

GREEN FIRE TIMES

News & Views from the Sustainable Southwest



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COVER: CULTIVATING TREE SEEDLINGS AT THE JOHN T. HARRINGTON FORESTRY RESEARCH CENTER; EUGENE PICKET AND GILBERT LOUIS SR.; WASHING CARROTS AT SOUTH VALLEY ECONOMIC DEVELOPMENT CENTER; BLOSSOMS TO BLESS ATRISCO ACEQUIA; PICKLED VEGETABLES AT THE SANTA FE FARMERS' MARKET; LOCAL PRODUCTS AT TAOS FARMERS' MARKET; TINCTURES AND BODY PRODUCTS AT SFFM; CHIMAYÓ PRODUCE; SCHWEBACH FARM CORN HARVESTERS; BLUE CORN ATOLE FROM LA MESA FARM; FOOD-AID BOX FROM TRUJILLO FAMILY FARM DE NAMBE PUEBLO; JULIETA SAUCEDO OF LA SEMILLA FOOD CENTER

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Green Fire Times is a platform for regional, community-based voices—useful information for residents, businesspeople, students and visitors—anyone interested in the history and spirit of New Mexico and the Southwest. GFT's small, dedicated staff and multitude of contributors generate articles documenting the interrelationship of community, culture, the environment and the regional economy. The sustainability of our region affects all of us, and requires people from all backgrounds working together to create solutions. One of the unique aspects of GFT is that it provides multicultural perspectives that link green, cutting-edge innovations with time-honored traditions.

Storytelling is at the heart of community health. We have an opportunity to change the story going forward, which can lead to positive transformational change. GFT shares inspiring stories of hope and community action. By helping our communities discover who they once were and what they can become, a more positive future can be created.

Of course, it is an extremely challenging time to continue to produce a free, quality, independent publication. Production costs have greatly increased. Many local and regional publications have folded or have been bought up by corporate entities. Fortunately, a growing number of publications are receiving boosts from nonprofits that are devoted to protecting journalism. GFT is owned by Southwest Learning Centers, Inc. (est. 1973), a nonprofit educational organization. SWLC provides a mentorship program for some of GFT's writers, aspiring journalists and documentarians.

Green Fire Times is struggling to survive. We also need funding to upgrade our online archive and make 13 years of articles more accessible to community members, students and researchers. Don't assume that someone else will help. Please consider making a tax-deductible donation through our website, or send a check made out to Southwest Learning Centers (with a notation 'for GFT') to P.O. Box 8627, Santa Fe, N.M. 87504-8627. Also, please advertise! The print edition—currently published every other month, while our website is updated more frequently—is widely distributed from Albuquerque to Taos and beyond. For a rate sheet, visit GREENFIRETIMES.COM.

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BACK TO THE FUTURE

BY DENISE MILLER

Last fall, 30 partners representing local food hubs, food and farming support organizations and state agencies convened at the UNM Biology Field Station near Socorro for several days of co-creating how to sustain, grow and support New Mexico’s local food system.

The gathering was part of a collective impact project called “Scaling Up New Mexico’s Food Value Chain,” a three-year USDA Regional Food System Partnership grant anchored by the New Mexico Farmers’ Marketing Association (NMFMA). The project regularly brings together a statewide coalition of public and private partners in dedicated work teams to address opportunities for improving the middle of the local food value chain—the part between farm and fork—so that local farmers, ranchers and food producers can feed their communities, and so that these producers can afford to stay on the land.

Porter Swentzell (Santa Clara Pueblo) former associate professor, Indigenous Liberal Studies at the Institute of American Indian Arts, and Arturo Sandoval, founding director of Center for Southwest Culture, based in Albuquerque’s South Valley, led the opening panel that focused on the history of agriculture in New Mexico. Swentzell and Sandoval described how for thousands of years, despite the impacts of colonization, land grants and wars, many Native and Hispanic communities maintained their connection to the crops, plants and animals of this place because it was essential to their culture and survival.

*Building on the knowledge and skills of
our communities, working with nature and
recognizing that food is sacred*

Albuquerque family eating local



Farming, food, land and water remain essential to our collective health and culture. Staying connected is the challenge. In the ambient November light of the low desert, our group set intentions for improving relationships with each other and a food system that has systematically left out far too many for far too

There is real movement happening to support values-based procurement and healthy food incentives for those in need.

long—nutritionally, economically, environmentally and spiritually. When Sandoval casually said it was time to go back to the future and complete the circle that keeps the food we grow in our communities, he struck a noticeable chord in the room.

Going back to the future is what the NMFMA's work has been about since 1994. Farming has never been easy, but ongoing drought and erratic weather, coupled with the high cost of land, labor, fuel and other supplies have really put a squeeze on farmers and ranchers.


Two bright spots have been new investments and extraordinary partnerships that are helping develop steady local markets for New Mexico-grown produce, meat and other foods. These federal, state and private investments are not only stimulating agriculture sales for small and midscale producers; they are also creating critical food access for our state's vulnerable communities. Partnerships are building upon decades of work by advocates, frontline organizations and other stakeholders who are working to further collaboration, share resources, and advance broader system-wide goals of providing local, healthy New Mexico-grown food, especially to those who need it most.

During the next few years, millions of new dollars will be kept close to home, along with the food that our farmers are growing. It's still incredibly hard to make a living being a farmer or rancher, but there is real movement happening to support values-based procurement and healthy food incentives for those in need.

The food system is a complex set of interconnected factors that influence nutrition, food, health, culture, community development and agriculture. Partners across the state are working to simplify these processes in order to work toward greater food sovereignty, whereby the focus becomes food for the people by building on the knowledge and skills of our communities, working with nature and recognizing that food is sacred. The essential question is how to do this.









Ernst Friedrich Schumacher, a 20th-century German-British statistician and economist best known for his proposals for human-scale, decentralized and appropriate technologies, and a book called *Small is Beautiful*, said, "Any intelligent fool can make things bigger, more complex and more violent. It takes a touch of genius—and a lot of courage—to move in the opposite direction."

As we work together to find answers on the best ways to move in the opposite direction and go back to the future



NEW MEXICO HARVEST CALENDAR

All of these delicious foods are grown in New Mexico, but local availability depends on a variety of growing conditions including weather, soil, elevation, and farmer preference.
Check with your local market to find out what is available near you!

SPRING >> MARCH THROUGH MAY	Nuts Pecans Pistachios Vegetables Arugula	Asparagus Beans (dried) Beets  Vegetables Arugula	Bok Choy Broccoli Dried Corn (chicos, posole) Greens (cooking) Herbs	Lettuce Onions Peas (shelling, sugar snap, snow) Radishes Rhubarb	Salad Greens Spinach Turnips 
EARLY SUMMER >> JUNE THROUGH MID JULY	Fruits/Nuts Apricots Cherries Figs Nectarines Peaches 	Plums Strawberries Vegetables Arugula Beans (dried) Beans (fresh) Beets	Carrots Cucumbers Dried Corn (chicos, posole) Fennel Garlic Greens (cooking)	Herbs Kohlrabi Lettuce Onions Peas (shelling, sugar snap) Potatoes	Radishes Rhubarb Salad Greens Spinach Summer Squash Turnips
HIGH SUMMER >> MID JULY THROUGH EARLY SEPTEMBER	Fruits/Nuts Apples Apricots Berries Grapes Melons Nectarines Peaches Pears Pecans	Pistachios Plums Watermelons Vegetables Beans (dried) Beans (fresh) Beets Peppers (shishito, jalapeño, bell)	Black-eyed Peas Cabbage Carrots Celery Corn Cucumbers Dried Corn (chicos, posole) Eggplant	Fennel Garlic Green Chile Greens (cooking) Herbs Kohlrabi Leeks Lettuce Okra Onions	Potatoes Pumpkins Radishes Salad Greens Summer Squash Tomatoes Tomatillos Turnips Winter Squash
FALL >> LATE SEPTEMBER THROUGH NOVEMBER	Fruits/Nuts Apples Grapes Melons Pears Pecans Pistachios Plums Raspberries Watermelons 	Vegetables Arugula Beans (dried) Beans (fresh) Beets Peppers (shishito, jalapeño, bell) Broccoli Cabbage Carrots Cauliflower Corn	Cucumbers Dried Corn (chicos, posole) Eggplant Fennel Garlic Green Chile 	Greens (cooking) Herbs Kohlrabi Leeks Lettuce Okra Onions Parsnips Potatoes Pumpkins Radishes Red Chile	 Rutabaga Salad Greens Summer Squash Sweet Potatoes Tomatoes Tomatillos Turnips Winter Squash
WINTER >> DECEMBER THROUGH FEBRUARY	Fruits/Nuts Apples Jujubes Pecans Pistachios Vegetables Arugula Beans (dried)	Beets Cabbage Celery Root Dried Corn (chicos, posole) Garlic Greens (cooking) Herbs	Leeks Lettuce Onions Parsnips Potatoes Radishes Red Chile Root Vegetables	Rutabaga Salad Greens Spinach Turnips Winter Squash 	

Plan Your Shopping with the New Mexico Harvest Calendar

Many farmers' markets and farm stands around the state open in early summer. The variety of products expands as the harvest season progresses. The New Mexico Harvest Calendar (available in English and Spanish) lists fruits and vegetables and when they are in season so you can be flexible with your recipes to make the most of the season's freshest food. A new ingredient may inspire you and become a staple on your table. To download the calendar, visit [HTTPS://FARMERSMARKETSNM.ORG/RESOURCES/SHOPPER-RESOURCES/WHATS-IN-SEASON/](https://farmersmarketsnm.org/resources/shopper-resources/whats-in-season/).

by feeding our communities, taking care of the land, and ensuring the work is economically viable for those who are doing the heavy lifting, let's make sure we are asking the right questions.

If you want to get involved in your community's food future, learn more at [FARMERSMARKETSNM.ORG](https://farmersmarketsnm.org) or stop by your local farmers' market and talk to the market manager. If you are a farmer or food producer interested in becoming part of the Approved Supplier Program, or have general questions, send us a note at QUESTIONS@FARMERSMARKETSNM.ORG. ■

Denise Miller has been the executive director of the New Mexico Farmers' Marketing Association since 2005. She lives in Santa Fe with her husband and three cats and is grateful to local farmers who helped their three children grow up knowing where their food comes from.

NEW MEXICO FARMERS' MARKETING ASSOCIATION PROGRAMS

Three key NMFMA programs supported by a coalition of statewide partners:

- Double Up Food Bucks:** This food access program that started in 2010 as a \$50,000 pilot at a handful of New Mexico farmers' markets now helps about 50,000 SNAP participants annually to stretch their fresh food budgets and provides farmers with more than \$2 million in local food sales each year. SNAP participants receive a dollar-for-dollar match when they purchase New Mexico-grown fruits and vegetables at 90 retail locations statewide including farmers' markets, farm stands, and participating grocery stores. *(Federal, state, and private funds will total about \$3 million this fiscal year.)*
- FreshRx:** This statewide produce prescription program provides low-income health clinic patients and their families with fresh New Mexico-grown produce along with nutrition education. Now available in 11 counties, current health clinic partners include: El Centro Family Health (Española, Las Vegas, Taos), Hidalgo Medical Center (Silver City), First Choice (Albuquerque), Indian Health Services (Kewa, Cochiti, San Felipe, San Ildefonso, Santa Clara, Nambé, Pojoaque, Ohkay Owingeh), La Clinica de la Familia (Las Cruces), La Familia Medical Center (Santa Fe), Presbyterian Health Services (Española, Albuquerque, Santa Fe, Tucumcari, Socorro), and Taos Pueblo Health and Community Services *(Federal and state funding will total about \$400,000 this fiscal year.)*
- The Approved Supplier Program:** This quality assurance program helps ensure the highest food safety standards are being met by local producers who sell their produce, meat, and other foods through the state-funded "New Mexico Grown" program to schools, preschools, and senior centers. Beginning in January, it will also support federally funded local producer sales to New Mexico's food banks. *(State funding for the New Mexico Grown procurement program will total \$1.8 million this year. Federal funding for the Food Bank procurement will be nearly \$2 million over the next two years.)*



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May 15 Día de San Ysidro, Atrisco, New Mexico

BY JAIME CHÁVEZ

*I can hear the hoe
On the ground next door
Falling onto the bindweed
of existence.*

*The birds singing remember
High water in the arroyo
That is still coming.
Maternal waters from the monte.*

*The circle was planted in a field
Yesterday, with magpies observing
The winding motion on the acequia,
Rose petals travel blessed in the canals.*

*The fields plowed and disked
Furrows are ready, singing
For the harvest, as the matachines
Shake their rattles in the earth and in the water.*



Photos © Seth Roffman



San Ysidro and his wife, Santa María de la Cabeza, are patron saints to farmers, ranchers, farmworkers and day-laborers everywhere. The procession and blessing of the waters in the Atrisco community took place on May 15 at Holy Family Parish to pray for rain, crops and community well-being. The final *entrega* (delivery) of the saints to the new *mayordomos*/caretakers is to promote harmony and stewardship of the land. Native blessings were shared by las Promotoras and in the dance of the Matachines to the four quadrants of the universe. The walk along the acequias in the Atrisco Valley evokes deep reflection. It reminds us of our youth, when we watered, swam, fished and survived in our acequia ecosystem. *Agua es vida*, Water is life!

NEW MEXICO CAN FEED ALL IT'S PEOPLE WELL

Wise, Local Investments Are Possible

BY DEE GAMBLE

FOOD AND AGRICULTURE POTENTIAL IN NEW MEXICO

Every New Mexican family could receive a large, green head of lettuce, once a week. All New Mexico schools and childcare facilities, elder centers, hospitals and prisons could have daily fresh fruits and vegetables in their meals. The freshest organic produce could be on the plates of every creative chef in the state's amazing restaurants! We have what is necessary to make this happen: ancient and scientific agricultural wisdom, hardworking, dedicated, wise farmers, sun and wind energy, food-processing and storage wizards, and a growing number of food hub distribution centers. The missing link is targeted, local investments. One way this would be possible would be with the creation of a Public Bank of New Mexico.

TWO CASE EXAMPLES

Below are two examples of innovative and flourishing food production enterprises that could benefit from additional targeted investments. These examples, and others listed in the sidebar, provide a vision for what similar efforts throughout the state could make possible. These kinds of food and agriculture systems can improve people's health and create jobs for countless young entrepreneurs.

AGRI-CULTURA COOPERATIVE NETWORK

Agri-Cultura Cooperative Network in Albuquerque's South Valley is bursting at the seams to expand into *Raíces Sagradas*, a Sacred Roots Farm & Food Hub that will consolidate Agri-Cultura and the South Valley Wellness Ecosystem. When complete, the Wellness Ecosystem will include a community farm, Farm to Table restaurant, Health Leadership high school, fitness center, walking trails, classrooms and much more.

Food and agriculture systems that improve people's health and create jobs for young entrepreneurs.

Leading this regional development in the middle Río Grande Valley is Helga Garza, Agri-Cultura executive director, who came to this work having spent her lifetime learning the value of healthy soils, water conservation and fresh foods from her Native and Indigenous ancestors. Wisdom from her ancestral ceremonial calendar coupled with community organizing skills has helped her put together a cooperative of some 45 organic growers whose farms range from one to 10 acres. These small, cooperative farms provide fresh produce for more than 300 CSA (Community Supported Agriculture) members, as well as thousands of pounds of foods through New Mexico Grown for childcare centers, senior nutrition

sites, public schools and hospitals. Agri-Cultura has been rooted in community for over 12 years and currently distributes over 4,000 pounds of local foods a week. All of it is grown locally in fields, hoop-

houses and greenhouses, so there is some seasonal control. Most fresh foods are available from April to October.

Currently, Agri-Cultura operates from the South Valley Economic Development Center, where it receives, cools, washes, repackages, sometimes processes, and distributes fresh, organically grown produce throughout the state. Agri-Cultura is the first USDA Harmonized GAP Plus+ certified food distribution center in New Mexico. Garza and her collaborators have built an infrastructure and cooperative food-growing and distribution network that helps the whole community understand the meaning of culturally respectful wellbeing.

This regional food system has definitely outgrown its space. Agr-Cultura has already acquired the land and water rights for a new site that will house the *Raíces Sagradas* food hub. Two hoop-houses and one greenhouse at the site are already providing the capacity to extend the growing season by starting seedlings early and allowing for second and third plantings of some produce. The food hub will be a 13,200 square-foot facility that will be fully solar-powered and provide sufficient cooling capacity for the harvested produce, as well as kitchens to create value-added products, and classrooms to share knowledge—ancient and scientific—for healthy growing and living.

Agri-Cultura is the first USDA Harmonized GAP Plus+ certified food distribution center in New Mexico.

TRAINING YOUNG AGRICULTURALISTS

In addition to fresh organic food sales, Agri-Cultura continues to train a dozen aspiring farmers in the Grow the Growers program in three-year internships that prepare the next generation of sustainable and regenerative food producers. Land rented from Bernalillo County provides the space for beginning farmers to ply the magic of turning soil and seeds into carrots and peppers. Not all the young trainees are cut out for the hard work and dedication of farming. As Fidel Gonzales, Agri-Cultura's board chair says, "Farming is a verb; agriculture is a living. Until you have spent July and August days weeding and harvesting in the New Mexico sun, you will not appreciate what it means to make a living from agriculture."

All the trainees, as well as a wide swath of community members, learn regenerative growing practices that can help them grow food in their own backyards, even if they do not become commercial growers. Agri-Cultura has developed a network of programs in collaboration with other regional nonprofit and governmental organizations that are providing food-safety classes, technical assistance, group purchases, irrigation supplies, nutritional education, food processing and USDA Harmonized GAP Plus+ food certification, expanding the value of collaborative and cooperative food security networks.



Agri-Cultura Cooperative Network received a New Mexico Food & Farm Day award at the state capitol in 2020.

© Seth Roffman

*“Farming is a verb;
agriculture is a living.”*

— Fidel González

to retire, drawn by the sun, beautiful skies and enchanted mountains. Neighbour fortuitously got connected with the Santa Fe Community College (SFCC) sustainability classes, where he learned how to grow food in enclosed, controlled environments: hydroponics and aquaponics. Both of these systems can be carried out in greenhouses, warehouses or even back patios. Both use water in place of soil. The difference is that hydroponic systems need chemical fertilizers to nurture plants. At the end of the grow cycle, the water and any remaining fertilizer and chemicals are sent back into the ground. The system is then recharged with fresh water and more chemicals.

Aquaponics, on the other hand, is a closed, natural ecosystem. Plants are grown in water, and the nutrients are supplied from the waste products of fish that are raised in the system. Naturally occurring bacteria break down the waste to release nutrients. The plants, at the same time, make the water safe to return to happy tilapia. It is a continuous cycle. Water is never discarded; a small portion has to be replenished periodically to make up for evaporation and use by the plants.

