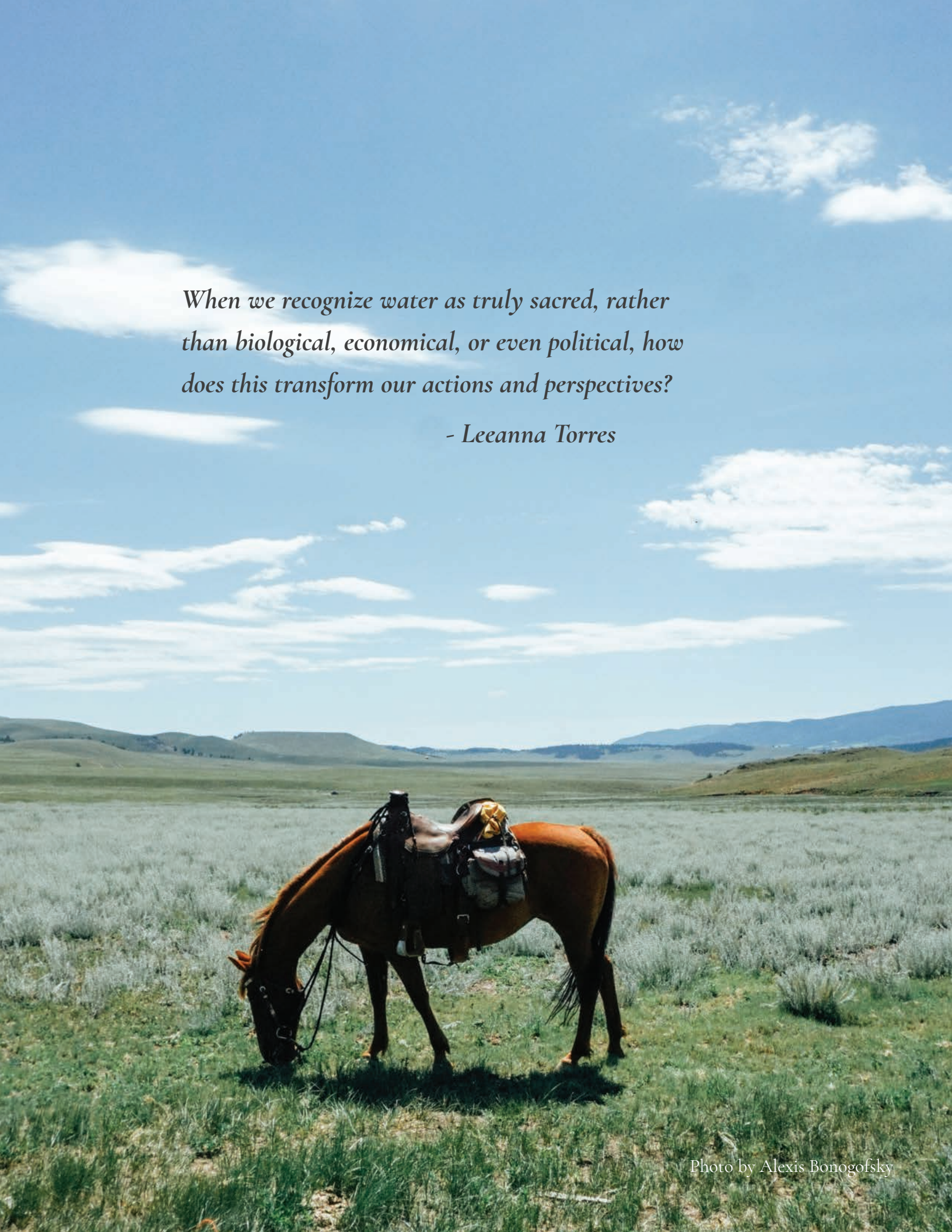
***Dr. Rene Henery*** is the California Science Director for Trout Unlimited.

***Sam Hinkle*** is a Colorado Springs native and Communications and Development Director for Quivira. His earliest memory of being outside was at the Venetucci Farm.

***Sean McCoy*** grew up in Arizona and has worked on ranches across the Southwest. In addition to this publication, he edits *Contra Viento*, a journal of art and literature from *Rangelands.*

***Sunny Dooley*** is Nihókáá Diiyiin Diné/Earth Surface Divine Person residing in Ní'dishchíí'biłyildiz Dédeez'á' Bighá́á - Pinetree Valley on the High Ridge. She is a Diné Hozhojii Hané Teller, poet, and organizer of positive possibilities for true change to root.

***Zach Withers*** is a crazy anarchist pig farmer stewarding the land he was born on in central New Mexico.



*When we recognize water as truly sacred, rather than biological, economical, or even political, how does this transform our actions and perspectives?*

*- Leeanna Torres*

Photo by Alexis Bonogofsky

*Photo by Alexis Bonogofsky*

# TAKING STOCK

## *Bite-size research exploring social sustainability and the U.S. beef industry*

Research by Hannah Gosnell, Kelsey Emard, and Elizabeth Hyde

Photos by Taylor Muglia and Alexis Bonogofsky

*Editor's note:* We are excited to share some of the research findings collected and published by Dr. Hannah Gosnell and her co-authors Kelsey Emard and Elizabeth Hyde at Oregon State University. Their recently published paper presents the results of a study of social sustainability in the U.S. beef industry with a focus on the pre-harvest, cattle ranching portion of the industry. In this bite-size research segment, we've pulled out key details about how the research was designed and the key themes that emerged across their interviews and interactions with producers in the West. Referenced endnotes have been removed for brevity but can be found in the original published work. A link to the original paper can be found at the end of this article. The majority of the text that follows has been pulled directly from Dr. Gosnell's paper, with her permission, with only slight edits that provide a third person perspective.

Dr. Gosnell's research explores the concept of social sustainability as it relates to ranching and the U.S. beef industry. Drawing on a set of interviews with 15 thought leaders in sustainable approaches to beef production and a review of scholarly and gray literature on the concept of social sustainability in agriculture, Dr. Gosnell and her team identify key themes on the topic of social sustainability and ranching in the U.S. West. Their qualitative approach gave interviewees the opportunity to contemplate strengths and weaknesses of the current systems, share stories and experiences, and visualize alternative futures. Based on their findings, they suggest that future efforts to evaluate social sustainability "would benefit from an approach that creates space for qualitative insights, rather than attempting to identify indicators that can be measured quantitatively."

Individuals that were interviewed are referenced by identifiers (i.e. R1, R2, N4, A5, R6, R12, etc.) What follows are some bite-size segments, pulled and summarized from the paper with permission from the author.

## Key Indicators Identified

Key indicators of social sustainability identified in this research can be organized under the themes of

- human health
- learning/adaptation
- community relations
- equity and inclusion
- land ownership, tenure, and succession
- industry structure

Indicators were examined across the ranch, community, and industry scale and cross-scale linkages were identified. An important point emerging from this project is that systemic changes are needed in order for the beef industry to better balance the three pillars of sustainability: environmental, social and economic. The findings indicate a significant tension between economic priorities at the industry scale and social concerns at the ranch and community scales. There is a need for future research that builds on the nascent ideas presented here and explores alternative future scenarios for the role of ranchers in the U.S. beef industry, including those that might emerge from a value system not built around efficiency and volume.

*Photo by Taylor Muglia*

Dr. Gosnell and her team considered definitions, criteria, and indicators as well as barriers and pathways to social sustainability in the ranching industry. Building on prior work done in the literature and on insights from their key informants, they proposed a qualitative framework for evaluating and improving social sustainability in the cow-calf sector of the beef industry that considers processes and activities at three interconnected scales: operator/ranch scale; community scale; and industry scale. The authors also posed questions that need further contemplation including: is the term sustainability adequate and useful to envisioning a truly beneficial beef industry? Are metrics and indicators useful for considering and addressing social sustainability issues? What systemic changes need to happen for the beef industry to balance the three pillars of sustainability?

## Key Indicators and Themes from Interviews with Producers:

- Human Health

One of the key themes that emerged from these interviews on the social sustainability of cattle ranching and the US beef industry was that of human health and well-being. Indicators of human health and well-being are easily observable across multiple scales including that of the individual ranch operation, the ranching community, and the national industry.

One interviewee described the pressure that can lead to mental health challenges in ranchers in this way:

*It's almost like our job in the world is to take care of the world, but to take care of the world, you've got to take care of yourself. If your business is relatively stable, you're more able, either as a ranch family or as an individual, to be able to respond to the needs of others. If you're really struggling and anxious and fretting about your business, you're going to have less energy capacity to help other people in your community* (R13).

Emotional and physical health are deeply tied to one another, and although ranching creates opportunities for a high quality of life and good health, there are currently a number of significant health concerns facing the ranching community. Further, although these interviews focused on cow-calf operations, one respondent noted that, *"in feedlots and processing centers, many employees face health risks associated with their labor"* (N3). And, *"at an industry scale, the ways that beef is raised, finished, and processed impacts the quality of the meat, thus influencing consumer health"* (R15). Human health creates a cross-scale linkage in considerations of social sustainability, as the method of meat production impacts the rancher, the rancher's community, the packaging/processing employees, and the consumer.

*"It's almost like our job in the world is to take care of the world, but to take care of the world, you've got to take care of yourself."*

*Photo by Taylor Muglia*

## • Learning/Adaptation

A second thematic category to emerge from the interviews is the role that learning and adaptability play in a socially sustainable beef industry. Interviewees highlighted a number of places where this learning could take place including formal education, intentional networking, and informal community gatherings like church and brandings. But across all comments on this theme, interviewees emphasized the need to remain open and undefensive, seek out and share new knowledge, and build the emotional reserves necessary for productive dialogue (R1, R2, N4, A5, R6, R12). This learning and adaptability applies to all scales, as ranchers, communities, and companies can improve their practices.

## • Community Relations

Consistent with the scholarly literature reviewed, interviews revealed that ranchers' relationships with others comprise a key aspect of social sustainability. There was a common sentiment that ranchers need to realize they are part of a social network and cultivate that network with care.

*When I see a rancher that I would call sustainable, it's that person who is embedded in the community, the school, church, whatever. They're networked with conservation organizations, the Farm Bureau, HMR Service, NRCS, you name it. They can establish their spider web of support. Those are the ones that are successful. Not only that, they're the ones who instead of being grumpy all the time, have a smile on their face. I don't know if they're happy because they're sustainable or they're sustainable because they're happy, but I think it's both.* (N11)

*"Diversity is critical to social sustainability because it brings new ideas and values, increases social capital, and improves resilience."*

*So all of the nodes [in the network] need to become a lot closer. And the rancher, too, needs to become closer to the scientist, to the market, and explain, teach, share … share the pain points, share the fears, share the challenges.* (RN7)

A healthy social network will support a rancher when challenges arise, making them less vulnerable to shocks, stressors, and unexpected crises. Further, a cultivated network can improve consumer trust and reduce conflict between stakeholders.

In addition to good relations with stakeholders with interests in land, water, and wildlife, there's a need for mutual understanding and respect and empathy between ranchers and beef consumers, many of whom are urban people.

## • Equity and Inclusion

Interviewees frequently brought up themes of equity and inclusion, explaining that diversity is critical to social sustainability because it brings new ideas and values, increases social capital, and improves resilience (R1, R2, RN7). Diverse perspectives are necessary at the decision-making table in order for ranching to adapt to current challenges and sustain itself into the future. The need to do more than just tolerate ranchers or workers of color, but to ensure that

diverse perspectives have a say in decision-making [was] clearly articulated.

Not only are there significant barriers of entry for people of color to become ranch owners and decision-makers, even though people of color comprise a significant percentage of the workforce on feedlots and in packaging centers [42-43], but those who do manage to bring in new perspectives and occupy different social positions bear an immense emotional burden.

## • Land Ownership, Tenure, and Succession

Another recurring theme had to do with the role that land ownership, land tenure, and succession play in social sustainability. Several interviewees commented on the lack of diversity in the cohort of ranchers who are owner/operators, and, due to historical circumstances, current opportunities to buy land and/or inherit it are mostly limited to white men.

Planning for succession is seen as increasingly challenging. Interviewees noted that in many ranching communities, the next generation is opting for better opportunities off the ranch for a variety of reasons. (RN7). To sustain the family ranch tradition, young people need to be welcomed back, made to feel heard, and their new ideas incorporated. (R1, R12). This relates to the points discussed under Learning/Adaptation.

A complicating factor for the future of ranch land ownership is the rapid rise in agricultural land values over the past few decades. This has made it more difficult for ranchers to own land and pass it on to their children. Ranch land in many places is worth more than livestock production value. These trends are resulting in development and land conversion on one hand and ownership changes involving absentee and/or amenity buyers with different land management priorities on the other.

*"Are we creating a system in which the next generation or generations are able to continue ranching? What are the barriers to that? In California, the context here, the background is that we lose 20,000 acres of rangelands every year."* (N11)

*"To sustain the family ranch tradition, young people need to be welcomed back, made to feel heard, and their new ideas incorporated."*

## • Industry Structure

Interviewees had a lot to say about the tensions between the beef industry, social sustainability, and, especially, community resilience. A common observation was that the centralized industry structure with its emphasis on efficiency has had a negative impact on rural communities, and that what's good for the industry is not necessarily good for the community, the individual rancher, or the animals.

Interviewees similarly commented on the links between the beef industry and the decline of rural communities.

*"Agriculture, and especially since industrial agriculture took over, and the whole food system, as it is today, has prioritized volumes and efficiencies and has eroded ecological and social richness and capital. So we have lost a lot of our traditions, a lot of our culture, a lot of our indigenous knowledge …on how to do things. And with that goes so much social, cultural, traditional, wisdom and richness"* (RN7).

Several pointed to breakdowns during the recent COVID-19 pandemic as evidence of the system's vulnerability (R1, R8, RN9). Increasing media coverage of problems with feedlots and migrant labor are giving ranching a bad reputation, and ranchers are having to deal with pressure from both environmental communities and consumers, leading to a loss of pride in their profession.

Impacts of industry structure on social sustainability play out at the operator scale, since it dictates the timing and methods for raising cattle which impacts cultural norms and traditions around cattle husbandry, and at the community scale because of the impacts on local infrastructure and jobs.

