### GREEN FIRE TIMES

News & Views from the Sustainable Southwest

























TENDING HABITAT, SEEDS AND COMMUNITY

PUBLISHER GREEN EARTH PUBLISHING, LLC

EDITOR-IN-CHIEF SETH ROFFMAN, EDITOR@GREENFIRETIMES.COM

**ASSOCIATE EDITOR JAIME CHÁVEZ** 

A COLLABORATION WITH THE NEW MEXICO FOOD & AGRICULTURE POLICY COUNCIL AND FARM TO TABLE NEW MEXICO

ADMIN. ASST. / EXEC. CONSULTANT THÉRÈSE WILLIAMS

**DESIGN** WITCREATIVE

**COPY EDITOR** STEPHEN KLINGER

CONTRIBUTING WRITERS EMIGDIO BALLÓN, TRACY L. BARNETT, JAIME CHÁVEZ, LORENZO DOMÍNGUEZ, LAWRENCE GALLEGOS, MICHAEL KOTUTWA JOHNSON, MIKE LAVENDER, TRAVIS MCKENZIE, BONNIE MURPHY, SAYRAH NAMASTE, DEVON PEÑA, LINNETTE RAMIREZ, MIGUEL SANTISTÉVAN, JESSICA SWAN, SETH ROFFMAN, PAM ROY, EVA STRICKLER, KAYLEIGH WARREN, LEAH POTTER WEIGHT, SARAH WENTZEL-FISHER, JEFF M. WITTE

CONTRIBUTING PHOTOGRAPHERS TRACY L. BARNETT, TRESTON CHEE, LORENZO DOMÍNGUEZ, MICHAEL KOTUTWA JOHNSON, RION MOON, STEPHEN PICHA, SETH ROFFMAN, JAM ROSE, MIGUEL SANTISTÉVAN, ARNOLD TRUJILLO, KAYLEIGH WARREN

ADVERTISING SALES ADVERTISE@GREENFIRETIMES.COM

PRINTED LOCALLY WITH 100% SOY INK ON 100% RECYCLED, CHLORINE-FREE PAPER

GREEN FIRE TIMES ©2023 GREEN EARTH PUBLISHING, LLC C/O SOUTHWEST LEARNING CENTERS, INC.
A NON-PROFIT EDUCATIONAL ORGANIZATION (EST.1973)
505-989-8898, P.O. BOX 8627, SANTA FE, NM 87504-8627
GREENFIRETIMES.COM

**COVER:** WEAVINGS AT 2023 SPANISH MARKET, SANTA FE; CULTIVATING BEANS, ARROYO HONDO, N.M.; N.M. FARMERS AT CLIMATE RESILIENCE RALLY; N.M. CHILE; TRADITIONAL CROPS; AGRI-CULTURA'S HELGA GARZA AT D.C. RALLY; SF FARMERS' MARKET; *ENJARRANDO EL HORNO* (OVEN-BUILDING), SAN LUÍS, CO.; RÍO EMBUDO ACEQUIA; RUDY ARREDONDO SPEAKS AT LFRI CONGRESO; POLK MIDDLE SCHOOL (ABQ) STUDENTS; FIELD BLESSING, SOSTENGA FARM, NNMC, ESPAÑOLA, N.M.

#### **GREEN FIRE TIMES REALLY NEEDS YOUR SUPPORT**

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 14 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.



Learn cooking, American Regional Cuisine, and how to start a business like our exiting new Cultura Café. INSTRUCTOR: Mr. Simon Vaz COURSE: ENTR IIIO Introduction to Entrepreneurship CRN 14953 Class starts Sept 6, 2023! Mon/Wed IOam to 2pm Call (505) 747-2185 TODAY We'll help you get registered!

NORTHERN New Mexico College | 921 Paseo de Oñate, Española, NM 87532 | www.nnmc.edu

### **GROWING A REGIONAL** FOOD SYSTEM

**GREEN FIRE** TIMES

News & Views from the Sustainable Southwest

Tending Habitat, Seeds and Community

### **CONTENTS**

THE 2023 FARM BILL: BUILDING A RESILIENT FOOD SYSTEM - PAM ROY AND MIKE LAVENDER / 4

THE 2023 FARM BILL: NEW MEXICANS SHOULD ENSURE THEIR VOICES ARE HEARD - JEFF M. WITTE / 5

BUILDING A FAIR AND EQUITABLE FARM BILL / THE AGROFORESTRY MARKER BILL LINK - JAIME CHÁVEZ / 5

**REGIONAL FARM TO FOOD BANK - BONNIE MURPHY / 7** 

CHIMAYÓ SAN YSIDRO / 2023 SPANISH MARKET SANTA FE / 9

LESSONS FROM SOL FELÍZ: 20+ YEARS OF LEARNING FROM THE LAND - MIGUEL SANTISTÉVAN / 10

LATINO FARMERS & RANCHERS INTERNATIONAL - JAIME CHÁVEZ / 12

LFRI IS EAGER TO WORK WITH YOU - RUDY ARREDONDO / 14

THE AGRI-CULTURA NETWORK AND LA COSECHA CSA / 15

LOCAL, SLOW AND DEEP FOODS FOR THE SAN LUÍS FOOD SOVEREIGNTY INITIATIVE - DEVON PEÑA AND LINNETTE RAMIREZ / 17

**DUELING WITH DROUGHT: HOW REGENERATIVE AG, DRYLAND FARMING** 

AND WATER CONSERVATION CAN HELP SAVE FARMING IN THE SOUTHWEST - LORENZO DOMÍNGUEZ / 17

**HOPI DRYLAND FARMING - MICHAEL KOTUTWA JOHNSON / 22** 

TREES, GARDENS AND PEOPLE: EMBEDDING AGROFORESTRY IN THE WEB OF LIFE - LEAH POTTER WEIGHT / 23

2023 REGENERATE CONFERENCE, NOV. 1-3 IN SANTA FE - SARAH WENTZEL-FISHER / 25

**FOOD FORESTS: A GROWING MOVEMENT / 25** 

STEWARDING WORKING LANDS / MAKING BIOCHAR / EVA STRICKLER, PH.D. / 26

BOOK PROFILE: BIOCHAR IN THE SOUTHWEST BY CJ AMES AND EVA STRICKLER, PH.D. / 27

OAXACA MURAL DOCUMENTS STRUGGLE TO DEFEND NATIVE CORN - TRACY L. BARNETT / 28

OP-ED: EMIGDIO BALLÓN - FIGHTING FOR SEED FREEDOM: PROTECTING THE SACRED GIFT / 31

TENDING HABITAT, SEEDS AND COMMUNITY AT THE ESPAÑOLA HEALING FOODS OASIS - KAYLEIGH WARREN / 32

OP-ED: TRAVIS MCKENZIE – GROWING THE FUTURE: SCHOOL GARDENS IN THE SOUTH VALLEY, AGRICULTURAL EDUCATION AND CULTIVATING THE NEXT GENERATION OF EARTH STEWARDS / 34

OP-ED: SAYRAH NAMASTE: CONNECTING FARMERS AND PRESCHOOLERS IN NEW MEXICO / 36

FOOD & WATER WATCH REPORT: "CORPORATE AGRICULTURE DRIVES NEW MEXICO'S WATER CRISIS" / 37

OP-ED: LAWRENCE GALLEGOS: REVISITING CONSERVATION PRACTICES FOR CLIMATE CHANGE MITIGATION / 38

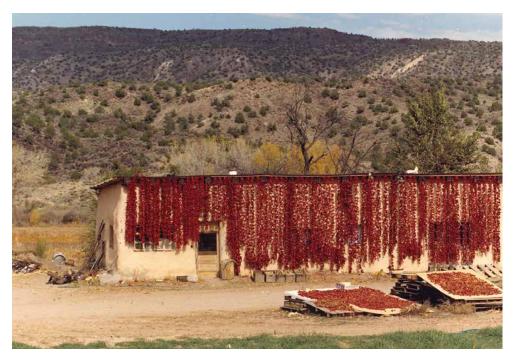
WILDLIFE-LIVESTOCK CONFLICT RESOLUTION - JAIME CHÁVEZ / 39

ECOSYSTEM MANAGEMENT USING LIVESTOCK / BOOK PROFILE: THE GRAZING REVOLUTION BY ALLAN SAVORY / 40

**NEWSBITES** / 6, 8, 16, 21, 27, 30, 42, 43

BOOK PROFILE: THE REGENERATIVE LANDSCAPER BY ERIK OHLSEN  $/\ 44$ 

WHAT'S GOING ON / 44



Red chile ristras drying in northern New Mexico © Seth Roffman

### The 2023 Farm Bill

### Building a Resilient Food System

#### BY PAM ROY AND MIKE LAVENDER

#### What is the Farm Bill?

The Farm Bill is a large piece of legislation that defines the majority of federal farm, food, nutrition and rural economic programs. It is the "Rules of the Road" for our nation's food and farm system and influences what is grown, who grows it, how it is grown or produced, what is done with those products and where they are sold, who can access and afford those goods, and how we invest in rural and urban communities. The projected cost of the Agriculture Improvement Act of 2018 (2018 Farm Bill) is \$867.2 billion over 10 years. It is the nation's largest food safety net for those who are food insecure. More than three-quarters, \$663.8 billion, supports 15 nutrition programs including the Supplemental Nutrition Assistance Program (SNAP). A new Farm Bill is passed every five years—if all goes well!

#### What's at Stake?

Since the last Farm Bill was signed into law in 2018, we have experienced the most unprecedented and catastrophic issues of our time—from the COVID-19 pandemic, an increasingly disruptive and changing climate, to a long-overdue racial justice reckoning—and each has completely exposed the fragility of our food system.

These events are affecting the daily lives and livelihoods of farmers, ranchers and communities—both urban and rural—across the country. The loss and degradation of soil health, freshwater resources and biodiversity—along with extreme weather events like droughts and floods—increasingly threaten our food supply. The fragility of our supply chains and workforces, made even more vulnerable during the pandemic and further tested by ongoing global conflicts, serve as a stark reminder of how quickly food access can be jeopardized. Moreover, the national conversation about racial justice has laid bare how agriculture—particularly the pursuit of sustainable agriculture—is rife with obstacles for Black people, Indigenous people and other people of color (BIPOC), including immigrants, migrants and refugees.

Amidst all this, other trends within our food system have continued virtually unabated. Throughout the past century, farms in the United States have grown in size and dwindled in number, while the average age of the U.S. farmer—now 57.5 according to the most recent Census of Agriculture—has continued to rise. Consequently, just as most people who manage U.S. agriculture are on the brink of retirement, the decades-long trend of farmland consolidation that is silently endorsed by federal policy has created tremendous barriers for new and beginning farmers.

### Strengthen local food system initiatives, nutrition programs and farming in New Mexico.

These barriers include the limited availability of affordable and desirable farmland, challenges in acquiring startup capital and financing, and inadequate access to hands-on training and risk management tools—at a time when we need them most.



### Setting the stage for a re-envisioned food system that addresses the challenges of our times

Since the 2018 Farm Bill became law, Congress has passed, and the president signed, additional legislation that has invested billions of dollars in beginning to address many of the obstacles laid out above. For example, the AMERICAN RESCUE PLAN ACT (PL 117-2) and the INFLATION REDUCTION ACT (PL 117-169), among others, have sought to stave off some of the most urgent impacts of the pandemic while simultaneously setting the stage for a re-envisioned food system that addresses the challenges of our times.

The challenges facing our food system, and the initial steps taken in recent years to address them, light a path for the 2023 Farm Bill. At this critical moment in our nation's history, we must collectively work to address the challenges that have plagued our nation's conscience, health, environment and communities for too long.

Over the past year, local and national organizations have come together (united) to define the most important changes that can take place to dramatically shift the food system to be accessible and inclusive for all. The 2023 Farm Bill should leverage the power of our nation's food and agricultural system to seek solutions which ensure that America is resilient and healthy for generations to come.

### New Mexico—A Leading Example of What Can Work and What We Need

New Mexico is an excellent example of how farmers, ranchers, food hubs, food service, organizations, businesses, agencies and policymakers have come together at the state and federal levels to define and advocate for a food system that focuses on strengthening our local food system and food security first—prioritizing food production for local markets, institutions like schools and senior centers, and those who are most vulnerable, while making sure our farmers, ranchers and food businesses get a fair price to support their businesses. Organizations, agencies and policymakers have put into practice a robust and growing food system through coordination, state, private and federal investments.

Through the highly coordinated Food Initiative led by the Office of Gov. Michelle Lujan Grisham and implemented by agencies, partner organizations, food hubs and policymakers, more than \$82 million has been invested in our food system: from farming, food assistance and nutrition programs, to infrastructure, distribution and coordination (fiscal years 2023 and 2024).

Programs like the SNAP Double Up Food Bucks offered at farmers' markets, roadside stands, CSAs and participating grocery stores are a great example of how New Mexico organizations and agencies are working together to leverage state and federal Farm Bill dollars to invest in the health and wellbeing of New Mexicans. These programs and partnerships have created opportunities for those who are most food insecure to buy locally grown and raised foods while adding to the farmers' and ranchers' business bottom lines. Run by the New Mexico Farmers Marketing Association, the SNAP Double UP Food Bucks program, the Fresh Rx Program, and WIC and Senior Farmers' Market nutrition programs, in partnership with state agencies, reported more than \$2.3 million in sales in 2022, expanding access to New Mexico's bounty for those in need while adding to the farming economy.

### THE 2023 FARM BILL: NEW MEXICANS SHOULD ENSURE THEIR VOICES ARE HEARD

#### BY JEFF M. WITTE, NEW MEXICO AGRICULTURE SECRETARY

Think about what New Mexico might look like without food production. What if we didn't have New Mexico chile, open space or healthy crops? Food nutrition is a crucial part of our everyday life. As you drive around your local community, take a minute to notice how the food and agriculture sector is everywhere.

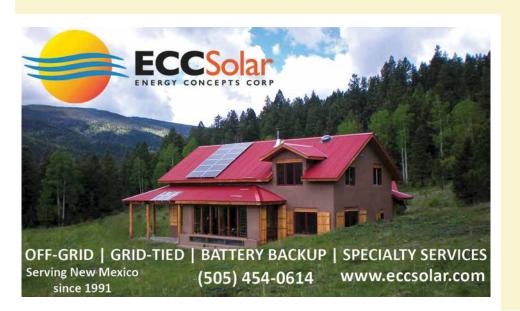
All New Mexico agriculture and the consumers who enjoy our state's products are impacted by the 2023 Farm Bill being discussed by Congress, which is renewed every five years. The renewal provides an opportunity for producers and consumers to make decisions about commodities to grow, conservation practices to invest in and requirements to establish the nutrition programs that are important to so many people, such as the Supplemental Nutrition Assistance Program (SNAP), through which 510,595,215 meals were provided to low-income New Mexicans over 12 months, as of June 15, 2023, according to the New Mexico Human Services Department.

The Farm Bill encompasses many programs and initiatives, including the Emergency Food Assistance Program. The bill also supports the Federal Crop Insurance Program, which offers subsidized policies that help farmers by protecting against losses in yield, crop revenue or whole farm revenue.

The current Farm Bill—the 2018 bill—is valued at approximately \$428 billion. What does this mean for New Mexico? According to the USDA, Farm Bill funding directly affected 621,000 New Mexico acres enrolled in the Conservation Reserve Program in fiscal year 2022. In FY 2020, New Mexico had just over one million acres enrolled in the Environmental Quality Incentives Program and led the nation with 933,753 acres enrolled in the Conservation Stewardship Program. Also in FY 2020, 435,659 people in 217,639 households received SNAP benefits in New Mexico. An average of \$51 million in SNAP benefits were issued each month, supporting farmers, processors, distributors and retailers.



The Farm Bill is important to everyone, so get involved in the discussion. We don't want to imagine what New Mexico would look like without the provisions being offered in the bill. Go to AGRICULTURE.SENTATE.GOV or AGRICULTURE.HOUSE.GOV to submit feedback and input.



### **BUILDING A FAIR AND EQUITABLE FARM BILL**

The Agroforestry Marker Bill Link

#### BY JAIME CHÁVEZ

Since the end of 2022, the Rural Coalition, Latino Farmers and Ranchers International (LFRI), the National Sustainable Agriculture Coalition; National Center for Appropriate Technology, the New Mexico Food and Agriculture Council (with broad farmer and rancher input), and representatives from forest communities in the Northwest, Southeast and Southwest, have analyzed the Farm Bill process and provided important contributions to the Agroforestry Marker Bill. They have provided input on equity, forest workers, immigrant workers, access to USDA programs and suggestions on how to build and support agroforestry initiatives in historically underserved communities.

### Agroforestry is particularly important for New Mexico.

The wording for the agroforestry on private lands section of the bill was based in part on wording developed by the National Center for Appropriate Technology. With input from the Western Landowners Alliance, LFRI, Northwest Forest Workers and others, we added additional language that applies to worker protections and public lands.

#### Agroforestry

Working sessions on agroforestry have been conducted with constituent leaders, national and local NGOs, environmental groups and the New Mexico Congressional delegation, including the office of Sen. Ben Ray Luján, who sits on the Senate Agriculture Committee along with Sen. Michael Bennet (Colo.) and Sen. Amy Klobuchar (Minn.). Klobuchar may lead the agroforestry marker bill legislation. Senator Debbie Stabenow of Michigan heads up the committee on Agriculture, Nutrition and Forestry in the chamber.

An October 2013 report, "Agroforestry: USDA Reports to America" detailed how agroforestry practices can help farmers; ranchers and woodland owners enhance agricultural productivity, protect the environment and increase profits. The USDA has invested less than 1 percent of its budget into tree-based practices, yet that small investment can help make possible goods and services that will result in reduced greenhouse gas emissions and more resilient land. Vilsac has said that "much work remains to promote and sustain agroforestry practices, which have great potential to promote economic growth and job creation in rural communities."

Agroforestry is particularly important for New Mexico because of the recent wildfires, and as a forest remediation tool employing science, Indigenous and traditional knowledge, agroecological principles, rotational herding, regenerative agricultural practices and Silvopasture, which calls for the deliberate integration of trees and livestock grazing operations.



Jaime Chávez, from Atrisco, N.M., is national field organizer with the Rural Coalition and works with Latino Farmers & Rancher International.

### NMDA TO RECEIVE \$4.6 MILLION USDA INFRASTRUCTURE GRANT

Program aligns with Gov. Michelle Lujan Grisham's Food, Farms & Hunger Initiative

New Mexico anticipates receiving \$4.6 million to assist the state's agriculture industry with infrastructure needs through the USDA Resilient Food Systems Infrastructure grant program. In this case, infrastructure includes—but is not limited to—facilities, structures, equipment and storage needed to build resilience in the middle of the food supply chain. States may use a limited portion of funds to develop and/or strengthen supply chain coordination and targeted market development services for local and regional products.

The purpose of the grant program is to provide more and better markets to small farms and food businesses and support the development of value-added products for consumers, fair prices, fair wages and new job opportunities. The goal is to keep profits circulating in rural communities and increase diversity in processing options in terms of business model approaches, geography and availability to underserved communities.

"We think this new funding opportunity could be a game changer for our food system in New Mexico, said New Mexico Agriculture Secretary Jeff Witte. "We will be working with our sister agency, New Mexico Economic Development Department, to provide the necessary supply chain coordination and technical assistance."

The program aligns directly or indirectly with Gov. Michelle Lujan Grisham's Food Initiative by:

- investing in local producers' ability to support New Mexico's Food System;
- building capacity of New Mexico's supply chain;
- increasing opportunities for more value-added products to diversify offerings and extend availability;
- implementing sustainable agricultural practices and climate-smart technologies to keep agriculture in business in New Mexico and bring food closer to where it is ultimately consumed, and
- providing hunger-relief efforts for New Mexicans experiencing food insecurity.

Those involved in the aggregation, processing, manufacturing, storing, transporting, wholesaling and distribution of locally and regionally produced food products, including specialty crops, dairy products, grains for consumption, aquaculture and other food products (excluding meat and poultry) will be eligible to apply for funding in September. To learn more about the program, visit the <u>USDA AGRICULTURAL MARKETING SERVICE WEBSITE</u>. For New Mexico-specific questions, call 575-646-4929 or email RESI@NMDA.NMSU.EDU.

### GOV. LUJAN GRISHAM'S FOOD, FARMS & HUNGER INITIATIVE

New Mexico's local food system is supported by a long tradition of small and midsize farms and ranches that are part of the state's agricultural industry, which generates over \$3 billion in revenue every year. Yet, 95 percent of these products have been leaving the state.

New Mexicans came together to work on the governor's Food, *Farm, and Hunger Initiative,* a large, comprehensive plan to strengthen connections among food, hunger and farming. More than 25 community organizations, churches, hunger advocates, farmers and ranchers, including representatives from the New Mexico Food and Agricultural

Council, Rural Coalition and Latino Farmers and Ranchers International, educated and lobbied state legislators in support of the bill. The measure received the Legislature's support in 2022 and 2023 and is now having institutional impact, particularly in the public schools, senior centers and among the most vulnerable.

The initiative reflects a commitment to foster food systems that address hunger while improving economic resiliency in New Mexico's communities. It was essential that program funding for infrastructure support also be part of a response to the pandemic and the catastrophic wildfires in New Mexico. The state's FY24 Executive Budget recommendation includes more than \$24 million—the largest investment increase in food and agriculture in the state's history.

The Taos County Economic Development Center and its partners applied for funding from the governor's initiative and received \$1.3 million for infrastructure and program development.