*Targeted, local investments
would be likely with the
creation of a Public Bank
of New Mexico.*

DESERT VERDE FARM

In the heart of Santa Fe, another innovative example of food production has emerged that is mindful of just how precious our water resource is. Like many before him, Andrew Neighbour came to New Mexico

In this completely closed system, aquaponics grows beautiful lettuce and other vegetables every six weeks, year-round. Neighbour’s 5,700-square-foot warehouse farm in the middle of Santa Fe uses both stacked horizontal growing



Agri-Cultura Network’s Grow the Growers program in Bernalillo County; Page 9 photo (l-r): Helga Garza, Agri-Cultura executive director; Sofia Martinez; lead Grow the Grower farmer trainer Shannon Concho (Zuni); Eugene Pickett of Black Farmers and Ranchers New Mexico

troughs and two-foot-in-diameter circular growing towers with plenty of plumbing. He now grows 1,000 dinner plate-sized heads of lettuce every week, lots of microgreens and herbs, and will soon be growing fruiting produce like tomatoes and cucumbers.

Neighbour never thought of becoming a farmer in his 70s (“too hot, too dirty”), but after learning the basics of controlled agriculture at the SFCC, he asked, “Why couldn’t this kind of system feed the whole of Santa Fe?” He and his wife learned early about the degree of food insecurity that exists in the county and state, and they wanted to do something good for the community in the autumn of their lives. He came with a science background and some retirement resources that helped him get started. He currently employs three part-time helpers who received beginning training at SFCC. In

FEEDING ALL NEW MEXICANS

A few more examples from around the state of organizations that are showing how to feed all New Mexicans:

- **Healthy Soils Working Group** helps farmers and ranchers statewide keep their land productive. Fallow land does not save water and degrades productive soil. Dead soil requires years to regenerate, but it can be done with lessons from the HSWG. [HTTPS://WWW.NMHEALTHYSOIL.ORG/CATEGORY/SOIL-HEALTH-PRINCIPLES/](https://www.nmhealthysoil.org/category/soil-health-principles/)

- **Reunity Resources** in Santa Fe turns household and restaurant food waste into topsoil to amend community gardens, and teaches young and old the value of good soil and fresh food. In addition, they donate more than 10,000 pounds of food each year to reduce hunger. [HTTPS://WWW.REUNITYRESOURCES.COM/](https://www.reunityresources.com/)

- **La Semilla Food Center** and the **Mesilla Valley Food Policy Council** on our southern border have been teaching and demonstrating methods to empower food production activists, especially small-scale farmers, in sustainably growing nutritious food that is available to the whole community. [HTTPS://LASEMILLAFOODCENTER.ORG/](https://lasequillafoodcenter.org/)

- **New Mexico Acequia Association** honors and practices the Indigenous and historical methods of protecting water and land, and builds community to make fresh food available to all. [HTTPS://LASACEQUIAS.ORG/](https://lasacequias.org/)

- **Quivira Coalition** understands the critical need to build soil, biodiversity and resilience on Western working landscapes. [HTTPS://QUIVIRACOALITION.ORG/](https://quiviracoalition.org/)

- **Covenant Pathways—Spirit Farm** in McKinley County uses Indigenous and scientific methods to promote regenerative agriculture for the health and food security of traditional communities. Healing the soil improves the health of Native peoples and Mother Earth by using cultural traditions that change people’s attitudes and actions with regard to food and soil. [HTTPS://COVENANTPATHWAYS.ORG/](https://covenantpathways.org/)



Aquaponic towers at Desert Verde’s indoor farm in Santa Fe

his first full year of production, he is selling to four restaurants, the CSA New Mexico Harvest, and to food banks. As a New Mexico Grown certified organic farmer, he also sells to the Santa Fe Public Schools. He would like to expand to the full extent of the warehouse. He dreams of continuing to build both the profit and nonprofit parts of the business so that he can break even. That means selling to restaurants and CSA members who can pay the full value for fresh produce so that he can also sell to childcare centers, schools and others at a lower cost.

Neighbour has reached the limit of financing his operations from his savings and retirement. Another \$50,000 would allow him to fill the warehouse with horizontal and circular planting platforms. And another \$40,000 could help him install either solar or wind energy to cut down on the cost of lighting and temperature control the plants require. His really big dream is to get a huge old building in Santa Fe that could support a half-dozen young, aquaponic farmers and another half-dozen food processors to add value to the produce, and organize them into a cooperative food hub for the community. That would require targeted investments in buildings, fish, seeds, lots of plumbing, cold storage, refrigerated trucks and related costs. Neighbour continues to train young farmers in the skills and problem-solving needed for this kind of production and will now also teach classes at SFCC. With targeted, local investments, this kind of warehouse aquaponic farming could be established anywhere in the state.

BUILDING HEALTHY FOOD OPTIONS WITH WISE INVESTMENTS

How can New Mexico expand the kind of work being done by Agri-Cultura in the South Valley and Desert Verde Farms in Santa Fe to provide healthy produce grown to be for New Mexicans? Where should investments be directed? From Helga Garza's 35-plus years of growing and organizing experience comes this list:

- Farmable, healthy land and water rights or access to quality water
- Infrastructure; drip irrigation systems, solarized pumps, cold frames and greenhouses to grow food year-round, washing stations and refrigerated storage and transportation
- Labor workforce and equipment for larger-scale production and harvesting

Organizations such as the nonprofit New Mexico Food and Agriculture Policy Council and the state New Mexico Grown program have supported policies and infrastructure to promote universal access to fresh foods. We have lots of sunshine and wind to power regenerative agriculture. With New Mexico resources invested equitably in people and organizations that have demonstrated care for soil and water and the value of nutritious food, we can be the well-nourished, productive population we wish to be.



The Alliance for Local Economic Prosperity (AFLEP) has promoted legislation to establish a Public Bank of New Mexico in the last three years and will support it again in the 2023 legislative session. Currently, New Mexico's money, three to nine billion dollars on any given day, is

deposited and managed globally for profit elsewhere. The proposed Public Bank of New Mexico (PBNM) would safely invest a small portion of our taxes and fees for improved wellbeing for all New Mexican communities. Establishing a public bank for the state will put the state's financial investments and outcomes in the hands of the people, democratizing our money.

The only deposits in the PBNM would be state taxes and fees, keeping them within the state to invest in local communities. It would work in collaboration with local banks, credit unions, tribal entities, municipalities and Community Development Financial Institutions (CDFIs) by forming partnerships for local lending programs. As the return on local investments grows, a PBNM becomes a steady revenue source for local businesses, including food production. Economic models based on an initial \$50-million capitalization of the PBNM from the state's general fund and \$60 million in deposits from which to leverage loans in the first year can, by the seventh year, have total gross loans that would amount to more than \$485 million. Growing such a lending fund changes the current problem of depending on boom and bust resources from volatile industries.

The PBNM alone will not solve all of the weaknesses of New Mexico's finance system and low rankings on socioeconomic measures of wellbeing. However, it does set up a springboard for how to tackle those low rankings, especially in the area of food insecurity and health status. In partnership with local financial entities, the PBNM's collaborations can boost investment in local entrepreneurs who want to grow healthy food for all New Mexicans. Access to fresh fruits and vegetables, good health and quality education are the investments needed to move us out of the mind-set that we are just too poor. Let's invest in proven solutions for how to feed all New Mexicans well. ■

Dee Gamble is an outreach volunteer for the Alliance for Local Economic Prosperity (AFLEP) WWW.AFLEP.ORG.

THE SOUTH VALLEY ECONOMIC DEVELOPMENT CENTER

Heading west over the Río Grande into the beautiful, culturally rich South Valley of Albuquerque, the energy rises and the hustle begins. In the Isleta and Bridge corridor, entrepreneurship is an identity, a way of life. The area is bursting with local small businesses. More than 35 entrepreneurs are using the commercial kitchen, coolers and freezers at the South Valley Economic Development Center (SVEDC), preparing for sales later in the week.

Workers with the Agri-Cultura Network, a farm-to-table cooperative that brings produce from South Valley growers to local supermarkets, are hard at work washing vegetables. The cooperative has a longstanding partnership with the Río Grande Community Development Corporation (RGCDC), and uses the kitchen facilities to help farmers prepare their produce for regional stores. Founded in 1986 by the South Valley community as a hub for social and economic entrepreneurship, RGCDC oversees SVEDC and Delicious New Mexico. RGCDC helps entrepreneurs test feasibility, launch, scale and grow food businesses. The organization values community solutions and strives to increase community and generational wealth through entrepreneurial enterprise.

Efrain Gaxiola, founder and owner of La Vina Foods, said, "I came to the U.S. in 1989. I had a dream to share my passion for hot chile peppers and hot sauce with everyone. I started making food in my brother-in-law's kitchen and selling it in the streets. I quickly developed what became the 'authentic' La Viña Hot Sauce. It wasn't until 2017 that my dream of manufacturing became a reality when the SVEDC and Delicious New Mexico helped me introduce and distribute my product."

RGCDC shifted its focus in 2021 to make connections with New Mexico's food system. The organization now has a unique opportunity to expand its services and infrastructure in the South Valley. Over the next three years, RGCDC expects to move from five to 10 pallets of food a week to 26 pallets a day, and to go from its current 270 cases to 1,000 a day. Temperature-controlled storage for farmers, automated aggregation—a food facility of their dreams—is being planned. To achieve this dream, the RGCDC team continues to work collaboratively to build a better, more inclusive food system for the community and the state.

For more information, call 505-217-2473, email INFOR@RGDCDC.ORG or visit [HTTPS://WWW.RGDCDC.ORG/](https://WWW.RGDCDC.ORG/).

2022 NEW MEXICO FOOD & FARMS DAY AWARDS AND NM GROWN COALITION GOLDEN CHILE AWARDS

Good Food for New Mexico Award

Celebrating NM Farmers' Markets

Bianca Encinas and La Familia Growers' Market

Albuquerque, N.M.

La Familia Growers' Market, South Valley MainStreet, was established in 2015, paying homage to a grocery store with the same name that used to be at that location. La Familia is a community-based farmers' market located along the Río Grande at Dolores Huerta Gateway Park. The market highlights the cultures, traditions and history of the South Valley. It was created as a space for gathering and community building, and to support local bricks-and-mortar small businesses in the area. In late summer and early fall, the market conducts hands-on workshops on traditional cultural ways of living handed down from generation to generation.

Sowing Change Award

Organizations Engaged in Creating Sustainable Food Systems

Alma Maquitico and Anthony Youth Farm

Anthony, N.M.

The Anthony Youth Farm consists of three greenhouses, cold storage and diversified irrigation systems on 25 acres. On the surface it might look like any other farm in southern New Mexico. But if you look closely, you'll find a team of trainers and advisers in the form of local farmers and food purveyors, as well as New Mexico State University (NMSU) extension agents.

At the center of the team are 12 to 15 young farmers who received professional, educational and leadership training, through which they were inspired to create transformative change in their communities. They provide more than 500 pounds of produce each week, serving almost 40,000 students in Las Cruces and Gadsden School districts, as well as 300 rural families who participate in their CSA (Community Supported Agriculture) program.

According to farm director Alma Maquitico, "Youth develop critical thinking skills, leadership to solve everyday problems, and awareness about their health and the needs of their community. They learn the importance of land, water, the air, and taking care of the environment. We realized that we have a model. Participating youth are training not only to be farmers, but leaders in their community, whatever they grow up to be."

Living Land Award

Outstanding Leadership in Land Stewardship

Ralph Vigil and Molino de la Isla Organics

Pecos, N.M.

Molino de las Isla Organics LLC is a small organic farm specializing in traditional and acequia agriculture, focusing on Farm to School, CSA and farmers' market sales. As an eighth-generation acequia farmer from east Pecos, and chair of the New Mexico Acequia Commission, owner Ralph Vigil's primary goal is to defend land and water through organic agriculture by utilizing centuries-old acequia systems to demonstrate their ability to sustain communities economically, combat climate change and aid in physical and emotional well-being.

Heart of the Land Award

Outstanding Leadership in Ranching

Gilbert Louis and Acoma Number 8 Ranch

Acoma Pueblo

As Gilbert Louis and his family see it, Acoma Number 8 Ranch has been an example of conservation since the beginning of time. As Native Americans in the arid Southwest, their lives depend on it.

Since 1982, Louis and his family have managed a self-sustaining 17,000 acres and 80 head of livestock. There have been drastic infrastructure improvements, from miles of fencing and water lines, to storage tanks and windmills converted to solar wells. There are eight pastures with water

sources. This arrangement has allowed cattle to be rotated every three months. Through breeding, the family raises registered and commercial Black Angus, which are sold to local producers. "We strive to stay current on the cattle market and land management, along with our Native American culture, all mixed together," Louis said. "It's all a balance we must maintain to preserve our resources if we are going to make it another 40 years on the same 17,000 acres."

Heart of the Land Award

Outstanding Leadership in Farming

Emigdio Ballon and Tesuque Pueblo Farm

Tesuque Pueblo

Tesuque Pueblo Farm's mission is to revive traditional farming practices while integrating sustainable, low-tech techniques. Converted to a food-oriented operation in the early 2000s, the farm cultivates more than 70 acres, producing traditional crops, herbal medicines, many varieties of grains and vegetables, as well as 750 fruit trees. It is a certified organic operation, and most of the crops are tended by hand. The farm is also home to beehives. A strawbale and adobe, solar-powered seedbank preserves key seed species. Geothermal technology heats hoop-houses. All the produce grown is given to community elders and schoolchildren.

The farm's agricultural director, Emigdio Ballon, a descendant of the Incas from Bolivia, has degrees in agriculture and plant genetics. He came to New Mexico in 1984 to work for Southwest Learning Centers' Talavaya Center, which won a U.N. Environment Programme Award for its heritage seed preservation efforts. Since 2005, he has run the pueblo's farm operations, expanding outreach and knowledge-sharing to include seed-sharing with other area tribes.

Growing the Future Award

New or Young Farmers and Ranchers

Kirsten Couevas and Sublime Pastures LLC

Tome, N.M.

Kirsten Couevas is the owner/operator of Sublime Pastures LLC., a small, family-run, regenerative farm. "Our main goal is to have healthy soil. Starting at the base is so important. When you have healthy soil, your plants and animals are healthy, meaning they are providing nutritionally-dense food," said Couevas. Animals help regenerate soil, and annual cover-crops are planted on old hay fields using no-till methods. The fields are then grazed in rotation with American Aberdeen (Angus) cattle, KuneKune pigs and chickens (a variety of egg-layers and meat birds). The farm sells grass-fed- and -finished beef, pasture-raised pork, organic-fed, non-GMO, pastured chicken and eggs. Sublime's motto is "Healthy Soil = Healthy Animals = Healthy People."

N.M. Grown / Golden Chile Awards

Recognized by the New Mexico Grown Coalition

The N.M. Grown Coalition announced the Golden Chile awardees in recognition of the hard work of leaders who have championed New Mexico Grown efforts in preschools, schools and senior centers across the state. Applicants were scored based on local procurement, edible gardens, nutrition education and community engagement. Award categories are Seed (program has potential), Sprout (program is growing strong), Blossom (program is reaching maturity) and Golden Chile (mature and fruitful program).

Seed Award

City of Las Vegas Senior Services—Wanda Salazar

Getting started with purchasing New Mexico Grown produce and products for senior meals

Sprout Award

Deming Family Resource Center / Head Start

The center purchases New Mexico Grown produce for meals and snacks and has an edible garden to teach children about how produce is grown. The center brings in families to support their work.

2022 NEW MEXICO FOOD & FARMS DAY AWARDS

CELEBRATING FOOD, FARM AND HUNGER INITIATIVES

Gutiérrez-Hubbell House, Albuquerque



Kendal Chávez, Jaime Chávez, Pam Roy, Gilbert Louis, NM Agriculture Secretary Jeff Witte and wife Janet



Blossom Awards

Albuquerque Public Schools—Sandra Kemp;
Roswell Independent School District—Kim Meeks

These awardees have a history of purchasing New Mexico Grown produce from multiple farms, have robust edible garden programs, promote local purchasing and conduct nutrition education. Both districts are looking forward to expanding their programs.

Golden Chile Award

Sandoval County Senior Services Program—Donald Ravizza and Janice Mortensen

These awardees have purchased a variety of New Mexico Grown produce and products. They work with multiple local producers and processors and are mentors for other senior providers.

The New Mexico Food & Agriculture Policy Council: WWW.NMFOODPOLICY.ORG
Pam Roy, coordinator, 505-660-8403, PAM@FARMTOTABLENM.ORG

ROASTING GREEN CHILE WITH THE POWER OF THE SUN

Greener approach opens possibilities for food roasting

BY MOLLIE RAPPE, SANDIA LABNEWS

Every August and September the unmistakable pungent aroma of roasting green chile permeates the air across New Mexico. This delectable staple of regional cuisine is green in color, but roasting the pepper to deepen the flavor and make the inedible skin easier to remove is hardly environmentally friendly. In New Mexico alone, burning propane to roast the peppers leads to a seasonal emission of approximately 7,800 metric tons of carbon dioxide—the equivalent of driving 1,700 cars for a year.

Sandia National Labs engineer Ken Armijo, who grew up on a chile farm in Sabinal, thought there was a “greener” way. The results of his experiments with concentrated sunlight were shared at the American Society of Mechanical Engineers conference in July. “The principle behind this research was to see if high-temperature food roasting (not just peppers) could be done with solar and produce comparable results to traditional propane roasting. The answer is yes,” Armijo said.

“Combining state-of-the-art facilities and research with the culture, food and people of New Mexico is just so special,” he said. “What other national lab in the world would have done this?” For decades, Sandia has developed technologies that convert renewable resources like wind and sunlight into electricity and useful heat without producing greenhouse gases. Armijo’s demonstration using solar power to roast green chile could inspire new applications of solar technologies and new avenues of research.

With the assistance of several engineers, technologists and interns, Armijo got a traditional steel-drum tumbling chile roaster to the top of the 200-foot tower at Sandia’s National Solar Thermal Test Facility. Armijo’s father, who grows organic, heirloom chile from seed passed down through generations, donated several burlap sacks of green chile and his experience assessing properly roasted chile.

“This has a lot of potential for roasting chile more quickly, with better quality. And it’s a greener process.”

roasting drum. This is comparable to a propane chile roaster. He used concentrated solar to roast three batches of green chile: two that had been washed immediately prior to roasting and one that was dry-roasted. The washed chiles took slightly longer to roast, but the amount of charring was more uniform, and the flavor profile was preferred by green chile connoisseurs, Armijo said.

Using 38 to 42 of the 212 heliostats—mirror-like devices used to focus sunlight, Armijo was able to achieve a temperature above 900 degrees F uniformly across the

Afterward, the team returned the chile roaster to the ground and roasted three more batches using propane. Propane was slightly faster, taking four minutes to roast washed chiles, compared



Roasting green chile with concentrated sunlight at Sandia’s solar-thermal test facility
Photo by Randy Montoya

to six minutes for the fastest solar roast. With further experimentation, and using more heliostats, Armijo thinks they can roast chile even faster than propane, but he didn’t want to scorch the chile during his first experiments. “With solar roasting we were actually able to achieve a more uniform distribution of heat,” he said. “With propane, you just get heat right where the burners are, but all the chile piled on top isn’t really getting heated as efficiently. We saw with our infrared cameras that with solar, it’s more uniform; the heat is reaching all the chile in the front of the roaster. In practice, this has a lot of potential for roasting chile more quickly, with better quality. And it’s a greener process.”