*Photo by Taylor Muglia*

## • Barriers and Pathways to Social Sustainability

Interviewees also provided insights into the key barriers and pathways to social sustainability. This is not a thematic category under social sustainability, but was nonetheless a key aspect of the interviews so the authors summarize barriers and pathways identified by the interviewees by scale. At the individual rancher scale, interviewees identified risk aversion, an inability to listen and learn, and poor planning for succession as major barriers to

**Table 1. Indicators of social sustainability in the pre-harvest sector of the beef industry at three scales**

| | Ranch Scale | Community Scale | Industry Scale |
|---|---|---|---|
| Human Health | • Ranchers have good physical health<br>• Ranchers have good mental health | • Community has physical and mental health services<br>• There is awareness, acceptance, and support for health challenges | • The product provided to consumers is healthy<br>• Working conditions throughout the industry are healthy |
| Learning and Adaptation | • Ranchers apply new ideas and technology | • Community members dialogue across differences<br>• Opportunities exist for social learning | • Industry organizations facilitate learning opportunities |
| Community Relations | • Ranchers cultivate relationships with stakeholders and consumers | • Forums exist for community dialogue<br>• Community members participate in collaborative problem-solving | • Industry organizations solicit and respond to feedback from ranchers and consumers |
| Diversity, Equity, and Inclusion | • People from diverse backgrounds have equitable roles in decision-making<br>• All people on the ranch feel safe and respected | • Diverse constituents feel a sense of belonging in the community<br>• Efforts are made to recruit, train, and support people from underrepresented groups to participate in ranching | • Industry governance characterized by diverse leadership<br>• Many backgrounds are represented in decision-making<br>• Inequitable impacts of the industry are addressed |
| Land Ownership, Tenure, and Succession | • Next generations return to the ranch<br>• Ranches have succession plans | • Owners are invested in the community<br>• Invested community members have the opportunity to own | • Land market and beef prices allow for intake working landscapes vs. land conversion and other land use change |
| Industry Structure | • Ranches are food secure<br>• Ranchers feel secure in their livelihoods | • Communities are vibrant and livable<br>• Good paying rural jobs in beef exist | • Organizations are held accountable for social sustainability indicators<br>• Monitoring programs are in place |

*Photo courtesy of San Juan Ranch*

*"Are we creating a system in which the next generation or generations are able to continue ranching?"*

achieving social sustainability (R13, R15). However, the interviewees identified neighborly support and community building as important pathways to achieving social sustainability at the ranch scale (R2, N11). Further, interviewees said good succession planning and retaining knowledge through generations were also critical (R2).

Important pathways identified at this scale included community co-ops such as Country Natural Beef, developing relationships and trust between producers and consumers by visiting retail stores or inviting consumers to the ranch, ensuring good schools in the community, creating opportunities for dialogue and diverse ideas, and building organizations that allow members to participate in the betterment of their community (R2, RN7, N11).

Finally, at the industry scale, interviewees identified the size and structure of the industry as a barrier to nimbleness, responsiveness, and adaptability, making change difficult. They considered the inability to decouple beef and corn, a monopolized industry, a focus on efficiency and volume, and lack of government support for small-scale, grass-fed, and non-conventional methods of ranching to be major barriers (RN7, R8, RN9).

You can read the full published paper at Sustainability 2021, 13(21), 11860. https://doi.org/10.3390/su132111860.

Hannah Gosnell is a Quivira Coalition board member and a Professor of Geography at Oregon State University who studies agricultural landscape change, collaborative conservation, climate change, and environmental governance in the context of rural working landscapes. Her research focuses on the human dimensions of rangeland management from a social-ecological systems perspective. She is particularly interested in the social, cultural, and psychological aspects of the transition to regenerative agriculture and the implications for landowners' capacity to adapt to social, economic, and environmental change. Hannah earned her MA and PhD in Geography from the University of Colorado, Boulder and a BA from Brown University.

# WEAVING WATER

## *A Personal History in the Sandia Sub-basin*

Essay by Zach Withers

*Zach sitting with his niece, Charlie. Photo by Sarah Wentzel-Fisher*

My parents' house, a few miles up the road from our farm, perches atop a small ridge overlooking Cienega Canyon. As children walking home from the bus stop, my brothers and I followed the road that bears the canyon's name, then veered onto Four Wheel Dr., which shoots you straight to the ridgetop. From the deck of our childhood home, the view stretches north to Santa Fe and the Sangre de Cristo Mountains, east across the Ortiz hills and South Mountain, and south across the Estancia Valley. Hop the fence to the west and you find yourself in the Sandia National Wilderness.

This forest tells of a century of fire suppression and overgrowth, which began with the development of my small neighborhood (Sandia Park) in the 1920s—built to provide ski-cabins and, later, "rural"-suburban homes for residents from Albuquerque. Tucked away in the thicket of piñon pine and gambrel oak is a smattering of century-old cabins and new half-million-dollar homes. It is a beautiful place, hugging the national forest where a series of seeps and springs feed into the bottom of the canyon, creating an intensely alive little wetland area named La Cienega. Just beyond the boundary to the national forest, you can find the remnants of an abandoned picnic area where the old springs along the old road have run dry—a result of groundwater pumping to support the surrounding development.

Farther up the canyon, a new picnic area with a much nicer road now offers ample parking and access to a maze of paved paths that crisscross The Cienega—an expanse of grasses and sedges created by the still-running seeps and streams that drain from the mountain's upper slopes. This unique riparian area, nestled inside federal jurisdiction, has, so far, been protected from the nearby groundwater decline. It is one of two remaining perennial surface water resources for miles around and home to a cluster of biodiversity in both flora and fauna. The water is gravity fed through cracks and fissures higher up the mountain, primarily by snowpack and the brief rains that fall during monsoon season.

As teenagers, during the early spring when the snow began to melt, my brother and I would pause at the bottom of the hill leading up to our house and lie on our bellies at the roadside to slurp water from a little waterfall, created by the head cut on the uphill side of the culvert. Today, the fence here follows the bottom of a nearly vertical rock face, which leads to a pair of enormous, architectural masterpieces—vacation homes for wealthy folks from another state. The deck of the more visible mansion juts off the top of the ridge, craning over an artificially lined pond. On those occasions when water breaches the dam of this private (and seldom-enjoyed) oasis, it rushes down a heavily-incised ditch and proceeds about two miles to our family's farm, purchased by my grandparents in 1976. Along the way, it winds through the mostly-forgotten village of San Antonito, built two centuries ago by descendants of Spanish colonists to buffer the Rio Grande valley against raids by the nomadic tribes who still controlled the plains to the east. Beyond our farm, the water theoretically would flow through Armijo Arroyo and connect into San Pedro Creek, the other perennial stream in the area, and eventually back into the Rio Grande.

In reality, this stream is dying as a result of reckless groundwater pumping, prolonged drought, and the absence of beneficial fire and grazing patterns that have kept this ecosystem thriving for millenia. As a child, I watched the stream here run for months out of the year. In the last few years, it has only run a handful of times. This year, even with an exceptionally good monsoon season, it did not run at all. Despite the visual fact of water scarcity (dry creeks and streams, the dry bed of the Rio Grande, nearly empty reservoirs, bare mountain sides where snowpack should be), we continue to ignore our worsening water crisis and pursue short term profits at the cost of our present communities and future generations. It is time for a new story. It is time to weave our communities back into the landscape, reunite our economies with ecological reality, and harmonize the interplay of our lives and livelihoods with the water we depend on.

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The pond on our farm was dug by my grandmother in the late '70s with a Masey Fergons backhoe she bought with the winnings from a particularly lucky night at bingo. When I was young, the banks of this pond and the islands therein hosted a swath of cottonwoods, willows, sedges, and a raucous army of frogs that made the whole farm feel like a jungle on summer nights. Grandma built us a raft out of fifty-five gallon drums and two-by-sixes that we would paddle across the pond, trying to catch tadpoles and salamanders. These were the defining memories of my childhood.

And I recall another memory, the significance of which has only recently come into focus: driving around with my grandpa to check on local well levels. My grandpa, Gene Polk, was a geologist who worked in the drilling industry. My grandpa believed that if you gave someone access to a resource, you also needed to make sure they had the knowledge to effectively manage that resource. Once a year, he would go around and take readings on many of the wells he had helped drill. My job was to rub chalk on the end of the long steel tape we sent down the well holes. Based on data from the previous year's water levels, we would send down the tape a set distance, then pull it up to see how much of the chalk had been washed off—from which we could deduce the current water level. Grandpa kept a log for each well; sometime around the late '90s he became concerned about what he was seeing: groundwater levels were dropping at an alarming rate.

*My grandpa believed that if you gave someone access to a resource, you also needed to make sure they had the knowledge to effectively manage that resource.*

On average, only a fraction of a percent of the 18 or so inches of annual precipitation will infiltrate the aquifers. When you pump more water out of the ground than is going back in, groundwater levels decline and wells and streams go dry. My grandpa took his concerns to the county, and explained that we were moving beyond the long-term carrying capacity of our communities' only water resources. In response, the county initiated a program to continue monitoring well levels, but declined to place any restrictions on development or the drilling of new wells. (Under New Mexico state law, any time a county or municipal government issues a permit to build a home, the state is obligated to issue a permit to drill a domestic well, regardless of whether there is enough water.)

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In the last couple of decades, an intense increase in development has transformed my community from a rural and agricultural one into one of sprawling suburbia. Groundwater levels are dropping at an average of 2.5 feet per year in the Sandia Basin. This has been exacerbated over the last 20 years by the worst drought to hit this

*Swimming as kids in the pond grandma made, circa 2000*

area in a millennium. Even the Cienega up the road from my parents' house has run dry parts of the year, and the stream that runs through our farm has flowed only a handful of times in the last decade. San Pedro Creek has shrunk to a trickle of its original length. The scientists who work for the state estimate that we are about 20 years away from sucking most of our accessible groundwater resources dry, and yet hundreds and thousands of homes continue to pop up around us, and tens of thousands of empty lots are approved for development. Immediately north of our farm, a 4,000 home mega-development complete with another eighteen hole golf course is moving forward, threatening to use San Pedro Creek as a dumping ground for gray water and storm run-off.

As the lack of groundwater to support this spreading suburbanization has become clearer, many developers have turned to private water utilities that are buying up agricultural water rights in Estancia Valley and pumping the water here from there—a journey of anywhere between five and 75 miles. The Estancia Valley, meanwhile, is also seeing its groundwater decline at an alarming rate; experts estimate a 50- to 70-year timeline until their water resources run out, primarily as a result of a massive amount of center pivot irrigation for producing corn, alfalfa, sod, and beans.

This interbasin water transfer to the neighboring Sandia sub-basin is small in comparison to agricultural water use, but also represents an inflexible demand. It is much easier to fallow fields than ask people to go without bathing or doing dishes or laundry. The unspoken assumption among a majority of people is that the problem of supplying water for residential use will be solved by converting agricultural water rights to that purpose. Never mind what happens to our neighboring agricultural communities; never mind how we produce the food to feed all these people. Perhaps the most disturbing development in all of this is the increase in predatory speculation on future water shortages. One corporation (ironically named Aquifer Science) has dumped over ten million dollars into lawsuits over water rights in the Sandia Basin, angling to gain legal rights to mine and resell groundwater to people in our community.

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Hardly a week goes by that I don't hear of another neighbor whose well has gone dry, yet every week I see more houses popping up. There are no state regulations to prevent price gouging on water (which is rapidly turning into a very serious issue in our community), and so it seems that the privatization and commodification of an essential resource is already a *fait accompli*. But despite the seemingly intractable nature of our water problems, from a technical standpoint the issue is not unsolvable, at least not for my immediate geographical area.

*Many developers have turned to private water utilities that are buying up agricultural water rights in Estancia Valley and pumping the water here from there—a journey of anywhere between five and 75 miles.*

Balancing a water budget is like balancing any other budget: income has to exceed expenses or you go broke. Our water "income" is based entirely on annual precipitation that infiltrates the aquifers. This reality makes the situation appear more difficult, but there's a silver lining: our water supply is not subject to any treaties that require the seven Southwest states, multiple tribal nations, and Mexico to find agreement. Here in the Sandia Sub-Basin and throughout the Estancia Basin, we can manage our own water supply. We already do. The groundwater resources are our savings accounts. Right now, we are acting like a strung out trust-fund baby addicted to cocaine and gambling with a debit card connected directly to the accumulated wealth of every generation that came before us, and no job.

We can change this. We can use zoning laws and local ordinances to prevent further increases in demand on already over-tapped water resources. We can stop depending solely on groundwater and instead work to capture rainfall and store it for domestic use. We can change our agricultural practices to increase efficiency and reduce agricultural water use: installing drip irrigation, irrigating at night, growing less water-intensive crops, investing in hedgerows and tree lines that reduce evapotranspiration, and, most importantly, improving the health


*This photo and the image on the following page depict a collaborative science project with the Quivira Coalition to improve soil health in our pastures by applying compost we produce at the farm.*

of our soils to make more effective use of the water in growing crops. These are the obvious methods, all of which would be helpful at slowing the decline. Truly solving the issue, though, and ensuring that future generations will enjoy the same access to food and water, will require a more radical shift in our relationship to land and water, as well as a change in the role that government plays in our societies. In short, we must realize that water doesn't come from a pipe and that the way we use land and the way we produce food directly influence the ecological cycles that sustain us and all life. Also, we must learn that the proper role of government is the effective stewardship of communal resource pools, not the defense of private property and the facilitation of the extraction of natural resources to accumulate meaningless capital.

Perhaps by elucidating these alternatives, we can avert our eyes from the shadow puppets of the powers that be and fix our gaze on more just and sane times to come.

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Reducing the amount of groundwater we are pumping enough to ensure that future generations will have access to a reliable reserve of potable water in times of drought may seem like an impossible task, but consider this fact: roughly a third of domestic water use goes down the toilet. Transitioning to composting toilets would reduce domestic water consumption by 30% alone. (Some might scoff at the idea that we should go back to outhouses, but I'd be willing to wager that someday people will look back in horror at the era when we intentionally shat in clean water on a daily basis). Add tanks and gutters to our roofs, and we've cut domestic groundwater use by more than half. These steps will slow the decline of our aquifer and buy time to tackle the more complex task of moving the needle on the supply end.

Restoring the health of our forests can dramatically impact the amount of water that feeds into our aquifers and, hence, into streams, rivers, and wells. (As an added bonus, it also reduces the potential impact of catastrophic wildfires.) A year after the forest service thinned and burned the area surrounding the Cienega, my parents' well (immediately downstream in that drainage) saw a sixty-foot rise in water levels. The overgrown understory of the forest is also an important source of carbon that can be used in combination with the nitrogen-rich waste from composting toilets, food scraps, animal manures, and other "waste streams" to produce biological soil amendments needed to restore the health of our degraded land.

Reestablishing the health of our agricultural soils and forests can increase the water absorption capacity at a watershed scale while simultaneously building a living local economy and increasing our collective food and energy security. A one percent increase in soil carbon translates to roughly twenty-five thousand gallons of additional water absorption capacity per acre. Spread that out over many square miles and, if even a small

*We must realize that water doesn't come from a pipe and that the way we use land and the way we produce food directly influence the ecological cycles that sustain us and all life.*


*Photo by Sarah Wentzel-Fisher*

Photos by Sarah Wentzel-Fisher

*The same pond space grandma dug, circa 2022*

portion of that makes it back into the savings account, we will have taken another chunk out of our remaining deficit. If nothing else, that increase in organic matter will reduce the amount of water needed to produce the same amount of crops or feed the same amount of cattle, lessening dependence on groundwater pumping while maintaining (or even increasing) yields for farmers and ranchers.

*Balancing a water budget is like balancing any other budget: income has to exceed expenses or you go broke.*

We can also use well-managed grazing operations to repair the damage done by mismanaged grazing operations over the last century, and employ the compost produced from our composting toilets and other "waste streams" to help jumpstart degraded soils, nurturing a positive feedback loop that increases forage production, soil aggregation, water absorption, and all the diversity that comes along with that—from microbiology in the soil, to plants, to bees, to baby humans.