### NEW MEXICO PRODUCERS JOIN FOOD BANKS TO FEED HUNGRY NEW MEXICANS

Regional Farm to Food Bank seeks producers of all sizes

The New Mexico Association of Food Banks has joined the New Mexico Department of Agriculture (NMDA) and the New Mexico Farmers' Marketing Association to bring the Local Food Purchase Cooperative Agreement to New Mexico. The renamed Regional Farm to Food Bank Program will recruit New Mexico producers—farmers, ranchers and other food suppliers—by offering them fair prices for their products. Upon purchase, producers will deliver to one of the five food banks in New Mexico or to a member of the food banks' hunger-relief network. The Food Depot is taking the lead on behalf of New Mexico food banks to develop and implement the program's purchasing and food deliveries.

"New Mexico food banks are committed to providing nutritious foods to people seeking emergency food assistance," said Chairperson Sherry Hooper of the New Mexico Association of Food Banks. "This program enables food banks to obtain fresh produce, meat and culturally relevant foods for low-income families and seniors across the state."

The Regional Farm to Food Bank Program is the result of Gov. Michelle Lujan Grisham's prioritization of food security investments that bolster New Mexico agriculture. Led by the New Mexico Association of Food Banks, the program uses USDA funds to purchase locally produced foods. There is no producer that is too small to apply for the program. To participate, producers must be a part of the New Mexico Grown Approved Supplier Program, which allows producers to sell to schools, food banks and other institutions by ensuring their products are safe, traceable and use quality assurance practices.

The Approved Supplier Program is managed by the New Mexico Farmers' Marketing Association on behalf of the state of New Mexico. The NMFMA works to strengthen local food systems by supporting New Mexico agriculture producers and cultivating strong networks. The association has served as an access point for producers to sell through New Mexico Grown to state agencies and now to food banks.

In 2022, New Mexico food banks distributed more than 48 million pounds of food, providing 40 million meals to people in need in New Mexico. More than 46 percent of distributed food from the New Mexico Association of Food Banks was fruits and vegetables, while 13 percent was protein.

To sign up for the Regional Farm to Food Bank Program or to learn more about the New Mexico Association of Food Banks, go to HTTPS://WWW.NMFOODBANKS.ORG/.

### REGIONAL FARM TO FOOD BANK

How can we prioritize a resilient food web in a broken system?

#### BY BONNIE MURPHY

I had a boss once, at a farm where I came to know that farming as my occupation was going to be one of the deepest loves of my life. The laborers and the owners were all sitting at a long line of picnic benches for lunch. We gathered there for 30 minutes a day, 40 if we were lucky, temporarily relieved by the shade of old trees, electrolyte-powdered water, "farm sandwiches," and sometimes a fruit pie from someone who was miraculously capable of such herculean effort after a long day of toil. "I feel like an ant who has lost the scent trail," the farm owner said. A man with 40-plus years of farming experience, we all revered him as the wise and sage authority on organic vegetable production. But in a hard moment in the prime of summer, he confessed that he doubted if he was doing it right.

It is not an easy way. You have to be a bit nutty to live this kind of life. You can be doing it "right," and that may not be enough to stay in business. To scratch the surface, local markets are volatile. The climate crisis can collapse large investments of time, labor, resources and entire crops with a single extreme weather event. The hours are long. The pace is frantic. The average shopper favors price and convenience. The financial reward skews toward modest at best.

How can we prioritize a resilient food web in a broken system? Is it possible to integrate small, independent, diversified growers into the industrialized scales and systems of modern society? Can we expand production of local foods at a scale that truly feeds the immediate community while providing a meaningful economic opportunity for those that grow it? How can we prevent adverse impacts on the fragile ecosystems we inhabit any more than we already have, while pushing for economic growth?

The Regional Farm to Food Bank program in New Mexico strives to address these complexities head on. In the summer of 2022, New Mexico signed the Local Food Purchasing Assistance Cooperative Agreement (LFPA) with the U.S. Department of Agriculture (USDA) to deepen resiliency within the nationwide food and agricultural supply chain. More specifically, these funds intend to strengthen and develop food system linkages for underserved communities via food banks.

LFPA functions differently than other federal emergency food assistance programs and serves as a new entry point for small-scale growers. Historically, these growers have not been in a position to integrate their food products into federal programs. Scales of economy have prevented

'New Mexico Grown," the state funded program, has connected state institutions to locally produced fresh foods.

market-style, direct-to-consumer growers such an opportunity. LFPA gives New Mexico food banks the agency to purchase directly from New Mexican and regional growers at localized, fairmarket prices.

With support from Gov. Michelle Lujan Grisham's Food Initiative, the N.M. Department

of Agriculture, N.M. Farmers Marketing Association and the N.M. Association of Food Banks (NMAFB) have strategically partnered to infuse the state's emergency feeding network with nutritious, local foods where they are needed most. "New Mexico Grown," the state-funded program, has connected state institutions to locally produced fresh foods. By incorporating LFPA into New Mexico Grown's values, network and processes, food producers and food banks can build off decades of work done by the state's dedicated food systems leaders and innovators.

The realities of food insecurity in New Mexico are tragically commonplace. One in eight New Mexicans do not know where their next meal will come from. Childhood hunger is even more severe, as one in five children are experiencing hunger. In 2022, NMAFB collectively distributed more than three million meals *per month*. By leveraging their collective buying power to maximize

# You can be doing it "right," and that may not be enough to stay in business.

the impact of available dollars, NMAFB is able to feed people with limited funding and food donations at a historic low. However, this collective buying power does not always guarantee access to adequate amounts of fresh, nutritious, culturally relevant foods. This has become increasingly important as food costs have risen quickly with inflation, and COVID-19 funding has dried up.

This is where "Regional Farm to Food Bank" steps in—bolstering the efforts of NMAFB. The cooperative partners recognized that farmers and ranchers from historically marginalized groups work tirelessly to provide top-quality products, and face a challenging market that prioritizes lowest price above all else. Localized, fair-market pricing increases the agricultural community's capacity to develop sustainable markets. This logic is groundbreaking for the emergency food assistance network. The food banks gain access to valuable food products and support the producers in their communities by paying fair market prices. This creates an unprecedented opportunity which benefits everyone involved. By purchasing

# By purchasing consistently and steadily from local producers, the broken food web begins to heal.

consistently and steadily from local producers, we solidify connections that make local foods and the emergency food network stronger, and the broken food web begins to heal.

Several years ago, I hung up my hat as a farmer. Admittedly, I am sheepish to bestow upon myself that noble title. I once thought *farmer* was reserved for those who had somehow achieved it. Down to the sun wrinkles deep-set in the corners of the eyes, hands calloused, bodies stiff. The farmer knows the subtle contours and textures of the land, where the soil is loamy like chocolate cake. Knows the rotation of nutrients from one field the next, season after season. Knows when a pregnant cow is close to giving birth by the subtle changes in her body. The farmer wears practical, sturdy pants with soil baked in the knees. Knees that have bowed down and groveled before the greatness of the land and its power over and over again, to be rewarded with the simple gift of being named a loyal subject.

To our farmers and ranchers, we see you. You have not lost the scent trail. We are honored to be in the work together. ■

Bonnie Murphy works on behalf of Regional Farm to Food Bank as a local food-procurement project specialist. She was an organic produce farmer for a decade. She loves talking about all things agriculture and growing. (505) 510-7492, BMURPHY@THEFOODDEPOT.ORG

### NMDA RE-LAUNCHES "TASTE THE TRADITION/ **GROWN WITH TRADITION" LOGO PROGRAM**

Over 20 years ago, the New Mexico Department of Agriculture (NMDA) launched the "NEW MEXICO-Taste the Tradition" and "NEW MEXICO-Grown with Tradition" logo program to promote New Mexico products and identify them as grown or made in the state.

NMDA re-launched the program this summer with refreshed logos businesses may use. "Our logo program has grown immensely since 2000, and now offers many more benefits and services," said Agriculture Secretary Jeff Witte. "Membership is absolutely free. There is no catch." Membership is open to producers, processors, manufacturers, distributors, wholesalers and retailers. The program has expanded to also include pet food manufacturers, restaurants and farmers' market stands.

Tom Floren, owner of LavendeRx, said the logo program has allowed his company to bring its products to market and make a difference in the lives of people all over the globe. "If it weren't for the NMDA mentoring, our small farm and skincare business would never have become a thriving agritourism destination," Floren said. "The cost-sharing opportunities enabled us to learn from agritourism experts from around the world and implement what we learned." Lane Grado, owner of Freeze Dried Products, LLC, said NMDA's programs have opened doors and helped grow his business.

Logo program members receive branded, point-of-purchase materials and opportunities for funding and event participation. The NMDA has presented a Power Lunch Series, covering topics such as "Social Media for Beginners," "Refining Your Social Media," "Steps to Going International," as well as "A Guide to Tradeshows and Other Member Benefits." Businesses may visit **ELEVATENMAG.COM** to view a full list of perks, review the logo-use guidelines and learn more about membership eligibility. For more information, call 575-646-4929 or email TASTETHETRADITION@NMDA.NMSU.EDU.

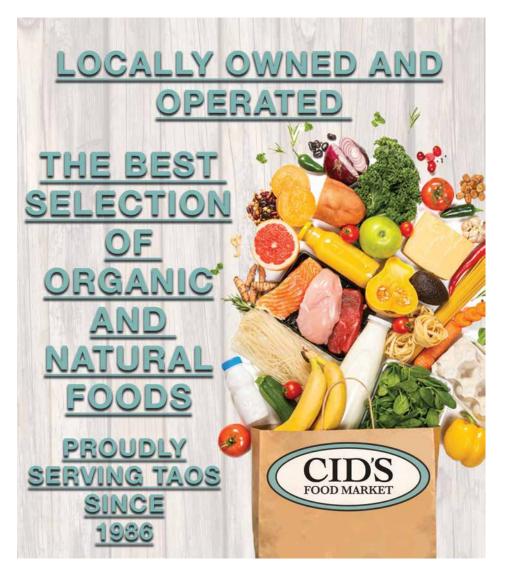


### 2023 NM LOCAL FOOD GUIDE

The New Mexico Farmers' Marketing Association has released its 2023 Local New Mexico Food Guide. Inside, you can learn where to find locally grown food in your community. You can also find:

- A directory of local food outlets throughout the state, including hours of operation and accepted food programs such as SNAP, Double-Up Food Bucks, WIC and Senior Nutrition programs
- Ways to "Expand Your Flavor Horizons" with new foods to try
- The health benefits of rainbow-colored fruits and vegetables
- A way to meet some of New Mexico's growers

You can ask for the guide at your farmers' market, farm stand, CSA or other food outlets. Or, if you're online, download a copy by clicking on: 2023 "LOCAL" NEW MEXICO FOOD GUIDE.





#### **INAUGURAL EVENT:**

Tuesday, September 12 through Thursday, September 14, 2023.

Dine Well & Do Good

Expressing gratitude to chefs from restaurants that support local farming and ranching:

#### List of participating restaurants\*

315 Restaurant & Wine Bar Amaya at Hotel Santa Blue Heron Restaurant at Ojo Santa Fo Cowgirl Santa Fe Estevan Restaurante Fire & Hops

nasazi Restaurant

\*Please check back for our growing list of participating restaurants



### RESERVATIONS ARE NOW ACCEPTED

Go to localharvestrestaurantcelebration.com for reservations or click on the QR code

Benefitting the nonprofit Santa Fe Farmers' Market Institute















# Intergenerational Gathering





### SAN ISIDRO CELEBRATIONS PROMOTE HARMONY AND STEWARDSHIP OF THE LAND

San Isidro is the patron saint of farmers, ranchers, farmworkers and day laborers. Through invocations, people of the land, the stewards and caretakers who preserve this way of life are remembered. In May, the annual San Isidro celebration took place in Chimayó, presented by the New Mexico Acequia Association, Barrios Unidos and the Chimayó Museum. There was a water blessing, seedball making, community garden planting, music, teatro acequiero, and a walk along historic acequias to pray for rain, crops and community wellbeing.

Photos © Seth Roffman



### **SPANISH** MARKET 2023

Santa Fe

In July, Spanish Market features handmade art from hundreds of local Hispanic artisans, as well as live music, art demonstrations and regional foods.













### LESSONS FROM SOL FELÍZ: 20+ YEARS OF LEARNING FROM THE LAND

#### ARTICLE AND PHOTOS BY MIGUEL SANTISTÉVAN

I have been living in a house on a piece of irrigated land known as *Sol Feliz* since 2001. This land I cultivate, lovingly known as *Huerta Sol Feliz* (Sol Feliz Farm), was set up for acequia gravity-flow irrigation by my grandfather with gates that guide water into my fields. In the 21 growing seasons I have participated in our acequia organization, I have seen many changes. The most important things I have learned have been about how to manage when water resources are scarce. This is of utmost importance in creating a resilient regional food system, especially in the desert Southwest. Central to creating resiliency is to work with a cropping system that is most suited for survival, as well as innovative ways of harvesting water from the landscape.

My first small garden was a success, with all the water I needed, usually provided to me once a week for a full day. In 2003, however, it was a different situation. Right when many crops were finishing up their lifecycle or ripening, I didn't have any water! The level diminished in the acequia channel week after week in June and July, but not enough to notice. On the day of my awakening, it slowed to a trickle halfway down a row of corn, only to disappear into the subsurface. Calling the *mayordomo* (ditch boss) didn't help. His reply was simply, "It's one of those years when you won't get any more water." In recent years, the consistent river flows of my childhood have become ephemeral, due to upstream development, drought and a forest characterized by overgrowth due to mismanagement and the loss of fire ecology. How can I achieve my agricultural ideals if I can't count on having enough water when I need it?

### How can I achieve my agricultural ideals if I can't count on having enough water when I need it?

To deal with this harsh reality, it was helpful to learn that acequias didn't really have consistent, season-long, water flows before the modern age. Our loss of water mid-season was due to the fact that our dams (*presas*) leaked to the point of not being able to divert water from the river channel. Constructed with logs, rocks and mud, the presas allowed for downstream river flows, riparian habitat and diversions. We have all but forgotten how acequias used to work, especially now that we enjoy massive concrete diversion structures with metal gates and wheels that allow us to divert the entire river.

Photo above: Huerta Sol Felíz with "melgitas" or sections of irrigated land established on the contour

The lesson from the leaky presas is that crops had to be able to withstand water shortage mid- to late-season because there simply wasn't enough water. This created an agricultural system that relied on crops that could be established with winter

### A cropping system most suited for survival and innovative ways of harvesting water from the landscape

precipitation, such as winter wheat, rye and garlic; in addition to those that could be well established with predictable springtime acequia flows such as *alberjón* (peas), *habas* (fava beans), lentils and garbanzos. Corn, beans and squash could also be started with the acequia flows in May, but after that, many crops had to subsist on little moisture until the monsoons in mid- to late July. During times of meager water, the saying goes: "Es más importante escardar y arrimar la tierra que regar." (It is more important to cultivate your soil and pile it around your plants than it is to irrigate.)

# No matter what you do, some years are just not good for certain crops.

Another important lesson learned over the years of cultivating the same land and saving seed is that no matter what you do, some years are just not good for certain crops. When I experience difficulty with particular crops, I always talk to other farmers and find that our experiences, for whatever reason, have been similar. There was a year when the corn grew really tall but did not produce ears. In another year, the beans failed. This year, almost every farmer had difficulties with squash. It is typical for us to want everything we think we should have, but nature often has her own peculiarities. This is where having a diverse garden can be the best insurance to withstand unpredictable environmental conditions. Some crops may not thrive, but others are likely to produce sufficient yields. Even in years that were bad for certain crops, individual plants were likely to survive and produce stronger seeds that hopefully have a better chance of survival next time.



Irrigation proceeds on the contour from either side of the field, in between modified hügelkulture berms.



Irrigation on the contour shows how berms can conserve water. Remnants of past years' rows are shown irrigating downhill relative to the contour.

### The irrigation systems on our acequias have been impacted by subdivision of land.

Knowing that not all cultivated crops do well all the time, we started looking at useful food and medicinal plants that grow on their own. *Quelites* and *verdolagas* immediately and traditionally come to mind, but we also started looking at other plants that are comfortable with our land and conditions. No matter the water situation, we always seem to have robust stands and healthy individuals of alfalfa and clover in patches. Pollinating animals love these plants when they flower, and we are able to use many parts of these plants for food



Water-stressed crops curl leaves for water retention and wait for cultivation of the soil or monsoon rains to finish their life cycle.

and medicine. We process the seedheads to make sprouts or to be able to reseed areas for ground cover and cover crops. Many other plants in our field have medicinal properties, and we allow them to coexist with our crops so that we can harvest them as remedios. This is a low-cost, low-impact way of using what works on our site, with stacked benefits to the soil, pollinating insects and birdsand us! However, some human visitors get confused when they see a messy garden not defined by strict, straight rows, and "weeds" that have not been eradicated.

In the traditional acequia form and function, irrigation channels were often constructed using the contour of the land. Large sections of irrigated land were structured in a series of terraces known as *melgas* and could be divided into smaller sections known as *eras*. Melgas were constructed so that irrigation water could be managed a section

at a time. During dry years, not all melgas could be efficiently irrigated, so they would remain fallow. In times and places where eras were employed, little berms directed water into pockets where the plants could benefit from concentrated moisture. The berms also served as windbreaks and shade to further conserve water, similar to Zuni waffle gardens, but in a method developed by Arabs on the other side of the world and with flood irrigation in mind.

The irrigation systems on our acequias have been impacted by subdivision of land, so larger fields once defined by melgas are all but gone in many areas. Remnants of these systems can still be seen as terraced land and swales, some of which are defined by berms made of rocks. Knowing this, we re-introduced a melga-like system in our Huerta Sol Feliz by creating sections that are smaller versions of the melga system along the land's contours and irrigating by splitting the water at the top of the field to run down each side of the section to meet in the middle. Instead of looking at our land as one big field defined by rows with one-way irrigation, we now think in sections that are managed to slow and hold water based on its relationship to the water's source, to the sun and shade throughout the day; and accessibility.

#### Hügelkulture

To take the idea of water conservation and soil building a step further, we became intrigued with *hügelkulture*, a way of burying large amounts of biomass to make berms, swales, or mounds. Most of the hügelkulture I have seen, however, requires an incredible amount of excavation, and they are usually sited in areas characterized by more water than we have in the desert. As such, we are experimenting with what we are calling "desert-modified hügelkulture."

We start by digging a shallow trench on the contour. We were able to create a wick of stomach wool from my neighbor's sheared sheep and lay it continuously across the entire trench. On top of that, we laid small diameter cuttings from fruit trees and bushes. We then piled on more dry carbon from cut weeds and sprinkled chicken manure on top. We then covered the whole thing with mature compost, and finally, soil. The idea is that this low-impact hügelkulture will decompose over time and create a site of moisture retention and in situ composting. As the years go by, clearing the fields allows us to rake more residue on top of the berm and continue building it up with carbon, manure, compost and soil. We find that the crops grown closest to the berm do not suffer through dry spells as much as those that are farther away. Over time, we envision these berms growing in size to create large, fertile berms that define sunken planting areas by water conservation. The berms will eventually be cultivated, first with nitrogen-producing legumes, and later with crops that require more nutrients as the system decomposes and matures. The use of hügelkulture, in addition to water storage in cisterns, is intended to help us weather the most difficult times of water scarcity.

The most exciting part about farming on ancestral land with no intention of going anywhere is that our relationship to our place is strengthened, dynamic and responsive. We view the land as part of our body and think of its long-term health and happiness instead of a canvas for production, as many farmers are forced to do to meet the demands of the market or their own expectations. As in any healthy relationship, we experience setbacks and failures, and work toward repair for the best outcome for all parties (elements and organisms) involved. We have learned to defer to the conditions and the process, to watch and listen; to rely upon our imagination and artistry more than looking for inputs we can buy to try to control the situation and maximize yields. We build upon what works, not what we think should work. Every year is different and exciting, with surprises and losses, but the end result is always the same: There is more abundance on the land than we can handle, so we are happy to share that with our ecology and look for better ways to use our time and energy to create more potential and nurture more life. ■



Miguel Santistéran is a father, husband, educator and Permaculturalist. He sells traditional food products and offers consulting and online courses. More on his activities and consulting can be found at <a href="https://www.growfarmers.org">www.growfarmers.org</a>.

### Latino Farmers & Ranchers International

2023 Congreso, October 26–28, Isleta Resort & Casino

BY JAIME CHÁVEZ



The basis of our agricultural knowledge predates U.S. history and encompasses Indigenous and traditional agroecological methodologies that apply to production, marketing, barter/exchange and human survival. Everybody has to eat!

### LFRI intends to help strengthen and safeguard the U.S. food supply system.

Isleta Pueblo, one of 19 pueblos in New Mexico, is a crossroads of Native and traditional ecological knowledge of people who have survived and are continuing to adapt from colonization, and to drought and climate change. During a time of catastrophic climate chaos, global economic dependence and imbalance, pandemic, unjust working conditions for farmworkers and food chain disruptions, a historic, national and international gathering took place in 2022 at the Isleta Resort-Casino. Its theme was "Our Land Stewardship Legacy." Nearly 500 people attended, including 200 school-aged youth who participated in seed, growing and harvest workshops.

The 2023 Latino Farmers & Ranchers International (LFRI) Congreso will be held at the same place, from Oct. 26 to 28. LFRI's mission is to provide policy advocacy,

LFRI is working to promote inclusion and protection for the rights of all farmers, farmworkers and ranchers, in the U.S. and globally.

as well as farm management and sustainability training, education on conservation best practices and technical assistance to enable multiethnic farmers, farmworkers and ranchers to transition to and thrive in Indigenous, regenerative and sustainable farming and ranching operations. In the process, LFRI intends to help strengthen and safeguard the U.S. food supply system.

The annual *Congreso* is a forum where issues are raised publicly and voted on. There is a plenary session and workshops. LFRI's constituent base of historically



disenfranchised Latino, Black and Indigenous people of color small farmers and ranchers focus on solutions to the myriad of problems facing the farm and ranch complex in the U.S, and to establish relationships with stakeholders and advocates from both the public and private sectors. The gathering

provides opportunities to connect directly with resources and markets that have traditionally not been accessible.