“GREEN” GREEN CHILE

For each of the traditional roasts, Armijo recorded the amount of propane used for 22 pounds of green chile and found that switching to solar power would reduce greenhouse gas emissions by 2.68 pounds. If the whole state of New Mexico switched to solar roasting, the net result would be the equivalent of planting 130,000 tree seedlings and letting them grow for 10 years.

It’s great to roast green chile sustainably; however, if consumers don’t like the taste, it will never gain acceptance. That’s where the second part of Armijo’s study comes in. He presented 14 green chile connoisseurs with both solar-roasted and propane-roasted chile, and surveyed them. He found that on average, the respondents favored the solar-roasted chiles by 18 percent for flavor, 12 percent for smell and 2 percent for ease of peeling the skin. However, the respondents preferred the texture of the propane-roasted by 4 percent. “Overall, the participants preferred the solar-roasted to the propane-roasted,” Armijo said. “That was shocking to me. They preferred the taste because it didn’t have as burnt a taste. They said it tastes cleaner of green chile.”

Armijo acknowledged that it’s not feasible to build a tower and field of heliostats just for roasting foods like green chile, coffee or grains. However, he and his colleagues are exploring a much smaller, more modular solar system for roasting small batches like the propane-burning steel-drum roasters use. “In the future, I hope chile roasters will pull up to farmers’ markets, grocery stores and festivals with a trailer with a modular mirrored roaster,” he said. “They just pour the chile in, point the system at the sun and let it roast. That would be awesome.”

Concentrated sunlight could also roast food such as soybeans at 840 degrees F for animal feed and human food; grains for beer at 200-400 F; almonds and cashews at around 300 and 266 F. French roast coffee is roasted until the beans reach 464 F, and coffee beans 350-400 F for light roast. Traditionally, fossil fuels like propane or natural gas are used.

New Mexico has practically perfect weather for solar roasting, with an average of 300 days of sunshine each year. The almond production region of California gets 260 days of sunshine, particularly in the summer and fall. Two companies in California are working on pilot plants to use concentrated solar power for lower-temperature processes, such as pasteurizing almonds. Coffee farmers in Colombia, Ecuador and Peru grow and roast at high altitudes, which is also perfect for using solar. When it comes to the future of green, solar-roasted foods, the sky’s the limit. ■

REGENERATE AMERICA

Coalition Campaigns to Make Regenerative Agriculture Centerpiece of 2023 Farm Bill

In May, a bipartisan coalition of farmers, ranchers, non-profits, scientists and companies across the country seeking to generate resilience and prosperity launched “Regenerate America™ (REGENERATEAMERICA.COM).” On Aug. 11, after the Inflation Reduction Act passed the U.S. Senate, the group released a statement, part of which read: “The Act includes \$20 billion for USDA conservation programs. This allocation recognizes the vital role of farmers and ranchers in addressing climate change and is a tremendous opportunity. However, to tackle both our climate crisis and rural economic crisis with the urgency they demand, we must prioritize practices that rebuild soil through regenerative agriculture.”

Most of the soils in the U.S. are severely degraded. Farmland is losing topsoil 10 times faster than it is being replenished, which is not only endangering the country’s food system; it’s costing those who grow food and raise livestock an estimated \$44 billion annually, according to the USDA. Revolving around principles of soil health, and combining holistic management, Indigenous knowledge and cutting-edge science, regenerative agriculture can be applied at any scale with any cropping or livestock systems.

“While we don’t all agree on politics, we do agree that our country cannot survive without healthy soil,” said fifth-generation row-crop farmer Rick Clark, of Warren County, Indiana. “Our 7,000-acre farm is successful because we work with nature to build soil health by drastically reducing chemical

REGENERATE AMERICA™

inputs, which has saved us a lot of money. We know that through the widespread adoption of regenerative farming, America can rebuild soil, improve farm incomes, and reverse the damage that has been done to our lands and waterways.”

The coalition has set its sights on the 2023 U.S. Farm Bill, which they see as an essential opportunity to advance rapid, widespread adoption of regenerative agriculture through key shifts in policies. The Farm Bill, which is passed every five years, exerts great influence on every aspect of the food and farming system. Through provisions for crop insurance, conservation, nutrition, rural investment, land access and much more, the nearly \$1-trillion bill touches the lives of almost all Americans.

The coalition’s campaign includes Regenerative Farm Tours for legislators from both sides of the aisle who have regenerative farms and ranches in their districts. “Regenerative agriculture is a transformative but pragmatic solution that unites rather divides Americans once they learn about it,” said Kara Boyd, of the National Black Farmers Association and president of the Association of American Indian Farmers. “If we want a healthy future for our families and a diverse array of family farmers stewarding the land, the way we do farming in this country must change—starting with the Farm Bill.”



The World We Depend On, Now More Than Ever, Depends On Us

Learn more about the power of nature at nature.org/newmexico

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The Nature Conservancy in New Mexico works to conserve our rivers, lands and forests. Guided by science, we create innovative, on-the-ground solutions to our state’s toughest challenges so that nature and people can thrive together.





OP-ED: RUDY ARREDONDO

THIRD ANNUAL NATIONAL LATINO FARMERS & RANCHERS CONGRESS

Isleta Resort & Casino, Oct 27-29

The National Latino Farmers & Ranchers Congress—in person at Isleta Resort & Casino (1100 Broadway Blvd. SE, Albuquerque, NM 87105) and online (WWW.NLFRTA.ORG)—provides an opportunity for delegates and participants to collaboratively analyze, seek solutions and develop plans to address the current crisis in which farmers, ranchers and

A tribute to the true stewards of the land.

their families find themselves. The third annual congress will bring agricultural stakeholders together to share best practices, Farm Bill resolutions and climate-smart updates. They will discuss their individual and/or organization's programs and learn directly from each other.

They will discuss opportunities, challenges and how best to collaborate. We encourage all stakeholders to support one another, and in particular, the underserved producers, in thriving and achieving more sustainable food and agricultural systems.

The NLFR Congress is a tribute to the *true* stewards of the land: farmworkers, farmers and ranchers. The theme in 2022 is: *This is Our Land: Our Land Stewardship Legacy*. We will hear firsthand about our farmers' and ranchers' daily experiences, consequences and solutions in the aftermath of the COVID-19 pandemic, emergency climate crisis events, wildfires,

drought, labor shortages, transportation and food-chain disruptions.



The *congreso* will bring together many of the best minds in rural agriculture and farm and ranching leadership in the Latino community. Our intention is to bring relief to our farm and ranching families by developing real-life solution-oriented approaches and crafting resolutions to be voted on and adopted by delegates.

It will be a treat to reunite

farmworker leadership for a historic, solutions-focused forum to address the dire need to establish a stable labor force, disaster assistance and support, farmer and rancher debt relief, conservation, the organic-transition process, environmental justice and steps that address impacts of the climatic crisis we find ourselves in.

NLFR has become the premier organizing and advocacy organization. Our members continue to heal the land through sound conservation and cultivation practices, and serve all stakeholders, including the upcoming young farm and ranching generation. In our congress, farmers, ranchers' and stakeholders' voices will be heard. We need to find immediate solutions for our farmers and ranchers nationwide, especially for those who have been historically discriminated against.

¡Sí se puede, yes we can! ■

Rudy Arredondo is the president and founder of the National Latino Farmers & Ranchers Trade Association.

Left: Teacher Travis McKenzie and Rudy Arredondo in front of Dolores Huerta mural

NLFR ESTABLISHES COOPERATIVE AGREEMENT WITH THE USDA

Culturally Responsive Training and Technical Assistance

Latino and Hispanic farmers and ranchers are the fastest-growing agricultural demographic in California and New Mexico. The National Latino Farmers and Ranchers (NLFR) provides technical assistance to underrepresented Latino farmers and ranchers across the United States. Having recently entered into a Cooperative Agreement (NIFA 2022-70416-37110) with the U.S. Department of Agriculture (USDA), NLFR has embraced new opportunities to connect farmer and rancher networks to culturally responsive training and technical assistance programs.

NLFRTA engages with farmers and ranchers and shares best practices through its regional chapters. The organization works proactively rather than reactively to mitigate barriers that have made such programs inaccessible. NLFR is raising awareness of the USDA and other organizations, and is guiding farmworkers, farmers and ranchers in California and New Mexico to apply to the appropriate programs.

NLFR Executive Director Rudy Arredondo is excited about the opportunities the agreement with the USDA offers. "We have the ability to continue to be boots-on-the-ground, immersed with the issues facing our stakeholders, and learn what the needs of each of our individual farmers and ranchers are," he said. NLFR Deputy Director Eugene Pickett and the organization's teams in California and New Mexico are eager to help farmers and ranchers through the complicated processes.

NLFR also offers workshops, forums and webinars on farm and ranching policy. NLFR's goal is to provide support and resources so that all stakeholders can thrive. For more information visit: WWW.NLFRTA.ORG.

THE INFLATION REDUCTION ACT AND ITS IMPACT ON NATIVE AMERICAN PRODUCERS

The Inflation Reduction Act (IRA) includes:

- \$ 3.1 billion to distressed borrowers who hold direct or guaranteed farm loans
- \$ 2.2 billion for farmers who experienced discrimination in USDA loan programs
- \$ 125 million to provide outreach and technical assistance on areas such as agricultural credit
- \$ 250 million to support agricultural research, education, and extension
- \$ 250 million to provide grants and loans to eligible entities to improve land access
- \$ 20 billion for climate-smart agricultural programs administered through the Natural Resources Conservation Service (NRCS), including programs such as Environmental Quality Incentives Program (EQUIP; \$8.45 billion) and Conservation Stewardship Program (CSP; \$3.25 billion)

Many producers, and in particular Native Americans, are facing unprecedented times. The perfect storm of issues such as climate, inflation, supply chain, COVID-19, farmland values and poor market prices in certain areas could lead to another farm financial crisis. Many of the issues felt in the 1980s have been exacerbated with additional challenges facing today's farmers. The IRA could be a lifeline for many producers that will not make it without help now. Naysayers of the IRA are not looking at the immediate need of producers.

There are two main areas those naysayers are focusing on: The lack of debt forgiveness and not enough in addressing climate change. I disagree with those comments and challenge those opposed to look at the current language in the IRA and the former language in American Rescue Plan Act (ARPA). Although blanket debt forgiveness for minorities was removed, the amount of funding that will go toward disadvantaged or producers that have experienced discrimination in the past is almost identical and more in other sections.

In many ways, the IRA is more creative in its proposal to serve all producers through authorities that have been in existence at the Farm Service Agency (FSA) but previously lacked funding to make them effective. Now FSA can use those tools to assist producers and help keep them on their farms. One-hundred-twenty-five million dollars in outreach and technical assistance will also provide a much-needed lifeline to producers and those that advocate for farmers and ranchers, such as Tribal and State governments, educational institutions and non-profits. As far as the IRA being too weak on climate, more than \$20 billion in agriculture alone will go toward recognizing and improving climate-smart agricultural practices.

The IRA legislation is just a beginning, and Tribes and Native producers must have a say in how the funding is distributed, as well as how the rules and regulations surrounding eligibility requirements are administered.

This is an opportunity for Native producers to receive support from the FSA through credit servicing and technical assistance programs. The USDA is asking for input instead of dictating how a program will be administered. For many long-time farm advocates, this is the first time USDA is making a significant effort to hear from those affected about how a program should be administered. This is a step in the right direction. It will allow a holistic approach to addressing discrimination against Native farmers and ranchers, as well as protections preventing another era of a farm financial crisis. Bottom line, something is better than nothing, and when that something starts with a B, as in billions, that's significant! ■

The Native American Agriculture Fund (NAAF) provides grants to eligible organizations for business assistance, agricultural education, technical support and advocacy services to support Native farmers and ranchers.

THE NATIVE FARM BILL COALITION

The Native Farm Bill Coalition (NFBC) is a nationwide initiative to lift up the voices of Native American producers and tribal governments to advance a common policy agenda. It works to ensure that Indian Country's priorities are acknowledged and included in the decision-making process for the next Farm Bill, from farming and ranching to nutrition programs, rural development and forestry. The NFBC is a joint project of the Intertribal Agriculture Council (co-chair), the Shakopee Mdewakanton Sioux Community (co-chair), the National Congress of American Indians and the Indigenous Food and Agriculture Initiative, its official research partner.

Since its launch in 2017, more than 170 tribes, intertribal groups, other Native organizations and non-Native allies have become members of the coalition. Together, the members developed priorities for the Farm Bill and kept Congress focused on Tribal concerns. Thanks in part to the Coalition's research, education and advocacy at the U.S. Capitol and across the country, the 2018 Farm Bill was signed into law in 2018 with 63 separate provisions that benefit Indian Country. They impact everything from strengthening tribal self-governance and the management of nutrition programs to investing in economic development opportunities.

The coalition is working with the United States Department of Agriculture (USDA) on its implementation of new tribal authorities and access under the Farm Bill. NFBC continues to educate policymakers on Native nutritional and agricultural issues, assisting in oversight activities and urging Congress to further expand its recognition of tribal self-determination authority.

SAVE the DATE
"This is Our Land: Our Land Stewardship Legacy".

THIRD ANNUAL NATIONAL LATINO FARMERS & RANCHERS CONGRESS

27-29
OCTOBER 2022
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The land belongs to those who cultivate it.
Emiliano Zapata

I don't fear the enemy who attacks me, I fear the false friend who embraces me.
Francisco Villa

Info: www.NLFRTA.org - info@nlfrta.org

USDA National Institute of Food and Agriculture
U.S. DEPARTMENT OF AGRICULTURE

NLFR
NATIONAL LATINO FARMERS AND RANCHERS

The Regenerative Organic Alliance

BY **SETH ROFFMAN**

Studies have shown that conventional, industrial agriculture has contributed as much as 25 percent of the emissions driving the climate crisis, and that global topsoils will, at the current rate, be depleted in 60 years. Depleted soils endanger the complex balance of natural systems, threatening everything from the productivity of cropland to the availability of foods and commonly used materials.

Regenerative organic agriculture focuses on the full farm ecosystem. To be truly regenerative, farmers, as stewards of their lands, must consider all players involved—from soil microbes to animals to workers. Regenerative organic agriculture may include practices such as cover-cropping, crop rotation, minimal soil disturbance (low- to no-till), rotational grazing, compost, and zero use of persistent chemical pesticides and fertilizers. Layered into these practices (depending on a farm's needs) could be the addition of perennials, development of pollinator and wildlife habitats, incorporation of agroforestry systems, vegetative barriers and other practices that contribute to the development of soil organic matter.

Regenerative agriculture is not a modern creation. It draws on Indigenous wisdom and practices. The term was first introduced by Dr. George Washington Carver and popularized by Robert Rodale of the Rodale Institute, who coined the term to distinguish a kind of farming that goes beyond “sustainable.”

The nonprofit Regenerative Organic Alliance (ROA) was founded in 2018 by the Rodale Institute, Dr. Bronner's and Patagonia to promote regenerative farming as the gold standard for agriculture. It is designed to “heal a broken system, repair a damaged planet, and empower farmers and eaters to create a better future.” Its

members believe that by adopting regenerative practices on farms around the world they can create long-term solutions to the climate crisis, factory farming and fractured rural economies.

In 2020, a group of ROA farmers, business leaders and soil health experts created “Regenerative Organic Certified,” (ROC™) for food, fiber and personal care ingredients. Soil health, animal welfare and social fairness are its three pillars. ROA members continue to review and update the ROC framework. For more information, visit [HTTPS://REGENORGANIC.ORG](https://regenorganic.org).



Organic farm on Bernalillo County Open Space Land. Produce is grown by a local farming cooperative. © Seth Roffman



An online platform cultivating connections across our food community

Explore our regional Food Community Map: a searchable database featuring detailed profiles of food producers, food buyers, and resource providers. Learn and connect at: agrigatesfc.org



REGENERATIVE AGRICULTURE PRACTICES

Vegetative Cover

Keep the land covered with living vegetative cover, crop residues or mulch year-round. Using diverse and nitrogen-fixing cover crops draws down carbon, returns nutrients to soil, controls pests, prevents erosion and decreases weeds.

Crop Rotation

Planting different crops sequentially on the same plot of land to improve soil health optimizes nutrients in the soil while combating pests and weeds.

Minimal Soil Disturbance

Tillage equipment destroys the structure of the soil and the soil microbiome. Minimal soil disturbance maintains soil biology and structure, retains water, prevents erosion and carbon loss.

Rotational Grazing

Grass-fed and grass-finished ruminants like cattle rotate through paddocked pastures, return nutrient-rich manure to topsoil, and give land time to rest between grazing cycles.

Compost

Adding compost to fields, forests and ranges boosts soil health and supercharges carbon sequestration. Microbe-rich compost can improve soil structure, suppress diseases, increase water-holding capacity and support biodiversity.

No Synthetic Fertilizer or Pesticides

Land is spared from toxic chemicals and soil ecology is sustained; fertility and pest-control are achieved by composting and rotating in beneficial plants, animals and insects.



REGENERATIVE ORGANIC ALLIANCE BOARD MEMBER A'DAE ROMERO BRIONES

In October 2021, A'dae Romero-Briones became a member of the Regenerative Organic Alliance Board of Directors. Romero-Briones was born and raised in Cochiti Pueblo, in New Mexico. She is director

of the Native Agriculture and Food Systems Program of the First Nations Development Institute and was executive director of Cochiti Youth Experience. A Fulbright Scholar, she received her B.A. degree in Public Policy from Princeton University, a Law Doctorate from Arizona State University, and a degree in Food and Agricultural Law from the University of Arkansas. Her thesis was on the Food Safety Modernization Act as it applied to the federal-tribal relationship. She writes extensively about the protection of tribal traditional foods.