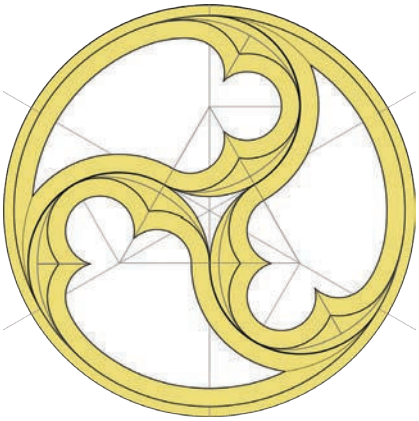
Diversifying the crops and animals we raise can create a locally adapted genetic pool that will maintain our ability to feed ourselves regardless of which global supply chains fail and support a myriad of local businesses that can process and sell those goods, keeping food, money, and people in our communities.

We can stop responding to the needs of a globalized commodity system of agriculture and invest in regenerative systems of local food production, simultaneously restoring ecosystems and building local economies that recognize real value in the food we eat and the people with whom we eat it.

Through retaining more carbon in our soils—achieved by abandoning the folly of industrial agriculture and (re)adopting sound, sustainable, and regenerative agricultural practices—we can solve problems of local food and water security and also prevent that carbon from wreaking havoc on our atmosphere. Not only do we reduce greenhouse gas emissions, but we proactively pull those gases out of the air.

The change is coming. Believe it or not; like it or not.

We can make these changes now, when doing so poses a minor inconvenience, or we can indulge in our delusions about the possibility of a world of infinite growth until the reality of finite resources demands a more violent shift. If we don't decide now, mother nature will make the choice for us.



# AGUA SANTA

## Essay and photos by Leeanna Torres

On Día de San Juan, always celebrated on June 24, Papa would wake us early, throwing water on us while we were still in bed. "Que día es hoy!?" Papa would ask in a wild shout as he splashed the water. We'd quickly jump out of bed, surprised, shocked, jolted from sleep by water divine. Papa would laugh, and eventually we'd laugh too, trying to get him back with splashes of our own throughout the day.

Día de San Juan (the celebration of the birthday of John the Baptist) was a day when all water was holy, whether it came from the sink, the hose, or the acequia. Even the water poured into a bucket so you could go dump it on one of your primos as a surprise—yes, even this was considered holy. Papa would spray us or sprinkle us, and he'd spray Mama too, then he'd go to Tia Franny's and try to "bless" her. And so while some community members would go down to the river or acequias on this day, Día de San Juan, and put water in little containers to take back to their homes for blessings, our familia turned it into more of an occasion for festivity.

Within the divine, within the grace, Mama and Papa wove this space for playfulness and joy. This was one of my first lessons learned from agua santa.

Why do we so rarely speak of the holiness of water? And how is its sacredness woven into our cultural connections and landscapes—our querencia—in this, our Nuevo Mexicano home?

On a recent Zoom conversation presented by a Santa Fe bookshop, I watched the plática between two talented NM-grown writers, Kirstin Valdez Quade and Denise Chávez. At one point, Ms. Chávez revealed (much like I imagine one of my tías might) that one of her favorite words is mercedes—mercy. She explained that she loves this word because "the quality of mercy is endless." At her revelation, I thought instantly of my own favorite words and phrases, and despite there being so many, I kept returning to 'agua santa' in particular. Perhaps because its meaning is, to me, so boundless, edgeless, like water itself.

When Tía Franny makes tortillas (she is one of the few mujeres who still practices this art in her kitchen instead of buying them at the store), she knows the water has to be just the perfect temperature, otherwise they won't come out right. This small detail she offers isn't found in a recipe book. I watch her dip her finger into the glass that holds the water before mixing in la harina. Some deep part of her knows what that right temperature is—wordless and instinctive. I don't ask her about the temperature; instead, I ask to feel for myself, and when she allows me, skin touching water, recognition becomes knowing.

When we recognize water as truly sacred, rather than biological, economical, or even political, how does this transform our actions and perspectives? And how do we reclaim water's beauty, blessings, and querencia even in the face/space of politica, pandemic, and mega-drought conditions?

According to the United Nations World Water Development Report (WWDR) for 2021, the inability to recognize the value of water is the main cause of water waste and misuse, especially in this time of growing scarcity, population growth, and climate change. "Water is our most precious resource, a 'blue gold' to which more than two billion people do not have direct access. It is not only essential for survival, but also plays a sanitary, social, and cultural role at the heart of human societies," said the director-general of UNESCO, Audrey Azoulay.

*When we recognize water as truly sacred, rather than biological, economical, or even political, how does this transform our actions and perspectives?*

But what about the spiritual/divine aspect of agua? Why do we so often shy away from speaking, revealing, or even commenting on water's sanctity?

In a recent podcast by American Rivers titled "We are Rivers," attorney and river-guide, Jocelyn Gibbon, speaks of her experience as a river-guide, and about the complex policy and law surrounding water in the West. But only very briefly, and very generally, does she mention the "spiritual" connection to water and place as related to western rivers. It's mentioned as a passing thought rather than a central theme. And it makes me wonder why we so rarely speak of the spiritual/divine aspect of that which centers us or that which makes us passionate. Would we not be taken seriously if we did speak of rivers in the Divine sense? We'll speak openly and honestly about policy and law and even management and opinion, but why not of the essence of the beauty we experience? Por qué? Why the reluctance to speak of the holy?

When I was a child, Papa taught me how to drink water from the outside hose—a faded green garden hose coiled neatly on the concrete pad against his work shed. On summer afternoons, when the heat was at its peak and our thirst was greatest, he taught my brother and I how to turn on the water first, then let it run a bit, because the water would come out scalding hot. In this very small lesson, he was sure to point out that we were to save this hot water, let it run into the adjacent bucket instead of spilling onto the concrete. Papa taught us to save the water in the bucket for the birds and the dogs to drink. After a few seconds of running, the water would turn cool, coming up and out from the ground through the garden hose, and my hermanito and I would drink from it, swallowing that cold clean water, letting the remains fall into the bucket below, captured and never wasted.

Mi famila, mi gente don't tell me that water is sacred; instead, they show me. Like water sprinkled on us during Día de San Juan. Like respect for the acequia that irrigates our fields. Like Nana pouring a bit of holy water from Easter Mass into her beans on the stove.

Agua in our cultura is more than just a metaphor, more than an economic commodity, more than a liquid bottled in plastic and purchased so cheaply at the discount and big box stores. When the graffiti on concrete pillars reads "Agua es vida," the spray-painted letters hidden beneath a city bridge speak the intrinsic knowledge that is both physical and divine.

In Catholicism there is the Father, Son, & Holy Spirit—the Trinity, the great Mystery where three are one, and there is no separation. Similarly, in our vallé life here in the Middle Rio Grande, the primary spaces of water include rio, acequia, y tierra (or groundwater, from the space in the sub-surface of the earth). These three are also connected, they exist as one without separation—an integral weaving of systems that gives life to this valley. For farmers, ranchers, and everyday gardeners of this vallé, these three types of water are key; an essence we do not forget, but welcome into our daily lives as unspoken sacredness.

Again, agua santa.

"Mexican people, Chicanos, Latinos—we are from an animist people because we are indigenous peoples. Christianity is an overlay," offered the author Cherrie Moraga in an interview with Orion Magazine.

In my heart I believe Ms. Moraga's words to be true, especially among so many of our Nuevo Mexicano experiences, where there is a blending of knowledge deeper than just religious Christianity at its surface.

In the Spanish language, bendición is preceded by the feminine-granting "la" instead of the masculine "el." In other words, bendición could be considered feminine, an image assigned to the female, a softness incurred first by the "gender" of the word in Spanish; meditating on this fact, I walk along the acequia, past an abandoned plastic canister with old syringes laying in the dirt.

Acequias define this valley. They are constructed channel 'veins' adjacent to the Rio Grande, and I resist even writing about them, afraid that their meaning will elude me, afraid I'll misrepresent everything they stand for. These dugout canals carry precious river water to our fields. Some are alfalfa fields, growing produce for the local dairies, for cattle, and horses. Other fields are simply grass, or well-kept lawns.

*In the Spanish language, bendición is preceded by the feminine-granting "la" instead of the masculine "el." In other words, bendición could be considered feminine, an image assigned to the female, a softness incurred first by the "gender" of the word in Spanish*

Acequia—space where adobe water flows, color de café. Acequia—place of slow-moving water, brown, the color of coffee, compuerta raised by a farmer's hands, allowing agua to enter into fields of chile, calabazas, maiz, y tomates. This is the cliché, the narrative we'd like to cling to. It's important to call out the clichés in our own Southwest, the landscape of our querida—not to discredit them, but to recognize them in order to see the truth that exists on their underside.

At the center of an acequia's cliché is a description of running water, deep and brown, it's color like my Nana's café con poquito leche. But if I dare step outside of the cliché, I'll say ditch instead of acequia, then it becomes a place to do drugs and drink, among other unspeakable things. The ditch is a place for shady business, and a slow-moving truck out on the ditch sometimes means trouble. What remains when all the cliches are stripped away? Sloppy graffiti on the metal face of the compuerta gate reading in sharp red spray-paint: "do meth", and there is no punctuation at the end of this statement, so it's unclear if it's a suggestion, a question, or an exclamation. Empty plastic miniatures—Dark Eyes and Bacardi, the cheap stuff. A faded hoodie, once bright blue, now a soggy rag left between the Chinese elm and Charlie Sanchez's big open field. An old refrigerator, dumped on purpose, it's rotting contents spilling out and reeking. A dog leash, bright orange, that someone's dropped during their afternoon walk. Stripped of cliché's, what remains? Agua or santa or nothing at all?

Rosalin's father was killed in the acequia known as La Sena. It was nighttime, and her father, Arlen Romero, was watering with his brother Steve (Rosalin's uncle). They were doing something—maybe putting the compuerta down—when the truck started to roll backwards. Arlen tried getting back in the truck to hit the break, but it was too late; the truck kept rolling, and turned over. It tumbled down into the ditch, and his legs were pinned. The truck then became like a check gate itself, and the water gathered up behind the metal barrier where Arlen remained. Slowly the water rose, his brother Steve was unable to free him, and he drowned as the water slowly rose, submerging his body and eventually the truck. What time of night did this occur? Was it in deep darkness or was it closer to the light of morning? Even now I imagine his wife, sleeping as her husband fought for breath, for escape, under the dark water of the steep-banked and narrow acequia. Rosalin's father drowned, and so for that familia, water is not about growth and life, but about endings, extremes, accidents, and death.

And I think, then, of this duality of water itself—the terror and damage of flash flooding in the West, flanked by the essence of water itself needed for life. The duality of water, and the duality of life itself, and where will we find the space that can hold these contradictions? How can we seek hope even as our region tailspins into what experts are calling a "megadrought"? How can we explore the idea of the Divine even as we try to recover from the devastation of a global pandemic? Where is the space for all these contradictions?

Perichoresis is a Greek word used to describe the binding of the Holy Trinity. "Nothing can divide the three members of the Trinity—the Father, Son, and Holy Spirit. People sometimes struggle to understand the combined Godhead and identity, and rightly so, as it is a mystery. However, the word perichoresis can help us understand. The word itself comes from the Greek peri, meaning 'around,' and chorein, meaning 'to give way' or 'to make room.' Perichoresis could be translated as 'rotation' or 'going around.' Some scholars picture this as a sort of choreographed dance. All members of the dance move as one, precisely and fluidly, to create a meaningful work together." (https://www.compellingtruth.org/perichoresis.html)

*image source: wikipedia.org/wiki/Perichoresis*

Perichoresis: when I see the image, it reminds me of the rueda Papa uses to open and close the acequia compuertas. In order to open or close the "check-gates" that allow irrigation water in and out of the acequias and fields, one needs a wheel that turns the thread that moves the metal gates up or down. This small metal "wheel" is the irrigator's main tool, along with a shovel, a

flashlight, and a pair of boots. This wheel, this reda, is a tool I've carried in my hands countless times. Papa keeps this piece of equipment in the bed of his little truck or secured to his UTV rack for quick access. It is a tool of 'regando,' watering the agriculture fields with water from the río.

Is it a coincidence that the rueda used by so many farmers in this valley to open compuertas is so similar to the image of perichoresis?

And I imagine so many of the vallé farmers, even in this time of an oncoming "megadrought", still traveling the dirt roads of Valencia County with this piece of equipment on hand—an irrigation check-wheel, resembling the divine weaving of three elements into one. Is it the Father, Son, and Holy Spirit this applies to, or is it Rio, Acequia, y Tierra instead? Who is to say it isn't both; the lines between the divine and the physical are always blurred, always weaving into the existence of our ordinary days.

When we recognize and acknowledge water as elementally sacred—rather than simply economical or even political—it transforms our actions and perspectives. And we don't reclaim water's beauty and blessings, but, instead, it reclaims us. Through flooding, through drought, through abundance, and scarcity; through such realities we are shown spiritual truths.

Life is a weaving of both pain and beauty, suffering and joy. Divinity itself, this concept of grace, threads these instances, holds the space between them, weaving us into a fullness that is only conceptualized in moments of small attention made large.

Rosalin's father died in a ditch, his body pinned beneath water from the weight of his own overturned truck. I wonder what she thinks, every time she crosses that acequia in her car, whether she thinks anything at all? Does she think of her father or only of that water that ended his life? And when I speak of holy, does it encompass this water too?

"Well," answers Papa as he leans back into the kitchen chair, "I've cleaned all my ditches really well, like really well, cleaner than they've been in a long time, and your brother and I have weaned calves earlier..." This is Papa's response when I ask him what small actions he is taking as a valley farmer, as all the officials talk about and prepare for the predicted "megadrought." Mama is frying papitas and I am cutting cebolla for dinner. When I ask Papa what he is doing, he mentions these two small actions. As he sips his coffee, dunking a cookie before dinner, I wonder what else is predicted to come, and how many farmers there are who don't know what to do—because what can you do? Ignore the warnings and keep doing what you're doing, or make small changes/ adjustments where you can?

"They're telling us to prepare for no more irrigation water after mid-June," says Papa, and he sets down half of his cookie, as though his appetite is suddenly gone. "Que vamos hacer?" he asks, not to me, but to the benevolent summer surrounding us. "What are we going to do...?"

The lesson I learn from water, lo que aprendo de agua, is this: time and change and movement, but also scarcity and sacredness, two words with more similarity than I care to admit. Esto es lo que aprendo de agua—that there is a language and a lesson in the presence of agua santa.

Lo que aprendo de agua is that we do what we can: small steps and small actions taken by ordinary people.

Y lo que aprendo de aqua is that we don't have to speak of the holiness, because it is woven into our very existence, and, instead of speaking it, we live it, and it lives in us.

We enter the church through the wooden double doors, early for Saturday's 5:30 mass. Santiago is eager to open the door for me. "I'll get it Mama," he says, and I motion to him, wordlessly, to remove his ball-cap. As we pass through the doors and into the dim, cool sanctuary inside, I recognize Ms. Padilla just ahead of us. With a purse on her left shoulder, she places her weekly offering envelope into a basket on the foyer table, picks up a weekly bulletin paper, and then just before heading further into the church to find a pew, reaches for the right font positioned on one of the large entrance beams. I watch her reach inside, instinctively, like a reflex, for the holy water that isn't there.