One motivation of the 15-member leadership committee—responsible for the Congreso's logistics, agenda, workshops, documentation and social media—has been to develop positions and advocacy platforms in real time. "We also established this forum so that our constituent base of Latino and Indo-Hispano (Treaty of Guadalupe Hidalgo) communities form a body with the capacity to act," said LFRI President/CEO Rudy Arredondo. The 2022 Congreso also highlighted the relationships with historic land-based agricultural campesino struggles of México and the continent. "We are seeking solutions to the myriad of problems facing the farm and ranch complex in the U.S. We



2022 Congreso Youth Contingent

Photos © Seth Roffman

foster meaningful relationships in the spirit of brotherhood and sisterhood," Arredondo said.

### Some of the resolutions that arose from the 2022 Congreso:

- A Seed Sovereignty Declaration stating that seeds will not be exploited as commodities, and farmers have a right to keep and exchange seeds
- Prioritize youth development, mentoring and engagement in agriculture, harness resources and develop educational programs that will create the next generation of earth stewards, farmers and ranchers
- Support the creation of gardens, edible landscapes and outdoor learning spaces in schools and communities
- Request that the New Mexico Legislature pass legislation to provide funds to cover the non-federal matching requirements for all restoration and conservation projects in the state
- Support having hemp designated as a commodity not regulated by the Drug Enforcement Administration (DEA)



2022 Congreso General Session © Arnold Trujillo



Sustainability Strategist Michelle Stearn, Rudy Arredondo and Magdaleno Rose-Avila © Seth Roffman

- Work for racial equity, access to capital, USDA programs and business plan management
- Support labor, H2A (a program that allows foreign nationals who meet specific requirements into the U.S. for temporary agricultural work); Farm Bill recommendations; climate, conservation and cost-share programs
- Prioritize rural broadband

Latino Farmers & Ranchers fostered a partnership with the Organic Trade Association to provide guidance and resources for transitioning from conventional cultivation practices and prepare for organic certification. The organization also formed a partnership with the Chicago High School for Agricultural Sciences to support the school in becoming a resource for expanding agricultural sciences high schools across the country and as a step toward implementing an Agricultural Youth Corps.

Jaime Chávez, from Atrisco, N.M., is national field organizer with the Rural Coalition and works with LFRI.



### LATINO FARMERS & RANCHERS INTERNATIONAL IS EAGER TO WORK WITH YOU

BY RUDY ARREDONDO, PRESIDENT AND CEO, LFRI

Latino Farmers and Ranchers International (LFRI) has represented farmers and ranchers who historically have been discriminated against at the national level in the U.S. In some areas, LFRI has been the only source of support for some small and developing farmers and the impoverished communities where many reside.

### Our mission: "To Protect, Preserve and Serve"

LFRI has evolved into an international organization with the capacity to eventually offer our members a complete spectrum of support, advocacy and technical assistance to develop regenerative, sustainable and diversified farming systems that can help them develop sustainable businesses and take the lead in improving local food systems.

Through development of diversified and resilient food products, nutritious food can be made available locally through organic farms, farmers' markets and cooperatives. In addition, innovative techniques such as mobile markets that deliver food to isolated schools and food deserts are potentially viable.

LFRI is committed to always incorporating organizations and groups of producers who can help us identify needs and search for solutions. Organizations that collaborate with LFRI network and exchange



information about production resources, marketing, food safety regulations, export and import regulations for agricultural products, as well as programs that exist for hiring periods and workers' issues. We invite our members to participate in events and conferences that we promote and organize.

Photos © Arnold Trujillo

### **SOME LATINO FARMERS** & RANCHERS INTERNATIONAL MEMBERS



• Alfonso Abeyta, a farmer and rancher from the San Luís Valley in Colorado, is a longtime member of the board. Abeyta was a plaintiff in a class-action lawsuit filed by Hispanic farmers and ranchers against the USDA.



• Jaime Chávez, from Atrisco, N.M., is national field organizer for the Rural Coalition and is on the Congreso's host committee.



• A.G. Kawamura, a third-generation produce grower and shipper from Orange County, Calif., served as the Secretary of the California Department of Food & Agriculture from 2003 to 2010. He is founding co-chair of Solutions from the Land, a nonprofit that is developing innovative, climate-smart collaborations.



• Shirley Romero Otero co-founded the Land Rights Council in 1977 to regain the rights of heirs of the Sangre de Cristo Land Grant. She is an educator in the San Luís Valley and directs the Move Mountains Youth Project.











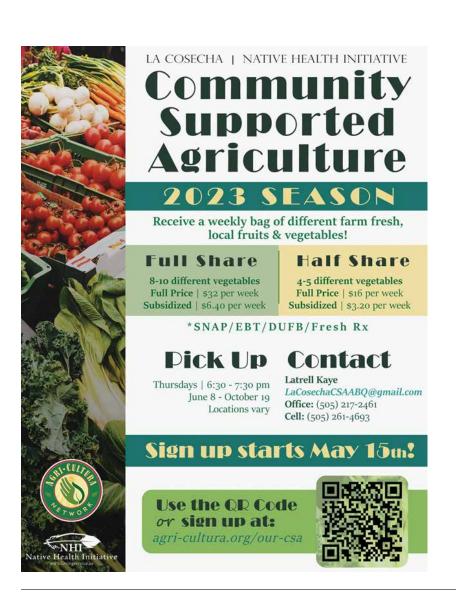
• **Devon Peña** is professor of American Ethnic Studies and Anthropology at the University of Washington. He is the founder and president of the Acequia Institute in the San Luís Valley. His most recent book is "Mexican Origin Foods, Foodways and Social Origins: Decolonial Perspectives."

• Eugene Pickett, vice president of LFRI, is owner-operator of Black Farmers & Ranchers NM, and is on the N.M. Food & Agriculture Policy Council governing board.

• Magdaleno ("Leno") Rose-Avila, a civil and human rights activist and writer, recently served as director of Seattle's Office of Immigrant and Refugee Affairs. He has been the Congreso's master of ceremonies.

• Leonard Salgado, of Salgado Farms in Belen, N.M., co-chairs the Congreso's host committee.

• Verna Teller is a former governor of Isleta Pueblo and a retired pueblo chief justice.



### THE AGRI-CULTURA COOPERATIVE NETWORK / LA COSECHA CSA

The Albuquerque-based Agri-Cultura Cooperative Network is composed of 73 New Mexico farmers and ranchers from 13 counties, working in partnership with La Cosecha CSA's equitable food access program. The community-driven model is advancing the state's small-scale farming economy through "food justice" practices. The partnership's farm-to-market system and statewide distribution emphasize self-determination, food sovereignty and market support for small-scale farmers. Procurement policies are intended to bolster community health, wealth and wellbeing. The network and CSA have established national partnerships and alliances. Their business model has set a precedent for other regions and communities.

Helga Garza, executive director of both entities, is in her second two-year term as the chair of the New Mexico Food & Agriculture Policy Council. She encourages cross-sector and cross-cultural collaboration to amplify the programs' impacts. Amidst rising demand for healthy local food, and expanding operations, Agri-Cultura and La Cosecha are dedicated to sustainable growth. PRODUCE@AGRI-CULTURA.ORG, WWW.AGRI-CULTURA.ORG

Photos by Rion Moon and Jam Rose, healfoodalliance.org

### 2023 CLIMATE RESILIENCE RALLY, WASHINGTON, D.C.

In March, the Agri-Cultura Cooperative Network took a delegation of farmers and ranchers from the Southwest to Washington, D.C. Concerned about the upcoming Farm Bill, they joined hundreds of farmers for three days of organizing and advocacy, and participated in the 2023 Climate Resilience Rally, where Helga Garza, executive director of Agri-Cultura and La Cosecha CSA, was a keynote speaker. After Farm Aid founders Willie Nelson and John Mellencamp sang, Garza led the crowd in prayer and rallied everyone to march the uphill climb to the Capitol and Supreme Court.

There they joined grassroots and national partners to advocate for dignity and fairness for food-chain workers, equitable access for small-scale farmers and ranchers, nutrition education, communities over corporations, the survival of ecosystems and the planet. They were able to meet with members of important committees in both the House and Senate. "We were honored to meet with our representatives, all champions of agriculture and New Mexico," said Jessica Swan, Agri-Cultura's community outreach director. "Our time in DC allowed us to connect with other historically disenfranchised communities."











Bottom left: Chili Yazzie, Helga Garza, Jessica Swan, Marielena Vega; Bottom right: Jessica Swan with Gailey Morgan

### **BIPARTISAN WOMEN IN AGRICULTURE ACT INTRODUCED**

The act recognizes that women are essential to farmlands across the country.

In July, Congresswoman Teresa Leger Fernández (D-NM) joined by Congresswomen Jen Kiggans (R-VA), Chellie Pingree (D-ME) and Jenniffer González-Colón (R-PR) introduced the bipartisan Women in Agriculture Act. The act would create a Women Farmers and Ranchers Liaison at the U.S. Department of Agriculture (USDA), establish a research priority for agriculture machinery and equipment designed to be used by women, and prioritize funding for childcare facilities in rural areas. The bill was endorsed by the Women, Food and Agriculture Network (WFAN).

"Our women farmers and ranchers deserve recognition and representation for working our precious lands. Pero sabemos que el trabajo de nuestras hermanas que representan un 26% de la mano de obra agrícola y enfrenta disparidades muchas veces no se reconoce. Women farmers, especially non-white women farmers, are undervalued, underserved and underpaid," said Rep. Leger Fernández. Women ranchers and farmers drafted this and they told us what they need. "I am introducing the Women in Agriculture Act to support a pathway for agricultural education and resources for women-led farms."

#### **Background**

In 2019, women accounted for 26 percent of the farm labor workforce, a 19 percent increase since 2009. However, farms operated by women earn 40 percent less income compared to male-dominated farms, and only 16 percent of Natural Resource Conservation Service (NRCS) contracts are awarded to women. According to a Government Accountability Office (GAO) report commissioned by the 2018 Farm Bill, women comprise a disproportionately small share of agricultural producers, and many female farmers have reported experiencing discrimination in obtaining agricultural credit. The report also confirmed that disproportionately fewer USDA loans are made to women

Although the number of women in the agriculture industry is growing, the majority of tools are designed and manufactured the height, strength and body type of a man. Women being forced to use tools that weren't designed for them not only disadvantages their work, but also puts them at risk for injury. And while lack of affordable, accessible child care is a problem for families across the country, women farmers and ranchers face unique challenges. Access to child care is even more scarce in rural areas, and agriculture's seasonality can make scheduling and regular payments difficult.



Xochitl Torres Small and husband, Rep. Nathan P. Small (D-NM) at her swearing-in ceremony in Washington, D.C.

### **XOCHITL TORRES SMALL,** THE FIRST LATINA DEPUTY SECRETARY OF THE USDA

In July, Xochitl Torres Small was sworn in as the Department of Agriculture's deputy secretary, making her the first Latina and second woman of color to hold the No. 2 spot at the agency. The former New Mexico congresswoman was tapped by President Biden in 2021 to serve as undersecretary for rural development at USDA, the branch that oversees infrastructure, utilities and healthcare across rural communities.

"To get to be deputy secretary and in charge of the backend of the shop is really exciting because we impact people's lives in so many ways," Torres Small said before her swearing-in ceremony. "I'm the granddaughter of farm workers, and of course, that impacted my life. But my parents were educators. And when it comes to thinking about the kids they're teaching, making sure that those kids have healthy, nutritious food to help them learn is crucial."

Torres Small has been promoted at a time when the department is undergoing changes to address historical discrimination across its lending and other programs. Late last year USDA began making payments on loan defaults for some farmers and providing \$2.2 billion for farmers who experienced discrimination prior to Jan. 2021. She is also promoted as farmers, food advocates and lawmakers are gearing up for the renewal of the Farm Bill. Torres Small assured lawmakers during her confirmation hearing that the views of farmers and stakeholders would be communicated from the department.



### Local, Slow and Deep Foods for the San Luís Food Sovereignty Initiative

San Luís Peoples Market

& Traditional Crops for a Solidarity Economy

BY DEVON G. PEÑA, PH.D. AND LINNETTE RAMIREZ

Growing a "regional food system" involves the delicate and often difficult coupling of different sub-systems. One familiar coupling in our movement involves the merging of ecological, economic and social subsystems.

A 'bioregional' agri-food system recognizes and privileges ecological values, how and why regenerative land and water use practices matter. Soil health is plant, animal and human health. Dirt to gut. And spirit. The rhizosphere and human gut microbiomes are similar and interconnected. Caring for soil means caring for all our relations.

A 'bioregional' agri-food system operates through a "solidarity economy" and values local acequia farmers and food artisans through mutual aid, cooperative labor and shared wealth. A solidarity economy focuses our collective action on strategies like no-interest mutual aid revolving loan funds rooted in our own *mutualista t*raditions.

A 'bioregional' agri-food system recognizes and values diverse social systems and especially the local acequia water democracies that support the totality of the bioregional agri-food system. Without acequias there can be no bolitas (beans), chicos, nixtamal (pozol), chiles, habas (fava beans) or tortillas. There can be no adobe ovens or swertes brimming with heritage food crops. This means preserving and diversifying the heritage landrace crops we grow and wild relatives we forage in our unique subbasins. This recognizes the distinct place-based Indigenous and diaspora cuisines and culinary practices that have emerged in the Río Arríba over centuries.



Guadalupita Encinal Blue Corn harvest

The San Luís Peoples Market and Annex is the center of our coupling of the ecological, economic and social systems of the Culebra watershed acequia communities. But before we get to that story, a bit of a history excursion to set the context of our current work with the San Luís Food Sovereignty Initiative.

It was in April, 2009 that Gov. Ritter signed the historic "Colorado Acequia Recognition" law (HB 09-1233) acknowledging and partially correcting the erasure of acequia law caused by the Colorado Supreme Court in 1882.

This structure of settler colonial land and water law disrupted the coupling of the ecological, economic and social systems that had been painfully stabilized in the Upper Río Grande over many generations of conflict and confluence of peoples, classes, races and ethnicities.

One of the most profound long-lasting effects of the La Sierra enclosure



Irrigating Acequia Institute farm milpa

(1960-2005) was the transformation of the proven resilient acequia agroecological, economic and social system. Shut out of the common lands for more than two generations, acequia farmers increasingly shifted from diverse polyculture and agropastoral systems to an alfalfa monoculture to survive financially, if not ecologically or culturally.

By the end of the 1980s, the transition was almost total,

and Costilla County had become, like so many other acequiahoods, a hay and beef export colony. The cost of this shift was the loss of our own food self-sufficiency and multi-crop farming systems.

Another cost was community health and wellbeing and the loss of our traditional diets and heritage cuisines. Scientific studies suggest the erosion of heritage food systems and culinary traditions is associated with horrifyingly high rates of diabetes (15 percent in our case) and obesity (42 percent) with multiple associated

### Local acequia water democracies support the totality of the bioregional agri-food system.

morbidities. We are dying because we no longer follow ancestral foodways or lifeways. And acequia farmers have stopped widely growing healthy crops to feed our families and communities.

It is this challenge—the community health effects of a legacy of settler colonial violence—that led to the San Luís Food Sovereignty Initiative.

# Support to transition from the alfalfa monoculture habit into traditional heritage row crops.

In December 2021, The Acequia Institute (TAI) received \$1.6M in grants from The Colorado Health Foundation (TCHF) for the Initiative. We have since received an additional \$700,000 in grants and donations of more than \$500,000 for a mutual aid revolving loan fund. These substantial financial resources have allowed us to start reviving the local agroecological, economic and social systems that will lead us back toward food sovereignty and improve community health and wellbeing.

To rebuild local economic system assets, in February 2022, TAI purchased the historic R&R Market, which was established in 1857 and is the oldest continuously operated business in Colorado. It was included on the "Most Endangered Places" list by Colorado Preservation and was in danger of closing, which would have made Costilla County a "food desert," or a casualty of food apartheid, with the closest grocery stores 100- to 130-mile round trips to Alamosa or Taos.

We have made significant investments to modernize and upgrade this historic building which hosts the main facility for the San Luís Peoples Market (SLPM). The entire plumbing and electrical systems have been modernized alongside a smoke and fire alarm system with carbon monoxide detectors. All the mechanical, refrigeration



Planting San Luís peas

and other equipment (meat department, forklift, etc.) have been replaced with new units.

We matched this facilities asset with the polyculture productive potential of acequia farms including the TAI home farm (Alumnyah de Las Dos Acequias), a 181-acre extension (riparian long-lot) in Viejo San Acacio.

We cannot attain food sovereignty without safe buildings and healthy soil. We are currently starting a major asbestos-lead paint-black mold abatement project at the Main Street Market building with funding from federal and state sources. The Brownfields reclamation problem is present among most of the buildings along Main Street in San Luís. Many northern New Mexico rural townships face the same challenge, itself a legacy of environmental racism that prioritized cleaning the ski resorts and tourist destinations and ignored land-based farming communities.

### We are building a community food cooperative.

To revive our agroecological systems, we have established two vital programs:

A partnership with the Move Mountains Youth organization is preparing the next generation of youth and young adults to become skilled acequia farmers. The partnership works to share the knowledge of acequia farming methods and practices. As paid interns (\$15/hour), our youth are learning to farm in a regenerative mode while providing scarce labor to our acequia farmers who need this support to transition away from the alfalfa monoculture habit into traditional heritage row crops like *bolitas*, *maíz concho*, *calabacitas*, *habas*, *col* and all the other brassicas.

The second program is to work with acequia farmers to embrace a multi-crop system that still has alfalfa and livestock but includes these traditional row crops for the community food cooperative we are building at the San Luís Peoples Market.

## The heart of our work to promote the resurgence of the acequia social system is the mutual aid institution.

To encourage and support the social system, TAI and the Market, alongside the farmers in the Milpa-Molino Collaborative, are offering free decolonial cooking and nutrition classes to local youth, SNAP recipients and other community members, and especially the elderly.

The heart of our work to promote the resurgence of the acequia social system is the mutual aid institution. The Acequia Institute's Revolving Loan program is designed to provide no-interest loans to farmers who deliver traditional crops

to the market and food artisans who use our certified commercial kitchen to produce value-added products from our crops and wildcrafted foods. This is vital to our mission of improving community health outcomes by investing in the increased capacity of our people to create and keep agricultural wealth in our bioregional community.

A few final words about resilience.

We started this project in the middle of the COVID-19 pandemic, which had a dreadful impact on us and the entire bioregional community. We weathered the pandemic and moved forward

with all the multi-levels of organizing. In June-July of this year, a team of experts we hired found what we had expected all along: They detected asbestos, lead paint and black mold in the building hosting the San Luís Peoples Market. On July 6 we made the decision to close the market until abatement is completed.

We did not panic or lie down in the face of this new challenge. Instead, we found a new home, a building three blocks away with a certified commercial kitchen and space for our local foods business incubator and volcanic-rock corn mill (molino)



Milpa alta

### We are dying because we no longer follow ancestral foodways or lifeways.

operations. The Head Start building was constructed in 2003 (in the post-asbestos and lead paint era) and is now home to the San Luís Peoples Market Annex. Our partners at Rocky Mountain SER (Service, Empowerment, Redevelopment) made this possible by graciously agreeing to a lease.

This new asset is allowing us to continue feeding the communities of San Luís, Costilla, and northern Taos County (Amalia, Costilla). We have hosted three food pantry events since establishing ourselves in the new annex. We held our first "Decolonizing SNAP Nutrition Education" cooking class this past weekend and have five more through the end of September. We started our volcanic rock nixtamal operations and are producing high-value artisan *masa harina* products and will soon launch the first of our no-interest loans for the local artisans' foods incubator.



People often talk about the resilience of acequia culture and communities. The way our project managed to flourish despite the conditions of pandemic and the challenges posed by the need for environmental mitigation, which could have made San Luís a food desert, is a testament to the resilience of the acequia way of life. Sin agua no hay vida. Sin tierra no hay paz. Creer es resistir y resistir es crear.

Devon G. Peña, Ph.D. is executive project manager of The Acequia Institute. Linnette Ramirez is director of the Commercial Kitchen and Molino, San Luís Peoples Market

### **DUELING WITH DROUGHT**

How Regenerative Agriculture, Dryland Farming and Water Conservation Can Help Save Farming in the Southwest

### ARTICLE AND PHOTOS BY LORENZO DOMÍNGUEZ

Nearly 25 years have passed since the start of former Vice President Al Gore's crusade against climate change. His message not only still resonates, but *the truth* remains as inconvenient as ever.

On July 25, Brian Kahn, a scientist at NASA's Jet Propulsion Laboratory, noted in the *Earth Observatory* that, "although urban development in the Southwest probably exacerbated recent warming—by replacing vegetation with impervious surfaces more likely to trap heat—anthropogenic climate change [i.e., resulting from the influence of humans on nature] was likely contributing to this heat wave."

Likewise, Myles Allen, professor of geosystem science at Oxford University, said in the *Washington Post* on July 5 that "the solution to the problem is actually rather simple: capturing carbon dioxide, either where it is generated or recapturing it from the atmosphere and disposing of it underground."

So, how do we capture more carbon dioxide? Easy: *plant more plants*. It is a solution that farmers implement practically every day. Plants, especially trees, capture carbon dioxide through photosynthesis that supports the growth of their leaves, branches and roots.

In addition to prompting some planting, the unforgiving heat dome we've endured this summer should remind us all that we all need to take water conservation



Chelenzo Farms' grow-dome at sunset, Cerrillos, N.M.

### Our operating philosophy is set on three pillars: education, research and community.

seriously, and need to prepare for warmer days to come. It is an inconvenient truth that we have embraced on our farm, one that we are committed to responding to in a number of innovative ways.