Through these links, you can read Romero-Briones' perspective on the relationship between Indigenous people and regenerative agriculture, and a Native Lands Stewardship webinar recap from one of her presentations. [HTTPS://NONPROFITQUARTERLY.ORG/REGENERATION-FROM-THE-BEGINNING/](https://nonprofitquarterly.org/regeneration-from-the-beginning/), [HTTPS://WWW.NMHEALTHYSOIL.ORG/2020/10/21/DECONSTRUCTING-REGENERATIVE-AGRICULTURE/](https://www.nmhealthysoil.org/2020/10/21/deconstructing-regenerative-agriculture/)

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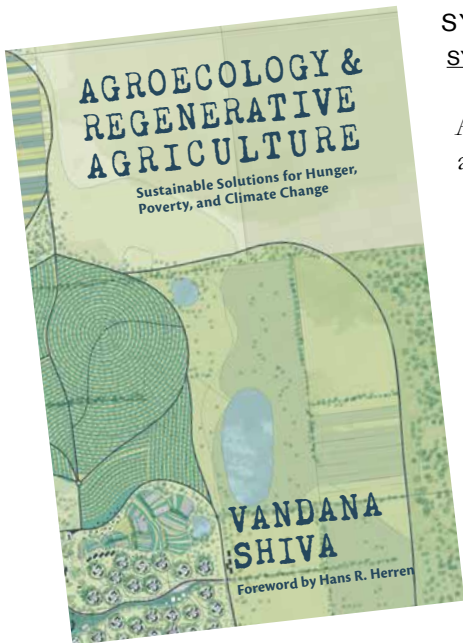
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BOOK PROFILES

AGROECOLOGY & REGENERATIVE AGRICULTURE

SUSTAINABLE SOLUTIONS
FOR HUNGER, POVERTY AND CLIMATE CHANGE

BY DR. VANDANA SHIVA



SYNERGETIC PRESS, 2022,
[SYNERGETICPRESS.COM](https://synergeticpress.com)

Authored by physicist, ecologist and biodiversity advocate Dr. Vandana Shiva, *Agroecology & Regenerative Agriculture* offers detailed analysis of the multiple planetary dilemmas we face due to chemical and industrial agriculture, including land degradation, water depletion, biodiversity erosion, climate change and health crises, while also focusing on practical solutions.

“A scientific and ecologically robust paradigm of agriculture is emerging in the form of biodiversity, agroecology and regenerative organic farming, which addresses the triple crisis,” Dr. Shiva writes. “Instead of degrading the soil, health and rural livelihoods, it rejuvenates and regenerates

them. ...It relies on a diversity of flora, fauna and microorganisms, each with respective ecological functions.”

Agroecology & Regenerative Agriculture details the work of Navdanya, an organization Dr. Shiva founded, that promotes agroecology, seed freedom and a vision of Earth Democracy that seeks justice for the Earth and all living beings. This work serves as a guidebook for agriculture scientists, policy makers, environmentalists and individuals who care about their own health and as well as the vitality of the planet.

“We find ourselves at a crossroads, between two paths—one green and the other scorched. It is known as the time of the Seventh Fire. And, at this moment, Vandana reminds us that we still have seeds and soil. In those life forms there is great hope and promise.” – Winona LaDuke

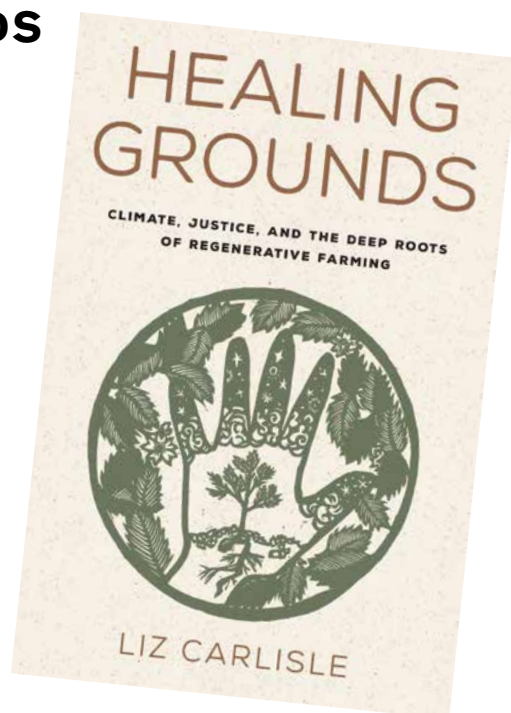
HEALING GROUNDS

CLIMATE, JUSTICE,
AND THE DEEP ROOTS OF
REGENERATIVE FARMING

BY LIZ CARLISLE

ISLAND PRESS, 2022,
[HTTPS://ISLANDPRESS.ORG](https://islandpress.org)

A powerful movement is happening in farming today—farmers are reconnecting with their roots to fight climate change. In *Healing Grounds*, Liz Carlisle tells the stories of Indigenous, Black, Latinx and Asian-American farmers who are reviving their ancestors' methods of growing food—techniques long



suppressed by the industrial food system. These farmers are restoring native prairies, nurturing beneficial fungi and enriching soil health. While feeding their communities and revitalizing cultural ties to land, they are steadily stitching ecosystems back together and repairing the natural carbon cycle. This, Carlisle shows, is the true regenerative agriculture—not merely a set of technical tricks for storing CO2 in the ground, but a holistic approach that values diversity in both plants and people.

Cultivating this kind of regenerative farming will require reckoning with our nation's agricultural history—a history marked by discrimination and displacement. And it will ultimately require dismantling structures and policies that have blocked many farmers of color from owning land or building wealth. The task is great, but so is its promise. By coming together to restore these farmlands, we can not only heal our planet, we can heal our communities and ourselves.

BIONEERS READER: REGENERATIVE AGRICULTURE

2022, [HTTPS://BUFF.LY/3BTBEWT](https://buff.ly/3BTBEWT)
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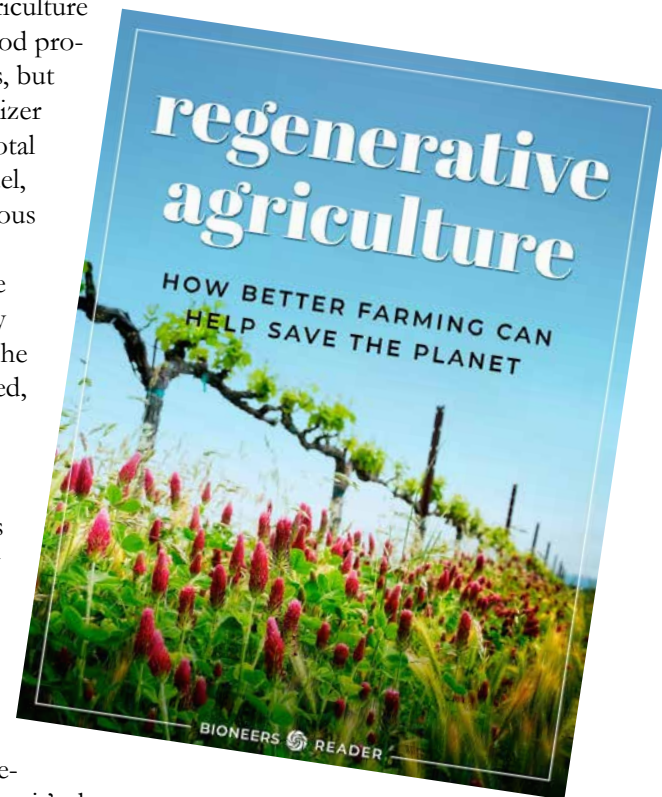
What if how we farm could not only slow down climate change but actually help reverse it?

Modern “industrial” agriculture has radically boosted food production for feed billions, but its monocropping, fertilizer and pesticide use, and total dependence on fossil fuel, have come at an enormous cost to people and the planet, destroying whole ecosystems and radically degrading soil vitality. The way our food is produced, stored, transported and processed is totally unsustainable, and in our current climate crisis, its carbon footprint simply can't be ignored.

Agricultural production currently accounts for 11 percent of global greenhouse gas releases, and in 24 countries it's the top source of emissions. And, ironically, food production is one of the economic activities most heavily threatened by climate change. The very problem it is helping create could be its downfall.

But obviously, our ever-growing human population can't live without food production. This Bioneers Reader takes a look at how visionary reformers are demonstrating that healthy agriculture is possible, and even discovering ways saner food production can draw down carbon from the atmosphere to help combat climate change.

When you download this new Bioneers Reader, you'll have access to an overview of regenerative agriculture, including key practices, plus ideas from A-dae Romero-Briones (Cochiti/Kiowa) on decolonizing agriculture; David Montgomery on bringing soil back to life; and Jeff Moyer on how regenerative practices are changing the face of farming.



FEDERAL COURT REJECTS GLYPHOSATE REGISTRATION DECISION

On June 17, the 9th U.S. Circuit of Appeals sided with the Center for Food Safety (CFS) and its farmworker and conservation clients by overturning the Environmental Protection Agency (EPA) decision that the toxic pesticide glyphosate is safe for humans and wildlife. Glyphosate is the active ingredient in Monsanto-Bayer's flagship RoundUp, the most widely used pesticide in the world.

The 54-page opinion held the Trump administration's 2020 interim registration of glyphosate to be unlawful because "EPA did not adequately consider whether glyphosate causes cancer and shirked its duties under the Endangered Species Act (ESA)." The court concluded that the EPA flouted its own cancer guidelines, ignored criticisms of its own experts, as well as epidemiological (real-world cancer cases) and lab animal studies. Non-Hodgkin's lymphoma is the cancer most tied to glyphosate.

The petitioners represented by CFS in the lawsuit included the Rural Coalition, Farmworker Association of Florida, Organización en California de Lideres Campesinas, and Beyond Pesticides. A consolidated case led by the Natural

Resources Defense Council includes Pesticide Action Network. In California, jury trials continue to be held.

In July 2021, Bayer announced it will end sales of its glyphosate-based herbicides (including RoundUp) in the U.S. residential lawn and garden market in 2023.

In June, the Supreme Court rejected Bayer's appeal to shut down thousands of lawsuits claiming that RoundUp causes cancer. The same month, Bayer won four consecutive trials in state court against people who claimed they got cancer from their use of the weedkiller.

An analysis released in July by the Centers for Disease Control and Prevention found that about 87 percent of children tested had detectable levels of glyphosate in their urine. The researchers said that food is children's main route of glyphosate exposure. Samples of urine from adults found 80 percent had detectable levels. According to research published in 2017 by the University of California San Diego School of Medicine, both the amount and prevalence of glyphosate found in human urine has been rising steadily since the 1990s, when Monsanto introduced genetically engineered crops designed to be sprayed directly with RoundUp. It is also used on non-GE crops such as wheat and oats as a desiccant to dry crops out prior to harvest. More than 200 million pounds of glyphosate are used annually by U.S. farmers.

Northern Rio Grande National Heritage Area NOTICE OF GRANT OPPORTUNITY

The mission of the NRGNHA is to help sustain the communities, languages, cultures, traditions, heritage, and environment of Northern New Mexico.

Communities, tribal and local governments, land grant associations, non-profit organizations, youth programs, historical and archaeological societies and preservation groups are encouraged to apply for grant funding up to \$10,000 that supports the NRGNHA's mission and goals.

An original + one (1) copy of the entire application is
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Or mail to: P.O. Box 610, Espanola NM 87532

To request an application: INFO@RIOGRANDENHA.ORG
or call (505) 752-7273; or forms may be downloaded from our
website: WWW.RIOGRANDENHA.ORG

FUNDING AVAILABLE FOR NEW MEXICO ORGANIC OPERATIONS

New Mexico Organic Farming Conference to Award Grants

Educational grant opportunities are now being offered to New Mexico organic producers through the New Mexico Organic Farming Conference (NMOFC). This opportunity comes in lieu of the traditional conference, which is not being offered in 2022. Instead, funds will be distributed to support educational opportunities and advance organic production knowledge through conference or workshop attendance. NMOFC committee member Sage Faulkner said, "I think it is really important that organic farmers continue to network and look at new and exciting ideas in the organic production realm. The committee is dedicated to ensuring a continuing successful organic community."

Up to 18 scholarships will be granted at up to \$1,500 per applicant, no more than one time per year. However, more than one applicant may come from a singular organic farm. The funds are only applicable for organic educational programs in the continental U.S., and may be used for both in-person and virtual events. If you are interested in applying, email

NMOFC@MAIL.COM to request an application. Applications are reviewed monthly until all funding is distributed.

The New Mexico Department of Agriculture (NMDA) has a number of organic program resources available. To schedule a consultation or learn more about organic operations within the state, visit the Organic Program page on the NMDA website.

ARIDIFICATION OF THE WEST

150-YEAR-OLD SAN LUÍS VALLEY FARM STOPS GROWING CROPS

In the San Luís Valley of southern Colorado, 500,000 irrigated acres have long hosted potatoes, vegetables like lettuce and carrots, and alfalfa, a particularly thirsty crop. But across the valley, farmers' and ranchers' underground water source is drying up as a result of overuse and a decades-long drought driven by climate change. To restore the supply, the Colorado Division of Water Resources says that the amount pumped out of the ground needs to be drastically cut. If that doesn't happen, the state has threatened to step in and shut off hundreds of wells, which would devastate the valley's agriculture-driven economy.

At least one farmer has agreed to permanently stop watering his 1,800 acres, where he has grown peas and oats. Instead, he will leave that water alone to save the area's shrinking groundwater and keep other farms in operation. The farmer is selling the land to the Río Grande Water Conservation District, which will work to revegetate the acres with native plants. This "groundwater conservation easement" could be the first of its kind in the country. It will apply to any future owner of the property. Conservation easements are legal arrangements that typically aim to protect a farm or a ranch by tying the land and its water rights together so it can't be divided up and turned into a

housing development. In this case, the easement means changing the property's use to provide a more regional public benefit.

Temporary moves, like farmers or ranchers agreeing to cut back on their water use for a season or two, haven't been enough. Putting this single farm out of production will keep about 358 million gallons of water beneath the San Luís Valley. That is expected to preserve enough groundwater for the Río Grande Water Conservation subdistrict surrounding the operation to meet or come close to its water sustainability goals. That likely means the region can avoid state interventions and well-shutoffs, and other farms can continue operating and growing food.


The farmer who is selling his water rights happens to be in a good position to exit the business because he and his wife don't have any children. He knows that his neighbors have a new generation that will eventually take over the management of those family farms. Some may be willing to suspend a portion of their groundwater use. That would enable them to continue farming and ranching while getting paid to not use all of their water.

Local leaders have been working to save the dwindling aquifer in other ways, including paying farmers and ranchers to temporarily fallow fields or try less water-intensive crops (like hemp) and more advanced irrigation systems.

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Taos Regional Farm and Ranch Food Security Collaborative

*\$1.4-Million Grant Awarded
by the Governor's Food Security Initiative*

BY JAIME CHÁVEZ

A project designed to connect and strengthen regional food systems across northern New Mexico and the San Luis Valley of southern Colorado has recently been awarded \$1.4 million in State funding through the Governor's Food, Farm and Hunger Initiative (Jan. 20). The award is part of a \$24-million appropriation supported by state agencies and farm and ranch NGOs that worked together in coordinated legislative advocacy efforts spearheaded by the New Mexico Food and Agricultural Policy Council.

The Taos Regional Farm and Ranch Food Security Collaborative, with the newly reorganized business accelerator, Taos County Economic Development Corporation (TCEDC), are the anchor and administrator with Taos County. TCEDC's partners in the collaborative include the non-profit Agriculture, Implementation, Research, Education (AIRE) and Ríos del Norte, a farmer/rancher cooperative.

The proposal is a response to the severe threat to the region's food security, exacerbated by the catastrophic Calf Canyon-Hermit's Peak wildfire, which came on top of the destabilizing COVID-19 pandemic. Affected farmers and ranchers have been faced with loss of farmlands, pasture, hay and livestock, regionally adapted seed, and delayed planting due to evacuations—not to mention loss of homes, farm and ranch infrastructure. Access to local food processing and fair market value for crops and meat will be essential to maximizing a recovery. The collaborative's plan is to increase the region's food security by building infrastructure for processing and storing vegetables, fruit, grain and meat, generating revenue through local food production, direct market sales and farm-to-institution reimbursable meal contracts.

The newly reorganized business accelerator, Taos County Economic Development Corporation (TCEDC), is administering the grant.

For 33 years, TCEDC has served farmers and ranchers in six counties: Mora, Río Arriba, San Miguel, Taos, Colfax and Sandoval. TCEDC is a food aggregation site with a 5,000-square-foot commercial kitchen and 400 square feet of cold/freezer storage. From 2008 to 2014, the nonprofit ran a mobile matanza livestock slaughter unit and a cut-

&-wrap operation, which served 100-plus ranchers within a 100-mile radius of Taos. The program ended because the undersized facility created a bottleneck in production, a barrier to profitability.

For nine years, AIRE has leveraged resources and managed partnerships to increase food security in Taos County. The organization facilitated local production of fruit, vegetables and meat, distribution to low-income families through a CSA (Community Supported Agriculture) program, provided farm-to-school meals, established food banks, school backpack programs, and food education.

For three years, Ríos del Norte's 15 member/producers have generated 45,000 pounds of fruit, vegetables and meat annually, distributed through the CSA, Taos Municipal Schools (TMS), charter school lunch programs and other outlets. Taos Shared Table is a twice-monthly food bank for 250 families. Underwritten by a \$10,000 donation, Shared Table plans to purchase carrots, cabbage and onions from AIRE and Ríos del Norte. Other participants include Taos Pueblo Day School, Picuris Pueblo and the Taos County Senior Program. During COVID, AIRE and Ríos del Norte accessed 120 tons of hay in a bulk purchase, and sold it to ranchers at a 25 percent discount to support local meat production and breeding stock retention.

Access to local food processing and fair market value for crops and meat will be essential to maximizing a recovery.

ADDRESSING FOOD INSECURITY CHALLENGES

In 2018–2019, TCEDC and AIRE received Farm-to-

School planning grants to work with TMS to identify gaps in the local supply chain in order to give small-scale producers access to institutional markets and offer locally grown food to schools. Despite COVID-19 disruptions, TCEDC, AIRE, TMS and the other partners were able to achieve these objectives.

In June 2020, the school board approved the Taos Farm-to-School Assessment and Action Plan, along with a resolution recognizing the benefits of and pledging support for procurement of fresh, local foods such as carrots, cabbage, beans, chile, blue corn, wheat and beef. The resolution also pledged support for development of the district's existing school gardens and agricultural education programs. Subsequently, high-tunnel hoop-houses

were installed and tastings and cooking classes expanded. This also led to the formation of the Ríos del Norte Farmer/Rancher Cooperative. Carrot production is projected to increase from 5,000 to 24,000 pounds. A cohort of 12 to 15 northern New Mexico farmers will be equipped to enter into specialty-crop production.

AIRE and Ríos del Norte also participate in a farm-to-family food-box program, weekly distribution for 180 CSA members, increasing accessibility through EBT, Double-Up food bucks, and a share-a-share program. The Ranch-to-Family program provides direct marketing access to local ranchers and provides over \$25,000 worth of local beef and lamb annually to more than 40 northern New Mexico families. In 2020 and 2021, AIRE procured \$60,000



Products found at the Taos Farmers' Market

worth of locally sourced products including produce, flour, eggs, dairy and beef to provide 220 families in Taos and Taos Pueblo with groceries for 16 weeks, about 4,620 meals.

The Child and Adult Care Food Program (CACFP)

CACFP is a federal program that provides reimbursements for nutritious meals and snacks to eligible children and adults enrolled at participating schools, childcare centers, daycare homes and adult care centers. TMS is committed to developing a CACFP dinner program, and Peñasco Community School and Vista Grande Community School are initiating and increasing meals for students. State-funded CACFP after-school dinner meals can be produced at the TCEDC commissary kitchen and delivered to sites throughout the county. A pilot program would produce 1,000 meals daily. This commissary production model will also be used for emergency food and meals like those needed for the fire response.