For sixteen months, the holy water fonts in this church (and every New Mexican Catholic church) have been empty. Due to COVID-19 pandemic safety precautions, all holy water was removed from the public spaces of the church.

As many Catholics know, holy water is commonly placed at the entrance of church buildings; the devoted regularly "bless" themselves with this water prior to entering or after departing from a church service or visit. They dip their fingers into the water, and then bless themselves with the water in a genuflecting gesture. A gesture of the holy. A practice to encounter the Divine. A reminder. An act of attention. And for so many of us, an intuitive reflex upon entering the holy space—reaching for agua santa. I watched Ms. Padilla reach for the water that wasn't there. She knew well that the fonts would be empty—that they have been empty now for over a year—and yet the gesture remained. Her longing for the water, the holy, agua santa, remained. Through the months and months of the pandemic, headlong into an on-coming drought, still her instinct remained.

Ms. Padilla's hand reached for the water that wasn't there—hope, desperation, and our only solution—found within that single gesture on an ordinary Saturday. This is the lesson water teaches us, the duality of water, a space to hold any and all contradictions.

Agua santa.

Still and always and even in the absence of water, the intuitive gesture remains within us, always reaching, always longing.

Salmon stitch life together across space and time. Their journeys span thousands of miles, from rugged mountain streams to distant ocean depths. For millennia, their bodies have delivered nutrients from the ocean, life's origin point, to inland ecosystems. Everything from racoons to redwood trees, wetland soils to songbirds, dragonflies to wine-grapes, bear, deer, coyotes, and (of course) humans are nourished by salmon. They are both a mechanism and an expression of our inter-connection; they are an embodiment of the web of relationships from which we arise and to which we belong. In tending to them, we are tending to all life.

The critical role salmon play linking life also results in their reflecting its condition. In my home ecosystem at the foot of Mount Shasta, California, the spring-fed McCloud and Upper Sacramento rivers, that once provided the spawning and over-summering habitat of Winter-run Chinook Salmon, have been without them since the early 1940s when Shasta Dam was constructed. Further downstream, in the shadow of the Sutter Buttes, much of the vast complex of valley wetlands and floodplains that once provided seasonal rearing habitat for out-migrating Chinook juveniles has been trapped behind levees and converted to agriculture. Winter-Run Chinook Salmon, which are unique to and an expression of this diverse landscape, are now among the most endangered Chinook populations in North America.

Mirroring the condition of the salmon with whom their lives are intertwined, the Winnemem Wintu, indigenous peoples of the McCloud Watershed, have also been severely impacted. Loss of access to much of their ancestral homeland, lack of federal recognition, and a critically endangered language are among the fingerprints of those impacts. The Winnemem are also the people, perhaps, most dedicated to the recovery of Winter-Run Chinook Salmon and have been working to advance that vision as a pathway towards the broader recovery of the ecosystems and people of the McCloud watershed and region.

*Illustration by Rene Henery*

# SALMONSCAPE

## *A Healing Prayer*

Illustration and words by Dr. Rene Henery

The culture of Conservation in the United States arguably began as a (fairly nascent - 1960s) collective awareness of the value of nature, of wildness, of charismatic species, and an associated preservation ethic focused on preventing further degradation or loss of those things. From that focus grew an awareness of ecosystems, communities, biodiversity, and bioregions, coupled with a movement not simply to preserve but also to restore. That new vantage, incorporating systems thinking, an awareness of place, and a desire to restore, in-turn, gave rise to an awareness of and attention to the landscape and ecosystem dynamics and processes that create the template and context for resilient biodiversity and healthy species populations and communities by allowing them to leverage their co-evolution and adaptation with place and each other.

From my vantage, Conservation is undergoing another iteration in its own evolution and adaptation. This time the opportunity is to actively orient as part of a coherent living system tended to by those people who have been in relationship with the system the longest and reciprocally tending to the health and well-being of those people in the process. A step towards this new orientation was recently made in Northern California where the State Department of Fish and Wildlife, the National Marine Fisheries Service of NOAA, and the Winnemem Wintu reintroduced Winter Run Chinook Salmon eggs into the McCloud River. Working together, supported by practices that include science and ceremony, the collective is also investigating the long-term restoration of Salmon above Shasta Dam.

*Essential to natural systems and places, to their dynamic, emergent nature and its resilience, diversity, and abundance are the peoples co-evolved and adapted to and with those systems: indigenous peoples.*

Essential to natural systems and places, to their dynamic, emergent nature and its resilience, diversity, and abundance are the peoples co-evolved and adapted to and with those systems: indigenous peoples. Although initially invisible to Conservation science and culture, indigenous peoples' roles in ecosystems were essential to the expressions of those systems (e.g. diverse and abundant species). The histories, cultures, and physical bodies of indigenous peoples are both mechanisms for and expressions of all those life forms they are in relationship with; just as with salmon or any life form living in relationship with other life, in a place, over a long period of time.

I consider myself in the service of the systems of which I am a part. In the course of this service, I leverage the lens of ecology and the structures and tools of Conservation (e.g. science, law, policy, politics). In part because of this intertwined identity and suite of practices, my own path towards this de-colonizing re-orientation has been, at times, illusive. It has also been the most fulfilling work of my life to date. And... it has only just begun... in simple steps: making the place that I live the focus of my energy and service, reaching out to those people who are from that place and asking them, "How can I help, if at all?", listening deeply, loosening my grip on the narratives that scaffold my individual identity to allow for more and different experiences of relationships... making space for belonging.

This image was inspired by the belonging that salmon evoke and the continuum between their bodies and the landscapes, ecosystems, and people they are in relationship with. It is an expression of my own practice for orienting toward that continuum and centering it. It is intended as an offering to the Winter-Run Chinook Salmon of the McCloud River, the Winnemem Wintu, and their integral roles in the healing of my home ecosystem. My prayer is that it invites and inspires others towards their own de-colonization, re-orientation, and belonging practices.

*Author's Note:*

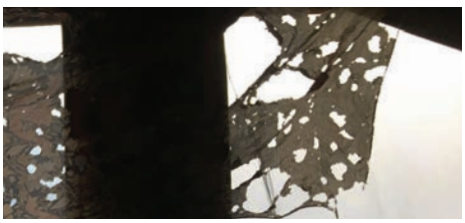
*Recently, Trout Unlimited, the US's oldest and largest salmon and trout conservation non-profit, teamed up with the outdoor clothing company Buff, to create a wearable version of the image, allowing the wearer to wrap themselves in salmon, the landscape, and a prayer for the co-healing of place and people. 50% of the sales proceeds are donated to the Winnemem Wintu. Wearing it, we might catch a glimpse of our reflection in a river and see a mountain, an eagle, a wetland, the night sky, and the body of a salmon, all in the course, and as a component, of seeing ourselves.*

# THIRTY-NINE WAYS OF LOOKING THROUGH THE HOLES IN A PAISLEY SCARF

Story and photo by Carly Fraysier

1.

Thunderheads split then merge across the valley. The hot dry afternoon leaves in a gust. A grey wall of clouds obscures the mountains and lightning forks down. The wind begins before the rain blows in, rippling a tattered paisley silk scarf hanging in the window. "Window" might be a generous word for the mesh square of my Starlite XL pop-up camper—my home for the summer. When the rain starts, the wind shifts and the scarf sucks outwards, tight against the mesh. The fact is that it would just waft off again if not restrained.



2.

I have always been a collector of natural objects. Growing up, the "nature shelf" was as prominent—if not more so—than the TV that got three channels if the antennae on the roof felt up to it. While I did not, at the time, recognize this as a privilege, I do now. To have inherited a mindset that admires, respects, and inquires about these pieces of "outside" brought "inside."

3.

Last August, in the midst of a dry and solitary COVID summer, I found the silk scarf that now hangs in my camper caught at the base of a sagebrush in an unfrequented (at least by humans) draw on the Wyoming ranch where I lived and worked. There it sat, reclining in comfort—deteriorating, dust-covered, and ultimately returning to the earth.

4.

While dissimilar to other objects on the nature shelf given its man-made quality, the scarf holds intrigue as a (presumably) once-pristine object, something someone took care of. Like any of the other objects—elk antler, arrowhead, snail shell—it's just an object. The story could end here, but I chose to keep the scarf and its potential stories with me on my recent move back to Bozeman, Montana.

5.

The scarf is predominately dusty lavender in color, overlaid with ivory-colored vines, and tendrils that sprout into dusty pink blooms whose long petals fold back onto themselves. The pattern both repeats and mirrors itself and is comprised of teardrop-shaped motifs that in Persian translate to boteh.

6.

From the camper window a four-wheeler track splits a circular field of half alfalfa and half barley and a pivot laces it back together. I can see eight other pivots creeping animal-like up and down gently rolling hills of farmland. Beyond the circles of green, the lights of town glow each evening. I watch planes come and go from the international airport. Behind me, not even a half-mile away, steep slopes of dense old-growth pines lead to the Gallatin National Forest and the Greater Yellowstone Ecosystem beyond.

7.

This place on the outskirts of Bozeman is one of the most fertile agricultural valleys in the world, or so I've heard. Sections of native grassland still exist amongst the sub-developments that rise thistle-like from the rich, black soil.

8.

While the ornamental design is of Persian origin, the name "paisley" derives from the eponymous town in Scotland, a center of the weaving industry. From Kashmir shawls to British ties and waistcoats, to psychedelic/bohemian fashion in the 1960s, applications of paisley print in textiles run the gamut. Paisley bandanas could be found on campaign paraphernalia during the American Revolution and World War's I and II. At other times, the design has been used to represent various forms of blue-collar, industrial, and agricultural labor, Harley Davidson motorcycle culture, and even as an identifier for gang affiliations.

9.

In the American West, the use of bandanas (originally cut from finished flour sacks) arose to meet practical needs: to keep dust out of mouths and noses, sun off necks, for warmth in the winter, cooling in the summer, and as a tool should anything need to be tied together. Nowadays, on the range, the silk scarf is often called a wild rag.

10.

The most alluring feature of this scarf (and a hard one to miss) is its state of semi-being. That is to say, it is completely covered, pockmarked like the moon, with holes.

Actually, about as much of it is gone as what is left.

11.

I picked it up with the utmost care, as if it might crumble to dust with the slightest disturbance. Instead, the only disturbance seemed to be to the dozens of grasshoppers who vigorously sprung from its nooks. That summer low-flying planes swept methodically up and down the valley where I worked, spraying the hoppers who emerged with a vengeance. Local ranchers bemoaned the destruction to their crops. Once lush croplands turned thin and twiggy, almost see-through. I stood with a friend plucking grasshoppers for fishing bait from a bush in her yard as if they were ripe berries. If you sat still, you could hear them eating, you could hear the destruction of one thing (crop) and the survival of the other (insect).

12.

A familiar tension: when something (an object, a life, this world) feels and looks like it's about to fall apart, and remains intact, solidly incomplete.

13.

The eye can't help but try to find congruity within the smattering of holes when gazing at the scarf as it hangs on a wall—scanning for a place, perhaps, where the same-shaped hole might appear twice (as if the fabric had been folded over on itself like an inkblot), or some indication that the hoppers preferred to consume a certain amount (leaving a certain sized hole) before moving on, or else preferred a particular color of dyed silk. Yet the holes are entirely incongruous, random. And what is left has proven more durable than it looks.

14.

On walks in the hills, my movement through the brittle grass parted the spread of hoppers like a boat in water. One evening, mid-walk, while I sat on a rocky outcrop, my dog circled away from me, then back to me and sat down next to me. We looked across the folded foothills leading to the Bighorns fading in shades of blue. I could tell he was smiling a dog's smile. When I turned to see, I saw the grasshopper sitting squarely on his head, gazing in the same direction, all of us, it would seem, just taking it in.

15.

It's possible the scarf had been blowing around in the red dirt and sage on that ranch for a couple of weeks, and it's possible it had been there for years. I recollect a list I made of objects years ago that "blew in" from who knows where, when I lived in a windier part of Wyoming's high plains.

A volleyball. Shake shingles. A Christmas tree with bits of tinsel still attached.

16.

The pleasures of the objects on the nature shelf: not simply in their aesthetic form, but in how they might inform us of the past, present, and future. How their stillness (on a bookshelf or bed stand) actually embodies a particular kind of motion, stirs up and shakes loose stories and ways of understanding, if we choose to listen.

17.

The scarf toed the line between man-made trash (to be picked up like the Natural Ice and Mike's Hard Lemonade cans that lined my dirt road) and—because silk is a natural protein fiber, produced by certain insect larvae when forming cocoons—an object belonging to the place (to be picked up like a piece of petrified wood or a sun-bleached bone).

18.

Here, in Montana, I tack it up and take it down and tack it back up on different walls, different surfaces: above the small propane stove or cast across the north-facing window with the best morning view.

19.

The holes reveal whatever lies behind the scarf; soon enough the object you think you are gazing at—the scarf—recedes completely. The holes take on a quality other than that of a void of missing fabric. They seem to take on a material presence. Negative space brought into focus, cast in a new light.

20.

A dingy white wall with scuff marks left by someone else. Horse-chewn barn wood. A fly walking slowly across the inside of a sun-warmed pane of glass. A jumbled pile of unfinished to-do lists strewn across the kitchen table. An empty field. A doe leading two speckled fawns across a field.

21.

I tell friends about the scarf, and when I can, I show it to them, treat it as a featured piece in an exhibition, or a whimsical sketch improv prop. I catch the eye of the farmer stopped outside my camper one evening chatting from his 4-wheeler. Before carrying on, he glances at it wafting in the mesh window.

22.

I hold it up in front of my face and someone takes a photo. Because I saw the camera flash, I know the photo shows at least one of my eyes, at least part of one of my eyes.

23.

One friend gazes at it and says, "It looks like the world, continents."

24.

It reminds another of a beloved thread-worn childhood blanket.

25.

On the phone with a select few, "How's the scarf?" becomes a stand-in for: "How are you?"

26.

Some questions I'll never get answers to: Whose neck did the scarf once surround? Did he/she buy it for themselves with hard earned money, or was it a gift and if so, to and from whom? What was the day like when someone's hands pulled continuous threads of silk from silkworm cocoons? Did mulberry leaves rustle in the wind or hang heavy in the still, humid air?

27.

I am sitting cross-legged on the thickly woven plaid bench seats at the camper's, almost, miniature dinette table. The silk and its portals—object and negative space—blend together in one sinuous, meandering, endless thread. My mind makes two categories of words that flit around each other and land in different arrangements. In one: growth, loss, change. In the other: biodiversity, climate, population, community, life (my own/ others'). Metaphors split and like tributaries, trickling, they run dry.

28.

Last week a strong wind blew the scarf down from its spot in the camper window leaving two little tack holes in the canvas. It's been crumpled in a pile on the table next to a white rock, a black rock with white stripes, a barley head plump with seeds, and a clump of moss—a still life of decay.

29.

I remember, and momentarily give credit to, another friend's artistic assessment of the scarf: "Maybe it's done."

30.

When I first moved to Bozeman in 2008, long-time residents told me where town used to end with a blend of nostalgia and concern in their voices. Now, I catch myself repeating the same line with different coordinates and the same tone. Now, I look up and for an instant cannot distinguish between textile and landscape, between the scarf in the window and the field within its holes.