In 2021, my wife, Dr. Chelsea Hollander, and I decided to pick up our family and leave a convenient suburban lifestyle in New York and move to the Land of Enchantment so that we might have a healthier life a lot closer to nature. We landed in Cerrillos, 20 miles south of Santa Fe, and started a homestead. Even before our move in May of that year, we knew that in addition to growing organic produce, we were committed to conservation and ecosystem restoration on our 350 acres.

### Prepare for a Career in Trades and Sustainability









Learn to grow your own using aquaponics and hydroponics. Prepare to become a plumbing or HVAC professional. Discover the secrets of cultivating algae and creating biofuels. Study smart energy grids and building automation and control technology. Gain valuable welding and adobe construction skills and knowledge.

In the Trades and Sustainability Pathway at Santa Fe Community College, you can do all these things and more!



SFCC...
THE RIGHT PATH FOR YOU.
SFCC.EDU/SUSTAIN | 505-428-1270







Top left: Ten beds to grow produce for the local Cerrillos Farmers' Market. Top right: Earthworks project planted with 400 succulents, just in time for an unprecedented heatwave. Center right: Inside the 33' geodesic grow-dome greenhouse, which will soon use water from a catchment system. Center left: Jan-Willem Jansens of Ecotone Landscape Planning, leads one of the workshops at Chelenzo Farms. Bottom right: Water-harvesting earthwork. Water-harvesting earthwork: a ditch and berm have been used in México by agave farmers for hundreds of years.

Thus, with the help of a number of amazing partners, including the Quivira Coalition and Ecotone Landscape Planning, we honed our overall efforts to focus on regenerative agriculture, dryland farming and ecosystem restoration, and set our operating philosophy upon three pillars of education, research and community.

And so began our incredible journey into a redefined life that is much less convenient but far more meaningful. As one might expect from a life that is off a dirt road, largely off-the-grid, in the high mountain desert—there have been almost daily trials and tribulations.

# A journey into a redefined life that is much less convenient, but far more meaningful



LORENZO DOMINGUEZ
El Patrón 646.320.6553 a
chelenzofarms.com
haciendadomínguez.com
lorenzo@haciendadomínguez.com













One of the foremost challenges has been water conservation. From the onset, our operational directive has employed and experimented with a number of innovative and traditional cultivation and water-harvesting techniques.

Foremost is our commitment to dryland farming, which is the practice of producing crops during the dry season by using the moisture stored in the soil from the previous "rainy" season. To support this practice, we embraced healthy soil principles, which include using cover crops, minimizing soil disturbance, fostering animal and plant biodiversity, eliminating synthetic fertilizers and pesticides, integrating livestock and maximizing the presence of living roots. The combination of these practices ultimately leads to healthier soil that will retain more water over the long run.



With the help of a grant from the New Mexico Department of Agriculture, we were able to implement these principles within our first year and saw positive results immediately—all without any supplemental irrigation.

We also chose to plant drought-resistant native plants and succulents that would endure an arid and unforgiving landscape. On June 10 of this year, with the support of several organizational partners and two dozen workshop volunteers, we planted over 500 agave, cacti, yucca, cholla and sotol. With the support of a Western SARE grant,

we are also creating a one-acre Permaculture food forest that includes 500 more succulents and native plants such as saltbush, tomatillo, sage bush, amaranth, cottonwood, honey locust trees and a retention pond.

To create infrastructure that will support this endeavor, we are continually creating water harvesting earthworks across our cropland. Heading up this ambitious initiative is Nina Listro, our director of farm operations, who presciently took it upon herself to become a certified water harvesting design practitioner through a course offered by the Watershed Management Group in Tucson. Subsequently, she has led the creation of acres of erosion-control structures like one-rock dams, Zuni bowls and media lunas and also designed a couple of raintank and greywater systems.

### Regenerative agriculture, dryland farming and ecosystem restoration on 350 acres

Thus, in addition to a 1,500-gallon catchment tank we have attached to our home, we now have two 500-gallon tanks that capture rain and snow-melt off our

2,000 square-foot garage. This provides water for our farm interns' living spaces and is ultimately recycled by a greywater system that waters a wildflower garden outside their kitchen window.

With a generous grant from the LOR Foundation, we are also building an innovative water catchment system that will help supply the needs of plants and seedlings growing in our 33-foot geodesic greenhouse. The project entails capturing precipitation in a corrugated half-pipe that circumvents the exterior of the dome and runs into a 2,500-gallon underground catchment tank, which will be connected to a solar-powered pump and hydrant inside the dome. Completion of this pioneering system will serve as a model for other producers with domed greenhouses, helping to sustain agriculture in the drought-ridden Southwest.

These are merely a few examples of innovations we are implementing at Chelenzo Farms. We feel fortunate to have settled in Cerrillos for our little life-changing experiment, for we owe a lot to our gracious neighbors who have embraced our aspirations, family and farm team. Our success is also due to the army of volunteers and the multitude of awesome organizational partners we have worked with over the last two years. See a full list of projects and partners at chelenzofarms.com.

Lorenzo Domínguez is El Patrón, co-owner of Hacienda Dominguez & Chelenzo Farms in Cerrillos, NM, along with his wife Chelsea, aka "the real boss." Domínguez is also host of the El Puente radio show on KSWV 99.9 FM in Santa Fe, which bridges regenerative agriculture with regenerative health and community through interviews with leaders and practitioners. He recently served as the only farmer on the inaugural review committee for the New Mexico Economic Development Department's Healthy Food Financing Fund, an integral part of the governor's Food Initiative. He is currently a candidate for the governing board of Santa Fe Community College.



### ABOUT HACIENDA DOMINGUEZ & CHELENZO FARMS

Our organic research farm serves to educate the community and offer training in permaculture farming, land conservation, Indigenous sustainability practices, and the realm of sciences that seeks to understand the relationship (past, current and future) that humans have with nature and the land. We also aspire to contribute to knowledge about agricultural practices and drought-resistant crop cultivation that will contribute to improve soil health in the arid U.S. Southwest. This includes efforts to cultivate agave and other succulents in northern New Mexico.

Educational opportunities are offered through public workshops and promoted through work with multiple partners, local schools, as well as hosting farm interns via the Worldwide Opportunities in Organic Farming (WWOOF) organization.

Our community work is focused on resolving food insecurity issues, assisting underserved farmers, particularly Mexican, Indigenous and other immigrants, through programs and partnerships that teach regenerative agriculture and increase awareness among the general public about the historical, cultural and social contributions of immigrants in New Mexico.

We also aspire to rejuvenate the landscape through ecosystem restoration and regenerative agriculture that includes outdoor and greenhouse gardens replete with edible native plants, such as cacti, agave, succulents, legumes, herbs, microgreens, fruits and vegetables. Currently, our animals include meat and egg-laying chickens and goats that we integrate into our farming practices via rotational grazing and the creation of compost and organic-based soil amendments.

#### **GLOBAL WARMING RECORDS BROKEN**

On July 4, scientists declared it to be the hottest day on Earth in about 125,000 years. Most attribute soaring global temperatures primarily to a combination of climate change and the switch from La Niña to El Niño, which is a natural climate phenomenon that occurs when sea surface temperatures in the central and eastern tropical Pacific Ocean are warmer than average.

On July 16, Sanbao, China recorded a temperature of 126°F—the country's highest ever observed and the highest recorded north of 40 degrees latitude globally. The same day, the heat index—which measures how it feels—reached 152°F at the Persian Gulf International Airport on Iran's southwestern coast and continued to post several days above 140 through the start of August.

This summer, Phoenix broke its record with 31 consecutive days of 110-degree heat; the previous record was 19 days, set in 1974. In July, the "Valley of the Sun" also set a record for the highest monthly average temperature of any U.S. city, at 102.7°F. Other new records include 19 days with a minimum of 90°F or higher and an average minimum of 90.8°F throughout the month.

Likewise, El Paso, Texas, suffered for 44 consecutive days at or above 100°F, from June 16 to July 29, which was 19 days longer than its previous record, set in 1994.

### HOPI DRYLAND FARMING

Some Thoughts from Michael Kotutwa Johnson Indigenous resiliency specialist, university of arizona



Raising crops in a semi-arid environment is a challenge. But, we do it because that is what we were told to do a long time ago. Faith-based agriculture incorporates community-based values and keeps our relationship with the environment continuous... To be part of something, you need to truly understand it. I built my house with what nature provided. This house and the fields I plant are designed for our younger generation. I use this place to not only talk about culture but to help them and me grow.

Hopi corn is planted six to 18 inches deep, depending on the soil moisture level... No pesticides, herbicides, soil enhancements, and no irrigation. I had to replant one of my fields because of cutworms... July 12: It's going on over 75 days without rainfall, and upper-90 degree temperatures. Some plants got heat stressed but some did not. Those that produced will have their seed planted next season. Biodiversity is the key to sustainability... Once roasted, I have seen corn stored, resoaked and then boiled to eat 20 to 50 years later. This is yet another example of Indigenous ingenuity and food security... Hopi apricots. You do not always have a crop like this, but that makes you more grateful when you do.

At Hopi, crops are grown to fit the environment, and the environment is not manipulated to fit the crops. These types of systems need to be supported... Nature teaches us if we just take time to observe and listen. Working only within her rules will I truly benefit. Will I make money, can I feed the world, is my system efficient? No. But will I survive? Is my culture and value system intact, are my people and I happy? Yes.





















# TREES, GARDENS AND PEOPLE: EMBEDDING AGROFORESTRY IN THE WEB OF LIFE

The Southwestern Tribal

Agroforestry Outreach Project

#### BY LEAH POTTER WEIGHT

Arriving at Roxanne Swentzell's home in Santa Clara Pueblo moves you from one world into another—from the hot, dry piñon-juniper ecosystem into a diverse forest of trees, shrubs, animals and art. The air cools significantly as you step into the shade, where birds are chirping and chickens mill about in their forest pen. I'm here with our team of partners to interview Roxanne for the Southwestern Tribal Agroforestry Outreach Project. Funded by the USDA National Agroforestry Center, the project is a collaboration among numerous Indigenous and non-Indigenous partners working together toward the revitalization of Indigenous agroforestry. We're accomplishing this through the development of educational materials and training for Southwestern Tribal entities and natural resource professionals interested in or practicing agroforestry.

Swentzell, co-founder of Flowering Tree Permaculture Institute, graciously agreed to serve as a case study, along with Tewa Women United, through their Healing Foods Oasis in Española and the Santa Ana (Pueblo) Native Plants Nursery. Each group incorporates agroforestry into its land stewardship efforts, but not everyone calls it "agroforestry." As Swentzell put it, "I never thought that what we were doing was agroforestry, or any name to it. Except that we were following a natural path that makes sense."

Indigenous peoples have practiced diverse and evolving forms of agroforestry and agroecosystems for centuries. Through generations of observation and experimentation, they have evolved complex practices to manage diverse ecosystems that provide food, fuel, building materials, tools, hunting and ceremonial spaces essential to maintaining Indigenous ways of life and cultural traditions. (See: *Indigenous Traditional Ecological Knowledge in Agroforestry* by Rossier and Lake.) "Indigenous permaculture structures increase topsoil depth, bank overflow, herbaceous cover, water saturation and nutrients available in the soil." (Exploring Indigenous Permaculture for



Photos by Treston Chee

### The revitalization of Indigenous agroforestry

Land Management Strategies: Combining People, Food and Sustainable Land Use in the Southwest by Kathryn (Alicia) Thompson)

Communities have survived and thrived in the dry Southwest since time immemorial through these diverse and responsive agroecological practices. However, colonization, altered political boundaries, laws, regulations, economic incentives and socio-cultural practices have inhibited Indigenous peoples' ability to manage their ancestral lands and pass down traditional agroforestry practices. Nonetheless, current Indigenous-led agroforestry efforts exist and persist in New Mexico's 19 pueblos and all around the Southwest. Those of us with a passion for agroforestry have a lot to learn from both the practices themselves and the worldviews, Traditional Ecological Knowledge (TEK) and cultural connections in which these practices are embedded.

Agroforestry blends agriculture and trees, and commonly includes practices like:

- Alley Cropping: alternating rows of trees with other crops, such as annuals
- Forest Farming: utilizing upper and lower forest canopies to grow crops
- Silvopasture: integrating animal grazing with trees
- Riparian forest buffers: dividing streams from adjacent agricultural use and providing bank stabilization
- Windbreaks: utilizing trees to protect other crops from wind

The term "agroforestry" has grown popular in certain parts of the country, like Wisconsin, where I previously lived. However, the term is not as commonly used in New Mexico, despite the fact that agroforestry is more woven into the culture here than many of us realize—from cattle grazing in public forests, to graziers running their livestock under pecan trees, to trees grown along river banks for stabilization and to prevent cattle overgrazing riparian areas, the practices exist around us. And agroforestry is present in spaces like Swentzell's home, where she's grown a 35-year-old food forest, flush with life from bottom to top. But she didn't go into this work to become an agroforester, or to diversify her revenue streams.

As Swentzell puts it, "For me as a Tribal person [Flowering Tree Permaculture Institute] has really incorporated my identity and thoughts of who we are as Pueblo people here at Santa Clara, and Indigenous peoples of the Southwest, and of human beings on this Earth. Flowering Tree has emerged

more as a self-reflective, cultural preservation entity, trying to help the people from here to possibly self-examine who they are as people, stewards, and members of this area, this land. We're life forces on this planet and we can relate to the land by knowing ourselves. So, if you know yourself a little bit, you probably know what the land needs, too."

It is from this place of knowing herself, and understanding the land, that Swentzell grew a food forest. It all started with a rock on a hot driveway 35 years ago. That rock created microclimates; on its north side it provided a little extra shade and protection from evaporation to allow Swentzell to grow her first tree, a Black Locust. This type of tree —often considered a weed—is drought tolerant and was tough enough to grow in the hot driveway, becoming the mother tree from which the forest was able to grow and



diversify. The forest invites wildlife, provides shade and forage for birds and livestock, produces culturally and ceremonially important food and resources, brings a

sense of peace, is home to Swentzell's incredible sculptures, is a space for education and connection for members of Santa Clara Pueblo, and provides seeds (literally and metaphorically) for the future.

# Agroforestry efforts exist and persist in New Mexico's 19 pueblos and all around the Southwest.

Agroforestry can be an end itself—it's worthwhile to involve trees in agricultural systems. It can, however, also be the outcome of a worldview that centers listening to and tending to the earth and her people. In the case of Tewa Women United, their Healing Foods Oasis in Española centers healing for women, children and the most vulnerable by providing spaces of reflection, beauty, community and medicinal and culturally important plants to support that healing. Or in the case of Santa Ana Native Plants Nursery, which seeks to maintain and grow traditionally important plants and trees, and support land rehabilitation efforts such as post-wildfire recovery and pollinator restoration.

Through the Southwestern Tribal Agroforestry Outreach Project, we hope to uplift these pueblo projects grounded in community and stewardship, and help inspire future generations of Indigenous and non-Indigenous agroforestry efforts that are embedded in connection and care for the land and for the people.

The project will be completed at the end of 2023, and all educational materials for the project will be posted on Quivira Coalition's website. We'll be hosting webinars this fall highlighting the project outcomes and case study participants; check back with us to learn more.

### REGENERATE Conference—Nov. 1–3 in Santa Fe

We're excited to be highlighting agroforestry during the annual REGENER-ATE Conference in November. Held in collaboration between Quivira, Holis-



tic Management International and American Grassfed Association, the conference aims to convene ranchers, farmers, conservationists, land managers, scientists and thought leaders to share knowledge, build community and create a culture of resilience and regeneration in agriculture.

We'll be hosting an in-person workshop during the conference on Nov. 1 about the project featuring project partners

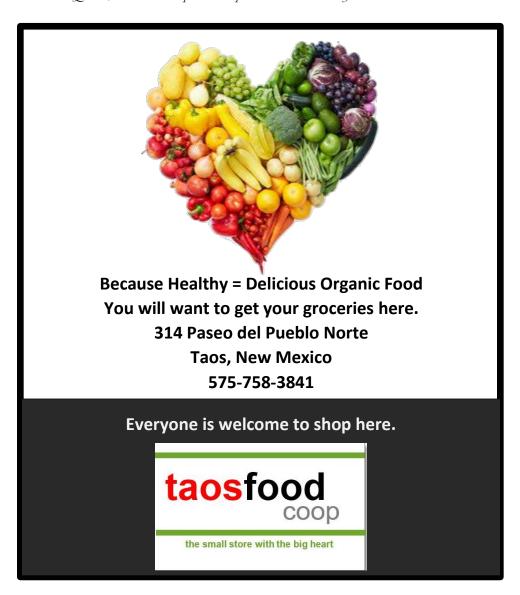


### Diverse and responsive agroecological practices

James Calabaza (Trees, Water & People), Victoria Atencio (Ecological Restoration and Education consultant) and Dr. James Allen (Northern Arizona University). And you can see project partner Alicia Thompson (National Young Farmers Coalition) speak on "Southwest Agroforestry from an Indigenous Perspective" on the conference main stage on Nov. 3. Learn more at REGENERATECONFERENCE.COM.

In the calm understory of Swentzell's high desert food forest, you can feel the possibility of a future of regenerative and perennial agriculture that is rooted in Traditional Ecological Knowledge, and that prioritizes not just the land but also Indigenous people and their sovereignty.

Leah Potter-Weight is the Education and Outreach project manager at the Quivira Coalition. She lives in Questa, N.M. and helps run the produce CSA at Virsylvia Farm.



### 2023 REGENERATE CONFERENCE - SANTA FE

Microbes, Markets, Climate

#### BY SARAH WENTZEL-FISHER

The Quivira Coalition will be at the Santa Fe Community Convention Center Nov. 1–3 with our partners, Holistic Management International and the American Grassfed Association, hosting the 6th annual REGENERATE Conference. We will explore regenerative agriculture at every scale—from microbial soil communities, to social relationships and markets, to our changing climate, and everything in between.

The phrase "regenerative agriculture" was coined over 40 years ago. In the last 10 years, industry and markets have embraced this approach to food production and land stewardship, but the root practices have existed for millennia, starting with Indigenous, land-based communities. Today, large corporations are investing in new technologies for carbon-capture and ecosystem service verification, and see opportunities for climate change mitigation from regenerative agriculture. Amidst all these advancements, we still need to look more deeply at human influences that shape who has a seat at the table, who can access these markets, how markets are defined, and who can utilize the funding available for research and adaptation.

We like to approach this event with inquisitiveness and a willingness to consider ideas and opinions not our own. This is at the heart of the work of the "radical center," one of Quivira's core values. What history and knowledge has been lost, and continues to be lost, because of policies, agendas and vested corporate interests? Who are the new faces of and leaders in the regenerative agriculture movement? How can we do a better job of creating access to resources for all those eager to participate in and scale this vital work? How can we, individually and collectively, shape how this industry evolves to address social, economic and environmental needs?

Partnership and collaboration have been key tenets of the REGENERATE Conference, and this year we are excited to work with American Farmland Trust, the Savannah Institute, National Young Farmers Coalition, Rodale Institute, Edible Communities and many others to offer a great event for learning and building community. We are also grateful to have the support and partnership of the USDA through a Grazing Land Conservation Initiative and

REGENERATIVE
AGRICULTURE
PRACTICES

Judicious use
of chemical
inputs

Minimize
tillage
Maintain
soil cover
Foster plant
diversity

All working to build
SOIL HEALTH

Source: Adapted from Giller et al. 2073

of members of Funders for Regenerative Agriculture, so we can offer more discounts and scholarships than in previous years.

For those who can't commit to the full three days, consider joining us for a workshop with American Farmland Trust discussing their Women on the Land initiative on Nov. 1, or coming for an evening to the Market Connections Social with Rodale Institute on Nov. 1 from 5:30-7:30 p.m., or a career fair and intergenerational mixer with the National Young Farmers Coalition, Nov. 2 from 5:30-7:30 p.m. If you are in for the whole enchilada, you might consider making it a combo meal by registering for the Edible Institute on Saturday, Nov. 4; you get a discount when you register for both.

To learn about this year's speakers, including Zach Ducheneaux, director of the Farm Services Agency, Paula García of the New Mexico Acequia Association, Alicia Thompson of the Young Farmers Coalition, and others, visit regenerateconference.com.

Sarah Wentzel-Fisher is executive director of the Quivira Coalition.

### **FOOD FORESTS: A GROWING MOVEMENT**

Food Forests—essentially, edible parks—can be sited on vacant lots in urban areas. They may grow large and small trees, vines, shrubs and plants that produce fruit, nuts and other edible products. Food forests are designed to mimic ecosystems found in nature, with many vertical layers. They shade and cool the land, protecting soil from erosion and providing habitat for insects, animals, birds and bees.

Food forests are an exciting new way to protect nature without displacing people. They contribute to rainwater harvesting and help beautify neighborhoods. They don't just conserve biodiversity; they also promote community wellbeing. While fostering nature in urban settings, they can promote civic engagement by serving as gathering places, connecting neighbors across divides of class, race, language and culture.

### What if you could grow fresh food where it is most needed, cost-effectively, and create green space for the local community?

Local collective action is central to repurposing open spaces, yards and vacant lots into food forests that may be linked into a citywide network. Neighborhood volunteers may choose what to grow, plan events and share harvested crops with food banks, nonprofit and faith-based meal programs, and neighbors.

In Boston, small, urban food forests (averaging 7,000 square feet) of reclaimed land have been placed in a community trust, a coalition that partners with the city government and holds the food forests as permanently protected lands. Neighborhood stewards manage the sites' routine care and maintenance. The nonprofit Boston Food Forest Coalition is working to develop 30 community-driven food forests by 2030. The coalition provides technical assistance, fundraising support and hires experts for some tasks.