The Farmhouse Lunch Program in Taos, created and run by Micah Roseberry, is a successful model of reimbursable farm-to-school meals, serving 900 USDA meals daily. This initiative can be scaled to include additional school districts and CACFP meals.

Building food security and production in northern New Mexico through collaboration is a step to supporting food sovereignty for our children, increasing resilience for farmers and ranchers, and strengthening northern New Mexican communities. *Que viva la gente!* ■

Jaime Chávez, from Atrisco, N.M., is on the governing board of the N.M. Food and Agriculture Policy Council. He is also national field organizer with the Rural Coalition and National Latino Farmers and Ranchers.



AIRE director Micah Roseberry and Ríos del Norte Co-op farmer Anjel Ortiz measure blue corn in a 7-acre planting; Taos High School students harvest lettuce mix for salads and food boxes; Taos Community Farms CSA pickup at TCEDC. Preparing school lunches at TCEDC; Local salad for local kids. Photos by Micah Roseberry and Nikki Cain

THE COLLABORATIVE'S PLANS INCLUDE:

- A new mobile slaughter unit and a cut-&-wrap facility that will serve more than 60 ranchers. The unit will initially process 600 cows annually (300,000 pounds of meat), with the capacity to process up to 1,300 cows annually.
- Equipment to augment local fruit and vegetable processing, aggregation and storage. This will increase efficiency, reduce costs and create markets for value-added products such as grated carrots and shredded cabbage. Increased freezer/refrigeration space will enable farmers and ranchers to increase production and store produce for year-round sales. This will make the products convenient for institutional programs and more profitable for farmers and producers.

- Equipment for TMS and other schools. Current distribution is limited by food service equipment and capacity. This will increase the availability of healthy meals in schools.

- A production commissary kitchen will be added to the TCEDC facility for farm-to-institution meal preparation. The kitchen will produce baked goods, tortillas and a variety of value-added products.

Wash-&-pack aggregation and commissary kitchen investments, equipment and storage infrastructure will increase the number of farm-to-school meals by 80 percent, an increase of 5,300 meals, double CSA vegetable production to 60,000 pounds, and increase production of locally grown grain from 20,000 to 100,000 pounds.

- A mobile food truck to deliver hot meals and CSA products. This will provide a new option for EBT/Double-Up Food-Bucks sales.

TENDING SOIL AND ROOTING CHANGE

Julieta Saucedo, Farm Education Coordinator at La Semilla Food Center

BY MICHELLE E. CARREON



"We are holding the past, present and future [in the soil]." — Julieta Saucedo

Anyone who has met Julieta Saucedo can attest to her passion for soil conservation and dedication to community, as well her infectious laugh and joy—even in the earliest morning hours. Saucedo is farm education coordinator at La Semilla Food Center, a nonprofit established in 2010 in Anthony, New Mexico. La Semilla is deeply rooted in the interconnected Paso del Norte region, which spans southern New Mexico; El Paso, Texas; and Ciudad Juárez, México. This multilingual, multicultural region faces systemic obstacles including food insecurity.

La Semilla is helping build a more just food system. Through six dynamic programs, La Semilla provides places for youth and families to grow and cook healthy, culturally relevant food. Saucedo provides leadership for La Semilla Community Farm's (LSCF) education programs. She previously was a partner/farmer with La Semilla's Farm Fresh Program, which, with an expanding network of small farmers, offers a weekly farm box program. She also was a technical assistant for Farm Fresh's Food Safety Program.

La Semilla's community programs include *Raíces*, which offers youth educational, leadership and entrepreneurial opportunities, and LSCF's Food and Farm Youth Apprenticeships, which provide short-term intensive training in foraging, farm production, community gardening and agroecological practices in the Chihuahuan Desert.



Saucedo, originally from Juárez, speaks proudly of her grandfather: "My grandpa was a farmer [in Guadalupe Victoria, Chihuahua]."

Cultivating connections among food, culture, health and local economies

His form of stewardship was very loving toward the land and very respectful. He felt responsible for the people working there too, so he did things other farmers in the area didn't do. He offered a lot of benefits, like housing,

and also a percentage of the crop was for the workers to consume or sell. As a child, I didn't really see the impact or importance of how he was doing things. I just saw that he was always happy and joyful. The land reflected my grandpa's joy. When he died, the land changed...everything around there changed."

Saucedo was exposed to *campesino* movements at a young age, which provided a foundation for her interest in transformative farming practices that prioritize human rights. She speaks passionately about the barriers small-scale farmers face in accessing resources. In art school, she learned how art could strengthen communities. She then co-founded an artist/activist collective in Juárez that showed community members how to start neighborhood gardens.

In 2021, La Semilla launched the Agroecology Farming Fellowship—a project in the making for over a decade. Co-created by Cristina Dominguez (executive director) and Josh Jasso (farm manager), the fellowship provides a 6-month, paid opportunity for beginning farmers to learn from a network of local farmers about diverse ways to grow in the Chihuahuan Desert amidst climate chaos. Designed as a cohort system, the fellowship cultivates community among fellows, mentor farmers and others.

Saucedo co-develops curriculum, mentors fellows and co-coordinates many weekly workdays and sessions. During Integration Day for the current cohort, she shared her knowledge of the scientific as well as the sociocultural dimensions of soil. "Soil always tells a story," she said. "...a story of the land, where we are geographically, and in our own lives." She spoke of what we gain from "reading" soil to learn about what is going on beneath and above the surface: "We are holding the past, present, and future [in the soil]."

"Our lives are not always as linear as we expect them to be," Saucedo explained. "The path toward justice is truly paved by our stories, our connections with the land and each other, and the choices we make to become more aware, active players in collective learning and social change."

Saucedo said, "I think a great first step for someone who is totally disconnected from the food system is to learn where something is coming from and what it takes to produce it. By knowing that, a lot of other awareness develops as well." ■

"Through learning and practicing with the community of La Semilla, OG Farms, and Full Circle Mushrooms, I have gained a new, profound experience that includes all of the elements of agroecology."
— Jade Gonzalez, Agroecology Farming Fellow



Michelle E. Carreon has a Ph.D. in American Studies with a concentration in sociology.

AFSC-NM'S FARM-TO-SCHOOL AND EARLY CHILDHOOD PROGRAMS

Improving the Health of NM's children and communities

The American Friends Service Committee has worked for almost 50 years throughout New Mexico to support small-scale, sustainable farms, incubate farmer cooperatives and increase access to local food. The organization assists land-based people in protecting culture, land, water and jobs. In places such as Albuquerque, Española and Anthony, AFSC has provided farmer-to-farmer training programs and built infrastructure such as passive-solar cold-frames and walk-in coolers.

AFSC-NM's motto is: "Kids Win When Farmers and Schools Work Together." AFSC has managed a Farm to School program for seven years and Farm to Early Childhood Education centers for six years. Healthy food campaigns, like the Great Carrot Crunch, Terrific Turnip Tasting and Cherry Tomato Chomp, get children excited about healthy eating with fun classroom activities. Some of these have been documented in a booklet highlighting farmers' and teachers' voices, insights and stories: *Crunch, Munch & Chomp: Findings from Farm to Early Childhood Education in New Mexico*, which can be found on AFSC's website.

In response to the COVID-19 pandemic, AFSC created a Farm-to-Food Bank project. Small-scale farms had food, but many markets were no longer buying perishable produce. Meanwhile, food banks were experiencing unprecedented need. With the help of generous community members and foundations, AFSC helped bridge that gap. In 18 months, the organization directly purchased 22,000 pounds of produce from 30 regional farms at a fair price and donated it to food banks and relief organizations across the state. AFSC also supplied farmers with seeds and safety items like face masks and gloves. The farmers, in turn, donated a portion of what they grew.

Casey Holland of Chispas Farm, in the South Valley, said, "It was incredible to know that we were growing food to feed young people, my neighbors and community. It's hard to build those relationships as a grower, so it's been amazing to have AFSC be that connector."

For more information, visit [HTTPS://WWW.AFSC.ORG/OFFICE/ALBUQUERQUE-NM](https://www.afsc.org/office/albuquerque-nm) or [FACEBOOK.COM/AFSCNM](https://www.facebook.com/afscnm)



THE NORTHERN YOUTH PROJECT

The Northern Youth Project, based in Abiquiú, N.M., has been providing agriculture, arts and leadership opportunities to Río Arriba youth since 2009. Each day, power, hope and healing blossom when NYP's young people have opportunities to connect to the land and water, to cultural traditions, and to their own creativity and passions. Children and teens are invited to join for free fall, spring and summer programming—and the wider community is invited to support this work by spreading the word or making a donation to NYP's internship program. info@northernyouthproject.org, WWW.NORTHERNYOUTHPROJECT.ORG



Photos above by Emily Arasim

TEWA WOMEN UNITED'S FOOD-AND SEED-SOVEREIGNTY WORK

BY TALAVI DENIPAH COOK

Thanks to a GATHER Food Sovereignty Grant from First Nations Development Institute (WWW.FIRSTNATIONS.ORG), in the past year, Tewa Women United (TWU) provided 15 garden beds, seeds and supplies to Indigenous mothers and families in the Española area and surrounding tribal communities. TWU also partnered with MoGro Mobile Grocery to distribute 25 packages of healthy, local foods. This effort helped mothers and families learn more about how to produce traditional seed and food and to pass that knowledge down to their children. This is especially important for those that don't have access to land to practice food sovereignty.

Women are participating more in strengthening food- and seed-sovereignty and rematriation of the land. TWU wanted to provide opportunities for Pueblo women farmers to talk openly, lovingly and strategically about their work within and outside of their community. We hosted two online panels. The first featured Tiana Suazo (Taos Pueblo), Kayleigh Warren (Santa Clara/Isleta) and Reyna Banteah (Zuni). The second featured Theresa Pasqual (Acoma) and Janice Lucero (Isleta). Both were facilitated by Chasity Salvador (Acoma). More than 100 participants discussed how to support these women in their work, the future of farming in New Mexico, the challenges of this work and

how it contributes to the collective well-being and healing of our communities. TWU has planned four more conversations with other panelists, focusing on rematriating seeds and food and seed sovereignty, this fall and in the spring of 2023. You can watch and listen on TWU's YouTube channel: youtube.com/c/TewaWomenUnited.

TWU has re-opened the Seed Library inside the Española Public Library. Many visitors have "borrowed" seed to grow their own home garden. Perennials were the most popular this year, perhaps due to the decline of available



food for pollinators. Growing perennials helps mitigate that problem. Do you know that it takes 12 bees their entire lifetime and millions of flower visits to make one teaspoon of honey? We need to grow more flowers, native plants and landrace crops to help these pollinators and other organisms survive within a healthy ecosystem. TWU is seeking more volunteers to restock seeds for public access throughout the coming year. If you're interested, visit WWW.TEWAWOMENUNITED.ORG and sign up.



The public is also welcome to visit the Española Healing Foods Oasis (EHFO) to help harvest herbs, plants, berries and seeds. On Sept. 10, TWU is hosting an amaranth-harvesting event guided by Beata Tsosie. Those who attend are eligible to receive a tree. We are giving out trees that need to be restored in the high desert, such as the piñon. Piñon trees are going through a rough time with bark

beetles. We hope to help revive the piñon and other trees. They support our health, provide nourishment and are part of our land rematriation practices. If you visit the garden on your own, please read the harvesting guidelines, wear gloves and closed-toed shoes. Contact KAYLEIGH@TEWAWOMENUNITED.ORG if you are interested in volunteering or harvesting.

If we learned anything from the pandemic, it was to find holistic solutions to remedy the symptoms of COVID-19 and help prevent it from spreading to other people. Many of us who went through this sickness and lost many relatives look to ways beyond Western knowledge to take care of ourselves and each other. In the summer of 2022, TWU organized a workshop series on herbal medicines, taught by Chasity Salvador and Jessica Lujan. Additional workshops are planned for the fall and winter, with Pilar Trujillo.

The food sovereignty grants began as part of First Nations' three-year GATHER project, with generous support from The Indigenous Peoples Fund at Tides Foundation and The 11th Hour Project of The Schmidt

Family Foundation, along with other organizational funders and individual donors. These grants support work that contributes to building a national movement that will fulfill a vision of Native food systems that are self-directed, well-resourced and supported by community policies and systems. ■



Talavi Denipah Cook, M.S., is environmental health & justice Manager for Tewa Women United. [HTTPS://TEWAWOMENUNITED.ORG/](https://TEWAWOMENUNITED.ORG/)

BOOK PROFILES

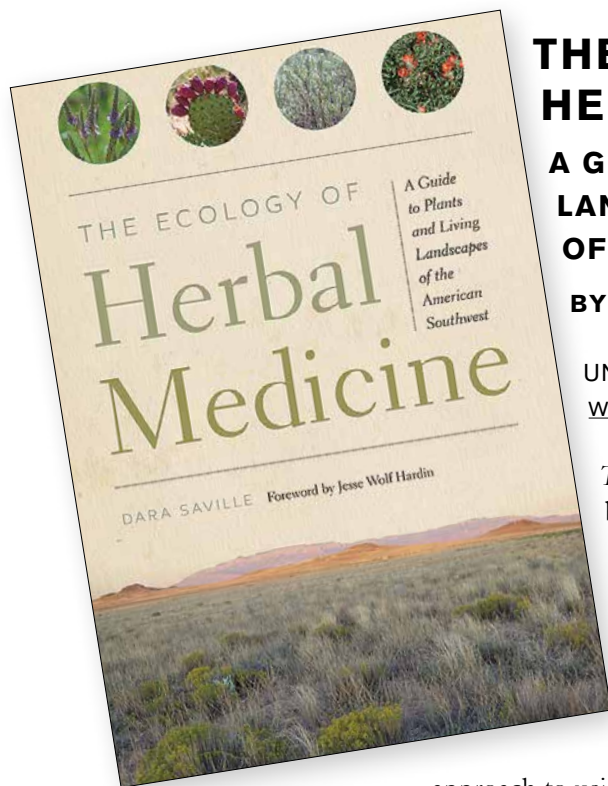
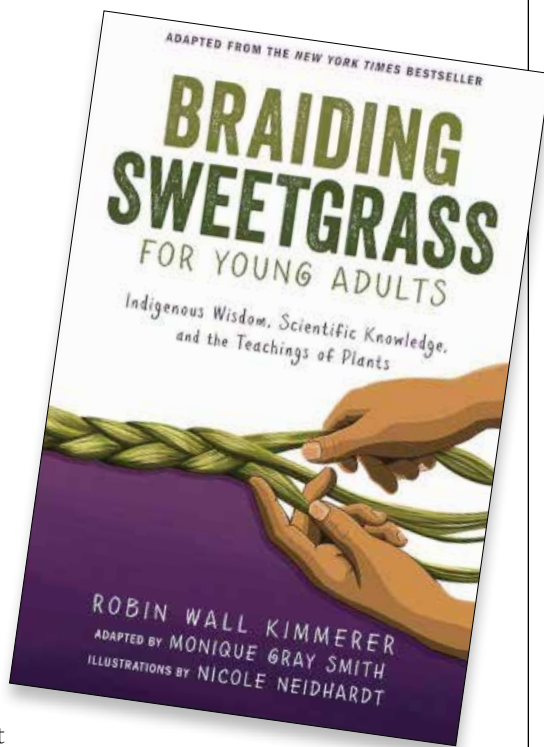
BRAIDING SWEETGRASS —FOR YOUNG ADULTS

INDIGENOUS WISDOM, SCIENTIFIC
KNOWLEDGE, AND THE TEACHINGS
OF PLANTS

BY ROBIN WALL KIMMERER

LERNER PUBLISHING GROUP, NOV. 2022
[HTTPS://LERNERBOOKS.COM](https://lernerbooks.com)

Braiding Sweetgrass for Young Adults is an adaptation of Robin Wall Kimmerer's best-selling book *Braiding Sweetgrass*. This book is adapted by Monique Gray Smith and illustrated by Nicole Neidhardt. From her experiences as an Indigenous scientist, Kimmerer, a botanist, demonstrates how all living things—from strawberries and witch hazel to water lilies and lichen—provide us with gifts and lessons every day. This new edition reinforces how wider ecological understanding stems from listening to the Earth's oldest teachers: the plants around us. With informative sidebars, questions to inspire reflection, and art, *Braiding Sweetgrass—For Young Adults* brings Indigenous wisdom, scientific knowledge and the lessons of plant life to a new generation.



THE ECOLOGY OF HERBAL MEDICINE A GUIDE TO PLANTS AND LIVING LANDSCAPES OF THE AMERICAN SOUTHWEST

BY DARA SAVILLE

UNM PRESS, 2021,
[WWW.UNMPRESS.COM](http://www.unmpress.com)

The Ecology of Herbal Medicine introduces botanical medicine through an in-depth exploration of the land, presenting a unique guide to plants found across the American Southwest. An accomplished herbalist and geographer, Dara Saville offers readers an ecological manual for developing relationships with the land and plants in a new theoretical approach to using herbal medicines.

Designed to increase our understanding of plants' rapport with their environment, this trailblazing book speaks to our innate connection to place and provides a pathway to understanding the medicinal properties of plants through their ecological relationships. With 39 plant profiles and detailed color photographs, Saville provides an extensive *materia medica* in which she offers practical tools and information alongside inspiration for working with plants in a way that restores our connection to the natural world.

"...the most unique and refreshing view on the healing power of plants—for both human health and land health—in decades!" – Gary Paul Nabhan

The Zuni Youth Enrichment Project

Grants, Gardens, Water Conservation,
Workshops



Proud to be a Shivi (Zuni) farmer. 2021

The Zuni Youth Enrichment Project (ZYEP) provides innovative, culturally relevant Native food sovereignty programming that benefits the entire pueblo community. The nonprofit initiative supports family and community gardens, rainwater conservation, and provides in-school education, workshops and special events.

Prep work for the 2022 growing season began during the winter, when the project collaborated with the Native American Agriculture Fund to make mini-grants to local farmers and organizations. Jessica Quinlan, ZYEP's food sovereignty coordinator said, "When we support our local farmers, we're uplifting Zuni traditions and strengthening the connection the youth have with their culture. This year, we received 24 applications and awarded a total of \$22,000 to 13 grantees."

Shortly after that, ZYEP hired its support team: Jocelyn Edaakie, Junior Haloo, Tyler Sice, Liam Simplicio and Michael Vicenti. "Being an Ag



Jessica Quinlan

Team member allowed me to be more involved in the community," said Haloo. "I really enjoyed seeing how happy people were about planting and saving rainwater." "My favorite part was just being able to interact with families," said Edaakie. "I love seeing kids and families take pride in their gardens." Calista Hannaweke, a young Zuni



farmer, said, “My experience was awesome. What motivates me is to grow crops and get fresh air. You get to grow your own food with your family.”