31.

A wolf lingers by the dairy farm down the road. Helicopters take high-paying guests to Big Sky daily, and the sound of their blades becomes commonplace, or, rather, not notable. A clear creek tumbles down from the mountains bringing with it a cold burst of air. Sports cars fly past slow moving farm equipment. Lichen marbles the straight trunks of pines. On a 95-degree day, three elk zigzag through the fields in front of me at a high-headed, open-mouthed trot then a full on run as Fourth of July fireworks erupt from three of the four cardinal directions. Thunderstorms bring the relief of rain and fear of lightning. The verdant circles that surround me are an odd comfort; it's hard to imagine them ablaze.

32.

Maybe it's just that the edge between wild and not wild is as smudged as the wavy horizon during the heat of the day.

33.

And yet, here, it's evident that neither really exists without some strand of the other woven in. With the scarf as a literal lens and figurative translator, I ponder what it means when something is gone, and how we reckon with, understand, and tend to what is left.

34.

The shimmering appearance of silk is due to the triangular, prism-like structure of its fibers, which refracts light and allows for different colors to be seen at new angles. This scarf—now draped over the back of a collapsible Kelly green camp chair—was both produced and eaten away during different stages of metamorphosis (silkworm larvae, then grasshopper). It's the product of a state of change undergoing change.

35.

Lately, I do my best to heed a friend's advice to "embrace living in the fragments"

36.

A sky dense with smoke from wildfires in different states. Dusk-like daylight and a bright pink sun. The mountains beyond donning the scar of last year's fire. A field of grass rippling in the wind. A swather, a rake, and a bailer taking turns packing it all up. The sharp stubble left.

37.

Though I wonder whether that is what scares me most. As I look out, I look directly at the sun inserting itself into the horizon like a coin in a slot, like a bellwether of the significant changes happening in the world; I have the fleeting thought that I figured the scarf out, that its meaning is more about my search for a simple, single thread connecting it to me, to the world outside, than anything else. But if I think too hard about that thought, it slips through my fingers and is gone.

38.

The practice of looking yields valleys of thought previously inaccessible. When things break down or decay, when the ecosystem out the window and beneath our feet feels pockmarked, reduced to some state of semi-being, the hole—whatever we thought was missing—still lets the light in.

39.

Up on the hill, at the camper, the impossible greens of spring and the fading greens of summer have given way to auburn and caramel shades of fall. In between the circular cultivated fields, native grasses gone, sere rattle in the chilly evening breeze, releasing seeds that will try to grow next year. The fawns have grown out of their spots and venture forth without being led. Every evening the seesawing call and answer of the same pair of sandhill cranes cracks the silence. Through the holes in the scarf, they twist and tilt their tails to land gently down on either half of this green circle.

# REFLECTION

## Essay and photos by C. Marie Fuhrman

It's a game I like to play. A way I test myself.

Out in the woods, atop a peak, or along a winding stream, I lie down and close my eyes. I allow my other senses to take over. I inhale deeply. I listen beyond my thoughts and my heartbeat, past the sound of panting dogs. I put my hands on the earth and touch it. I feel the parts of my body where it supports me: hips, shoulders, back, thighs, head. What does the ground feel like? Pine needles or cobble? Snow or grass? Then, I open my eyes. This is when the test begins. What if, Rip Van Winkel-like, I had fallen asleep here? Could I, by the smell, sounds, feel, and sight of my surroundings, know where—and in which month, or at least season—I have awoken?

Last night I played again. The first sound (heard primarily due to my disdain of them) was the buzz of mosquitoes. Then it was the whir and chirp of wings, a winnowing snipe; the sound came in circles above me, tailfeathers vibrating with the air as he plunged in a courtship dance. Then it was the redwing blackbird's song. The first trill recalled the bright orange shoulders, the surety of black. Below that, and beside me, the sound of rushing water. I smiled. It is spring: late May or early June.

Eyes still closed, I pulled in the scents and felt the aliveness of my mind, wondering if my brain lights up the way my dogs' brains do when they spend what seems a very long time at each scent we meet on our walks. Grass, but not lawn, not mown. Sweet. Not unlike a tilled garden. The smell of open soil. A smell I can almost taste.

Then, wet dog. Now I am sure it is spring. Autumn grass carries a scent of decomposure. Summer air is, at least lately, tinged or heavy with smoke, and heat has its own smell. This is fresh. Not fresh like the unsmell of winter, but fresh like the smell of aspen leaves. Cold water. Spruce tips.

My bare legs are warm, but not hot.

When I touch it, the ground touches back with shoots of grass soft as the hair on my dog's ears; I stroke the grass and open my eyes. Blue.

Blue is the color of forgiveness. Amnesty blue. Hope blue. And a handful of shouldered clouds moving across the horizon. At first, they are in the shape of a comma; then they stretch like a trout. The fish cloud swims across the horizon just beneath the sun. The western horizon. It is evening. I turn my head to a bush beneath which my dogs lie and see the tight leaves have begun to open like fingers from a fist. There is snow on the peaks, and, beside me, a stream filled to the banks and moving fast. Companionable but busy on its way to somewhere else, a kind neighbor saying hello before rushing off to work.

*I am only a few miles from home. In this way, I have come to know place, to make my own map.*

I sit up, and the dogs rise and stretch. The peak before me is granite-topped—all shades of gray and dashes of snow. I have learned this mountainscape as a whole. I find one mountain that I am sure of and then, moving along the horizon, can name many others. But this peak is distant, indistinguishable, a bit of a loner; I don't know it.

I rise and turn around. Here is a peak I recognize. From the front and back to the highest rock and tallest whitebark, I know this mountain. This is Pikeminnow Peak. I am in Pikeminnow Meadows. Beside me is the North Fork of the Payette in its beginnings as a stream. There is Burgdorf Summit, and this is West Central Idaho. The Payette National Forest. I am only a few miles from home. In this way, I have come to know place, to make my own map.

Two years ago, from atop Pikeminnow Peak, the same test.

Sound and smell and feel. Then sight: blue again, but when I sat up, I saw the meadow below. It lay in the valley like a tapestry. Colored green, mostly, with browns and patches of white in the shade, and through it all the thick thread of water. I would know this meadow if only by the stream. Stretched out, the North Fork of the Payette would be twenty miles long. But as it runs through this two-mile meadow, it weaves and meanders, taking its time through the grass and brush, ribboning tight esses, so close in places that the stream nearly kisses itself. It is the ribbon through a tapestry I continue to weave in my mind.

After descending the peak that spring afternoon two years ago, my partner, Caleb, and I, along with our two dogs, slipped our canoe into the cold water of the North Fork and began our paddle upstream. When we reached the top of the meadow, we turned the boat around and let the current pull us back.

Paddles resting on our knees, the dogs keening over the sides, we let our gaze dance in the landscape around us.

Mine landed on three young mule deer.

They were playing tag a couple hundred yards in front of us. Leaps and false charges. Chases and pounces through the water. Now, two years later, I look for those deer, and though I don't find them on the landscape, I can put them there with memory—a gift this open space affords.

I have other memories here. Stories. Like the first time I saw the peak and these meadows. Memories now a decade old from when my partner first introduced me to the area. I was already dumb for the place.

Something like a dream, this Salmon River Country. Trees whose mere whispers—the sounds of their names—brought more trees to mind. Birds whose songs became the voices of friends. The soul-awakening howl of wolves. Flowers with names like monkey

*Pikeminnow peak from oxbow in meadow.*

and chatterbox and paintbrush. Snows deep as young aspen, and larch striking like a match to the autumn light. And mountains. Mountains so numerous and swift I thought I might never know their names, let alone know their skins. And then I did. I hiked their ridges and peaks. That afternoon, ten years ago, Caleb told me the name of the mountain I stood on: Squaw Peak. And below me: Squaw Meadows. I said, "I will not call them that." So, in our geographical lexicon, on our maps, they became Pikeminnow Peak. Pikeminnow Meadows.

Pikeminnow Meadows was, like all this area, once unowned. It was, in a sense, public land, but that public had no government managing it. Stories here belong to the Nimiipuu, the Shoshone Bannock, and possibly the Shoshone Paiute. The Tukadeka, or Sheepeater, no doubt wandered through. When six or more feet can blanket the meadow in winter, only the animal beings track the surface. What first name the peak or meadow had is unknown to me, possibly unbeknownst to anyone, kept within the mountain and water.

When I asked locals why it had not been changed, the reply was typical. "It's always been Squaw Peak." Of course that is not true, but the locals assured me that no one saw it as a pejorative; it wasn't an offense. Squaw just meant Indian woman, didn't it? Following my questions, there were, of course, the sighs and under-the-breath comments about political correctness. McCall's population, and the population of this entire west-central Idaho region, is white.

After rising from my game in the Pikeminnow Meadows last evening, I took a walk east toward the mountain where the Northfork is born. For most of the walk, I was barefoot. Feet falling in loam, warm water rushing to my ankles. I came to a sign nearly submerged as if it were being eaten by the grass and soil. It was a property boundary. Below it, a survey marker. I touched it with my toe, stood on it to see if my weight might push it all the way into the earth, but it held. Desperate still to make its claim.

Thirty years ago, Pikeminnow Meadow was privately owned. I looked east to where I imagined a homestead was and then saw a falling-in fence. I imagined the landscape peppered with fat cattle, the banks of the spring stream collapsing under their weight as they gulped the snowmelt. Cows and houses are gone. In 2006, the USFS acquired this place in a land trade, and, now, it connects to a larger portion of the Payette National Forest, added on like lace to a dress.

Beyond the marker, I could have crossed into an older part of the forest, a wilder area thick with pine and granite. But I had chosen to stop here. I was shoeless and happy enough to be walking the meadow. Summer will pull me into those trees, but spring, in all its ephemerality, begs this carefree, barefoot, and sundress frolic. I spin for the joy of it, the white of my skirt lifting and, for a moment, I see myself as simply another flower.

Several years ago, after five days in the Frank Church Wilderness, my partner and I returned to where we'd begun our hike. We drank a semi-warm beer, washed our legs in Big Creek, and climbed in our truck to head home. As usual for me, I reached to flip the visor down and use the mirror on the other side. Before my fingers touched the rim, I stayed my hand; I couldn't look at my reflection.

For nearly a week, my partner and I had been the only human beings we saw. Occasionally, when I bathed or pumped water, I caught my visage, distorted by ripples and reflecting sky, trees, clouds, and mountains: a mottled collage. I thought of my ancestors and the people who lived here thousands of years before others brought foreign names and survey markers and cattle. Before mirrors. Before printed maps. Before media and photographs, before ads telling us how we should look, telling us what beauty is. Before all this, we were reflected in and with nature. We recognized the self as part of a community that included plants and other animal beings. Indigenous languages evolved through place. Anthropomorphization did not describe plants through human traits; it was the only way to describe human beings through the characteristics of the other beings: the plants and animals around us. We were not separate from the beauty or severity of the landscape. Those five days allowed me a glimpse. There, in the backcountry, I had lost all need to know myself as a middle-aged, mixed-race woman. Unbothered by what I thought I had to be and who I was, I began to feel something keener: a sense of belonging and beauty. There was no judgment here. No expectation. My identity became one with what I was seeing: trees, water, elk, wildflowers, mountains, sky.

Returning to public, pulling down that mirror, I would return to labels. Names. I would have to be the woman my partner's friend once called a sexy squaw, the person the sheriff of Idaho County looked at and said, "I know all the Indians in my county. Why don't I know you?" I would return to a society that judged my weight, skin, and looks before ever hearing my voice. When I looked around my community, instead of seeing blue mountains, soft pine, laughing monkeyflower, graceful elk, and sleek trout, I would see pictures of others I was expected (or assumed myself) to look like. Even when I revisited maps, looking for places I knew, I would see Savage Creek, Dead Indian Flat, Squaw Peak, Squaw Meadows.

In Northern Idaho, the Coeur d'Alene tribe successfully had "squaw" removed from eight place names, three on the Coeur d'Alene Reservation and five outside the reservation but in the tribe's ancestral territory. We have seen the dissolution of the name across the west. From Phoenix (Squaw Peak is now Piestewa Peak, after Native soldier Lori Piestewa) to Lake Tahoe (Squaw Valley is now Palisades Tahoe.) The Puget Sound is called the Salish Sea, even if informally. The Puyallup Tribe is campaigning to rename Mount Rainier and give it back its original name—Mount Tacoma, or Mount Tahoma. In the Native language Twulshootseed, the mountain is called təqʷu?mə?—pronounced "Tacoma." We are re-storying maps so that looking at them, we might see something of a more profound history, something representative of the people who first knew them.

*Unbothered by what I thought I had to be and who I was, I began to feel something keener. A sense of belonging and beauty. There was no judgment here. No expectation. My identity became one with what I was seeing.*

*Cornice atop pikeminnow peak.*

Naming is, no doubt, a powerful way of knowing. The naming of landscape features, rivers, meadows, and mountains helps us make internal maps. The naming of birds and flowers, of brushes and insects, shows a kind of intimacy with the being; it allows us to create almanacs of the seasons and locate ourselves within them. Naming is also an affirmation. It is an acknowledgment of existence different from other lives. It makes the strange familiar, which, in turn, creates empathy. To name is to pay attention.

My grandfather named me. My parents wanted to call me Tina. Tina Marie. But Grandpa said, "She is no Tina." Would I have been a different person had that name held? Who have I become with this other moniker? What if I had named myself? What would happen to those moments of questioned identity if I kept a secret name for myself? What could happen if we knew the original names of places and saw ourselves, our entire community, reflected on maps and signs as part of this beautiful collage? If, when I finally exposed the mirror, I saw myself as one with this beautiful tapestry?

There are names on this forest I look forward to saying: Salmon River, Goose Creek, Snowslide, Maki, Golden, Crystal, Hard Butte, Grassy Twin. There are others that I find misnomers, but only because they deny beauty, withhold a certain amount of dignity from a place: Disappointment Lake, Hazard Creek, Box Lake, East Fork of Lake Fork. When I asked a friend recently about how things were up Nasty Creek, he said, "Still nasty."

Nevertheless, when I look at these places and think Crystal Mountain, Grassy Twin, Snake River—I create a picture in my mind. I know these mountains by their skins and these rivers by the taste of their water. I know the lakes by the incredible difficulty it takes to reach them. But when I looked at the peak and the meadow whose name I found, I could no longer think, let alone say, that I saw something else: something that had nothing to do with a mountain or a meadow.

I felt a pain. Hate.

Despite what some may think "squaw" means, it has taken on a specific connotation. You can hear the difference in a movie if a cowboy says "Indian maiden" or "squaw." Listen to the way a white woman in *The Help* says the word when she yells: "And for heaven sakes, don't sit like some squaw Indian! Cross your ankles!"

If maps are another way of knowing not just where we are, but who we are, what are the names telling us? What do they tell young Native women? Can a name keep a people locked in place and time? If we look to maps to find ourselves, are they taking us backward or toward a future that shows us who we can be?