In small cities, innovative zoning and permitting ordinances may be necessary to support small-scale urban agriculture.

### Stewarding Working Lands

### Making Biochar

#### BY EVA STRICKER, PH.D.

I'm an extremely risk-averse person. Skydiving? No chance. River rapids? I'd really prefer a slow and gentle float in an inner tube with some refreshing beverages that are at no risk of spilling. Investing in bitcoin? Never. So how did I find myself standing in front of a six-cubic-yard kiln filled with flammable material holding a propane tank with a torch?

As director of the Quivira Coalition's CARBON RANCH INITIATIVE, I've spent the last few years pursuing two main questions: How can we use the soil-health principles to build resilience on dry working lands, and how can we make agricultural waste productive? As I learned about biochar and dug into the (sparse) published literature, I realized that both making and using biochar can help answer those questions.

- 1. Because degraded dryland soils are depleted of organic material and have high and increasing amounts of bare ground, top-dressing organic amendments such as biochar aligns with one of the healthy soil principles: Keep the soil covered. The water-holding capacity of biochar should also help the soil hold water, which is crucial for building resilience to both drought and flooding.
- Because there is nuisance wood on western landscapes that is likely
  to burn catastrophically at some point in the future, ranchers and
  farmers need to spend time and energy to thin wood from either
  strategic locations or across the entire ranch. Some material is high-



Photos courtesy Quivira Coalition

value and could be used for firewood or other human needs, but much of the biomass is low-value and, therefore, is a cost to manage by either transporting to the dump or burning on-site. Making that nuisance wood into biochar could help divert material away from catastrophic fire or the landfill.

# Building resilience on dry working lands and making agricultural waste productive

The Carbon Ranch Initiative is devoted to research, engagement and technical support. We've been connecting with experts (check out this YOUTUBE VIDEO or THIS ONE) and running trials on range-

lands in New Mexico and Texas. We recently released our newest TECHNICAL GUIDE on biochar and spent a lovely weekend on Seven Oaks Ranch in Ozona, Texas, making biochar with the kiln method and the conservation pile burn method. The purpose of the burns was to:

- Remove nuisance wood from the landscape. The site is overgrown with juniper, which must be removed to build grassland habitat for wildlife and reduce wildfire risk.
- Transform the nuisance wood into a valuable organic amendment that can
  be used to build soil health to increase grassland productivity. We selected
  sites that had bare ground that stubbornly refused to vegetate despite
  previous interventions, such as prescribed fire and ripping.
- Train rural producers, especially women, to use managed fire to remove nuisance wood from their operations and build soil health.

These objectives were a key difference between a bunch of new friends hanging out around a bonfire vs. managing for a conservation purpose.





Safety and mitigating risk were front and center. One key component of safety is planning and a specific burn plan document that we share with hosts, participants, local fire authorities, neighbors and other relevant stakeholders so everyone is aware that there will be fire on the landscape. I organize my burn plan around "who, what, where, when, why," and I run my safety meeting such that after each section, I ask each person to state what piece of information that they are going to keep in mind that will keep them and others safe. Awareness of wind, communication with others, properly storing gear, patrolling for embers, knowing where the emergency beacon is, and taking breaks for water and snacks were frequently repeated.

And then... ignition. Then feeding the fire. One participant noted that being part of the burn was literally and figuratively transformative. My staff and I chatted

that it's a gift to spend time with a group of people focused and attentive on a single task, working together to keep everyone safe in uncertain and shifting conditions. Over four days, a group of five-to-seven women and Wayne, the host, transformed six trailer loads of nuisance wood into sparkling, dark biochar, inoculated with the finest gunky pond water we could find. We raked it out and will monitor next year to see if we can encourage plants and microbes to grow into the bare ground and build soil health.

Producers live with risks, constantly. A late freeze. An outbreak of a parasite. A new competitor in the market. Producers are willing to live with that risk because what they do matters—deeply—to themselves and the rest of society that depends on them for the most basic of needs. Anyone working toward social change faces risks. At the least, they might alienate friends and family who disagree with their beliefs. At the most extreme, they open themselves up to online, verbal or physical abuse and harm. While each person has a different level of risk that they're okay with, we can all bravely face our discomfort and work to make the world different in the ways that we can control. I was so scared standing in front of the first few flames, terrified that one little mistake or

one unfortunate gust of wind would mean that I had failed to keep the people, plants and animals around me safe. But I knew that I wasn't standing alone—people who have taken a risk to do something that they believed in were there with me.

Eva Stricker, Ph.D. is the Quivira Coalition's Carbon Ranch Initiative director.



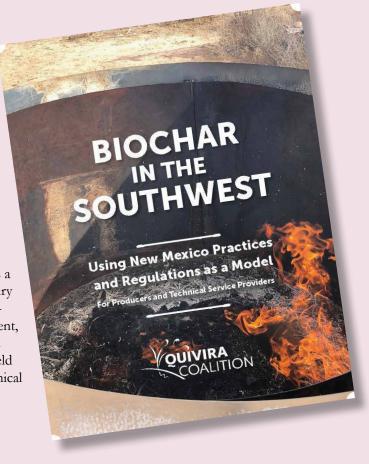
### **BOOK PROFILE**

### BIOCHAR IN THE SOUTHWEST USING NEW MEXICO PRACTICES AND REGULATIONS AS A MODEL

BY CJ AMES AND EVA STRICKLER, PH.D.,

QUIVIRA COALITION AND KELPIE WILSON, WILSON BIOCHAR ASSOCIATES https://Quiviracoalition.org/shop/

This workbook offers practices on New Mexico lands as a model for making and using biochar in a relatively hot, dry and windy environment. It is both a primer on what biochar is and what makes it a useful tool in land management, as well as a guide on how to produce and distribute it on the land. This workbook is intended to accompany in-field or video training that will enable land stewards and technical service providers to safely produce biochar for use in their operations.



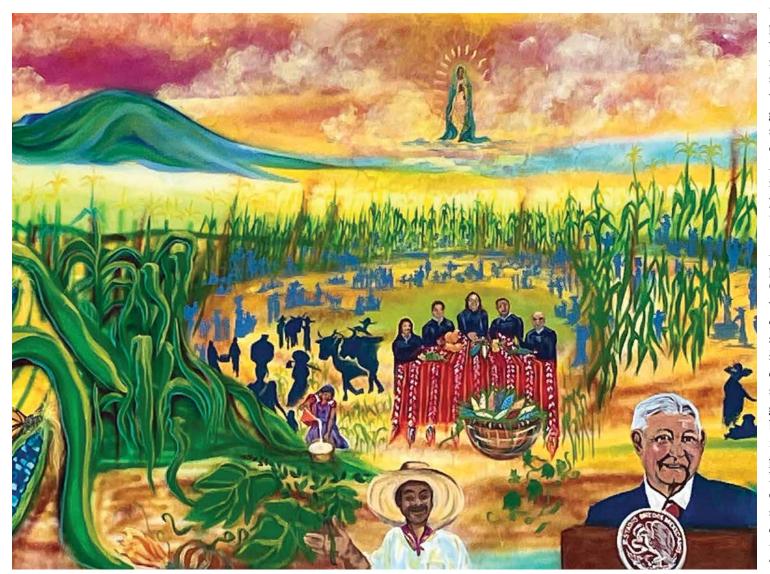
### NRCS WILL PAY FOR BIOCHAR APPLICATIONS

The USDA National Resource and Conservation Service (NRCS) provides financial and technical assistance to farmers, landowners, and land managers to implement conservation practices through the Environmental Quality Incentives Program (EQIP). Recently, a new code was added to the Soil Carbon Amendment (Code 336) specifying biochar application as an approved practice that can now be paid for EQIP funding. HTTPS://WWW.NRCS.USDA. GOV/PROGRAMS-INITIATIVES/ **EQIP-ENVIRONMENTAL-QUALITY-INCENTIVES** 

### OAXACA MURAL DOCUMENTS STRUGGLE TO DEFEND NATIVE CORN

Inauguration celebrates milpa cultures, Supreme Court decision banning cultivation of transgenic corn in México

ARTICLE AND PHOTOS BY TRACY L. BARNETT



México's president, Andrés Manuel López Obrador, is depicted on the mural. In 2020, he issued a decree prohibiting the import of transgenic corn.

In a noisy entrance to one of the oldest markets in the city of Oaxaca, not far from one of the sites where corn culture originated 9,000 years ago, muralist Mariel García stood on a scaffold in the hot sun for three weeks and painted her heart out. The mural she was creating, more than a year in the planning and execution, is a tribute to México's long struggle to protect the country's more than 1,000 native maize varieties from contamination by genetically modified corn.

García, born in northern New Mexico and now living in México, is part of a bioregional and binational collective of artists, scientists and activists that has been working for more than a decade to raise awareness about the need to protect the diversity of corn cultures of the Americas. Although García considers herself anything but political, the mural might be viewed in the context of big-money corn politics.

"When you turn daily news into a mural, you turn it into a legend to be looked up to by students of history... and this one tells the story of how all of México came together to save the corn and native *milpa* cultures," explained Chris Wells, founder of the All Species Projects (HTTP:// ALLSPECIESPROJECTS.COM). The mural was the latest in a series of symposiums, circuses and a traditional Oaxacan *calenda*—a dancing procession of giant puppets—to raise awareness in México and the U.S. about threats to native corn and México's root cultures.

A longtime native corn cultivator and "animateur" from New Mexico, residing in Oaxaca, Wells worked with García, planning the mural's sequenced stories and raising money to cover expenses. García and other members of the collective donated their time.

The milpa is the ancient, complex agricultural system that has supported life for millennia throughout Mesoamerica. Recent studies documented 191 different edible plants in a traditional milpa, including corn, beans, squash, varieties of chiles, toma-

toes, edible greens and medicinal plants. It is also a habitat for a wide variety of animals, including the native Melipona bee, considered sacred to Maya people who cultivate them. "The milpa is México's gift to the evolution of the Earth," said Wells. "The Indigenous and campesino corn cultures across the American continent were so innately agricultural that, after 10,000 years, they are still guarding more than a thousand corn varieties."

Alejandro Jiménez Molina, a master puppeteer who has been called "the Geppetto of Oaxaca," together with partner Soleil Marela, kicked off the mural inauguration with an engaging performance featuring wooden campesinos, Zapotec deities and a fluffy green axolotl, a salamander named after the Aztec god of fire and lightning that has been a symbol of Mexican culture for centuries. Pitao Cozobi, the plumed and imposing god of corn, had choice words for a pair of campesinos who became ill after switching to a diet of crispy corn chips and soda and no longer had the energy to tend to their milpa. "Corn is our meat, our bones, our being, our life," intoned Zapotec

Pitao Cozobi. "This is a mortal battle between the before and the now. These forces are trying to change what for more than 10,000 years the peoples of Mesoamerica have achieved: a corn that even today fills the hunger of many peoples."



Dr. Ana Ruíz Díaz, leader of the class-action lawsuit against GM corn.

### U.S.-México Trade Dispute

Corn has been in the headlines recently because of an ongoing trade dispute between the U.S. and México due to México's pending gradual ban of glyphosate and partial ban of transgenic corn, primarily for use in the country's staple food, the tortilla.







However, the mural was originally conceived to celebrate a less prominent but more important victory for native corn defenders: the 10th anniversary of the *Demanda Colectiva* (class action) lawsuit against transgenic corn, which resulted in a decision by the Mexican Supreme Court to prohibit production of GMO corn in México.

In June, members of All Species Projects and the Demanda Colectiva gathered with city authorities, market sellers, schoolchildren, artists, performers and residents to inaugurate García's mural at the Mercado Sánchez Pascuas. They were also paying homage to México's longtime *muralismo* movement, which integrates art, culture and science.

The mural, which served as a backdrop to the event, features a lush and verdant milpa in the highland valley of Oaxaca, where a rainbow of corn varieties has been cultivated. Superimposed on the green milpa is a biodiverse cast of characters: the deer, the jaguar and the red-tailed hawk. There is a monarch butterfly and other pollinators. There are beans, squash and *quelites*, greens that have developed amongst dozens of edible and medicinal wild plants that have evolved from this ancient agroecology, which is increasingly at risk from the rise of modern industrial agriculture.

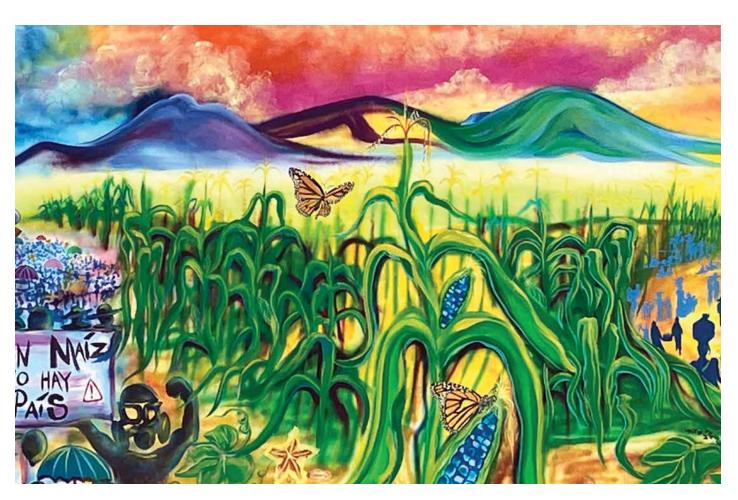
Also depicted are human elements behind the ecosystem: *campesinos* who, over millennia, developed hundreds of corn varieties, each capable of thriving in its specific bioregion. There too, is the Mexican Supreme Court, which upheld the Demanda Colectiva's appeal twice, most recently in 2021, in challenges by the transnational seed companies Syngenta and Bayer-Monsanto. And there are marchers in the street, who have protested for more than a decade. Their signs read: *Sin maix, no hay pais* (Without corn, there is no country) and *Fuera Monsanto* (Get out, Monsanto).

And there is perhaps the most controversial figure, México's current president, Andres Manuel López Obrador, who, in 2020, issued a decree prohibiting importation of transgenic corn, citing concerns that it will contaminate native varieties, as well as the herbicide glyphosate, which has been linked with an increase of cancer and other illnesses. México currently imports about 17 million tons of corn per year from the U.S., where 90 percent of corn crops are genetically modified.

The presidential decree, which was to go into effect in February, was greatly modified under pressure from the U.S. government, which argued that it constitutes a violation of international trade agreements. López Obrador pulled back from the original decree but has stood strong on a banning transgenic corn for tortillas and the *masa* used to make traditional foods. Imports of glyphosate (branded in the U.S. as Roundup) for use with Monsanto's "Roundup-ready" corn varieties, will be phased out by March 31, 2024.

Dr. Ana Ruíz Díaz, author of the first version of the presidential decree and a leader in the class-action lawsuit, spoke at the mural inauguration. "A transgenic corn plant is a pesticide plant," she said. "Why? Because it expresses pesticides within itself and because those who eat it transmit those toxins to their descendants, be it cattle, insects or human beings."

The *Demanda Colectiva*, as the lawsuit is known in México, was filed in 2013 by 53 people including scientists, peasant farmers, beekeepers, human rights and environmental activists against Monsanto and other agro-industrial giants, as well as the Mexican Ministries of the Environment and Agriculture. The plaintiffs pointed to the surprise discovery of GMO corn in Oaxaca that had been planted without authorization and had contaminated crops in a nearby farmer's field. The lawsuit maintained that cultivation of GMO corn violates the human right to biological diversity of native corn, that native corn would be contaminated and its vast biodiversity be damaged if transgenic corn is released on a large scale.



Just three months later, a judge representing 10 federal courts granted a precautionary measure, preventing the planting of transgenic corn nationwide, as the case worked its way through the courts. That has stood to this day. In October 2021, the Mexican Supreme Court ratified the measure, upholding the ban on granting permits to sow genetically modified corn in México. The high court further affirmed that judges in a class-action lawsuit can dictate any precautionary measure necessary to protect the rights of a collective.

Ruíz Díaz hailed the mural as a way of keeping the memory alive of watershed moments in México's legal history. "These are two results that we celebrate because the leadership of the judiciary, that is, the Supreme Court of Justice of the nation, ruled against the transnational and against the Federal Executive Branch, that is, against the secretaries of Environment and Agriculture, and ruled in favor of corn consumers."





Carlos Morales of the Espacio Estatal del Maíz Nativo de Oaxaca (State Space for Native Corn of Oaxaca), a collective of civil society and campesino organizations working to defend the diversity of corn, spoke of the importance of traditional and ancestral agricultural techniques: "In many places in Oaxaca, we still have the virtue that there is peasant knowledge that you will not find in science acad-

emies, and that, curiously, is what our parents, our grandparents and great-grandparents still have. Sometimes, it is enough to listen to them. The transmission of knowledge is fundamental," said Morales.

Just as we inform them about transgenics, so too can they share information on how the corn is planted in the Sierra Norte, how a ritual is performed in the Isthmus of Tehuantepec, how the seeds are preserved by drying in the sun, or stored with ash, or with dry chile, epazote or hierba santa. All this knowledge must continue to be consolidated." ■

Tracy L. Barnett is an award-winning journalist whose work has appeared in The Washington Post, Yes! Magazine, Reuters, Earth Island Journal and USA Today, among others. She is the founding editor of the Esperanza Project. HTTPS://WWW.ESPERANZAPROJECT.COM

PHOTOS: Pg. 29: Giant campesino puppets, with Doña Cecilia carrying sacred corn on her head, as Don Ubaldo guides her; Alejandro Jiménez Molina and Soleil Marela's "Corn, Spirit of the Earth" puppet show; muralist Mariel García with presenters at Sánchez Pascuas Market. Above: Chris Wells, founder of All Species Projects; corn deity puppets with heritage maize varieties.

### U.S. ESCALATES TRADE DISPUTE WITH MÉXICO OVER GM CORN

In August, after 75 days of formal consultations, the United States escalated its objections to México's curbs on genetically modified (GM) corn imports, requesting a dispute settlement panel under the 2020 North American trade pact. If the panel rules in favor of the U.S. and México fails to comply with its directives, the U.S. Trade Representative would win the right to impose punitive tariffs on Mexican goods, a move that could spark a trade war.

México buys about \$5 billion worth of corn from the U.S. each year, making its northern neighbor the country's largest trading partner. Most of those purchases are GM yellow corn used for livestock.

México sought U.S. cooperation to jointly conduct scientific research on the health impacts of GM corn, but their U.S. counterparts denied the request. México argues that biotech corn harms native varieties and may have adverse effects on human health, even if used as animal feed. In a statement, USDA Secretary Tom Vilsack said that biotechnology has "decades of evidence demonstrating its safety and the rigorous science-based regulatory review system ensures it poses no harm to human health and the environment."

### What would Santa Fe be Without History?

While virtually everyone acknowledges Santa Fe is a historic place, the stories and spaces that communicate our history to residents and visitors need constant upkeep and reinforcement.

### The Old Santa Fe Association works to preserve Santa Fe's cultural and architectural heritage.

Through history education, community service, and historic preservation advocacy, we promote and maintain Santa Fe's unique charm and distinction that combines culture, tradition, and environment the priceless assets of our region.

Help us keep Santa Fe the "City Different." Learn more at oldsantafe.org



### **OP-ED: EMIGDIO BALLÓN**

### FIGHTING FOR SEED FREEDOM

Protecting the Sacred Gift

In recent years, the diversity of our food and seed supply has been rapidly declining. It has become increasingly important for more individuals and communities to be focused on seed storage. Such efforts are fundamental to the protection of both biological and cultural diversity, which go hand in hand. When culture is eroded, so too, is biodiversity.

Seeds are a gift we received from the Great Spirit, and no individual or entity can own them. What happens to seeds can have long-lasting effects on the web of life. Seeds are living and regenerative, as they feed soil organisms, pollinators, animals and humans.

# Organic seeds and organic farming protect our health and the wellbeing of all living things.

When seeds are non-renewable and have chemicals, or are genetically engineered, their diversity disappears.

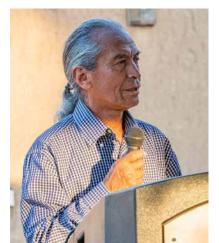
Chemicals kill soil organisms and pollinators. Seventy-five percent of the bees on the planet have disappeared! It is estimated that bees contribute more than \$159 billion annually in the agriculture sector. Chemically farmed soil that is sprayed with herbicides and pesticides kills beneficial organisms that create soil fertility and protect plants. Rachel Carson wrote *Silent Spring* to wake us up to the destructive impacts that pesticides have had on ecosystems. Organic seeds and organic farming protect our health and the wellbeing of all living things.

Industrial seeds and industrial agriculture have been major factors in the great reduction of our crops' diversity. Humanity has had 8,500 species of food crops



made available to consume, and each has evolved, creating more diversity in the process. India had 200,000 rice varieties before the "Green Revolution," but since then, that diversity has been replaced with monocultures. The same thing has happened with potatoes and other crops. Today, India grows only eight globally traded commodities. Genetically engineered corn and soy seeds are patented, and corporations can collect royalties from the farmers that use them. Farmers are becoming dependent on these GMO seeds, and seed freedom is going away. Since seed monopolies were established in India, more than 284,000 Indian farmers have committed suicide!