In April, ZYEP enrolled more than 80 families in its third annual Family Garden and Rain Harvest Initia-

Courtesy Zuni Youth Enrichment Project

tive and hosted three *Doye:nap'she* events where youth and families received garden kits, a large bag of tree soil, a child-size garden tool and a gardening book. At interactive stations set up in Ho'n A:wan Park, they learned about the blue corn, cilantro, pea, basil and sunflower seeds they received. They also learned about soil basics, companion planting, Zuni waffle gardens, as well as modern practices like composting and fencing, and how to harvest rain with barrels. Throughout the growing season, ZYEP has facilitated additional workshops such as caring for starter plants and transplanting.

The rain harvesting program has yielded significant results since its inception in 2020. Families collectively conserve thousands of gallons of water and also save money through a partnership with the Zuni Utility Department (ZUD). Local families have been eager to participate. “Water conservation supports agriculture, which lies at the heart of traditional Zuni culture, but it’s also about protecting a community resource during a persistent long-term drought,” Quinlan said. “When we collect rainwater for gardens and home use, we’re conserving the municipal water that ZUD staff works hard to provide.” ZYEP distributed 100-gallon barrels to families this spring. According to Quinlan, water harvesting is going well due to an active summer monsoon season.

ZYEP’s food sovereignty team also presented an in-school curriculum with Shiwi Ts’ana Elementary School’s staff. Called “Rooted in Healthy Traditions,” the curriculum focused on care for Mother Earth and included dancing and art. “We incorporate Zuni language, view historic photos, give students a chance to make waffle gardens and learn about nutrition through Zuni agricultural traditions,” Quinlan said.

The initiative is also made possible by support from the New Mexico Department of Health, the Substance Abuse and Mental Health Administration, Newman’s Own Foundation, and the Whole Kids Foundation. To learn more, visit ZYEP.ORG. ■

MIDDLE RÍO GRANDE PUEBLOS TO QUANTIFY WATER RIGHTS

In an unprecedented move, six pueblos that share the Middle Río Grande have begun a legal process to determine the specific amount of water that should be legally allocated to the pueblos. Regional irrigation districts recognize that the pueblos have the oldest claims to river water rights, and a certain amount of water is set aside for pueblo use each year. The pueblos are also seeking a seat at the table in regard to Río Grande Compact obligations and compensation for helping the state comply with those deliveries.

The coalition working toward quantifying the water in order to settle their claims to the river includes Cochiti, San Felipe, Santo Domingo, Santa Ana, Sandia and Isleta pueblos. Sandia Pueblo Gov. Stuart Paisano is chair of the coalition, whose members were approved by Interior Secretary Deb Haaland this year. At least twice in the past decade, the pueblos requested that the Interior Department assess the feasibility of a settlement.

The Middle Río Grande Basin has not been adjudicated, meaning that water rights in the region have yet to be formally established by a court decree. Because of the river’s diminishing water supply, state and federal legislation will likely be required to establish and administer tribal water rights, and infrastructure will need to be built for the tribes to utilize those rights.

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THE SANTA FE FARMERS' MARKET: 50 YEARS LATER

STANLEY CRAWFORD

My late wife RoseMary and I started selling produce from our Embudo Valley farm at the Taos Farmers' Market in the early 1970s. It was an all-day market, slow but pleasant. But around 1975 when we heard that at the Santa Fe Area Farmers' Market, then on Alto Street, you could be done by noon, we began the 50-mile Saturday drive, which continues to this day. Now I may well be the most senior farmer at Santa Fe.

The SFFM was founded by the Agricultural Project of the League of Women Voters, which turned the running of it over to its own organization toward the end of the decade. Its board was formed of half farmers, half community members. The first market managers were unpaid volunteers. I wasn't interested at the time in serving on the board: Our best customers were restaurants, and we soon gave up selling at the market in favor of selling to Santa Fe restaurants. A few years later when our garlic business took off, we then moved into selling garlic arrangements at craft fairs in Santa Fe, Taos and Los Alamos.

New crops of young farmers face high land prices and challenges of global warming.

I returned to selling at the Santa Fe Farmers' Market in the early '80s. I had long been interested in ag co-ops—despite the fact that northern New

Mexico had become a graveyard of such attempts—and finally woke up to the fact that farmers' markets were in effect co-ops, although not formally organized as such. I got myself elected president to the SFFM board, until then an inactive puppet of the Santa Fe Ag Extension Service office. I asked Clark DeSchweinitz, then executive director of Northern New Mexico Legal Services, to look into statutes governing what we could and could not sell at the farmers' market. It was generally believed we could only sell fruits and vegetables; a blind eye was turned on those who sold jams, jellies and ciders, generally considered illicit. Clark found nothing that limited our sales in the statutes: We could sell anything we produced ourselves.

That discovery led to the gradual expansion of market goods to include flowers, plants, honey, meat, dairy, baked goods, soaps and everything else you can find at the present-day Santa Fe Farmers' Market. There were a few hiccups along the way. The New Mexico State Entomologist wanted all plant and flower growers to buy a \$50 annual permit; the market was able to negotiate that down to the market itself taking out the permit while keeping a list of its plant and flower producers for the use, if needed, by the State Entomologist to track down an introduced pest or pathogen.

Then one fine day at Sanbusco, where the market had moved from Alto Street, a vastly improved location, one Vladimir from the New Mexico Health Department, approached my stand and threatened to shut down the market because none of our prepared food sellers had health permits. I gestured at the crowd of some thousand people milling around the market and said, "Sure, go ahead."

But what the Health Department wanted was relatively simple. They wanted our producers to have separate kitchens, believing, oddly, that our members were prone to changing their babies on kitchen counters. But a separate kitchen could be something as primitive as a sink in a shed with a dirt floor. Our producers had no trouble complying.

The market was at Sanbusco for a number of years until it was pushed out by Borders Books in 1998 (if memory serves). A long odyssey then began, during

which the market moved to various spots on the Railyard, newly purchased by the city. After chairing the market board for 14 years, I left it to become project director for the Friends of the Farmers' Market, a 501 (c)3, a position in which I worked for three years on planning for the permanent site, under funding I had worked up from the Ford Foundation. I left that position when a major Congressional grant came through to cover the cost of the public space of the current market site. I was not directly involved in the master planning and design of the present market hall, though during some of that time I served on the board of the Santa Fe Railyard Community Corporation, the nonprofit charged by the city to develop the city-owned railyard.

For those of us who have lived through, and often endured, setting up our stands in a half-dozen different sites over the past 50 years, a secure permanent site is a dream come true. We no longer have to deal with locked or unavailable restrooms (the case at Alto Street), an absence of snack bars or cafes (the case at many of our temporary sites), and generally wretched indoor halls during the winter months. Many people I talk to are surprised when I tell them the market runs all year around. This is a big change from the early days, when the first market of the season opened *the last week of July* and closed down in October.

Back in the day, a number of us old-timers were worried that when our time was up there might be no one to replace us. But perhaps because of our new permanent home, and the many fine support programs offered by the Santa Fe Farmers' Market Institute, formal owner of the building, we now have new crops of young farmers. Of course, they will be facing the problem of high land prices, dwindling supplies of water and other challenges of global warming.

But one thing they will presumably always have is a secure home to retail their produce. ■

Stanley Crawford writes and farms in the Embudo Valley.

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Santa Fe Farmers' Market 2022 – plus three historic photos (groundbreaking for the market pavilion in 2007; Jake's watermelon sales in the railyard; mother and child with red chile)
© Seth Roffman



Report to the Mayor: How to Solve Childhood Hunger

Ensuring Every Child in Santa Fe Has Access to Sufficient Nutritious Food

“We believe that many citizens do not know the extent of hunger among our children and that, upon learning, they will devote their attention, political will and financial investment necessary to end that hunger.”

In response to an invitation by Santa Fe Mayor Alan Webber, Sherry Hooper, executive director of The Food Depot, assembled a task force of food and policy experts to create a report. Here are some of the report's key components.

Big Impact Recommendations

1. Increase the “living wage” immediately to \$17/hour and incrementally move toward a legally mandated minimum wage in the \$22 to \$25 range.
2. Provide biweekly cash “family income adjustment grants” to make each family's income livable.
3. Introduce a supplemental grant for families with a parent/guardian unable to earn an income due to disability.
4. Form a compensated public works/community service jobs program for adults unable to secure full-time work.

Incremental Opportunities

While the big impact recommendations are designed and implemented, it is incumbent upon the Santa Fe community to immediately launch incremental change and progress, including:

1. Provide childcare for working families.
2. Support home visits for new parents.
3. Introduce nutrition curriculum for preschool through 12th grade.
4. Expand the availability of affordable housing.
5. Improve food access.
6. Reduce food waste.
7. Use city/county buildings for feeding locations.
8. Invest in outreach for food and tax credit/benefit programs.
9. Help parents with employment opportunities.
10. Advocate with state and federal officials to amend policies and budget priorities.

How Critical is Childhood Hunger in Santa Fe and Why

1. New Mexico food insecurity is among the highest in the nation. Approximately 5,000 children in Santa Fe County experience food insecurity

in one year. This includes when food is available but is not nutritionally balanced. Children require sufficient nutritious food to maintain health, growth and development. The experience of food insecurity is physically and psychologically harmful.

2. Food insecurity and hunger are symptoms of poverty, which is a result of income and resource insufficiency. When families cannot meet their basic living requirements of housing, utilities, healthcare and transportation, it also affects their ability to purchase fresh produce and other food.

3. Families are struggling to make ends meet. Two main obstacles prevent families from having sufficient income. The first is low wages, and the second is a barrier or an inability for a parent to work. Santa Fe's “living wage” of \$15/hr. is insufficient. Using the MIT living wage calculator, an accurate “living wage” for Santa Fe is \$27.66 or \$57,583 household income for a family of three.

4. By design, government food programs seek to meet temporary and emergency needs for food. They reduce the symptoms of food insecurity (hunger) without addressing the source, which is poverty. Additional obstacles include time-consuming applications and registration, awareness of benefits, lack of capacity for food banks and pantries to administer outreach, and other barriers related to stigma, language and mental health may be present. ■

The Food Depot is at 1222-A Siler Road in Santa Fe, 87507. 505-471-1633, WWW.THEFOODDEPOT.ORG



*Green Tractor Farm, La Cienega, NM
© Seth Roffman*

FOOD SYSTEMS: GOING BEYOND TALKING

Mil Abrazos, the nonprofit I run, recently sold its farm, located in one of the oldest and most fertile breadbaskets in New Mexico, the 5,000-acre Anton Chico valley along the Pecos River. Some may remember my saga running Gaia Gardens urban farm in Santa Fe (2012 to 2015), battling a city administration that was clueless about the need to accommodate and support large-scale growing of fresh food in the city. Do people realize that in 1909, Santa Fe, with a population of less than 5,000, had 6,000 acres of land in cultivation, irrigated by 38 acequias?

I decided to sell the farm because after nearly five years of restoring the land, building capacity to welcome visitors and interns, inviting the public to participate in the annual cleaning of the ditch and in the creation of an educational center in rural New Mexico, I got tired of waiting and growing crops by myself. Many said, “But you are so far away!” Really? Do people think a large surplus of food is going to be grown just outside of the city, where land is expensive and irrigation water scarce or non-existent? Do people know that Mora, Anton Chico and many of the breadbaskets along our watersheds were not only growing all their food but exporting to other parts of New Mexico and beyond?

I have only been a farmer for 12 years, but it has opened my eyes (and broken my heart) to the state of agriculture in northern New Mexico. In the Anton Chico valley, according to what elders told me, as far back as 1950, 80 percent of the land was in production (corn, beans, squash, fruits, grains, etc.). Nowadays, less than 1 percent is growing food crops, relying instead on hay fields and cattle. In some previously self-sustainable areas, like Villanueva, less than 50 percent of the land is currently irrigated because of aging or absentee landowners. Do you know that most areas in rural New Mexico are food deserts where the only food outlets are Dollar stores?

So, when I hear that we still have debates, I want to scream to wake people up. I have seen Santa Fe publish two comprehensive and expensive Sustainable Santa Fe Plans (2008 and 2018). I battled two city administrations and spent countless hours researching best practices from cities across the U.S. that were 10 to 15 years ahead of Santa Fe in supporting urban agriculture.

Most areas in rural New Mexico are food deserts where the only food outlets are Dollar stores.

I delivered the fruits of my research to a city administration that finally passed an urban agriculture ordinance that, in my view, is not only useless, but has done nothing to support and incentivize the growing of food. When an ag ordinance states that a farm within the city “shouldn’t be a nuisance to the neighborhood” (good luck defending that in court!) and that a farm stand shouldn’t exceed 40 square feet (a pop-up tent like at a farmers’ market is 100 square feet),

I wonder what kind of medication city bureaucrats are on when they concoct such ridiculous legislation.

To my knowledge, in the six years since that urban ag ordinance was passed by the City Council, no one has attempted to start another farm in the city. No wonder! Growing food in the desert requires lots of water. If the city doesn’t offer preferential rates to urban farms, and if the Office of the State Engineer doesn’t allocate commercial water rights to urban properties with wells (there are over 600 within Santa Fe’s city limits) wishing to be used as farms, Santa Fe will never see another urban farm in its midst, because paying for water to grow food is not economically feasible.

In the six years since that urban ag ordinance was passed by the City Council, no one has attempted to start another farm in the city.

at Walmart? Do we think that the 60-some farmers at the farmers’ market are going to feed our state’s population?

I am tired of the hypocrisy of the numerous foundations in Santa Fe that have food security as a high priority in their mission statement. In my five years in Guadalupe County, one of the poorest in New Mexico, and having been well known to many foundations for my high-profile work with Gaia Gardens and school gardens, and having been a year-round vendor at the Santa Fe Farmers’ Market and board member of the Farmers’ Market Institute, I have never even seen one representative from those organizations visit the valley where I have farmed.

Have people become dashboard activists, thinking that signing up to causes, or chatting on Permaculture Facebook groups really makes a difference in helping preservation and the return of farmland to production? When I see all the privileged folks posting selfies of their visits to scenic local areas on Facebook, I wonder if these folks realize the poverty, neglect and even despair present in many rural areas of New Mexico. When will they realize that if they would allocate a portion of their free time to actually lend a hand on farms, a lot of good could happen in this state?

We need to mobilize en masse if we are ever going to be serious about having any degree of food security.

We need to mobilize *en masse* if we are ever going to be serious about having any degree of food security. We have to stop pretending that all is good because Whole Foods and

Trader Joe’s still have shelves full of food, and the farmers’ market stalls are dripping with fresh produce.

I am delighted to have lived and farmed in Anton Chico and helped the ranching community as ditch commissioner for five years. It has humbled me as to the work we have to do. But I believe the talking is over. Let’s get serious and roll up our sleeves. We don’t have time to waste. ■



Poki Piottin has been a farmer, an athlete, commercial fisherman and creative entrepreneur. You can read more of his writing on the Mil Abrazos project at: WWW.MILABRAZOS.ORG or visit POKIBIO.BLOGSPOT.COM.

IN PRAISE OF HERITAGE GRAINS

BY CHRISTINE SALEM

Northern New Mexico was once the breadbasket of New Mexico with over 300 small mills operating around the state. In 1892 the Territory of New Mexico brought 230 varieties of wheat to the Chicago World's Fair.

Today most of our flour and grain products come from hybridized dwarf modern wheat, bred primarily for high yield at the expense of nutrition, flavor and biodiversity. It is grown mainly in the upper Midwest and sold on the commodity market. Modern wheat is dependent on chemical inputs and degrades human health, soil health and farmers' incomes.

In 2018, a small group of farmers, gardeners and bread-bakers formed Río Grande Grain ([HTTPS://RIOGRANDEGRAIN.ORG](https://riograndegrain.org)) with the idea of returning grains to their roots. We trialed small quantities of over 60 varieties of heritage and ancient wheat, rye, and barley in small plots near Alcalde. We collected qualitative and quantitative data over six growing seasons and discovered a few that are strong performers in our high-desert region—khorasan, Sonoran white, einkorn, emmer, Turkey red and spelt wheats; Rebel and Swiss Mountain rye; and Tibetan purple barley. Since many of these varieties are rare, we continually increased plot size until our fall 2021 harvest yielded hundreds of pounds of seed, which we shared with small farmers ready to try crops that regenerate the soil and fetch higher prices than commodity grain.

Río Grande Grain is now assisting farmers with harvesting and processing know-how and equipment. We also help create a market for the grains among consumers, home bakers and commercial bakers through events and outreach. And we are working to form what we call the Grain Chain by connecting farmers with millers, maltsters and brewers who can store, process and distribute these grains. Fortunately, the environmental and locavore movements are strong in northern New Mexico and are paving the way for locally grown, heritage grains to return to our fields and foods.

Part of our outreach involves addressing the myth that gluten is our enemy. Biochemists are discovering that foods made with whole heritage grains offer high fiber and support healthy gut microbes. It's the way modern wheat is produced and processed that aggravates wheat sensitivities.

Christine Salem is a lifelong gardener, sourdough baker and co-founder of Río Grande Grain.



Nature-based Solutions in Santa Fe County

BY LUCY FOMA AND CAITLIN WEBER

On a July evening, Santa Fe County Open Space staff made an exciting discovery when they spotted a firefly at Los Potreritos Open Space property behind the Santuario de Chimayó. This softly glowing insect was part of a rare, newly discovered species of firefly. Experts at the Western Firefly Project attributed the finding to the county's efforts to protect beavers on the property. The beavers built dams and canals establishing a healthy wetland ecosystem where fireflies can thrive. In short, the county worked with nature to restore nature.

AgriGate provides a free online platform for local food producers to connect with local buyers and resource providers.

Beavers and fireflies are not the only ones who benefit from such conservation projects. Healthy ecosystems are key to helping communities adapt



to and mitigate the effects of climate change. For example, scientists have found that beavers can help increase an ecosystem's resilience (*Beavers: The North American freshwater climate action plan*, Jordan and Fairfax 2022). Beavers build structures that help slow water down. This allows more water to soak into the soil, which reduces fire risk. Large floodplains restored by beavers even have the potential to serve as firebreaks, giving communities precious time to contain wildfires. These natural firebreaks are likely to become more important, as wildfires are projected to increase across the Southwest due to climate change (*Fourth National Climate Assessment, Chapter 25*, USGCRP 2018). Santa Fe County is working with Defenders of Wildlife and Río Grande Return to install devices that prevent beavers from blocking acequias used by farmers, to help communities co-exist with the animals and benefit from the services they provide.

Landscape restoration by beavers is just one example of a nature-based solution. Nature-based solutions are sustainable planning and environ-

To equitably adapt to and mitigate the effects of climate change, we must support our local farmers.

mental management practices that weave natural features into the built environment to tackle socio-environmental challenges such as climate change. Other examples of nature-based

solutions include protecting pollinators to support crop production, and planting trees in urban areas to sequester carbon and cool communities.