I think of Robin Wall Kimmerer and a passage from her book *Gathering Moss: A Natural and Cultural History of Mosses.*

The names we use for rocks and other beings depends on our perspective, whether we are speaking from inside or outside of the circle. The name on our lips reveals the knowledge we have of each other, hence the sweet, secret names we have for the ones we love. The names we give ourselves are a powerful form of self-determination, of declaring ourselves sovereign territory.

What does the mountain call itself? What does it call the meadow? When I lie on its peak, when I lie next to the creek, I am listening. And smelling and touching and looking. Never have I played the game and opened my eyes to wonder who I am.

In the winter, this peak and the meadow become featureless. Where before I was able to see the trail up to the summit, I see only white. The gray crags and granite boulders are covered as well. The stream in the meadow goes silent under as much as seventy inches of snow, and the redwing blackbird and the snipe song are the music of another landscape. It is a rug of white, the blank page of a book whose story lies forever on the next page.

*The names we give ourselves are a powerful form of self-determination, of declaring ourselves sovereign territory.*

I once sat for hours watching two women weaving blankets on window-sized looms in a small room in the New Mexican town of Chimayo. Thread by thread, the blanket grew, and a picture began to appear.

Layers of green and then a bold line of blue. Red. Just like the meadow and the peak as the snow melts. They talked as they wove, these women did. So, I imagine their stories went into the blankets as well.

When, finally, I had the nerve to interrupt, I asked if they ever made a mistake. Did they ever add a color that just didn't fit or undo part of their work so they might go back and make the middle blend with the latter? Did they ever sit back and look at the blanket and realize something wasn't right?

The older woman reached to a thread of white that ran through the bottom third of her creation. She found its end and pulled. Then, just as simply, she pulled another strand from her basket, a blue thread, and I watched as her gentle hands began to weave it in, a shift in her creation, a stream where before there was none.

*Pikeminnow peak from the northfork of the Payette in meadow.*


# LOVE GROWS HERE

Interview and photos by Sam Hinkle

The Venetucci Farm is a, roughly, 200-acre property near Security, CO, south of Colorado Springs. If you ask around, almost any person who went to kindergarten in or near Colorado Springs will know the name Venetucci and reflect on the farm with fondness. Now owned by the Pikes Peak Community Foundation, its chief product is flowers. It also boasts a beautiful wedding venue, but neither of these were the products that made the farm so popular for locals. The farm's journey to this point has been long and–for this Colorado Springs kid–sad. The journey features a New York Yankee, a ton of squash, and a significant pollution event. The story is not yet finished, and I expect it never will be. I interviewed one of the Venetucci caretakers, Nikki McComsey, to learn where the story stands now.

The Venetucci's moved to the area and purchased the farm in 1936. Their son, Nick Venetucci, moved back to support his family on the farm after a brief stint as a New York Yankee. Nick, his family, and, eventually, his wife, Bambi, grew several row crops, including beans, corn, asparagus, and pumpkins. That seasonal squash would become the icon of the farm and a formative memory for many youth in Colorado Springs.

The story goes that Nick Venetucci had parked his truck full of pumpkins on a main street in Colorado Springs back in the 1950s. A teacher noticed and asked if she could bring her students to the farm, kicking off a Colorado Springs autumnal tradition that lasted for

over 50 years. Nick and Bambi started inviting schools to their pumpkin patch, with Nick showing folks around the farm and Bambi coordinating with the schools in the area. At the height of it, they were giving out 30,000 pumpkins to kids per year. That is a lot of pumpkins.

Nick and Bambi did not have kids of their own. They arranged for the Venetucci Farm to pass on to the Pikes Peak Community Foundation, with nearly every acre of the property under conservation easement. They only asked that the property remain community-oriented and undeveloped outside of the 10 acre building envelope, a purpose the Foundation has since worked to honor.

In 2016, per- and polyfluoroalkyl substances (PFAS) were discovered in the farm's groundwater supply at levels that exceeded the EPA's water health advisory level. These chemicals are found in a variety of products from carpets to pans, but this contamination was connected to firefighting foam. As the EPA learned more about PFAS, which have been linked to cancer and endocrine concerns, it significantly lowered the levels it considered safe for consumption. Suddenly, water used at Venetucci Farm was no longer safe.

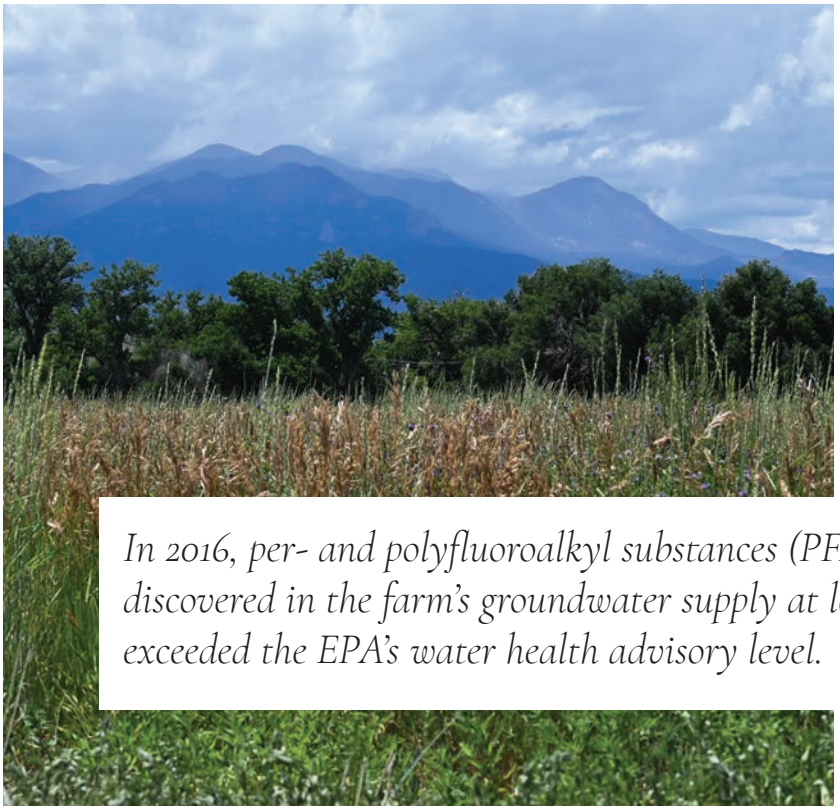
These PFAS chemicals are particularly concerning because it is difficult to break them down in natural systems, giving them the name "forever chemicals." For Venetucci farms that meant not only was the water unsafe for human consumption, but it had entered the farm's soils, creating a concern for future crops and livestock that effectively curtailed the farm's ability to grow and sell food.

The damage to the Security-Widefield community was immense. They had to renovate an entire water system with PFAS specific filters, meanwhile piping water from nearby Pueblo. The larger Colorado Springs Metro community felt the life of the farm fade while the Pikes Peak Community Foundation worked hard to find ways to engage the community at the pumpkin farm that could no longer grow pumpkins.

Just prior to 2020, Nikki McComsey had a personal injury with a long and difficult recovery process. Nikki expressed that her two sisters were also at points in their lives where change or recovery was desired. A significant part of this recovery was growing flowers, something she and her sisters did in their backyard throughout the COVID-19 pandemic. She inquired about the plans for Venetucci Farm, wondering if flowers might be a part of its future. After a short time, she and her sisters quickly cleaned up the weedy, overgrown farm, starting a flower growing operation and a venue business to boot.

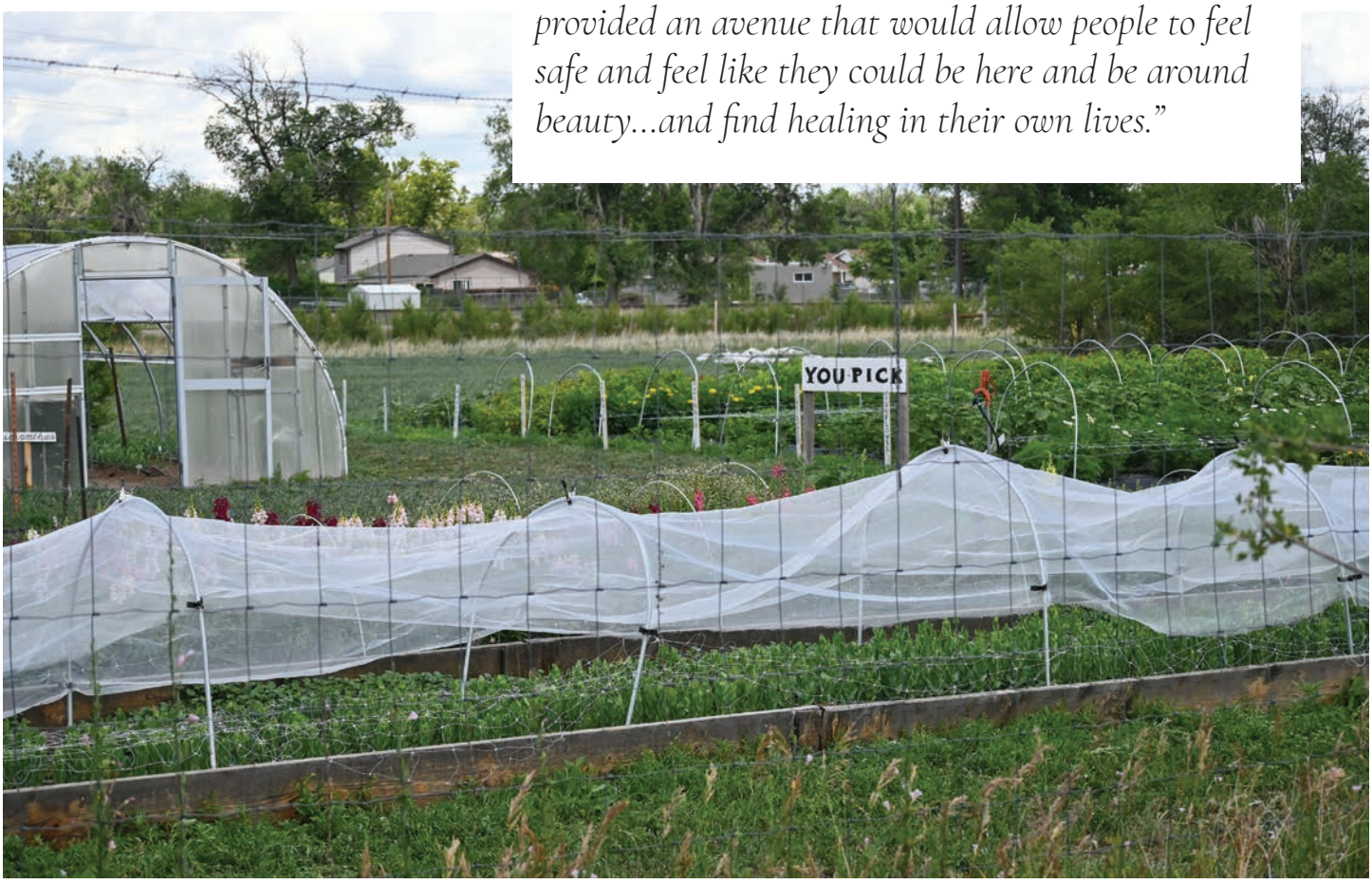
The flower's weren't the McComsey sisters' main product nor what drove their work: "Any time I sat down with my sisters… we never really talked about the flowers. We talked about all of the ways we were going to bring people in. Healing is really important to us. Just giving people the opportunity to come and have a safe place to share stories and show up exactly as they are. That is what was driving us and we knew flowers provided an avenue that would allow people to feel safe and feel like they could be here and be around beauty… and find healing in their own lives…and it happens, I don't know how it happens, but people for many different reasons come and show up, sometimes unexpected…and they tell us about someone dying in their lives or mental health issues they are going through. We hear so many stories, which is what we are here for, really."

They began a U-Pick flower event, welcoming people onto the farm, hosting live music, and keeping the gate open during this time for folks to "just show up exactly as they are." (During this interview alone, at



*In 2016, per- and polyfluoroalkyl substances (PFAS) were discovered in the farm's groundwater supply at levels that exceeded the EPA's water health advisory level.*

*"Healing is really important to us…we knew flowers provided an avenue that would allow people to feel safe and feel like they could be here and be around beauty…and find healing in their own lives."*



*"We needed to go through our own cycle of mourning loss in our lives and rebirth in the new way that we are. It just happened to be that the farm was going through that same cycle."*

least two guests wandered onto the farm and began talking with Nikki.) The farm still does a pumpkin giveaway for Springs youth, though it is much smaller and the pumpkins are not grown at the farm.

Nikki shared that, "Nature was never intended to exist in a perfect perpetual state of bliss. It goes through cycles of good and bad." I added that it is much like humans. Nikki agreed, sharing, "It's what we bring our human self to; it's how my sisters and I found ourselves here. We needed to go through our own cycle of mourning loss in our lives and rebirth in the new way that we are. It just happened to be that the farm was going through that same cycle."

When I set up my meeting with Nikki, I don't think I knew what I was looking to learn. In hindsight, I am sure I had some manufactured idea of understanding the emotional and logistical process of moving from damage and loss on a landscape to creating something new and significant, much like what I was seeing on the Venetucci Farm that had so influenced my upbringing. This is, after all, going to keep happening. According to a Congressionally mandated report, over 2,000 agricultural operations have already been notified of potential PFAS contamination on their properties simply due to their proximity to military operations where PFAS were routinely utilized. The Governor of Colorado recently passed sweeping legislation to restrict PFAS use in consumer goods, but these are forever chemicals. They are not going away soon. Add that to the manifold existing challenges facing producers: drought, a changing climate, difficult economics, land access, you name it.

And these are just the landscape-level challenges. We are not even beginning to unpack the challenges that face individual producers and individual people. Issues of personal loss, injury, mental health–these struggles aren't going away either.

I suppose that I knew that this healing process would be personal, subjective, and complicated, but I was grasping for any clues. Nikki and her sisters seemed like the right place to start. They have put a lot of work into the farm as it moves through a cycle of mourning and loss–loss of its past, its legacy, and its deep sense of community. They are helping to accelerate the arrival of a cycle of rebirth, something new and something good for this land and the people near to it. And this process seemed to parallel folks' personal healing, possibly even amplifying it. But at the end of the conversation, while I felt like I had learned something important, I still find it hard to grasp it in my mind long enough to put words on paper. I suppose I can only articulate where I learned to start. Land, water, and people will all go through cycles of loss, mourning, and healing. As I sat at Venetucci, in the warm July sun–despite a gathering hail storm over the nearby Front Range–the only way I saw to start navigating these cycles of loss was by starting. Grab some pruners, share a pumpkin, grow love where you are.

# LIVING WISDOM

## Essay by Sunny Dooley

I was born in the last decade of my great-grandmother's life. She passed at 103 or 104 years old and I was 13 years old. She knew when she would be leaving this earth place. My parents constructed an arbor to the north of our hogan that late summer. I stayed with her, tending to her comforts. I amused myself with her endless conversations she had with folks I could not see. She greeted them. She would motion as if she was eating with them. It was at that time I would give her sips of water, warm tea, or pieces of food soaked soft, so she could swallow it. She laughed, told somewhat audible stories, sang parts of sacred or social songs, said prayers, smiled a lot, and slept.