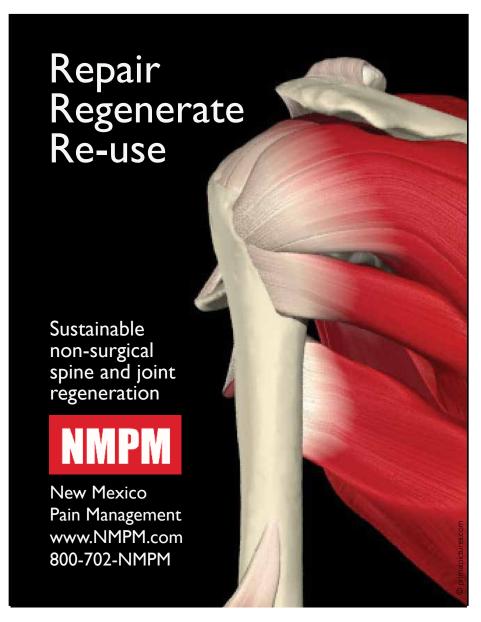


Gandhi spun cotton for our freedom. But today, GMO BT cotton has enslaved as well as indebted our farmers. Ninety-five percent of cotton seed is controlled by Monsanto, which was bought by Bayer AG for \$63 billion in 2018. The multinational pharmaceutical and biotechnology company is the second-largest agrochemical company in the world. It owns 33 percent of the global seed market and 23 percent of the agrochemical market.

In Native American spirituality, nature and culture are the circle of life. The Three Sisters—corn, squash and beans, a gift from the Divine Creator—are to be cherished and nurtured from generation-to-generation. When we nurture them, they nurture us. We must continue our work preserving this sacred gift and fight for seed freedom. This will allow us to preserve the heredity of our ancestors.

Emigdio Bailón (Quechua) was born in Bolivia. He has a master's degree in plant genetics. He specialized in research on quinoa and amaranth. He has been director of the Tesuque Pueblo farm, north of Santa Fe, N.M., for 18 years.

Photos © Seth Roffman



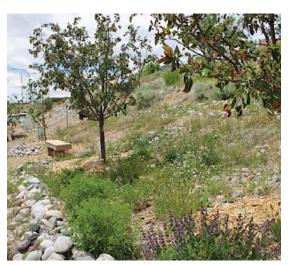


# TENDING HABITAT, SEEDS AND COMMUNITY AT THE ESPAÑOLA HEALING FOODS OASIS

#### ARTICLE AND PHOTOS BY KAYLEIGH WARREN

The arrival of summer monsoon rains set into motion a bustle of activity at the Española Healing Foods Oasis (EHFO). As rain cascades down the slope at the edge of the Española City Hall parking lot, it meanders through the garden's three stacked swales. Modeled after traditional Pueblo terrace gardens and permaculture practices, each swale serves its own function in rainwater harvesting and water distribution throughout the site. Each swale is also home to a different plant community—such as the top swale, which is composed largely of native shrubs including Wood's rose (Rosa woodsia), red barberry (Berberis haematocarpa), Apache plume (Fallugia paradoxa) and fourwing saltbush (Atriplex canescens). Oyster mushroom mycelium bricks buried beneath the soil provide stabilizing and remediating benefits to the larger agro-ecosystem.

Emerging from what was a weedy, erosive slope between city hall and Valdez Park is now a 1.5-acre ethnobotanical public demonstration, research and edible food garden in Española, New Mexico. The EHFO is a home to edible and medicinal plants of cultural and ecological significance. The garden provides seasonal food, herbs, native plants, accessible pathways and aesthetic beauty. The project broke ground in 2016 and continues to be cared for and guided by Tewa Women United's (TWU) Environmental Justice Program, in collaboration with the city. Parking is available at the Española Public Library/Lucero Center lot or on Vietnam Veterans Memorial Road, adjacent to the park.



The EHFO offers grassroots, stakeholder-driven, hands-on experience with Pueblo dryland farming, water harvesting and soil-building techniques as a means of learning about cultural, environmental, health and climate change issues related to water. Additionally, the garden serves as a demonstration site for the use of myco-remediation practices to restore soil.

At the main entrance to the EHFO in August, visitors were greeted

# The practices and values of Indigenous agro-ecology are central to the EHFO.

by swaying stalks of Santa Clara Pueblo white corn, planted by third- and fifth-grade students from Kha'p'o Community School in May in one of the rain harvesting spiral gardens. While the majority of the site is devoted to cultivation of native plant species, seed gardens that provide community members access to local heirloom seeds through the Española Seed Library have also been planted throughout the garden. On the second slope, an



expanding patch of showy milkweed (Asclepias speciosa) is a stopping point for monarch butterflies (one of three federally listed endangered butterfly species in New Mexico) on their migration route. Community members have observed monarch caterpillars on the plants.

The practices and values of Indigenous agro-ecology are central to the EHFO, and inform not only what is grown and how it is grown; they also support the garden's offerings as a community

gathering and learning space. The United Nations Food and Agriculture Organization (UNFAO) defines agro-ecology as a "holistic and integrated approach that simultaneously applies ecological and social concepts and principles to the design and management of sustainable agriculture and food systems... seeking to optimize interactions among plants, animals, humans and the environment, while also addressing the need for socially equitable food systems."

The practice of agro-ecology at the EHFO is further informed by Pueblo Tewa place-based farming practices and cultural values. TWU's "The Healing Foods Oasis is part of our vision to end all forms of violence against women, girls and our Mother Earth. It's facilitating our reconnection to the plants, water, air and all the elements."

—Beata Tsosie-Peña (Santa Clara Pueblo), EHFO founder







organizational core values are grounded in Tewa ways of knowing that contribute to the tending of beloved families and communities. The core value of *seegi ma vay I*, roughly translated as "loving care and caring for all," is rooted deeply in the work of



both TWU and the EHFO. By cultivating heirloom seeds, urban habitat for wildlife, and organic food and herbal medicine for community, the EHFO seeks to demonstrate what "loving and caring for all" can mean in a contemporary context where many local sustainable food systems have been disrupted by or face threats from colonization, climate change, social inequity and environmental toxicity from radioactive or chemical sources.

Kayleigh Warren is Tewa Women United's Environmental Justice Program coordinator. http://tewawomenunited.org













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

he 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.

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



#### **OP-ED: TRAVIS MCKENZIE**

### **GROWING THE FUTURE**

School Gardens in the South Valley, Agricultural Education and Cultivating the Next Generation of Earth Stewards

Mother Earth will survive! It is humans that are at risk of extinction. At times we get caught up in the day-to-day hustle and bustle of our modern era and forget that everything we need to survive comes from the Earth. We must honor and respect her for that. We have been given a sacred responsibility to care for the Earth and create balance and harmony with our natural world and with each other. This is what we try to instill in our young people's hearts and minds to ensure a healthy future for our people and communities.

I have been a teacher in Albuquerque Public Schools since 2017 and am now honored to be teaching in the Los Padillas community at Polk Middle School in the Valle de Atrisco on the historic Camino Reál. I was brought to the school because of my passion and knowledge of agriculture and years of food justice work. Former Assistant Principal Delilah López reached out to me during the pandemic and asked if I would consider bringing this work to Polk to help with their *Jardin de Los Sueños* garden initiative. I was interviewed by Principal Ben Bustos, an amazing Chicano from Mora in northern New Mexico. We talked about the importance of implementing agriculture in public schools and discussed our dreams and visions. We talked about authentically representing and reflecting the youth and families the school serves. Often, schools don't really do that. We have been a Spanish-speaking community for hundreds of years but only recently has the school officially become bilingual.



Students irrigating at Valle Vista Elementary for the first time in nearly half a century  $\ \ \$  Stephen Picha

the land and will fight to keep it that way. Agricultural education deserves its rightful place as an integral part of what is offered in public schools.

We are still

connected to

We are still connected to the land and will fight to keep it that way.

Outdoor learning is the new wave that can help lead the way in strengthening local food systems.



The resolana, a traditional outdoor space for community dialog has been revived at Polk Middle School.

School campuses have the potential and ability to cultivate healthy, nutritious and delicious food for students, families and the community. Our campuses could be transformed to encompass planting seeds, creating edible landscapes and outdoor learning spaces. Imagine if all our schools not only had thriving gardens, but also had classes, curricula and lesson plans that supported earth stewardship and environmental education. At Polk Middle School, we want to lead the way.

### Planting seeds for community needs, we are growing our future.

Unfortunately, for many years, highly processed foods are what students have been provided. They know that something has been wrong with school meals. A student said to me, "Why is all our food in bags?" I thought, why are we not cooking for our children? Why are we not serving high-quality foods from local farmers and ranchers? Why are our kids eating highly processed, high-sugar items for breakfast, and not home-cooked *atole*, breakfast burritos or fresh fruit grown in our homelands?

We brought more than 200 students to the 2023 legislative session to learn about government in New Mexico and how they can use their voices to make our state a better place. They learned about bills and how to connect with elected officials. We want to thank state senators Michael Padilla and Leo Jaramillo for sponsoring Senate Bill 4. That bill created Universal Meals, free of charge for students throughout New Mexico. It also made possible the purchase of more locally grown produce to be utilized in school meal programs and advocated for infrastructure that would make it possible for school cafeterias to be able to cook nutritious meals from scratch.

We no longer have a school garden. Polk Middle School now has a small school farm! Principal Bustos helped procure a Title 1 grant that allowed us to build three hoop-houses. We contracted with Mudhub Greenhouses for our first hoop-house to serve as a sensory outdoor learning space that can be

Agricultural education deserves its rightful place as an integral part of what is offered in public schools.





Above: Students in Polk Middle School garden Below: Albuquerque preschool teachers

utilized by all classes. Math teachers can sign up for the space and take students to learn there. Social studies teachers can bring their classes to have a discussion or write in their journals. Language Arts teachers can bring students to read a book, while surrounded by plants.

The second and third hoop-houses were built in partnership with the Agri-Cultura Network, Los Jardines Institute and the Southwest Organizing Project (SWOP). The students were able to integrate the creation and development of the space into our curriculum. When students are a part of a project, they care more about what they are doing. The second hoop-house will be used for production and hopefully will eventually grow enough food to supply a vegetable bar in our cafeteria. Students will be able to plant, maintain, harvest, process and then eat the food they grow. The third hoop-house will be a propagation station, to grow plant starts. We may also experiment with aquaponics.

Legislative funds have also been utilized to create outdoor learning areas that make it possible for the school to create meaningful, culturally relevant experiences. We built an adobe *horno* (oven) with the help of Maestro Don Albert Parra and Don Joaquín Luján. It is part of our *resolana* space. We will invite farmers, ranchers, community members and organizations to speak to the students so they can learn in a way that is culturally connected. Resolanas are

more than south-facing walls; they are traditional spaces that encourage community dialogue and help bring hopes and dreams to life!

At Valle Vista Elementary, South Valley school, water was running through the acequia when family members were there to pick up their children. One student's grandfather told us it was the first time in nearly half a century that he had seen water flow onto the campus. Other families walking along the ditch were also happy to see it.

Valle Vista also wants to create a community garden and outdoor classroom where students can be nurtured by an orchard and garden while learning biology, culture, history and other subjects. The project was conceptualized as *la resolana* because that term invokes the need to connect students to the history of the valley: thousands of years of native Pueblo history all the way to the founding of Atrisco in 1692, and more modern history, from 1848 to the present. It will also connect students and teachers to acequia *comisionados* and *mayordomos* from the Atrisco and Arenal acequias who can share their work in the community.

Imagine if schools in every district had thriving gardens and farms! We want to be a part of a renaissance that utilizes our rich agrarian history and cultural diversity to help produce not only nutritious food (and health) for our community, but also develop young leaders ready to become the next generation of farmers, ranchers and educators, and continue our legacy of land and water stewardship in New Mexico.

When we think about growing a regional food system, schools need to be in the equation. Schools can develop garden resource teacher positions, garden electives and afterschool programs, or even become STEAM/Agricultural Science magnet schools. We need to work with schools, school boards, districts and state legislatures to prioritize agricultural education in partnership with the community and create and implement statewide acequia and land grant curriculum.

We have so much vacant land on our campuses, and our students want to be outdoors. Outdoor learning is the new wave of educational practices that can help lead the way in developing and strengthening our local food systems. We need resources to take students on field trips to local farms, do intercultural exchanges throughout our region, and create more job opportunities and career pathways in agriculture, ranching and earth stewardship.

In pursuing these initiatives, we honor the First Nations, Indigenous people of what we now call New Mexico for passing on cultural knowledge and maintaining a relationship with our sacred Mother Earth. We also honor Chicano communities, the *acequieros* and *acequieras*, the farmers and ranchers that have stewarded this land and water for 500 years, as well as all cultures and people that continue this work. In times of climate crisis, historic wildfires, flash floods, extreme droughts and an unstable future, we must all come together to ensure health and wellbeing for ourselves and future generations.



Travis McKenzie is a Chicano who grew up in the East Mountains. He is a teacher at Polk Middle School, food justice organizer with the Southwest Organizing Project and part of the leadership team of Rooted in Community, a national youth food justice network. McKenzie is the 2023 César Chávez "¡Sí se Puede!" Award winner.

### **OP-ED: SAYRAH NAMASTE**

### CONNECTING FARMERS AND PRESCHOOLERS IN NEW MEXICO

The Cherry Tomato Chomp, Great Carrot Crunch and Give Peas a Chance

In his new book *Ultra-Processed People*, infectious disease doctor Chris van Tulleken describes the harmful effects of ultra-processed foods, which make up 80 percent of the diet of many adults and children in the U.S. The picture isn't pretty. Transnational companies make billions while also making us sick.

But we don't have to eat this way. In 2015, the American Friends Service Committee New Mexico (AFSC), created a Farm to Early Childhood Education (ECE) project, a win-win program that helps small-scale, organic farmers supply fresh vegetables to preschool (especially low-income) children. The project supports local farmers in providing food to ECE centers throughout the state, including Albuquerque, the Española Valley, Taos Valley, Jemez Pueblo and Isleta Pueblo. AFSC's work is led and planned by people in the communities.

A result of structural racism is that low-income children of color often do not have access to local fresh produce. This has long-lasting impacts, including poor health outcomes.

AFSC partners with Head Start programs that provide young students a monthly nutrition activity. AFSC's healthy eating campaigns provide local, organic produce free to each site, along with activity guides. With campaigns such as the Cherry Tomato Chomp, the Great Carrot Crunch and Give Peas a Chance, preschoolers enjoy learning about and eating unprocessed food that's good for them. Educators and parents have asked AFSC to expand the program. "Some of them had never tasted a carrot before," said one Albuquerque teacher. "They were excited to share with their families what they did at school."

Twelve small family-operated farms have provided food for over 1,000 kids at more than 30 preschools. This year, AFSC brought two Albuquerque farmers for classroom visits. The children enjoyed planting seeds with them and meeting one of the farmer's goats.

The State of New Mexico recognizes the value of local food programs, as well. Recently, a slate of new food and hunger legislation was passed, making much more robust financial and administrative support available. AFSC will continue to lift up the voices of farmers, early childhood teachers and cooks to share their experience of what works.





Twelve small family-operated farms have provided food for over 1,000 kids at more than 30 preschools.



Projects such as Farm to ECE have ramifications far bevond New Mexico. Connecting local, organic, small-scale family farmers with children is a good way to address larger issues. These farmers take better care of land and water. Communities benefit when money spent on food stays in communities rather than lining the pockets of megaagribusinesses.

Farm to ECE is also an important component in addressing climate change. By keeping food local and reducing use of fossil fuels in production and transportation, we're making a positive difference in our lives and the future lives of preschoolers. It's easy to feel overwhelmed by the depth and breadth of the local-to-global problems we face. Programs like our Farm to ECE can give us hope. Visit AFSC New Mexico at afsc. org/newmexico if you'd like to learn more and become involved.

Sayrah Namaste is co-director of the American Friends Service Committee's New Mexico program and founder of its Farm to ECE project.



## **FOOD & WATER WATCH REPORT**

# "CORPORATE AGRICULTURE DRIVES NEW MEXICO WATER CRISIS"

As New Mexico continues to face dire consequences of a relentless statewide drought, a new report from the national advocacy group Food & Water Watch, "BIG AG FUELS NEW MEXICO'S WATER CRISIS," alleges that mega-dairies, industrial alfalfa and pecan production drain aquifers and residential wells, leaving little water for local communities and family farms. The report also asserts that state agencies do not consider climate change in assessment of water rights, and state drought plans are inadequate to protect water security.

New Mexico has faced periods of drought before, but the deepening climate crisis has rendered the current system of relying on waterways like the Colorado River ineffective. In 2022, more than 90 percent of the state was in severe drought, burdened by the largest wildfire in state history and some of the driest months on record. Despite this, the report notes that over 80 percent of the state's fresh water went toward industrial agriculture—primarily mega-dairies, alfalfa and pecans—which account for more than 774 billion gallons yearly. By comparison, public water supply and domestic wells account for only 10 percent of water withdrawals.

Agriculture is a \$3 billion annual industry in New Mexico, representing only 3 percent of the state's gross domestic product. In light of this, the industry's water use is extremely outsized, the report says. FWW estimates that it takes 32 million gallons of water a day to maintain operations on the state's mega-dairies (those with 500 or more cows), or 11.7 billion gallons annually. This could supply 400,000 people with water for a year—4.5 times the population of Santa Fe. In addition, the report alleges that dairies further put New Mexico residents who live near these facilities at risk by contaminating groundwater at alarming rates.

The report estimates that New Mexico's alfalfa production required 85 billion gallons of water in 2021.

Hugely thirsty crops have seen increasing global demand, including pecans, which, while not native to New Mexico, used a staggering 93 billion gallons of water in 2021—enough to supply more than 3.2 million people. Alfalfa, the state's dominant crop, which goes to feed livestock, is typically flood-irrigated. Much of it is exported out of state or out of the country. FWW estimates that New Mexico's alfalfa production required 85 billion gallons

in 2021. The report says that the number of alfalfa farms over 1,000 acres in size doubled between 1997 and 2017, from nine to 19. However, many parcels in the Middle Río Grande Valley, where alfalfa has been grown, or the water rights to those parcels, are being sold to companies and municipalities for development.

FWW estimates that it takes 32 million gallons of water a day to maintain the state's mega-dairy operations. In addition to presenting this data, the FWW report calls on Gov. Lujan Grisham and the state Legislature to stop "the egregious misuse of New Mexico water" by halting approval of new or expanded alfalfa, pecan and mega-dairy operations, and by providing stronger

oversight and protection of citizens' right to water, first through creation of a State Drought Plan that clearly addresses industrial agriculture's water usage. It also recommends increasing funding for the 2019 Water Data Act so that the state can appropriately plan for a scarce water future.

In response to an *Albuquerque Journal* article about FWW's report, James "Santiago" Maestas, president of the South Valley Regional Association of Acequias, pointed out that only about 1.2 million acre-feet flow into the Middle Valley in a good year, and that the Interstate Compact established in 1938 requires New Mexico to deliver at least 57 percent of water flowing into the







New Mexico dairy cows, harvested alfalfa and pecans

Middle Río Grande to the Lower Río Grande. That includes Doña Ana County in New Mexico, El Paso in Texas, and México.

Maestas said that last year, the Middle Río Grande Conservancy District delayed irrigation and shortened the irrigation season to reduce the accrued debt. "Irrigators take the hit," Maestas said, "but groundwater wells keep on pumping. The abuse of groundwater by corporate agriculture... as well as industry and urban sprawl like Santolina are especially concerning, with a New Mexico Bureau of Geology and Mineral Resources report describing the use of groundwater as a 'mining operation' that depletes aquifers without recharge."

"Surface irrigation used by small farms and acequias replenishes the shallow aquifer and returns water for domestic wells and the public water supply," Maestas said. "Farmers and traditional acequia irrigators that use surface water are what make the valley green. They provide habitat for man and beast in the middle of the driest state in the Union."

#### **OP-ED: LAWRENCE GALLEGOS**

# REVISITING CONSERVATION PRACTICES FOR CLIMATE CHANGE MITIGATION

#### Revisiting Conservation Practices for Climate Change Mitigation

Federal and state government, along with conservation organizations, through various mitigation practices, play a vital role in addressing challenges posed by climate change. However, some policies initially considered beneficial for climate change mitigation may have unintended consequences over the long term. This article explores two such practices: perpetual removal of grazing from United States Forest Service (USFS), Bureau of Land Management (BLM) and state lands, along with permanent restrictions for federally designated wilderness and wilderness study areas.

#### 1. Reconsidering Perpetual Grazing Removal from Public Range Lands

Proposed federal legislation has been introduced twice, once in the U.S. House in 2020 by Washington Rep. Adam Smith and once in the Senate in 2021 by New Mexico Sen. Martin Heinrich to make it possible to permanently retire some livestock grazing permits. Today these bills appear to be off the table; however, there are several environmental organizations that would very much like to see these bills or similar legislation reintroduced.

Grazing has long been a tool for land management, particularly in combating the effects of overgrazing and mismanagement. While temporarily removing grazing from poorly managed lands might be necessary for recovery, the complete elimination of grazing may have unintended consequences. When managed properly, grazing can actually contribute to land restoration and ecosystem health. It can help control invasive species, reduce fuel loads that contribute to wildfires, promote plant diversity and improve soil health. By permanently removing grazing from such lands, conservation organizations may unintentionally deprive themselves of a valuable tool.



Equity. Advocacy. Policy.

The NM Food & Agriculture Policy Council is a statewide body that works towards solutions to New Mexico's food access and hunger related issues while advocating for local food and farming, thus ensuring resilience throughout our food system. Join us to:

- Advocate on behalf of local farmers, ranchers, and consumers.
- Educate policy makers about the importance of local food, agriculture, food access, land and water for New Mexicans.
- Work in and with communities across the state, to connect youth and families to local, healthy food.

**We invite you** to engage in this work and help to plant the seeds for change in our local food and agriculture systems in New Mexico.

www.nmfoodpolicy.org

Conservation practices based on evolving scientific knowledge can help strike a balance between climate change mitigation, ecosystem health and sustainable land use.



Adaptive management that allows for controlled grazing can help strike a balance between ecosystem health and responsible land use. Conservation efforts should incorporate the expertise of local land managers and Indigenous communities to ensure a holistic approach that considers both conservation goals and sustainable land use.