Santa Fe County is working to incorporate nature-based solutions into its county-wide climate action plan. To kick off the planning process, the County Sustainability Office partnered with the organization Nature-Based Climate Solutions to host three workshops for county staff. During the workshops, staff took stock of current nature-based solutions and partnerships (like the beaver project) and discussed opportunities to increase capacity for such initiatives.



Los Pteros Open Space. Courtesy Santa Fe County

One of the topics discussed was nature-based solutions to support agriculture. Local food production and consumption reduce greenhouse gas emissions generated from transporting food over long distances. Furthermore, sustainable agricultural practices can help regenerate soil. To equitably adapt to and mitigate the effects of climate change, we must support our local farmers.

Santa Fe County is working to support the longstanding tradition of farming in northern New Mexico by cultivating a more vibrant local food economy through the AgriGate program. AgriGate provides a free online platform for local food producers to connect with local buyers and resource providers. Through a profile-based searchable food community map, farmers seeking buyers for their products and restaurants or retailers seeking local sources can connect. Additionally, the public is also welcome to search for products and form connections with local farmers.

Community participation will play a central role in developing and implementing a robust climate action plan that works in concert with nature. Stay tuned for opportunities to get involved in climate action initiatives at the County and check out WWW.AGRIGATESFC.ORG for resources to help build a more resilient local food economy. ■

Lucy Foma is a senior planner and Caitlin Weber is a sustainability specialist with Santa Fe County.

OP-ED: JIM DYER

NOT IN THEIR BACKYARDS: FAIRNESS IN ALL FOODSHEDS

Sorting out foodsheds is a bit complicated. Rather than precise areas on a map, they are best used as a concept to think critically about where our food comes from and its impact on the land and on all that depends on that land, including other people. And by land, we mean the ecosystems, including the soils, water, air, climate and biodiversity. Further, since the health of the ecosystems on which our food is produced is so interdependent with the health of surrounding ecosystems, we prefer to think of the whole landscape of an area as the foodshed—the gardens, farms, ranches, *and* the surrounding ecosystems. Obviously, foodsheds overlap, change over time, and are a matter of opinion. Despite all the uncertainty and fluidity, a foodshed is a useful concept for pursuing sustainability and fairness in our dealings with food.

The “local foodshed” is the area that we a) should look to first for our food—not exclusively but deliberately first, and b) that area we are most responsible for—both ethically and practically, since we have more political power closer to home over food- and land-use policies. It could be considered our own backyard garden, then extending out to local farms and ranches, and then to regional sources. At that point, it would be good to pause in our food sourcing and consider the pros and cons of going further afield, and pause even more deliberately when crossing national boundaries and oceans, as we often do without knowing or thinking of the implications. This all begs the question: *Are we not also responsible for the health of distant lands that we appropriate as part of our extended foodshed—of other people’s backyards?*

Our foods impact the soils, water, air, climate and biodiversity.

Local food itself may not be the goal, but it is the answer—or at least one key answer to how we can best be responsible in our food choices—personally and policy-wise. Being aware

of the well-being of our local foodsheds and all who depend on those lands, as well as taking responsibility for those areas, is so much easier since they are in our own backyard. We may choose not to be aware or responsible, but it is harder to do. The farther our reach for food extends outward, the less we can know about our impacts on those ecosystems, those backyards of others, even if we try. Likewise, the farther afield we reach, the less able we are to protect those lands and ecosystems, even if we want to.



Corn harvesters at Schwebach Farm, Moriarty, NM © Seth Roffman

Ironically, however, it could be argued that we in the Western world as a rich people, as rich nations, have much more power to harm the local foodsheds or backyards of many others around the world, with our food dollars and policies, than we have the power to protect them (unless, of course, we stay local). To me, this makes local food a crucial answer even if it isn't the primary goal. Look local first—and when we do reach out for foods from more distant foodsheds, extend the same concern and fairness to their backyards that we do (or should) to our own.

Local food is one key answer to how we can best be responsible in our food choices—personally and policy-wise.

Fairness, as I see it, is the primary goal in our dealings with food. Fairness to ourselves—the health of ourselves and our families, to the health of our local foodsheds, to the health of all people and their backyards, and fairness to the planet and future generations. Ultimately, we might circle back to ourselves and see that our attempt to be fair to all around us is in fact being fundamentally fair to ourselves and our moral well-being. ■

Jim Dyer is the project director of the Southwest Marketing Network and Healthy Community Food Systems, and Colorado co-lead liaison to the National Farm to School Program.

Fear and Loathing Near Las Vegas

Personal Reflections on the Calf Canyon Fire (Part 1)

BY CHARLES CURTIN

It is Sunday, May 8th, just after dawn on the Cañoncito creek north of Mora, New Mexico. I've walked out of the house to see fingers of flames working their way down a hillside across the valley. It's game on! I'm about to find out if weeks of preparation will hold back the fires.

I found myself alone amongst a virtual moonscape of fire-blackened trees.

As hotshot crews light backburns that race upslope to meet the advancing flames, I rehash a mental checklist of what's left to do. The wood is moved away from the house (check). Pumps are set, and hose line is laid (check). Everything possible around the farm has been hosed down (check). Trees and brush around the house cleared to the extent possible (check). I set to work turning off the propane tanks, moving the tractor and my old truck to the fields below the house, and securing the livestock in a mowed and wetted area.

We'd been lucky. The fire's behavior was suppressed by arriving during the most cool and humid part of the day. It would have been very different if the fires had arrived mid-day when spotting off the ridge could have ignited the whole area. I sighed with relief. There might be some fires in a day or two, but it would not be too bad, it would be working down the valley, and now we had a good, blackened area upwind. Our valley was spared, I thought...

I was wrong.

A few hours later, the fire roared across the valley in full fury. This time, rather than a relatively placid descending burn, it was a head-fire driven by 70 mph winds. A wall of 50-foot flames ripped across the landscape. The professional firefighters bugged out to the safety of the fields while a handful of unpaid local volunteers remained to do what they could to protect their community's homes and property.

What the authorities perceived to be scofflaws and troublemakers were largely capable, independent people doing their best to selflessly help their community.

In the end, all the hills on the north side of the valley were blackened—200-plus-year-old ponderosa and junipers charred to a crisp. Once again, we'd been lucky in that between a thinned forest, the protection of fields below the house, and courageous local firefighters, our farm was spared, but every neighbor lost homes or outbuildings.

After the fire, I had expected, as is the usual procedure, for some fire crews to stick around to mop up hot spots and be on call if conditions changed. Instead, they were re-deployed north to combat the flaming front near Holman and Chacon. An eerie quiet descended on the valley as I found myself alone amongst a virtual moonscape of fire-blackened trees. As night fell, the scene was a bit akin to Dante's Inferno and a descent into hell; here and there in the dark, flames licked at a stump or a fallen tree, and occasionally, a previously unburned tree would erupt in a geyser of red-orange flame.

This eerie tranquility was not to last. A few hours later, the wind shifted again, coming straight down the valley blowing sparks and embers toward unburned areas near the farm. Too far from water for pumps, I scrambled with a shovel to put out hot spots. After several hours, I had knocked down the worst of the flames but decided in the long term this action was futile; there were too many sparks and embers and way too much ground for one person to cover. Before the winds picked up, I'd need some help. In my truck I raced down the road looking for crews doing mop-up who could put some water on the situation.

There were no crews to be found. The town was completely deserted!

I drove to the local police roadblock a mile or so down the road. The young cop on duty told me he had no way of contacting fire authorities, and even if he could, no one was coming. All boots on the ground had moved north. He ordered me to go home and wait. But wait for what? Sit by and watch homes burn?

As a last-ditch effort, I asked the cop if I drove another mile down the road to the local fire station would he let me back through the roadblock. He "might" if I was quick about it. I rushed down the road looking for help. Surely someone would be there operating the radios and coordinating local efforts.



Protest in Mora, New Mexico, May 2022 © Charles Curtin

Nothing... the place was shuttered and dark. I spoke to a fire crew topping up water in a brush truck out front. They were not from the area and had no idea where they were—but they said they would send help if they met somebody who was not busy. In short, I was on my own. I drove back through the roadblock and, fearing the worst, headed for home.

By some miracle, the sparks and embers had not yet ignited remaining unburned areas. I went to work again with a shovel covering the flaming remnants of a neighbor's sawmill, and then spent the rest of the night putting out fires near neighbor's homes and outbuildings and knocking out any new fires that cropped up near our place with a shovel or the bucket of our Kubota tractor. At dawn, some fire crews returned and began some mop-up work. I walked home, fell face-first on top of the bed and fully clothed, slept.

Prelude

We'd been spared, in part because I had stayed in defiance of federal evacuation orders. I'd stayed because, as a former burn boss and wildland firefighter, I had experience with wildfire and knew to stay out of the way of the professionals. I believed I could do more for my community and farm by staying. We were many miles from the fire, so the odds of the flames ever reaching us seemed low. We also had some livestock I wanted to keep a close eye on. Because of this decision, I had a front-row seat to the drama unfolding in our valley and across the region.

However, the drama actually began weeks earlier when the fires first approached the nearest town of Mora. Mora is a community of a few hundred people set in a 2,000-square-mile county containing about 4,500 people. That's roughly two people per square mile or about half the number per square mile that denoted the boundary of the frontier. The county is over 80 percent Hispanic, and many of these people also have Indigenous ethnic roots (mostly Pueblo or Apache).

These facts are important because Mora is strong in tradition and independence and has long viewed outsiders in general, and Anglos in particular, with suspicion. And with good reason: the last time the feds arrived in force was during the 1847 Taos revolt when the U.S. Cavalry shelled Mora—burning it to the ground. This was followed in

the 1850s by the government taking possession without compensation of 800 prime acres from the Mora Land Grant. And in 1916, still more communal lands were auctioned off over local objections on the steps of the San Miguel Courthouse. So, when the fires approached, and the police, the National Guard and firefighters rolled into town and ordered the locals to leave, for many, it tore the scab off historical wounds.

In addition, by order of emergency management, the power was cut to prevent additional fires from downed power lines. As was typical for many people, I lived for weeks with the roar of a generator amidst a jumble of extension cords, without water, and with minimal amounts of food. As supplies ran low, the community was up against another threat—roadblocks.

A series of roadblocks would pop up and disappear without any apparent logic. The challenge was, unless you found a sympathetic sheriff, once you left, you were not allowed to return.

At one point, I left for a food run to Las Vegas on an open road, only to find it closed on the way back. The police confiscated our driver's licenses and forced us to sit in line. After an hour of waiting, without explanation, they gave us back our licenses and sent us on our way.

Government trucks with sympathetic drivers were used to smuggle in food and supplies.

I understand the need not to have a community that had been evacuated vulnerable to the potential looting of abandoned homes and businesses. At the

same time, there were people present in the community for a good reason. Some helping family and neighbors, others were too old, infirm, or poor to leave. Evacuation is expensive and many people simply could not afford to do it. It would have made more sense to have people who were staying register and be given a pass card to get through the roadblocks and receive help from the authorities. Often the roadblocks felt like unnecessary harassment. There were ways to sneak in through back roads—so it became yet another issue to overcome in our efforts to assist neighbors or tend to livestock.

The situation became so dire that locals had to set up their own food distribution center. When private pickup trucks hauling food for the community were halted at roadblocks, government trucks with sympathetic drivers were used to bring food and supplies past the police blockades. Tempers reached such a pitch that people began running roadblocks. Some firefighters were confronted at gunpoint, and a senior politician threatened to pull out all firefighting resources, reportedly saying of the people in Mora, "Let them burn." This further fueled anger and mistrust, and community protests erupted.



The aftermath © Charles Curtin

Meanwhile, concurrent with the roadblocks and other challenges, the fires had taken out the cell towers in the valley. While there was a temporary tower setup behind the electric co-op, this only covered a small area within the town of Mora. Many of us daily took our place next to La Jicarita Telephone Co-op to hear news of where the fire was and to contact loved ones. The communications blackout in much of the valley further endangered people by denying them up-to-date information and hampering the work of firefighters who also had poor communications. All of this was unnecessary because mobile cell towers do exist and (the world over) are used in times of conflict or crisis. It was not lost on the locals that widely available tools and technologies were not employed to help make everyone's efforts easier and safer.

Concluding Thoughts

Eventually the roadblocks ended. The power and internet returned, and finally an officially sanctioned food distribution center was established. The tensions eased and people began returning to the valley—many of them to find their homes and livelihoods destroyed.

The whole experience was an abject reminder of the profound disconnect in understanding how to meaningfully engage and interact with a community-in-crisis. The authority's efforts to protect public safety were ignorant at times of what the people's real needs were and for a period of time outside authorities became yet another stressful reality to overcome.

Meanwhile, what the authorities perceived to be scofflaws and troublemakers were largely capable, independent people doing their best to selflessly help their community. As my experience bore out—local engagement was necessary and important in guiding the outside authorities in a more cohesive understanding of what was needed to be or real assistance the community.

However, all this was soon to change, as in the wake of the fire profoundly different forces took hold, the implications of which will be the focus on the next installment of this article. ■

Charles Curtin has over two decades of experience designing or managing place-based conservation projects. He is the author of Science of Open Spaces (2015) and Complex Ecology (2018). His forthcoming book is Prosilience: Channeling the Capacity for Positive Change. Curtin lives in the Mora Valley of New Mexico, where he works on collective solutions to large-scale challenges such as forest and watershed health, wildfire and climate change.

PUBLIC LANDS LEASE WILL TRIPLE NM'S RENEWABLE ENERGY CAPACITY

The New Mexico State Land Office recently completed an auction of about 147,685 acres of public land for wind energy production. The leases, which went to Pattern Energy, will increase renewable energy (RE) capacity on state land to more than 1,200 megawatts (MW), compared with about 400 MW in 2019. Public Lands Commissioner Stephanie García Richard said that it was the largest RE lease sale in the state's history. The project is expected to be three times larger than the state's current largest wind farm, making it the largest in the Western hemisphere.

The lands leased were part of the larger SunZia Wind Project, which will ultimately have a capacity of 3,000 MW in Lincoln, Torrance and San Miguel counties. The project will generate enough electricity to power 2.9 million homes. That will be augmented by the 1,050 MW Western Spirit Wind project, which was completed in December 2021.

Wind power is currently ranked second, after coal, in New Mexico's total electricity generation. Wind alone generated about 30 percent of the state's electricity in 2021, when renewables for the first time accounted for the largest share of in-state electricity generation. Most of the wind projects are in eastern New Mexico. The 11 leases sold were mostly in central New Mexico: five in Lincoln County, four in Torrance County, and two spanning Torrance and San Miguel counties. The winning bids totaled about \$9.3 million. The State Land Office expects them to produce \$196 million in revenue during their lifetime of operation (through 2077). The revenue will go to the Land Office and its beneficiaries—mostly public schools, universities and hospitals.

Pattern's new leases brought New Mexico's total wind farm lease count to 26. The state also has 12 solar power leases, and the Land Office reported it has 56 applications being processed. Pattern Energy has already built nearly 1,600 MW of wind projects in New Mexico and has committed to \$6 billion in wind energy and related infrastructure projects in the state over the next decade.

RANCHO VIEJO SOLAR PROJECT PROPOSED

Virginia-based global power company AES Clean Energy is hoping to design, construct and maintain the Rancho Viejo Solar project in Santa Fe County. The 98-megawatt facility with 48 MW lithium-ion battery storage (enough to power 23,342 homes annually) “will incorporate the most advanced solar technologies and is designed to minimize impact on the local environment,” according to the project’s website (www.aes.com/rancho-viejo-solar).

The single-axis tracker photovoltaic (PV) system would be located on 800 acres of privately owned land off of south Highway 14. Power generated by the system would feed into PNM’s grid. The project has a 20-year projected lifespan, and AES’s plan includes decommissioning and returning the project area to its existing or comparable condition. Construction would begin in 2023. The company projects \$7 million in tax revenue for Santa Fe County over the life of the project.

The project will require a Conditional Use Permit. Santa Fe area residents allege that AES has had 35 “environment-related offenses” since the year 2000, as well as employment, competition and safety-related offenses. The residents’ concerns include risks of battery fires and a possible “heat island” effect generated by the PV system that could impact wildlife habitat, ecosystem function in wildlands and human health in residential areas. The residents have also expressed concern about the potential for environmental contamination if the solar panels are damaged or improperly disposed of upon decommissioning. And they wonder how much water the project will require. Rancho San Marcos District residents rely on wells. On August 3, the company held a public meeting to present the project and answer questions.

SANTA FE COUNTY ADOPTS COMMUNITY SOLAR ORDINANCE

On July 12, Santa Fe County Board of County Commissioners (BCC) passed an ordinance to better allow for community solar projects in the county. These projects offer opportunities for renters and households without their own solar panels to go green. The ordinance follows the passage of the Community Solar Act by the New Mexico Legislature in 2021 and adoption of the Community Solar Rule by the Public Regulation Commission (PRC) in March.

The Community Solar Act created a program through which electric utility customers may subscribe to a community solar facility to offset their energy consumption and reduce their energy costs. Subscribers receive a bill credit proportional to their share of the facility’s energy output. The facilities can be up to five megawatts, large enough to support about 1,250 homes. They are required to have at least 10 subscribers and reserve 30 percent of the electricity produced for low-income customers and service organizations.

The PRC is to engage a third-party administrator to manage a competitive process to select community solar projects. The new county ordinance amends the Sustainable Land Development Code to facilitate the projects’ development. The ordinance includes design standards, including a requirement to reseed disturbed areas with native plants to provide habitat for pollinators.

In Santa Fe County, residential energy use accounts for 25 percent of greenhouse gas emissions countywide. The county’s Growth Management Department reported 271 residential solar permits were issued in 2021.

\$146 MILLION AWARDED TO EXPAND HIGH-SPEED INTERNET ACCESS ON TRIBAL LAND IN NEW MEXICO

The Department of Commerce’s National Telecommunications and Information Administration (NTIA) announced over \$146 million in funds to tribal entities in New Mexico on Aug. 11 during a press call with Vice President Kamala Harris. The awards will provide five tribal entities with funds for high-speed internet projects.

Commerce Secretary Gina Raimondo said, “These grants are just the beginning. The Bipartisan Infrastructure law has given us resources to provide transformative infrastructure to Native communities, bringing new economic and educational opportunities while enabling tribes to preserve their cultural identity and traditions.”

The Tribal Broadband Connectivity Program is part of the administration’s Internet for All initiative, which made \$980 million available from the Consolidated Appropriations Act, 2021. Assistant Secretary of Commerce for Communications and Information Alan Davidson recently added an additional \$1 billion from the Bipartisan Infrastructure Law to the current Notice of Funding Opportunity. A funding opportunity for the remaining \$1 billion from the Bipartisan Infrastructure Law will be announced in the fall. For more information, visit InternetforAll.gov.