I told my mother what was happening with her, to which she nodded. I asked her what would happen when great-grandmother died? My mother said we would continue to live our lives. We would continue to apply the knowledge and wisdom that preceding matriarchs bestowed upon each upcoming generation of young women. My great-grandmother was my mom's mother figure. My mother lost both of her parents to the tuberculosis epidemic of 1940. As many eastern Anglo folks moved into the dryer climates of the southwest to improve their respiratory conditions, many of them spread this air born contagious disease to the many tribes that lived in the four corners region of the United States. This infectious bacteria killed many Diné people. It displaced the matriarchal clan structure in our communities. This sudden change prevented the vital transfer of lived generational wisdom to the next generation.

My mother mentioned that my great-grandmother took in many of the orphaned young boys into our extended clan family and into our community, as my family had a large flock of sheep, horses, and grazing lands. Many of the other families took in the young orphaned girls, as they had inherited their family's wealth of livestock and land. With her grandmother, my mother took on the responsibilities of living a fully nomadic lifestyle. She learned to care for land, for the waters, and waterways, and knew when and where the flocks would be moved seasonally. She also knew where to forage for medicinal herbs that my great-grandmother needed for her role as a mid-wife and healer. She also knew when and where to harvest the herbal dyes she utilized for her woven Chief and Saddle blankets. Most importantly, she knew where the grasses grew that would benefit her family's overall physical health and well being.

This deep connection to the Earth was also evident in the relationship they had with their flocks. On one summer move with sheep, my great-grandmother knew they were not going to make their destination. She told everyone they would spend the night at the current location, and my mother asked how they would contain the flock in an open area. When the sun began to set, and the flock began to feel unsettled, my great-grandmother took a long stick, while singing a sacred Diné Sheep Song, she drew a circle around the sheep and laid the long stick, like a gate where the circle met. The flock did not move from that enclosure. When my great-grandmother lifted the stick in the morning and opened the gate, the flock followed her and my mother to the final destination, without stop, the next day. My family lived in harmony with the Earth, the Sky and defined our understanding and practice of Hozho.

My ancestors, my great-grandmother, and my mother maintained these principles. They did their best to live them. Even with the tremendous changes that would challenge, and practically destroy a way of life, they persevered to live through five life altering policies established by the government of the United States. These policies were: The Indian Removal Act of 1830, The Homestead Act of 1862, The 1887 Dawes Act, The Long Walk of 1860 and The Indian Reorganization Act of 1934 – Stock Reduction Act.

> "The Indian Removal Act of 1830 was signed into law on May 28, 1830 by United States President Andrew Jackson. The law authorized the president to negotiate with southern (including Mid-Atlantic) Native American tribes for their removal to federal territory west of the Mississippi River in exchange for white settlement of their ancestral lands. [1][2][3]. The Act was signed by Andrew Jackson and it was strongly enforced under his administration and that of Martin Van Buren, which extended until 1841."
>
> **-Wikipedia**

> "The Homestead Act of 1862 was a revolutionary concept for distributing public land in American History. This law turned over vast amounts of public domain to private citizens. 270 million acres, or 10% of the area of the United States was claimed and settled under this act. Repercussions of this monumental piece of legislation can be detected throughout America today."
>
> **-National Park Service/Homestead**

*Illustration by Chelsea Begoody, Sunny's grandniece.*

"The Dawes Act designated 160 acres of farmland or 320 acres of grazing land to the head of each Native American family. This was comparable to the Homestead Act, but there were important differences. The tribes controlled the land now being allotted to them. The lands were not owned by the federal government. Additionally, much of the land subject to the Dawes Act was unsuitable for farming. Often large tracts of allotments were leased to non-Native American farmers and ranchers."

**-National Park**

Prior to Hweedi, The Long Walk of 1860, very similar to the Trail of Tears experienced by the southern and eastern tribes, the Diné people were semi-nomadic. We began our New Year with the first New Moon after Fall Equinox. We moved seasonally with our flocks, maintained fields of domestic seeds, kept a seasonal ceremonial calendar based on solstices and equinoxes, and traded with various tribal communities, and maintained our matrilineal clan groupings and land use holdings. Each Diné individual belongs to four clan groups. The first clan is their mother's clan, the second is their father's clan, and the third and fourth clans are the clans of their matrilineal and patrilineal grandfather's clans. Each of the clans have origin and place stories that define their attributes, skills, talents, and capabilities. The clans assisted our practices of maintaining a strong sense of living in a balanced community. This way of life came to an abrupt end when the United States government began the systematic round-up of Native people that interrupted the implementation of Manifest Destiny in 1845.

"The Long Walk of the Navajo, also called the Long Walk to Bosque Redondo (Navajo: Hweeldi), was the 1864 deportation and attempted ethnic cleansing[1][2] of the Navajo people by the United States federal government. Navajos were forced to walk from their land in what is now Arizona to eastern New Mexico. Some 53 different forced marches occurred between August 1864 and the end of 1886. Some anthropologists claim that the "collective trauma of the Long Walk...is critical to contemporary Navajos' sense of identity as a people."

**-Wikipedia**

My great-grandmother was born, approximately, in the late 1870's, just as these new acts were being passed by the United States. She was born into a lifetime of being consistently aware of what a foreign government was capable of doing to her sovereign way of life on land that she and her ancestors had lived on and maintained for thousands of years. As access became more limited to many landscapes that held sacred shrines, pilgrimage paths, wild gardens that grew food for nomadic travels, herbal medicine patches, and places where relatives were replanted and sent off for their eternal journeys; my great grandmother had to find new ways to navigate a changing policy landscape to maintain winter grazing areas. She would come upon fences being built, various forests being clear cut for farmland, and permanent homes being built by homesteaders. My great-grandparents did their best to understand these unannounced changes.

The Long Walk of 1864 began with President Abraham Lincoln. The Navajo signed the Treaty of 1868 with the United States. They were released from the Fort Sumner imprisonment in the Eastern Plains of New Mexico in June of 1868. Central to this treaty was and is, Article 5. This article stated that a section of land was going to be allocated to a male head of household and an 18 year old Navajo man would receive 80 acres. This treaty fundamentally changed how the Diné People maintained their matrilineal cultural land holding practices.

My great-grandmother and her husband were healers, herbalists, shepherds, and farmers. They continued to weave this enormously complicated situation into their daily lives and integrate the changes into extended family and clan communities. They did their best to live by the treaty, while holding onto the traditional practices that had benefited and sustained the land and their families for centuries. They knew that they would need to plant seeds of determination in their grandchildren. These seeds would need to be fertilized in a rich soil of courage and fearlessness. The preceding generations would need a tremendous amount of resilience to survive. My great-grandparents saw what would be necessary to withstand the overwhelming changes.

My mother was a young girl when Franklin D. Roosevelt selected John Collier to head the Bureau of Indian Affairs (BIA) within the Department of Interior. Mr. Collier had worked with a number of tribal groups in the West and was instrumental in installing The Indian Reorganization Act of 1934. This act included the Navajo Stock Reduction Program:

"The Bureau of Indian Affairs (BIA) instituted a policy to reduce the large Navajo herds, stating that an acre of land could only support six sheep. BIA agencies held meetings with Navajo men about how many sheep the land would support. Why the agencies met with the Navajo men is not known, since the sheep belonged to the Navajo women. The Navajo people had no say in this decision. It was made between the Soil and Conservation Service and the BIA. Initially, Navajo were paid for their sheep as the government slaughtered them, but as the reductions went on sheep, goats, and horses were simply shot and their carcasses left to rot in the fields. In all, the federal agents killed more than 250,000 sheep and goats and more than 10,000 horses belonging to the Navajo people. The Stock Reduction Program caused starvation on the Navajo Reservation."

**-Southwest Indian Relief Council**

It was during this exact timeframe that my mother was also being hidden from US government agents that were forcibly taking children from their families and homes to be enrolled in BIA Boarding Schools and /or religious boarding schools, funded by the government. She recalled how her family's flocks were hidden from the government. She said the herds were split up among the extended families or traded with neighboring pueblos. This minimized the impact of hunger within the communities and maintained portions of the grazing lands. She also recalled being hidden in piles of the shorn wool being prepared for weaving. She was never found. My mother never experienced any of the deplorable methods used to rob and strip many native children of their cultural identities. My mother survived with her language, spiritual practice, cultural integrity, and knowledge intact. She was nurtured with ancestral wisdom and truly was seeped in tribal survival.

This is what my mother meant when she said, "We will continue to live."

I took the rug my mother wove for me out during the pandemic. I recalled the beautiful story she told of this rug. She described each sheep's personality, as this was their wool. She told me the characteristics of each season as the wool dried, releasing the lanolin through the sunlight, wind, rain, frost, and snowfall. She told me how she picked the debris out of the dried wool, carded the wool, and gave it a rough spin, thinking of the pattern and the subtle shades of herbal colors the wool would hold. She continued the story of weaving into this tapestry all the place names, the waters' places, the air, the fire, and all the sacred elements. She named all the ancestors who exhaled their prayers, songs, and stories into these places…this vast knowledge is the wisdom that is the resilience that is handed down. It is the tenacity of all the ancestral matriarchs that have established, maintained, and shared the equanimity of Hozho: this practice of living in balance with all my surroundings – both negative and positive. This is the daily work I do in my home.

Decade by decade, for 246 years, my great-grandmothers and grandfathers have lived through tremendously dark and stark times. The 12 seasons of the pandemic have re-revealed these same stark and dark realities. What is my understanding? I focus on where I come from. My ancestors endured, I will endure. They persevered, I will persevere. Just as my practice of Hozho holds harmony and balance; it also holds the juxtaposition of Hochxo: the opposite of balance and harmony. These two sides exist simultaneously. I must hold both sides, just as my ancestors did. I must hold both the holistic wholeness and its unholy brokenness. I know I have, within me, the depth for doing the difficult homework of the healing heart work that is absolutely essential for me and my Diné Nation to flourish. If home is where the heart is – I am doing the healing work. I am creating the capacity for the next generation to experience the song-story-prayers that hold in balance the elements of Earth and Sky: a humble boldness that contains the epigenetic courage of all my ancestors.

# NMCEWL FELLOWSHIP FOR CONVENING COMMUNITY COLLABORATIONS

*Introducing our first three 2022 NMCEWL Fellow awardees*

Holistic Management International formed the New Mexico Coalition to Enhance Working Lands (NMCEWL) in 2017 to bring together a broad group of stakeholders in working lands in the state including farmers, ranchers, nonprofit organizations, land agencies, and the private sector to support collaboration and stewardship. In 2018, a group of foundations announced a philanthropic effort called Zone Grants to provide planning and implementation funding to New Mexico nonprofits in five "zones", one of which was sustainable food and farm systems. NMCEWL was a recipient of this funding. The support has enabled the program to hire a full time coordinator and to develop a fellowship program to support leadership development in working land stewardship. Our first cohort of fellows convened throughout 2022.

We believe that the best people to address the needs of their communities and the lands those communities rely on for food and income are the people who live, work, and lead in them. We also believe that all of us, from all backgrounds and experiences, have much to learn and teach about how to promote diverse and equitable working relationships, particularly when it comes to working lands.

We are thrilled to introduce you to a few of our 2022 fellows. Part of our criteria was to seek out fellows who are passionate about grassroots leadership in the field of agriculture or conservation in their region and want to see greater breadth of participation in designing and implementing agricultural and conservation resiliency on the ground. We are fortunate to have found just that in our first round selection of individuals. We are excited to introduce three of our nine first-year fellows.

During their fellowship, fellows worked with each other and a diverse group of mentors from across the state with experience in managing conservation and agriculture projects; facilitating cross-culturally, across difference, and with community; navigating land tenure dynamics in the state; getting projects funded; and shaping the ways communities across the state steward land.

We encourage you to learn more about the full cohort of fellows and the other work of NMCEWL at *www.nmcewl.org*.

# GET TO KNOW CASEY HOLLAND

Compiled by Joanna Colangelo

My name is Casey Holland and I'm the farm manager/director of Chispas Farm. We're a four-acre, diversified vegetable market farm. We also have a large CSA program and do a number of different community initiatives throughout the year. We grow over 120 varieties of heirloom fruits and vegetables; we have goats, sheep, ducks and geese, and a flock of laying hens, in addition to rabbits. We do a little bit of everything on this tiny-big farm.

I never in a million years thought I'd be a farmer. I grew up in southern New Mexico. Outside was just oppressive when I was a kid; I hated it. But even as a young one, I had a desire to do something about all of the struggles in the world, and I didn't really have language for it. I went to UNM for sociology and psychology, and was really turned onto the plight of the world we're facing – the societal structures and oppressive power systems and all the "isms." I was given language with which to describe some of the intensity that we're experiencing now and how it came about. I really wanted to do something about it, but I had no idea what I could do. Sometimes it can feel pretty hopeless as an individual when faced with all these big problems.

I was lucky enough to go to school during the Occupy Wall Street Movement, and I got really involved with those folks. Through that, I was connected with some food justice organizations, specifically Southwest Organizing Project's (SWOP): Project Feed the 'Hood. When people talk about food systems, it's often with a language of destruction, chaos and ruin, but SWOP was talking about liberation and creation and something constructive that we could do.

I was studying Peace Studies at the time, and had to do a community internship. I reached out to SWOP to do my internship with them [Project Feed the 'Hood]. They said, "yes," and that was the single most transformative semester – my very last one – at UNM. It changed everything for me. I started out on the Feed the 'Hood farm. Then I jumped around to a few different farms – doing field labor for a few seasons. Then I got connected with Red Tractor Farm in the South Valley. I was there for over four seasons, and was connected with Chispas in 2017.

This space, more than any other space I've been on – particularly because I've been here the longest and it's the space over which I have had the most autonomy – has been my biggest lesson in environmental stewardship. When I got here, this whole place had been abandoned for a few seasons. I was trying to listen and see and respond to what the land needed. At first, it was just cover crop, some seeds, and water now and again. Slowly, over the years, it developed. We haven't needed any pesticide application since 2020; nothing – not even organic. We don't need to purchase fertilizer anymore. I have a really strict soil management regime that we follow, so now we can just use our on-farm-chicken-manure-compost. That's all we need for the entire farm.

One of my goals has been to make the space hospitable to more-than-humans. Last year was the first year that we had toad sightings, and, now, we have three or four resident toads. Yesterday, we had a snake spotting. When you're caring for the ecosystem, it becomes a home for other beings. The more beings that want to come and share the space, the more you know that you're on the right path.

There's three pillars of sustainability: social-community, economic, and environmental. We try to address all of those areas in the systems we're creating on the farm. As far as social goes and paying our folks a fair wage, this year


we were finally able to offer $13 an hour with a three percent profit share. Next year, I'm hoping to do $15 an hour with a five percent profit share and just keep increasing from there.

We do a number of different community initiatives; we host free cooking classes on the farm throughout the summer in partnership with Sprouting Kitchen. We also accept Double-Up Food Bucks and accept food stamps directly on the farm, so we opened a farm stand specifically for the local community to be able to come and access food at a price that's affordable to them and fair to us. I really like the food to be as direct-to-consumer as possible. Mostly, we're able to keep the food within a five-mile radius of our community.