#### 2. Wilderness Areas and Sustainable Land Management

The USFS and BLM propose new wilderness areas and wilderness study areas every 15 to 20 years when they revise and update their management plans. These areas are often designated and adopted after the agencies complete their revised plans. Wilderness areas are established to protect ecosystems from human intervention, with practices such as prohibiting logging for perpetuity; however, the long-term effects of this approach warrant additional consideration.

While these areas may start in good health, decades of fire suppression and restricted management practices can lead to overgrown forests that are vulnerable to catastrophic wildfires. Large-scale wildfires release significant amounts of carbon into the atmosphere, contributing to climate change. Implementing controlled burns and selective logging in a carefully planned manner can help restore natural fire regimes, reduce fuel loads and enhance overall ecosystem resilience.

These examples underscore the importance of adaptive management in conservation efforts aimed at climate change mitigation. Climate change itself is dynamic, and conservation strategies must be equally flexible. Banning specific land-management practices can hinder effective responses to changing conditions. Conservation organizations should collaborate with local communities, Indigenous groups and scientific experts to develop management plans that account for changing ecological dynamics. Regular reassessment of conservation practices based on evolving scientific knowledge can help strike a balance between climate change mitigation, ecosystem health and sustainable land use.

Practices like perpetual grazing removal and strict wilderness protection can inadvertently hinder the achievement of long-term climate and ecological goals. By embracing an adaptive management approach that considers the benefits of

carefully managed practices, conservation organizations can ensure that their efforts remain relevant and effective in an everchanging climate landscape.



Lawrence D. Gallegos is the New Mexico field organizer of the Western Landowners Alliance and is on the governing board of the New Mexico Food & Agriculture Policy Council.

#### WILDLIFE-LIVESTOCK CONFLICT RESOLUTION

#### BY JAIME CHÁVEZ

In 2014, a coalition of northern New Mexico Hispanic and Native American ranchers asked (current) U.S. Agriculture Secretary Tom Vilsack (who also held the position under the Obama administration) to address alleged civil rights violations they said compromised their traditions and livelihoods. The Northern New Mexico Stockmen's Association sent Vilsack a letter asserting that the U.S. Forest Service's implementation of policies and procedures in regard to the suspension or termination of grazing permits in New Mexico and Colorado was inconsistent. The stockmen subsequently sued the USDA and Vilsack, and the issue lingered for years.

In late 2021, New Mexico senators Martin Heinrich and Ben Ray Lujan introduced Wildlife-Livestock Conflict Resolution Act S.2980, to allow federal grazing permittees to voluntarily retire grazing permits in exchange for fair market value of their leases. Some ranchers saw this as an assault on working lands to satisfy a conservation mission of "wilderness without people," the Treaty of Guadalupe Hidalgo, land grant, tribal and acequia communities."

The Northern New Mexico Stockmen's Association, Ríos del Norte Farm and Ranch Co-op, with support from the New Mexico Association of Conservation Districts, cattle associations and ranchers across the state campaigned against the act. The Río Arriba and Taos County commissions introduced resolutions in opposition.

On June 10, the stockmen's association and community members held a meeting in Taos to discuss the conflict and related topics. About 30 people from Taos County, Río Arríba County and Colorado's Costilla County attended. There was a consensus of displeasure toward the bill; the primary concern being it would hurt ranchers' legal rights to graze their livestock.

The agenda included "agroforestry, regenerative farming and ranching, native ecology, water conservation, the Farm Bill and building a resilient social economy." There was also concern with the recent Hermits Peak/Calf Canyon fires and the inability of government agencies like FEMA to help make the community whole again.

Sen. Heinrich's regional director, Ashley Beyer, discussed the association's grievances via cellphone. The plan had been for Beyer to speak over Zoom, but technical difficulties forced someone to hold a microphone to the phone so she could be heard through the sound system. "Sen. Heinrich has

decided that he will not reintroduce the Wildlife-Livestock Conflict Resolution Act this Congress," she reassuringly told the association. She explained that the senator wanted to work with permittees, ranchers and the like through his aides to identify practical and sustainable solutions across the state.

One association member, Río Arríba County Commissioner Moses Morales, told Beyer, "I've been involved since I was 15 years old because I saw all the injustice that's been done to all the Native American cultures in New Mexico and I think it's time that those injustices get corrected. Our forests are not healthy because the people managing them don't know how to manage the forests. Look at our timber industry, it's a disaster... It's because of mismanagement in the Forest Service."

"These are very complex and longstanding issues, as you all are very clearly aware," Beyer responded. She also said that she would be happy to visit northern New Mexico for a tour of grazing lands to discuss NNMSA's concerns. In July, Heinrich himself did just that.



U.S. Sen. Martin Heinrich with County Commissioner Darlene Vigíl and ranchers in Taos

# NEW MEXICANS DESERVE FRESH, LOCALLY-GROWN FOOD!

Dedicated farmers, ranchers, and associated small businesses who practice sustainable methods, based on science, indigenous, and ancestral wisdom, need access to equitable financing to develop their food production, processing and distribution.

A NM State Public Bank that collaborates with community banks, credit unions, CDFIs, municipalities and tribal entities is one way to make this happen.

Let's keep New Mexico's revenue at home instead of in Wall Street banks. A NM State Public Bank can invest more of our NM dollars in rural farms and businesses, to create more fresh, locally grown foods for all of us!

# YES, WE CAN DO THIS! VAMOS ADELANTE!



Alliance for Local Economic Prosperity

Keeping Our Public Funds Safe, Local, and Working

visit aflep.org or

contact info@aflep.org

### **ECOSYSTEM MANAGEMENT USING LIVESTOCK**

Embracing Diversity and Respecting Ecological Principles

Dr. Urvashi Rangan's definition of renewable agriculture: "a holistic systems approach that starts with soil, and includes the health of the animals, workers and the community." Livestock farmer/ecologist Allan Savory's definition: "the production of food and fiber from the biological life of the world's land and waters through managing simultaneously the indivisible complexity of human organizations, economy and nature to sustain all businesses, economies and civilization."

Proponents of regenerative agriculture such as Hunter Lovins, who believes that it can deliver more abundant and affordable food—while generating bigger profits—fervently advocate for "regenerative grazing," pioneered at the Savory Institute, as an integral and productive part of agricultural systems. They cite peer-reviewed science publications (such as Hope Below Our Feet, WWW.SOIL4CLIMATE.ORG) which show well-managed grazing as a replicable, verifiable means to improve rangeland ecology, build soil carbon and mitigate global warming. They say that "grazing done right" recycles plant nutrients back to the land and durably sequesters massive amounts of carbon in the soil by fostering "microbial microenvironment modification."

Savory sees the correct timing and impact of livestock as a new biological tool that is essential (in the right circumstances) to help land managers restore biodiversity in brittle environments. "Along with renewable energy to eliminate fossil emissions, and circular materials flows to eliminate the rest of greenhouse gas emissions, this is the solution to the climate crisis," he says.

## The 2023 Farm Bill

**CONTINUED FROM PAGE 4** 

(USDA) Local Food Purchase Assistance Program. Born out of the pandemic as a way to increase nutritious food access, the program has provided millions of dollars to New Mexico. The Food Depot, in partnership with the NM Department of Agriculture, is leading this multi-year program whereby New Mexico's food banks buy and distribute New Mexico grown and raised produce, meat and farm products for those in greatest need.

## Years of work that have gone into building partnerships and programs to expand a robust local food system.

At the same time, organizations and agencies are expanding the New Mexico Grown program to get locally grown and raised foods into schools, senior and early childhood nutrition programs, with the state investing \$33 million for 2023-24, benefiting hundreds of thousands of children and seniors.

Because of the years of work that have gone into building these partnerships and programs, New Mexico was poised to pivot when the pandemic began, furthering the relationships and commitment to expand a robust local food system. All of this has led us to understand the potential of Farm Bill programs that could be more equitable and accessi-

This work at local and state levels has helped Farm to Table and the New Mexico Food and Agriculture Policy Council (NMFAPC) focus on the need to change and strengthen Farm Bill programs. In partnership with local and national organizations, we are working with New Mexico's federal delegation and many others across the state in a united front to change the Farm Bill. The NMFAPC, National Sustainable Agriculture Coalition, Rural Coalition, Good Food for All and others are working together to advance programs and policies that build resilience and equity, restore competition, invest in science and renew our environment for current and future generations.

#### **BOOK PROFILE**

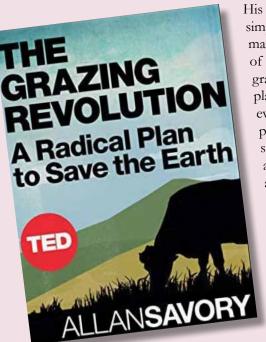
### THE GRAZING REVOLUTION: A RADICAL PLAN TO SAVE THE EARTH

BY ALLAN SAVORY

PUBLISHED BY THE SAVORY INSTITUTE, 2013

Our planet is rapidly turning to desert. Once-lush grasslands, the source of precious food and water, are growing dry and bare. Rivers that used to flow year-round now run dry after the rains. Grazing animals want for food. What is causing this "desertification" of the Earth, and how can we stop it?

In The Grazing Revolution, biologist Allan Savory says that human decisions and use of natural resources have caused unnatural animal behavior and resulting global biodiversity loss, which lead to increasing social and economic instability. He advocates for the symbiotic relationship among herding animals, predators and the health of vegetation in brittle environments, and for the correct management of livestock as an essential tool to help restore biodiversity, regenerate habitat and reverse desertification.



His solution is as radical as it is simple: huge herds of livestock, managed to mimic the behavior of natural herds that roamed grasslands centuries ago. When planning a herd's movement, everything is considered: people, finances and nature—from social and financial considerations, to wildlife movements and breeding seasons. He keeps livestock bunched together and on the move as a proxy for wild herds and their pack-hunting predators.

> Tracing his own story of discovery, Savory debunks common misconceptions and provides a vivid chron-

icle of the process by which he has seen

scrubby wasteland revert to robust ecosystems.



The loss and degradation of soil health, freshwater resources and biodiversity—along with extreme weather events—increasingly threaten our food supply.

THE NMFAPC AND PARTNERS HAVE AGREED UPON THE FOLLOWING OVERARCHING PRIORITIES TO ADVANCE EQUITY IN THE FARM BILL:

**INVEST IN HEALTHY URBAN AND RURAL COMMUNITIES** by strengthening resilient LOCAL AND REGIONAL FOOD SYSTEMS; rebuilding LOCAL AND REGIONAL MEAT PROCESSING CAPACITY; expanding and enhancing USDA purchasing programs and practices; and ENSURING ACCESS to locally produced, nutritious, culturally-relevant food.

**LEVEL THE PLAYING FIELD FOR SMALL AND MID-SIZED FARMERS** by supporting <u>BEGINNING FARMERS</u>' access to land and capital; fixing the flawed <u>FARM SAFETY NET</u> and improving access for diversified farmers; addressing corporate consolidation; and restoring <u>FAIR COMPETITION</u>.



#### ADVANCE RA-CIAL EQUITY ACROSS THE FOOD SYSTEM

by improving access to USDA funding and programs for FARM-ERS OF COLOR and strengthening data collection and analysis to inform racial equity-driven decision-making.

#### BUILD A CLI-MATE-RESIL-IENT FUTURE

by advancing land stewardship through CONSER-VATION PROGRAM funding and access; increasing funding for sustainable and organic agriculture programs;





Photos L-R: NM Food and Agriculture Policy
Council cohort and guests with Eric Deeble, Congressional Relations Deputy Undersecretary and USDA officials; Mike Lavender, Policy Director, National Sustainable Agriculture Coalition with NMFAPC cohort in Washington, D.C., Sept. 2022; Sherry Hooper, Exec. Dir., The Food Depot, with NM Gov. Lujan Grisham and Pam Roy of Farm to Table, celebrating state funding that leverages federal funds for program expansion

and prioritizing research that helps farmers adapt to and mitigate CLIMATE CHANGE.

#### **GET INVOLVED**

This is a key time for those of us who want to see a more sustainable and equitable food system—Congress is hard at work on the 2023 Farm Bill, making key decisions on policies and programs. One of the best ways to help right now is to contact your representative and senator to share your interests in Farm Bill programs and how they can best contribute to your life. Here is the Capitol switchboard number: (202) 224-3121.

Farm to Table and the NMFAPC organized and helped support more than two dozen meetings with New Mexico's delegation to inform and educate about the

needs and opportunities to change Farm Bill programs to strengthen local food system initiatives, nutrition programs and farming in New Mexico. Find more information on our website: <a href="#FARM BILL - NEW MEXICO FOOD & AGRICULTURE POLICY COUNCIL">FARM BILL - NEW MEXICO FOOD & AGRICULTURE POLICY COUNCIL (NMFOODPOLICY.ORG)</a>.

The NMFAPC initiated the NM Policy Cohort Program to engage new and young people in advocacy learning together and sharing our agreed upon Farm Bill priorities. If you are interested in learning how to be involved and support the cohort, contact us at: <a href="mailto:INFO@FARMTOTABLENM.ORG">INFO@FARMTOTABLENM.ORG</a>.

The New Mexico Food & Agriculture Policy Council welcomes participation in our state and federal policy and advocacy work. For more information visit: HTTPS://NMFOODPOLICY.ORG.

Learn from and join organizations that are working together to create a Farm Bill that meets our future needs such as the NMFAPC, National Sustainable Agriculture Coalition, Rural Coalition, and National Young Farmers Coalition.

We all have a role in our food system and the opportunity to share a Farm Bill that can invest in healthy communities, level the playing field for small and mid-sized farmers, build a climate-resilient future and advance racial equity across the food system.

Pam Roy is executive director of Farm to Table and coordinator of the New Mexico Food & Agriculture Policy Council. Mike Lavender is policy director of the National Sustainable Agriculture Coalition.

## **USDA'S HEALTHY FOOD FINANC-**ING FOR LOCAL AND REGIONAL **PARTNERSHIPS**

#### November 3 Deadline

Under the Biden-Harris administration, the USDA's stated goals include "working to transform America's food system with a greater focus on more resilient local and regional food production. This is intended to ensure access to healthy and nutritious food in all communities, build new markets and streams of income for farmers and producers using climate-smart food and forestry practices, and make major investments in infrastructure and clean-energy capabilities in rural America."

On July 21, USDA Sec. Tom Vilsack and Deputy Sec. Xochitl Torres Small joined state and national elected officials to announce expansion of the Healthy Food Financing Initiative (HFFI) with \$30 million in funding availability for the newly launched Local and Regional Healthy Food Financing Partnerships Program, which will "support national and local solutions to address the complexity of food access in America."

"We are growing local economies and building resilient communities, whether rural or urban, in every corner across the country," said. Vilsack. "The administration is committed to supporting urban communities through increased market opportunities for small-and mid-sized producers and investing in urban agricultural operations."

"Families should have access to healthy, locally grown food no matter where they live, and farmers should be able to access profitable markets and revenue streams regardless of their zip code," said Torres Small.

In August, the Reinvestment Fund, a national Community Development Financial Institution (CDFI), in partnership with USDA, invited applications for grant funding through the HFFI Partnerships Program. Grants will be awarded to regional, state or local public-private partnerships to establish and grow local, regional or state food financing programs. Until now, HFFI only offered grants and technical assistance to food retailers and other enterprises. The new program expands on that by engaging partners to improve access to fresh, healthy and affordable food as well as providing technical assistance in underserved areas.

Reinvestment Fund is a national Community Development Financial Institution (CDFI) serving as the fund manager and program administrator for HFFI. Applications must be submitted no later than 11:59 p.m. EDT on Nov. 3. For more information, including a link to the grant application, visit <u>WWW.INVESTINGINFOOD.COM</u>.

#### **USDA NEXTGEN FOOD SYSTEMS GRANT**

Nearly \$5M will support ASU students studying sustainable food systems

Arizona State University (ASU), in partnership with the University of Alaska Fairbanks, Hawaii Pacific University, University of Guam and the nonprofit FoodCorps (HTTPS://FOODCORPS.ORG) has been awarded an \$18 million NextGen grant by the U.S. Department of Agriculture (USDA) to directly support future leaders of our food systems. Nearly \$5 million will be directed to ASU's School of Sustainability (HTTPS://SCHOOLOFSUSTAINABILITY.ASU.EDU) via scholarship support and paid internships over five years to study sustainable food systems.

The NextGen grant is a one-time funding opportunity supported through the Inflation Reduction Act. The program will create a pipeline of diverse young leaders trained for jobs in the food and agriculture sector, especially at the USDA. It also aims to engage communities through hosting conversations about future USDA workforce needs based on community-identified gaps in service.

Kathleen Merrigan, executive director of the Swette Center for Sustainable Food Systems, a unit of ASU's Julie Ann Wrigley Global Futures Laboratory, will act as ASU's principal investigator. She said a partnership between the universities in Arizona, Alaska, Hawaii and Guam makes sense because for the most part, agricultural policy is dominated by Midwestern states and California. "I don't find that our voices are loud enough in food and agriculture debates, in Washington, D.C., and at the USDA," Merrigan said. "Our geographies are very different, and we offer different perspectives, particularly since we find ourselves on the front lines of climate change. This grant will create a pipeline of new leaders ready to fill those jobs and make their voices heard."

Melissa Nelson, a professor of Indigenous sustainability, is the co-principal investigator for ASU. She said the grant funds will go toward students obtaining their master's and bachelor's degrees through the sustainable food system program in the School of Sustainability. "A priority for the NextGen grant program is diversifying the workforce," Nelson said. "I'm excited that some of the scholarship money and paid internships will go to students from Indian Country, first-generation college students and people from other underrepresented populations."

According to the USDA, there are more than 59,400 job openings in food, agriculture, natural resources and human sciences. This grant-funded partnership aims to fill some of those openings by engaging 9,000-plus students from across the country.

Each grant partner will conduct at least one community meeting each year to solicit ideas on USDA workforce needs based on local perspectives. The University of Alaska Fairbanks will also design and lead an annual climate and food symposium, which all scholarship and paid internship recipients will attend.

"This funding is going to be so empowering to young people studying food systems and agriculture as they get through their college degrees and get paid internships that are pertinent to career goals," Merrigan said.

### **USDA SPECIALTY CROP BLOCK GRANT FUNDING AWARDED TO NEW MEXICO**

On Aug. 23, the U.S. Department of Agriculture's (USDA) Agricultural Marketing Service (AMS) awarded over \$611,000 in Fiscal Year 2023 Specialty Crop Block Grant Program (SCBGP) funding to New Mexico. With this grant, the NMDA will fund projects that enhance the competitiveness of specialty crop products and create new market opportunities.

The NMDA will fund five projects, including a demonstration kitchen, training veterans in beekeeping, and increasing awareness and access to the New Mexico specialty cut flower industry. Additional funded projects focus on areas such as expanding land access and providing technical training to specialty crop farmers, and training youth from the Navajo Nation on specialty crop production.

"While New Mexico's chile, pecans and onions are some of the most well-known specialty crops in the state, this program also provides funding for critical research and market development of specialty crops, such as jujubes, field vegetables, greenhouse and nursery crops," said N.M. Agriculture Secretary Jeff Witte. "Projects funded through this program make it possible for our industry partners, including our land-grant university, to navigate the expanding facets of market strategy, training and education specific to the specialty crop sector."

Since SCBGP's inception in 2006, over \$9.8 million has been invested into innovating, growing and diversifying N.M.'s specialty crop industry. The funding is authorized by the 2018 Farm Bill, and FY2023 funding is awarded for a three-year period beginning Sept. 30.

### NO-COST TECHNICAL ASSISTANCE AVAILABLE FOR MEAT & POULTRY PROCESSING GRANT

Businesses and individuals interested in applying for a grant under the USDA Rural Development's new Meat and Poultry Processing Expansion Program Phase II (MPPEP II) grant program can access no-cost technical assistance to navigate the grant preparation process through the Meat and Poultry Processing Technical Assistance (MPPTA) network established by USDA's Agricultural Marketing Service (AMS).

The network is composed of seven organizations with experience in USDA grants, processing plant construction, business development, supply chain management and other things related to meat and poultry processing. It was established to help guide people through the process of accessing USDA resources and developing viable processing enterprises.

"The Biden-Harris administration's nearly \$1 billion commitment to creating a fairer, more competitive and more resilient meat and poultry supply chain last year is designed to direct resources toward prospective and existing smaller processors that have never had experience in seeking, obtaining and managing USDA grant funding," said Roger Fragua, executive director of the New Mexico-based Flower Hill Institute (FHI), which, along with the Intertribal Agriculture Council and five other organizations, has a cooperative agreement with AMS to coordinate the network.

The network cannot write grants for applicants but can connect them with professional grant writers. "Our network has a wealth of experience equipped to help guide people through the process of applying for grants, developing feasibility studies and business plans, constructing facilities, identifying potential markets and more," Fragua said.

## NEW MEXICO AGRARIAN COMMONS CREATING ACCESS TO LAND

Access to land is one of the main barriers that beginning farmers and ranchers encounter. New Mexico urgently needs young people to enter the field—the average age is currently over 60—but unless land is inherited, new agricultural producers face steep interest rates, sky-high real estate prices, competition from developers and a history of discrimination against farmers of color by federal farm loan agencies.

A group of New Mexico nonprofits is determined to change those statistics. Naya's Refuge, Chihuahuan Desert Charities and New Mexico Healthy Soil Working Group have formed the New Mexico Agrarian Commons (NMAC) to implement an innovative framework developed by the national organization Agrarian Trust. Agrarian Trust's robust model of shared land ownership demonstrates that regenerative agriculture, social and environmental justice, community wellbeing, and ecological stewardship are fundamentally intertwined.

By holding land to provide long-term, affordable and secure lease tenure to farmers and ranchers for regenerative agriculture, the NMAC helps strengthen local food- and ecosystems. The organization actively stewards biodiverse ecosystems, including healthy soil and watersheds. Beyond conserving farmland, the NMAC is focused on ensuring economic opportunities for agricultural producers and food security for surrounding communities.