BOOK PROFILE

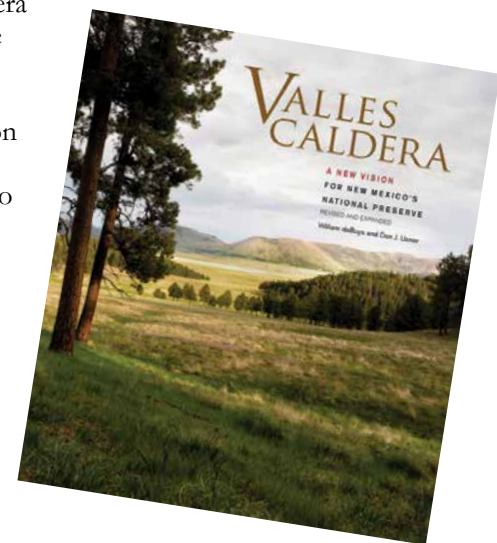
VALLES CALDERA

A NEW VISION FOR NEW MEXICO’S NATIONAL PRESERVE

BY WILLIAM DEBUYS AND DON J. USNER
REVISED AND EXPANDED EDITION, HARDBOUND
WILLIAM DEBUYS AND DON J. USNER
MUSEUM OF NEW MEXICO PRESS, NOV. 2022
WWW.UNMPRESS.ORG

About 1.25 million years ago, a spectacular volcanic eruption created the 13-mile wide circular depression now known as the Valles Caldera, located in northern New Mexico. This revised and expanded edition marks the 20th anniversary of the Valles Caldera Preservation Act, a visionary piece of legislation that transferred to the public domain a privately owned ranch (signed in 2000 by President Bill Clinton). The preserve was assigned to a board of citizens appointed by the president to manage it as a self-sustaining preserve. The experiment in semi-private land management ended in 2014 as the Valles Caldera was legislatively reassigned to the National Park Service.

This revised and expanded edition of Valles Caldera, originally published in 2006, brings us up to date on policy and management changes to the preserve in a new essay by conservationist writer and former trustee chair William deBuys. Don J. Usner contributes a new essay and new photography documenting environmental changes to the landscape over the past 14 years—notably the impact of the 2011 Los Conchas Fire.



WHAT'S GOING ON

ALBUQUERQUE

SEPT. 12-14

50TH ANNUAL NAIWA CONFERENCE INDIAN PUEBLO CULTURAL CENTER

North American Indian Women's Association. "Empowering & Strengthening the Spirit of Native American Women Past, Present and Future." WWW.NAIWAM.ORG

SEPT. 24, 3-8 PM

CHILE HARVEST FIESTA 2022

SWOP Courtyards, 2211 10th St. SW

Fundraising event to support SW Organizing Project internship programs. Raffle, stew tasting contest, music, games. Admission: Free/VIP: \$25. SWOP.OURPOWERBASE.NET/CIVICRM/EVENT/REGISTER

SEPT. 26-27

NM GOVERNOR'S STATEWIDE CONFERENCE ON ECONOMIC DEVELOPMENT

The Clyde Hotel

Legislators, local elected officials, keynote speakers and experts from across NM will discuss strategies aligned with the state's 20-year Economic Development Strategic Plan. Tickets: \$85/\$75. [HTTPS://WWW.NMCONFERENCE.ORG](https://WWW.NMCONFERENCE.ORG)

THROUGH OCT. 10

"TESTAMENT OF EMPOWERMENT"

Indian Pueblo Cultural Center, 2401 12th St. NW

Fine art grounded in Indigenous superheroes by Diné artist Shaun Begaye. Museum admission: \$12 with discounts available. 505-843-7270, INDIANPUEBLO.ORG

THROUGH OCT. 14, FRI, 4:30-7:30 PM

LA FAMILIA GROWERS' MARKET SOUTH VALLEY

Dolores Huerta Gateway Park, 100 Isleta Blvd. SW

Live music, children's activities, food trucks, farmers, arts & crafts vendors. Through Oct. 14. 505-217-2497, SOUTHVALLEYMAINSTREET@GMAIL.COM

OCT. 27-29

NATIONAL LATINO FARMERS & RANCHERS CONGRESS

Isleta Resort & Casino, 1100 Broadway Blvd. SE

"Our Land Stewardship Legacy." Agricultural stakeholders share best practices, Farm Bill resolutions and climate-smart updates to promote more sustainable food and agricultural systems. Info: 505-307-4429, INFO@NLFRTA.ORG, [HTTPS://WWW.NLFRTA.ORG/CONGRESS.PHP](https://WWW.NLFRTA.ORG/CONGRESS.PHP)

THROUGH DECEMBER

FRONTERA DEL FUTURO

NHCC, 1701 Fourth St. SW

"Art in NM and Beyond" A transformative look at pop culture, religion, tradition and identity. Intersections of art, science, technologies, cosmic musings, future-oriented visions. \$6/\$5/18 & under free. NHCC.ORG

THROUGH JAN. 29, 2023

WIT, HUMOR AND SATIRE

Albuquerque Museum, 2000 Mountain Rd. NW

More than 50 artists. Photography, prints, painting, ceramics and sculpture from the permanent collection. ALBUQUERQUEMUSEUM.ORG

SUNDAYS, 10 AM-2 PM

RAIL YARDS MARKET

777 1st St. SW

In person and online shopping, curbside and delivery available. Through Oct. 505-600-1109, [HTTP://WWW.RAILYARDSMARKET.ORG](http://WWW.RAILYARDSMARKET.ORG)

TUESDAY-SUNDAY, 9 AM-4 PM

INDIAN PUEBLO CULTURAL CENTER

2401 12th St. NW

"Gateway to the 19 Pueblos of N.M." Museum galleries, exhibits, restaurant. Tickets \$10/\$8/\$7. 505-843-7270, WWW.INDIANPUEBLO.ORG

SANTA FE

SEPT. 4, 12:30 PM

THE ROLE OF THE U.S. MILITARY IN THE CLIMATE CRISIS

Unitarian Church, 107 W. Barcelona

Slideshow by Jim Janko presented by Veterans for Peace and Unitarian Universalists of Santa Fe. JDARLING@SANDWICH.NET

BEGINNING SEPT. 6

RENASAN FALL CLASSES/TOURS/TRIPS

St. John's Methodist Church/Online

Archaeology, History, Art, Literature, Cultural Studies, Music, Current Events, Psychology, Science, Film. RENASAN.ORG

SEPT. 8, 7 PM

NEXT GENERATION NATIVE FILM & PHOTOGRAPHY FESTIVAL

Lensic Performing Arts Center

Film screenings, slideshow, Q&A panel. FUTUREVOICESNM@GMAIL.COM

SEPT. 10, 5 PM

STAND UP FOR NATURE

El Rancho de las Golondrinas, La Ciénega

SF Conservation Trust fundraiser. Exodus Ensemble theater premiere, dinner buffet, music by Lara Manzanara and J. Michael Combs. \$175. 505-989-7019, [HTTPS://SFCT.EJOINME.ORG/](https://SFCT.EJOINME.ORG/)

SEPT. 15-17

CLOUDTOP COMEDY FESTIVAL

Santa Fe Raiyard venues

9/16, 7 pm, Farmers' Market: Indigenous Comedy Showcase presented by the IAIA. \$25. WWW.CLOUDTOPCOMEDY.COM

SEPT 16, 7-9 PM

4TH ANNUAL WILD & SCENIC FILM FESTIVAL ON TOUR

Randall Davey Audubon Center, Upper Canyon Rd.

Films will include inspiring examples of environmental advocacy and restoration, and promise to give practical steps anyone can take for the environment. Hybrid event; updates and ticket information will be at: SANTAFEWATERSHED.ORG/WILD-SCENIC-FILM-FESTIVAL-2022.

SEPT. 17, 12-4 PM

2022 INDIGENOUS COMMUNITY DAY

Ragle Park, 2530 W. Zia Rd.

Free event featuring music, art, games, nonprofit booths, food, face painting, traditional and contemporary dancers, giveaways and more. Presented by the SF Indigenous Center. 505-660-4210, SFINDIANCENTER@GMAIL.ORG

SEPT. 21

SFCC OPEN HOUSE, 11 AM-3 PM, 6401 RICHARDS AVE.

IAIA Open House, 1-5 pm, 83 Avan Nu Po Rd.

[HTTPS://WWW.EVENTBRITE.COM/E/IAIA-AND-SFCC-PARTNER-ON-OPEN-HOUSE-TICKETS-403605313357](https://WWW.EVENTBRITE.COM/E/IAIA-AND-SFCC-PARTNER-ON-OPEN-HOUSE-TICKETS-403605313357)

SF Community College and Institute of American Indian Arts. Demos, art exhibits, campus tours. Bronze pour and raku firing at both sites. Meet students, staff and faculty. SFCC greenhouse, algae biofuels lab. IAIA film and tintype photo booth and much more.

SEPT. 23-25

EARTH USA 2022

Scottish Rite Center

11th international conference on earthen architecture and construction. Focused on all methods that use clay as a binder. Podium presentations, poster sessions, speaker meet & greet, tours to local earth-building sites. [HTTPS://WWW.EARTHUSA.ORG](https://WWW.EARTHUSA.ORG)

OCT. 1-2

50TH ANNUAL HARVEST FESTIVAL

El Rancho de las Golondrinas, La Ciénega/Online

Pumpkin patch, arts & crafts for sale, food trucks, hands-on activities and entertainment. 505-471-2261, GOLONDRINAS.ORG

OCT. 1-2, 9 AM-5 PM

MOUNTAIN AND VALLEY WOOL FESTIVAL

SF County Fairgrounds, 3229 Rodeo Rd.

Juried artists, crafters, vendors. Live sheep, alpacas, goats, angora rabbits. Demonstrations, silent auction, kids' activities, workshops, music, food vendors. Free.

THROUGH OCT. 2

ABEYTA/TO'HAJILEE KÉ

Wheelwright Museum, 704 Cam. Lejo

Paintings, sculpture and jewelry by Narciso Abeyta (1918-1998), Elizabeth Abeyta (1915-2006), Pablita Abeyta (1953-2007) and Tony Abeyta. 505-982-4636

OCT. 11
INDIGENOUS PEOPLES DAY

OCT. 13, 5:30–8:30 PM
SEED THE FUTURE CELEBRATION

SF Farmers' Market Pavilion

Presentation of the 2022 Farmer & Community All Star Awards. Menu in partnership with YouthWorks. Tickets \$100 public/\$50 farming community: WWW.FARMERSMARKETINSTITUTE.ORG

OCT. 19–24
SF INTERNATIONAL FILM FESTIVAL

Oct. 22, 6:30 pm at the Lensic: Godfrey Reggio (Koyaanisqatsi) to receive SFIFF Lifetime Achievement Award followed by the world premiere of his latest film: Once Within a Time, with music by Philip Glass. Festival passes on sale. Individual tickets available late Sept. SANTAFE.FILM

NOV. 2–5
LA COSECHA DUAL LANGUAGE CONFERENCE

SF Convention Center and nearby hotels

Our cultures, our languages— Nuestra identidad comunitaria e igualdad educativa. Conference for teachers by teachers. [HTTPS://LINKD.IN/GAB9WIBK](https://LINKD.IN/GAB9WIBK), WWW.LACOSECHACONFERENCE.ORG

THROUGH JAN. 15, 2023, 10 AM–5 PM
#MASK: CREATIVE RESPONSES TO THE GLOBAL PANDEMIC

Museum of International Folk Art, 706 Museum Hill

\$7/\$12 505-476-1200, INTERNATIONALFOLKART.ORG

MON.–SAT., 8 AM–4 PM
RANDALL DAVEY AUDUBON CENTER & SANCTUARY

1800 Upper Canyon Rd.

Free walks to see birds, Sat., 8:30 am. RSVP for Randall Davey House tours. RANDALLDAVEY.AUDUBON.ORG

TUES., 3–6 PM, THROUGH SEPT.
DEL SUR FARMERS' MARKET

Presbyterian Medical Center Parking Lot, Beckner Rd.

Fresh local produce, meat, eggs, bread and more.

TUES.–SAT. AND FIRST FRI. EACH MONTH, 10 AM–5 PM
“CURATIVE POWERS: NM’S HOT SPRINGS”

NM History Museum, 113 Lincoln Ave.

\$7 NM residents; \$12 non-residents. Free to NM residents first Sun. each month; Free to NM seniors 60+ Weds. Children 16 & under free. Through Sept. 4. 505-476-5200, NMHISTORYMUSEUM.ORG

TUES., SAT., 8 AM–1 PM
SANTA FE FARMERS' MARKET

1607 Paseo de Peralta

505-983-4098, SANTAFEFARMERSMARKET.COM

WEDS.–SAT., 10 AM–6 PM; FRI.–SAT., 10 AM–6:30 PM
SANTA FE CHILDREN'S MUSEUM

Interactive exhibits, play areas, weekly programs. Masks required for ages 2 and older. \$10/\$8/\$7/\$3/1 & under free. 505-989-8359, SANTAFECHILDRENSMUSEUM.ORG

ONGOING

“HERE, NOW AND ALWAYS”

Museum of Indian Arts and Culture, 710 Camino Lejo

Admission \$12 with discounts available. INDIANARTSANDCULTURE.ORG

DOWN PAYMENT ASSISTANCE FOR EDUCATORS

Local nonprofit Homewise, in partnership with SFPS, is offering up to \$40,000 to eligible district educators looking to buy homes in the city. 505-983-9473, [HTTPS://HOMEWISE.ORG](https://HOMEWISE.ORG)

MUSEUM OF INDIAN ARTS AND CULTURE

710 Camino Lejo

“Here, Now and Always.” A new, reimagined exhibit. 505-476-1269

SF HABITAT FOR HUMANITY

Seeking land, donated or for sale, to build affordable housing. Low-income homeowners help build homes and make mortgage payments to the nonprofit HFH. Property owners can qualify for 50% Affordable Housing tax credit through the NM Mortgage Finance Authority. 505-986-5880, ext. 109

STATE MUSEUMS

Museum of International Folk Art (10 am–4 pm), Museum of Indian Arts and Culture

(10 am–4 pm), N.M. History Museum (10 am–4:30 pm), N.M. Museum of Art (Tues.–Sun., 10 am–4 pm). NEWMEXICOCULTURE.ORG/VISIT

YOUTHBUILD / YOUTHWORKS!

Paid training for Youth 16–24. Construction, Culinary, GED. 505-989-1855, WWW.SANTAFEYOUTHWORKS.ORG/SANTA-FE-YOUTHBUILD/

TAOS

SEPT. 3–5, 10 AM–5 PM
TAOS OPEN STUDIO TOUR

33 artists representing a variety of media. Preview show Sept. 1–6 until 5 pm at Taos Valley Lodge. Tour maps with artist info can be found in shops around town, or visit: TAOSARTISTORG.ORG

SEPT. 8–10
MICHAEL HEARNE'S BIG BARN DANCE

Kit Carson Park

Bill Hearne Trio, Eliza Gilkyson, Gary P. Nunn, Michael Hearne & South by Southwest, Quebe Sisters. \$65 daily/\$25 dance only/\$190 three-day pass. MICHAELHEARNE.COM

SEPT. 24, 12–4 PM
EV EXPO

Taos Public Library

In conjunction with Drive Electric Week. Talks, demos. Free. Sponsored by Renewable Taos and Kit Carson Electric Cooperative. TAOSEVEXPO.ORG

OCT. 5–7
OUTDOOR ECONOMICS CONFERENCE

Sagebrush Inn & Suites

Economic development strategies and opportunities connected to protected public lands. Focus on governmental policies and local entrepreneurship. Panels, tours, film screenings, expo. \$125. [HTTPS://WWW.OUTDOORECONOMICS.COM](https://WWW.OUTDOORECONOMICS.COM)

OCT. 15–MAY 7, 2023
OUTRIDERS: LEGACY OF THE BLACK COWBOY

The Harwood Museum, 238 Ledoux St.

Images of drovers, fiddlers, cowpunchers, cattle rustlers, cooks, singers, bulldoggers and bronc busters with African heritage in the American South.

[HTTPS://HARWOODMUSEUM.ORG](https://HARWOODMUSEUM.ORG)

CON ALMA HEALTH FOUNDATION KITCHEN PROJECT

A project to bring back producers and bring in new producers who lost income during the pandemic. The project helps individuals evaluate product ideas, market-test products, write a business plan. [HTTPS://TAOSECONOMIC.WPENGINE.COM/TAOSKITCHEN@TCEDC.ORG/](https://TAOSECONOMIC.WPENGINE.COM/TAOSKITCHEN@TCEDC.ORG/)

UNM-TAOS PROGRAMS

Intro to Agriculture Economics and Business: For aspiring agricultural and food entrepreneurs, advocates and eaters. (Mondays, 3–5:30 pm, Aug.–Dec.); Sustainable Food and Farming II: Learn about regenerative, permacultural and other sustainable approaches to growing and animal husbandry for the home grower and aspiring producer, focusing on late season. (Tues. and Thurs., 3–5:30 pm, Aug.–Oct.) 575-737-6215, UNMTOAADMINISTRATIONS@UNM.EDU

HERE & THERE

SEPT. 3, 4–10 PM
DÍA DE LAS ACEQUIAS DEL NORTE

Moly Corp Field, Questa, NM

Northern NM concert includes Darren Cordova y Color. Proceeds benefit local acequia associations. Food & drink vendors. Tickets: Pro-Musician Supply (Taos), HOLDMYTICKET.COM

SEPT. 6, 5:30–6:30 PM
SOIL STORIES

Online

Interactive conversation with authors Anne Bikle and David Montgomery on soil health. Hosted by the NM Healthy Soil Working Group. Free. [HTTPS://WWW.NMHEALTHYSOIL.ORG/PORTFOLIO/SOIL-STORIES-WITH-AUTHORS-ANNE-BIKLE-AND-DAVID-MONTGOMERY/](https://WWW.NMHEALTHYSOIL.ORG/PORTFOLIO/SOIL-STORIES-WITH-AUTHORS-ANNE-BIKLE-AND-DAVID-MONTGOMERY/)

SEPT. 10 (EVERY OTHER SAT. THROUGH NOV. 19)
POST-FIRE LAND RESTORATION WORKSHOPS

9 / 10: Meet at Rociada Fire Station, 278 State Rte. 105

Querencia in Action. NM Forest and Watershed Restoration Institute and Luna Community College help landowners with tips and techniques for reducing erosion and restoring forests in burned areas. Free. 505-454-5308, LUNA.EDU, [HTTPS://NMFWR.ORG](https://NMFWR.ORG)

THIRD ANNUAL NATIONAL LATINO FARMERS & RANCHERS CONGRESS



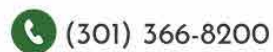
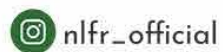
"This is Our Land: Our Land Stewardship Legacy".



27-29 **OCTOBER**
2022

ISLETA RESORT & CASINO NEW MEXICO

1100 Broadway Blvd SE
Albuquerque, NM 87105



www.NLFRTA.org

USDA National Institute of Food and Agriculture
U.S. DEPARTMENT OF AGRICULTURE

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