Economically, we do break even every year. It surprises me sometimes. We've been very intentional over the years to develop crop planning in ways that maintain the diversity of our plants, while prioritizing the ecosystem and working with the fields in order to get the production that we need to meet our numbers.

One of the most challenging aspects of this work, particularly as a young person who doesn't have many resources of my own, is that none of this is actually mine. It's all a matter of how long the property manager wants to keep us here, and whatever he decides to do with the land as he gets older and makes those life decisions. It all feels so tenuous. This is technically my third start on a new place, where I've really brought it up. I don't know how many new starts I have left in me. This is a place that I've developed and have this intense, wonderful bond with, but I also realize that it could all potentially just go away if the next person who's here doesn't want the same thing.

A lot of the work I do, for me, is centered in radical politics. I don't think that when people think of farmers, they think about farming as being really rooted in this idea of creating systems that work for ourselves and are outside of existing systems. Many of us are here trying to create the networks that will support our communities when we're no longer getting existing system support. I think the pandemic really opened people's eyes to how unrealistic our existence is. We have been able to survive on consumerist goods that were readily available at really cheap prices, but are based off of the exploitation of people around the world in ways that cannot continue.

Many of my peers who are growing and farming are trying to figure out how we can, at least, mitigate some of the losses when those systems are proven to be fragile and, then, actually do start collapsing. When it gets really hard out here, that's what keeps me going. I remember during those first few weeks of the pandemic, when no one really knew what was going on and we had no idea what would happen. We already had seeds in the ground, and I thought, "If things get really bad, at least my neighbors are going to eat." That's what so many other farmers were thinking, and I'm glad that people realized that in the moment.

It's heart work – the three H's: head, heart, and hands. I feel so honored and privileged to be able to build this relationship with my community, provide healthy and nutritious food, and meet all the beings in this space. People express their gratitude [to farmers] all the time, but what does it actually mean?

Thanks to the person who owns this land, we're able to have a no-cost lease, which is really important. We need more people who are willing to do that. There are too many people who have a spare acre in their backyard and they charge a farmer $2,000 a month to farm it. What are they doing with the land otherwise? It's literally dust. Then we come and put our heart and soul into the land and make it into something, and they think they can make a profit. That's not what it should be about. It's really about challenging those people with resources to start thinking of ways in which they can offer those resources to people who are trying to do good work, and who are trying to support and keep our communities alive.

# GET TO KNOW RICK MARTINEZ

Compiled by Joanna Colangelo

My name is Rick Martinez. I worked at car dealerships in the backend-service department area for 35 years, and retired because of COVID. I saw how ugly people got and how they changed, and I just wasn't enjoying my job much anymore. I spoke to my wife and she said, "You know what, you're not having a good time. Maybe you ought to start running the farm full-time."

We always talked about how, when we retired, we wanted to live off the land. We have just under three acres in Espanola. My wife wants to retire in a few years and it was time for me to get everything ready on the land – I had to get the farm to the point where it could pay the bills.

I decided that I needed to get involved in the acequia. In order for us to thrive off our land, we're going to have to have water. And, water in New Mexico is a very big issue. I had always told the acequia folks that once I retired, I would involve myself more with the acequia. One day, we were cleaning the ditch and complaining about how far down on the ditch we are – and how we get the last of the water. Sometimes, we don't get any water at all. I was talking to my neighbor about how we needed to start paying closer attention, and he took it to heart and nominated me for treasurer. When elections came, I got elected.

It was about two weeks into the job that I realized being treasurer isn't just about balancing a checkbook; it's about going after funding, getting capital outlay, and making sure the acequia thrives. We had $20,000 that we were about to lose in December because we hadn't used it; spending that money became my priority.

The first thing I did was ask what we needed for the acequia. Where the water comes in – where the gate is that opens to the river and feeds the ditch – had issues. It leaks and that's what the money was earmarked for, so we needed to get it fixed. I was able to reach out to the legislators and get an extension. We started getting designs for the gate, and, now, we're ready to start construction, but it'll need to wait until after the irrigation season.

Around the same time that I started as treasurer, I began seeing posts on Facebook about the NMCEWL fellowship. All my educational background is in automotive workshops and leadership seminars that the dealerships would send me to, nothing about the environment and agriculture. I thought, "This fellowship will help me meet people who know what they're doing." Through the program, I want to learn about acequia funding and figure out the irrigation system issues, because they're not going to go away.

Nobody irrigates off of the first mile of our ditch – it goes through federal and Indian lands. Maintaining that section is where we have the most expense year after year. If we could line or tube that area, we wouldn't have to deal with the maintenance as much. That's where my project for this fellowship is focused – to get funding and start phases of lining that part of the ditch so the water will flow faster downstream to the farms.

Being a farmer, it feels like I'm bringing back what I took for granted. My grandfather was a farmer in Pecos. He always had a massive farm, and he had cows that we had to go feed. I hated it. I thought, "I don't want to do this." But, once I hit my 20's, I started to miss it. I admire all of our local farmers. We're feeding the community. During COVID, everybody came to us for green chile. We dehydrate a lot of our vegetables – we dehydrated our green chile and our tomatoes. We were set during COVID, and nobody in our family went without chile or vegetables.

My wife does canning, and she wrote a cookbook on Northern New Mexico recipes. It was published and it took off like hotcakes; it's sold close to 6,000 copies. Tied into that cookbook, and everything else we've got going on with the farm, that's going to be our retirement. But, it's going to involve making sure that we've got the water to do what we want to accomplish.

We only have one child, a son in his 30's. He's an air traffic controller in Roswell. If there's an opening in Albuquerque, he'll transfer up there. But, the number one rule for us as a family is: "Never sell the farm." The farm is going to stay in the family; to kids, grandkids, godchildren – someone in our family who is interested in farming, but it is going to stay in the family. It's a family legacy.

My wife and I bought raw land in 1996 and worked it to what it has now become. Before, it was just pasture land; half of what we grow is just pasture for our one cow and, now, her calf. We'll breed the two of them when it's time. If we drop a bull, we'll castrate it and that's our meat. Right now, our freezer is full of meat; it goes to our family. That's what my wife and I do for our family. It's our goal. We don't want to get rich; we just want to survive.

# GET TO KNOW MELANIE KIRBY

Compiled by Sam Hinkle

My name is Melanie Kirby. I am a native New Mexican, born and raised in southern New Mexico. On my mom's side, we are members of the Tortugas Pueblo. I am also the founder of Zia Queenbees beekeeping company.

I started in apiculture in 1997 when I joined the Peace Corps. My mother had done Peace Corps and always talked fondly about it, so I signed up. I got assigned to a bee project in Paraguay, all of which was new for me. My background was in outdoor education - I had never done agricultural work with bees. Like, "Honey? You just go to the store and buy that, right?" Still, I was able to check out some books at the library and make a few calls to learn before I landed in Paraguay.

I became fascinated. From their architecture, to the way they manage their own society, to the way they procure nourishment, care for their young, and protect the hive. To me, it signaled high intelligence. Nature is brilliant.

After Peace Corps, I knew I wanted to go to grad school, but I wasn't sure in what. I was enjoying beekeeping, but there wasn't really a beekeeping degree. I figured I would do a couple more years of beekeeping in New Mexico and then make a decision about grad school.

A few years turned into 20. I ended up working for commercial beekeepers for eight years and then launched a small farm in Northern New Mexico. I had to learn how to keep bees in my home state, as opposed to Paraguay, which put me on a journey of really wanting to understand this landscape, my home, better.

Eventually, I launched Zia Queenbees with my farm partner Mark Spitzig, and we've been running it together for 18 years. Like many cattle ranchers, we basically do rotational grazing with our bees. We move them between varying pastures and landscapes. Part of this is because we are landless farmers – we do not own land. As many know, land in the West is expensive, especially if you need water rights. It has been a hard obstacle to overcome, but I didn't allow that to stop me in my tracks. It has forced me to be creative and encouraged me to be more connected with my communities.

Because I want to find places for my bees, I need to talk with those who have or manage land. This has connected me with a lot of different farmers, ranchers, gardeners, and property owners that are willing to share space. Some folks need pollination. I can bring bees in and provide pollination. In exchange, they provide space and nutrition for my bees. Whatever flowers they grow is what my bees are able to get as food.

We have 200-250 full colonies that create mating relationships with 400-600 other colonies. This is a good size for us – we don't want to affect the quality of our work. During the last 20 years, I have also been able to go back to grad school – I got my Master's in entomology, now knowing that I wanted to work with bees and bugs – as well as started a bee education program with the Institute of American Indian Arts.

I really feel like it takes a community. I know it is a cliché, but it really does. I am at the mercy of the elements like other farmers. I am also at the mercy of what everyone else is growing or (hopefully not) spraying. In order for this to be a win-win scenario, to be symbiotic, we need to be open to conversation and communication.

I have realized that I am more of an "interdisciplinarian." I really like insects, and I really like how pollinators are a bridge between the land and each other. I also recognize the need for a translator and creative communication. For example, I have noticed that farmers and scientists in

this space use entirely different languages, the type of data collected by one is hard to reconcile with the type of data collected by another. When you talk to farmers, many do not have the time, experience, or desire to translate a scientific paper. Then, you have scientists who want to connect with people doing this work (like farmers), but they lack the terminology.

Everyone is learning a new language – that can be a challenge, and how we learn this can make or break whether someone wants to continue to learn it.

In all of this work: being a landless farmer, needing to find a place for bees, being creative in making connections with people who can host my hives, creative communications – NMCEWL's name comes up a lot. So I applied for the fellowship.

The conversations have been great – hearing what the cohort is thinking about and questioning feels parallel to my thoughts and my questions. We are working through these things together and seeing where we can weave together to become a mosaic of community partnerships. It is cool that organizations like NMCEWL want to specifically invest in our work and projects, what we want to do in this field of community leadership.

My project, what I want to do, is to designate the whole Land of Enchantment, or an area within the state, as a pollinator preserve. We, as a people, are actively thinking about how to protect the environment, and if pollinators can be the poster child to help do that, we can help our soil, our food system in general, and trickle out into society.

Coming from an Indigenous community, and working and engaging with Indigenous communities, my hope has been to include them first and foremost as the original caretakers of this land. And there is interest.

I have had this idea for a while. I am hitting this point in my life where I really want to pay it forward with something that can become its own legacy for our community, something that we can constantly add to. With the support of the NMCEWL Fellowship and Quivira Coalition, and being able to link up with folks whose visions connect, we can take bigger steps forward.

What is a bee without her hive? An insect with wings yes, but you don't really know until you look at how they are behaving within their environment, I see that with the work that NMCEWL is doing. It allows us to connect those dots, helping us bring things back to within our peripheries where we are able to be a part of mindful stewardship. Between people and places, despite income and cultures, we are one, and we only have this one planet. We have to work together.

# WEAVING HOPE

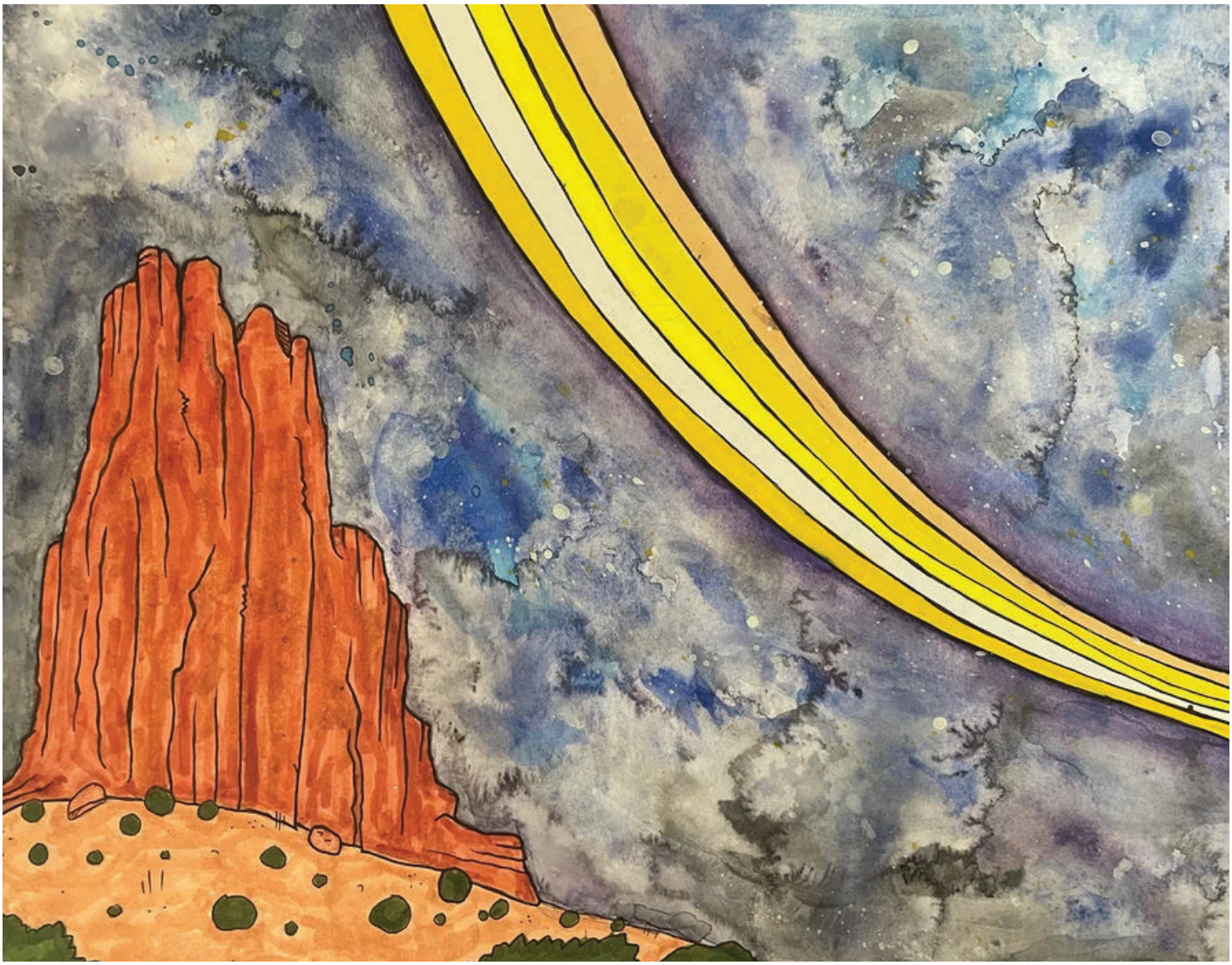
## Art by Erin Elder

Erin Elder's work combines drawing, painting, and collage into vibrant expressions of landscape and its energies. Her work has been exhibited at The Orpheum in Albuquerque (solo); Mountain Fold Books in Colorado Springs (solo); Museum London, West Texas A&M University, Phil Space, Caldera Gallery, Hecho a Mano, and the Santa Fe Collective. The following pages showcase four hand-selected drawings by the artist from her drawing series.

You can experience Erin's full portfolio at *www.erinelder.com*

*"Hills and Light" Illustration by Erin Elder*

*"Liquid Hope" Illustration by Erin Elder*



*"Conversation between earth and sky" Illustration by Erin Elder*

*"Channeling the Ancients" Illustration by Erin Elder*

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