The New Mexico Agrarian Commons is accepting donations of viable farms and rangeland. To learn more, visit https://www.nmhealthysoll.org/land-access/.

## COALITION OF SUSTAINABLE COMMUNITIES NEW MEXICO RECEIVES \$700,000 GRANT FOR URBAN GREENING

On July 17, the Coalition of Sustainable Communities New Mexico (CSCNM) announced that it was awarded \$700,000 from the Bezos Earth Fund to support "urban greening" in the Albuquerque region for parks, trees and community gardens. The fund's Greening America's Cities initiative is a new \$400 million commitment to create more equitable access to urban greening in U.S. communities.

"We are excited to be a part of this grant, which will strengthen the equity-focused sustainability work of our member city, Albuquerque," said Beth Beloff, CSCNM's executive director. "We hope that this model of empowering local community-based organizations to plan and lead urban greening projects can be replicated in other New Mexico cities and in neighboring states."

Andrew Steer, president and CEO of the Bezos Earth Fund, said, "Green spaces are critical for people and the planet. The fund is proud to partner with local communities and governments to expand urban green spaces. This initiative will support the health and wellbeing of historically underserved communities."

Greening cities with more and better parks, trees and community gardens has been shown to improve physical and mental health, increase local resilience to climate impacts like extreme heat, and reduce energy consumption. Health benefits come from improved air quality, more physical activity, reduced heat, stress reduction and opportunities for social interaction.

The Greening America's Cities initiative is starting with community projects in Albuquerque, Atlanta, Chicago, Los Angeles and Wilmington, Delaware. It will extend through 2030 and expand to additional communities, building on its prior \$300 million in funding to climate and environmental justice groups. For more information, visit: <a href="https://www.bezosearthfund.org">www.bezosearthfund.org</a>.

#### Coalition of Sustainable Communities New Mexico

The CSCNM is a nonprofit, nonpartisan membership organization founded in 2019 to represent and serve New Mexico's cities and counties in their climate and sustainability efforts. CSCNM collaborates with these governments and other stakeholders to develop equity-based solutions and benefit disadvantaged communities. CSCNM's member governments represent close to 50 percent of New Mexico's population. Current members include: The cities of Albuquerque, Las Cruces, Santa Fe and the Town of Taos. County government members include: Bernalillo, Santa Fe, Los Alamos and Taos.

#### **BOOK PROFILE**

#### THE REGENERATIVE LANDSCAPER

Design and Build Landscapes That Repair the Environment

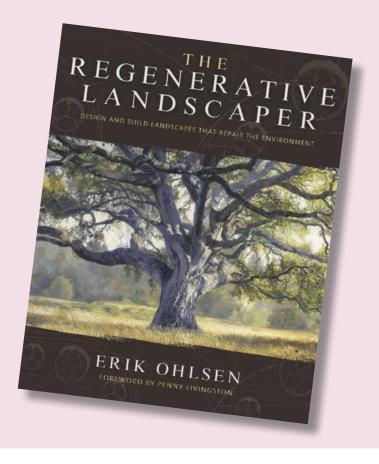
#### BY ERIK OHLSEN

FORWARD BY **PENNY LIVINGSTON**SYNERGETIC PRESS,
2023 (SYNERGETICPRESS.COM)

This inspiring guide weaves together Permaculture design, food resiliency, climate adaptation and Indigenous wisdom that you can implement in your own backyard. The book has been crafted for beginning gardeners and large-scale Permaculturalists alike. It is a step-by-step manual, starting from landscaping ideas and ending with seed and tree planting.

However, this is more than just a guide to landscaping; it is a motivational read. Throughout *The Regenerative Landscaper*, Erik Ohlsen addresses climate change, species extinction and ecological collapse, with encouragement that each of us can indeed become stewards of the land by installing or supporting healthy ecosystems in our own yards.

Ohlsen is an internationally recognized regenerative designer. He has spent decades repairing ecosystems and connecting people with the land. He is a specialist in water harvesting systems, food forest design, vocational education and much more. In *The Regenerative Landscaper*, he explains technical and scientific information clearly and in an engaging way. The book provides case studies, step-by-step processes, prevention and mitigation methods and land management techniques for designing and implementing a Permaculture haven.



## WHAT'S GOING ON

#### **ALBUQUERQUE / Online**

#### **SEPT. 7-8**

#### **NEW MEXICO TECH SUMMIT**

Albuquerque Convention Center

Formerly known as experienceIT. 30 breakout sessions, two keynote speakers, 600-plus attendees. https://nmtechcouncil.org/new-mexico-tech-summit/

#### SEPT. 14, 8 AM; SEPT. 15, 2 PM BUILDING AN ADVANCED ENERGY

#### **ECOSYSTEM IN NM CONFERENCE**

The Clyde Hotel, 330 Tijeras Ave. NW

Policymakers, researchers, industry, entrepreneurs, investors and others discuss "cutting-edge technologies to decarbonize, and how NM can be a global leader in the future of energy." \$200. HTTPS://WWW.EVENTBRITE.COM/E/BUILDING-AN-ADVANCED-ENERGY-ECOSYSTEM-IN-NEW-MEXICO-TICKETS-638879966177?AFF=ODDTDTCREATOR

#### **SEPT. 14, 10 AM**

#### **CLIMATE RALLY**

Robinson Park

Rally for real climate solutions at the conference above. NM No False Solutions Coalition. <a href="https://www.nofalsesolutions.com">https://www.nofalsesolutions.com</a>

#### **SEPT. 23, 6 PM**

#### **INDIAN PUEBLO CULTURAL CENTER 2023 GALA**

2401 12th St. NW

Contemporary Indigenous dinner under the stars. cultural performances, Silent and live auctions. \$150. 505-843-7270, SSIMMONDS@INDIANPUEBLO.ORG, HTTPS://INDIANPUEBLO.ORG

#### **SEPT. 30, 3 PM**

#### **ANNUAL CHILE HARVEST FIESTA**

SWOP Courtyards, 211 10th St. SW

SW Organizing Project's chile stew cookoff, vendors, raffle and more. 505-247-8832, SWOP.net

#### THROUGH SEPT. 30

#### TRADITION AND TRANSFORMATION

UNM Art Museum, 203 Cornell Dr. NE

"Colonial New Spain and Contemporary Hispanic America." Exhibit explores the impact of santero art—past and present. 505-277-4001, Free at artmuseum.unm.edu

#### **SEPT. 30, OCT. 1, 10 AM-4 PM**

#### HARVEST FESTIVAL AT CASA SAN YSIDRO

973 Old Church Rd., Corrales, NM

Music, traditional artist craft demos. Free. HTTPS://WWW.CABQ.GOV/ARTSCULTURE/ALBUQUERQUEMUSEUM/EVENTS/HARVEST-FESTIVAL

#### OCT. 7-15

#### ABQ INTERNATIONAL BALLOON FIESTA

Balloon Fiesta Park

#### **THROUGH OCT. 16**

#### **COLORS THAT SPEAK WORDS**

Indian Pueblo Cultural Center, 2401 12th St. NW

Artists Circle Gallery Exhibition. A collaboration among four artists. Visual art and poetry. INDIANPUEBLO.ORG

#### OCT. 18-21

## NATIONAL INDIAN EDUCATION ASSOCIATION CONVENTION & TRADESHOW

Albuquerque Convention Center

"Education Sovereignty: It Begins with Us." workshops@niea.org, <u>HTTPS://WWW.NIEA.ORG/2023-CALL-FOR-PRESENTERS</u>

#### OCT. 26-28

#### **EL CONGRESO**

Isleta Resort & Casino, 11000 Broadway Blvd. SE

Latino Farmers & Ranchers International annual conference. info@lfrinc.org, <u>www.lfrinc.org</u>

#### **THROUGH JAN. 10, 2024**

#### **CONVERSING WITH THE LAND: NATIVE NORTH AMERICAN BASKETS**

Maxwell Museum of Anthropology, UNM Campus, 500 University Blvd. NE Baskets from the museum's collection. Free. <u>WWW.MAXWELLMUSEUM.UNM.EDU</u>

#### **APRIL 17-21, 2024**

#### 77TH ANNUAL INTERNATIONAL CONFERENCE

Society of Architectural Historians

Albuquerque Convention Center

Architectural and art historians, architects, museum professionals, preservationists and those in allied fields will share research. Paper sessions, keynote talks, social reception, tours. <a href="https://www.sah.org">www.sah.org</a>

#### **INDIAN PUEBLO CULTURAL CENTER**

#### TUESDAY-SUNDAY, 9 AM-4 PM

2401 12th St. NW

"Gateway to the 19 Pueblos of N.M." Museum galleries, exhibits and restaurant. Cultural dance program Sat., Sun. 11 am, 2 pm. Tickets \$10/\$8/\$7. 505-843-7270,\_ WWW.INDIANPUEBLO.ORG

#### NM MUSEUM OF NATURAL HISTORY

1801 Mountain Rd. NW

505-841-2800. WWW.NMNATURALHISTORY.ORG

### **SANTA FE / Online**

#### THROUGH SEPT. 4

#### **WITH THE GRAIN**

NM Museum of Art, 107 W. Palace Ave.

Exhibition tracing the relationship between Hispanic, northern NM wood carvers and their use of incorporating natural wood in their carvings. 505-476-5072, NMARTMUSEUM. ORG

#### SEPT. 6, 10 AM-3:30 PM

#### **FARM TOURS**

Ground Stone Farm in Nambé and Tesuque Pueblo Farm, with a stop at the Poeh Cultural Center in Pojoaque. \$35. <a href="https://www.slowfoodsantafe.org">https://www.slowfoodsantafe.org</a>

#### SEPT. 7, 5:30-9 PM

#### SF WATERSHED FEST FILM SCREENINGS

Violet Crown Cinema / Video-on-demand

Hopeful examples of protection and restoration of biodiverse wild places. Films only: \$15, Reception only: \$25, combo: \$40. SF Watershed Assn. 505-820-1896, WWW.SANTAFEWATERSHED.ORG

#### **SEPT. 12, 6 PM**

#### STUFF: INSTEAD OF A MEMOIR—LUCY LIPPARD

Collected Works - In-store and Online

Autobiography features a tour of objects in Lippard's NM home, as well as family, friends, art, projects and remarkable people she has known. <u>COLLECTEDWORKSBOOKSTORE.COM/EVENTS</u>

#### SEPT. 12-14

#### LOCAL HARVEST RESTAURANT CELEBRATION

Benefits the nonprofit SF Farmers' Market Institute. Go to LOCALHARVESTRESTAURANTCELEBRATION.COM for reservations.

#### SEPT. 13

#### **2023 NM GROWN GOLDEN CHILE AWARDS**

An opportunity to recognize and celebrate innovative NM Grown programming at preschools, K-12 schools and senior centers across the state, and farmer and food producers who supply the food.

#### **SEPT. 14, 6-8 PM**

#### DO WE HAVE ENOUGH WATER TO SUPPORT GROWTH?

Scottish Rite Center, 463 Paseo de Peralta

Homewise Livability Speaker Series featuring Congresswoman Melanie Stansbury and Jesse Roach, Water Div. director, City of Santa Fe. RSVP: <a href="https://ow.ly/QhbC50PT2A8">https://ow.ly/QhbC50PT2A8</a>

#### SEPT. 15-22

#### AMERICAN IDENTITIES—A MICRO-FESTIVAL

Music, film, lecture, discussion presented by the School for Advanced Research, Center for Contemporary Art and the NM History Museum. \$10–\$15. <a href="https://sarweb.org/">HTTPS://sarweb.org/</a>
HUMANITIES-FESTIVAL-AMERICAN-IDENTITIES/

#### **SEPT. 16, 9-11 AM**

#### **COMMUNITY RIVER CLEANUP AND RECYCLED ART PARTY**

La Farge Library

Part of the 2023 SF Watershed Fest. 505-820-1696, WWW.SANTAFEWATERSHED.ORG

#### **SEPT. 16, 12-4 PM**

#### **2023 INDIGENOUS COMMUNITY DAY**

Ragle Park

Celebrate culture. Live music and Native dances.

HTTPS://SANTAFEINDIGENOUSCENTER.ORG

#### SEPT. 21

## SFCC OPEN HOUSE, 10 AM-2 PM

IAIA OPEN HOUSE, 1-5 PM

SF Community College (6401 Richards Ave.) and the Inst. of American Indian Arts (83 Avan Nu Po Rd.) are hosting open houses. It's a six-minute drive between the two. Demos, art exhibits, campus tours. Meet students, staff and faculty. HTTP://WWW.SFCC.EDU, HTTPS://IAIA.EDU

#### SEPT. 23-24, 3-6 PM

#### **REUNITY RESOURCES FARM FALL FEST**

1829 San Ysidro Crossing

#### **SEPT. 28, 5-7 PM**

#### **NM POETRY ANTHOLOGY 2023**

Collected Works—In-store and Online

Hosted by the anthology's editors Michelle Otero and Levi Romero and featuring more than 12 of the Museum of NM Press published poets. COLLECTEDWORKSBOOKSTORE.COM/EVENTS

#### **SEPT. 29, 6 PM**

#### SEED TO PLATE, SOIL TO SKY—LOIS ELLEN FRANK

Collected Works – In-store and Online

"Modern Plant-Based Recipes using Native American Ingredients." A new book by the award-winning author and chef. COLLECTEDWORKSBOOKSTORE.COM/EVENTS

#### OCT. 3, 6 PM

#### **SCREENING OF POWERLANDS**

Center for Contemporary Arts, Old Pecos Tr.

Documentary shows impact from energy development on Indigenous communities around the world. Filmmaker Camille Manybeads of Shiprock, NM will be present for an interview.

#### OCT. 9, 11 AM-4:30 PM

#### INDIGENOUS PEOPLES DAY

Santa Fe Plaza

Honoring Native Nations Intertribal Powwow, 9 am: vendor booths open.

#### OCT. 12, 5:30 PM

#### **CULTIVATING COMMUNITY CELEBRATION**

SFFM Pavilion (1607 Paseo de Peralta)

2023 Farmer Allstars (SFFM farmers and vendors) will be honored.

Tickets: <u>WWW.FARMERSMARKETINSTITUTE.ORG</u>

#### **OCT. 12**

#### **R. CARLOS NAKAI TRIO**

The Lensic

Premier Native American flautist with harp-guitarist William Eaton and worldbeat percussionist Will Clipman. \$29—\$45. 505-988-1234, LENSIC.ORG

#### OCT. 18-22

#### SF INTERNATIONAL FILM FESTIVAL

#### OCT. 23-24

#### NM RETA ENERGY STORAGE WORKSHOP

La Fonda on the Plaza

"Energy Storage and Reliability for our Renewable Future." Hosted by the NM Renewable Energy Transmission Authority. <u>HTTPS://NMRETA.COM</u>

#### OCT. 23-25

#### 2023 NM OUTDOOR ECONOMICS CONFERENCE & EXPO

SF Community Convention Center

Statewide conference. Jeff Steinborn, Exec. Dir., Outdoor NM: 575-635-5615

#### NOV. 1-3

#### REGENERATE CONFERENCE: "MICROBES, MARKETS, CLIMATE"

Santa Fe Community Convention Center

Regenerative agriculture can address complex issues of climate change, loss of wildlife habitat and biodiversity, food security and social equity. Agricultural producers, land owners, conservationists, scientists, students and concerned citizens will attend. Hosted by Quivira Coalition, American Grassfed Assoc. and Holistic Management Intl.

HTTPS://REGENERATECONFERENCE.COM

#### NOV. 10-12

#### **CREATIVE EXPERIENCE SANTA FE**

Gathering for visionaries leading creative tech and community resilience, innovations in venture investing and the cultivation of inclusive entrepreneurial ecosystems.

HTTPS://WWW.CREATIVESTARTUPS.ORG/CXSF/?UTM\_SOURCE=LINKEDIN&UTM\_

MEDIUM=SOCIAL&UTM\_CAMPAIGN=CXSF23

#### MON.-FRI.

#### **POEH CULTURAL CENTER AND MUSEUM**

78 Cities of Gold Rd., Pueblo of Pojoaque

Di Wae Powa: They Came Back: Historical Pueblo pottery. The Why, group show of Native artists. Nah Poeh Meng: core installation highlighting Pueblo artists and history. 505-455-5041

#### 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., SAT., 8 AM-1 PM

#### **SANTA FE FARMERS' MARKET**

Market Pavilion, 1607 Paseo de Peralta

#### SF FARMERS' DEL SUR MARKET

4801 Beckner Rd., just off Cerrillos

Tues., 3-6 pm through Sept. 26. 505-983-4098, SANTAFEFARMERSMARKET.COM

#### **WEDS-FRI. THROUGH AUGUST**

#### **MUSEUM OF SPANISH COLONIAL ART**

710 Camino Lejo

Trails, Rails and Highways: How trade transformed the Art of Spanish New Mexico. MUSEUM@SPANISHCOLONIAL.ORG

#### 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/one & under free. 505-989-8359, SANTAFECHILDRENSMUSEUM.ORG

#### WEDS.-SUN.

#### **EL RANCHO DE LAS GOLONDRINAS**

334 Los Pinos Rd., La Ciénega

Living History Museum dedicated to the heritage and culture of 18th- and 19th-century New Mexico. 505-471-2261, GOLONDRINAS.ORG

#### IAIA MUSEUM OF CONTEMPORARY NATIVE ARTS

108 Cathedral Place

888-922-4242, IAIA.EDU/MOCNA. Closed Tuesdays.

#### **SANTA FE 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

#### WHEELWRIGHT MUSEUM OF THE AMERICAN INDIAN

704 Cam. Lejo, Museum Hill

505-982-4636, WHEELWRIGHT.ORG. Closed Sundays and Mondays.

#### YOUTHBUILD / YOUTHWORKS!

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

#### TAOS / ONLINE

#### **SEPT.** 6-17

#### TAOS FALL ARTS FESTIVAL

Various locations

49th Annual festival promoting Taos County artists. INFO@TAOSFALLARTS.COM, HTTPS://TAOSFALLARTS.COM

#### **SEPT. 20, 6-7 PM**

#### PRESERVING ARTS & CULTURE IN NORTHERN NEW MEXICO

Harwood Museum of Art, 238 Ledoux St.

Harwood 100 Dialogue moderated by Alicia Romero. Panel includes Victor Goler, Carmela Padilla, Angelo Sandoval and Luís Tapia. \$5 suggested donation. HTTPS://HARWOODMUSEUM.ORG/

#### OCT. 2-7

#### **FALL HARVEST WEEK**

410 La Posta Rd., Rio Fernando Park

Taos Land Trust celebrates 35 years. Workshops, community harvest day, endof-season dinner. TAOSLANDTRUST.ORG

#### OCT. 13-14

#### STORYTELLING FESTIVAL

#### WEDS-SUN., 11 AM-5 PM THROUGH JAN, 2024

#### HARWOOD MUSEUM OF ART CENTENNIAL

238 Ledoux St.

Journey through the museum's (and the town's) rich history. 575-758-9826, HTTPS://HARWOODMUSEUM.ORG/CENTENNIAL/EXHIBITION-DETAILS/

#### LA HACIENDA DE LOS MARTÍNEZ

708 Hacienda Way

Northern NM-style Spanish colonial "great house" built in 1804 by Severino Martínez. Open daily. TAOSHISTORICMUSEUM.ORG

#### **MILLICENT ROGERS MUSEUM**

1504 Millicent Rogers Rd.

Tuah-Tah/Taos Pueblo: Home, highlighting the pueblo's culture and artistic achievements. Pop Chalee! Yippee Ki Yay! paintings. Open daily. MILLIF4N65OY45E.ORG

#### **HERE & THERE / Online**

#### **SEPT. 8 AWARD APPLICATION DEADLINE**

#### **WOMEN IN SCIENCE AND ENGINEERING**

Nominations sought for the 17th annual Impact Award, recognizing a NM woman who encourages entry into and/or career development in science and engineering, including physical, biological, behavioral, medical, social sciences and related fields. 505-249-8218, HTTPS://NMNWSE.ORG/WHAT-WE-DO/AWARDS/

#### **SEPT. 10**

#### **TOUR DE ACOMA**

Acoma Pueblo, NM

100-50 and 25-mile cycling event. HTTPS://TOURDEACOMA.COM/NEW.HTML

#### **SEPT. 12, 8 AM-12 PM**

#### **SEED SAVING WORKSHOP**

Agricultural Science Center, Los Lunas, NM

Presenters: Brett Bakker (Organic Farm Certifier (ret.); Lee Goodwin (J&L Seeds); Miguel Santistevan (Sol Feliz Farms); Charles Havlik (NMSU, Los Lunas Ag. Science Center) Registration: HTTPS://RSVP.NMSU/RSVP/SEEDSAVE

#### SEPT. 13. 2-3:30 PM

#### **GOLDEN CHILE AWARDS**

Online

Statewide awards ceremony organized by the NM Grown Coalition, a network of public institutions, community-based organizations, farmers and individuals working to strengthen community food systems across NM. <a href="mailto:GABRIEL.GAARDEN@DOH.NM.GOV">GABRIEL.GAARDEN@DOH.NM.GOV</a>

#### **SEPT. 19, 10 AM-4 PM**

#### FIELD DAY: FARMING FOR LIFE AND WATER

Clayton, N.M.

#### SEPT. 21, 6:30-8 PM

#### PLANNING FOR MIDDLE RÍO GRANDE WATER RESILIENCE

Online

Interactive discussion with the State Engineer Mike Hamman and OSE General Counsel Nat Chakeres about MRG water management and planning. MRGWATERADVOCATES.ORG

#### **SEPT. 23, 5-8 PM (9/20-23 ONLINE AUCTION)**

#### **MOVING ARTS ESPAÑOLA GALA**

"Building community and Cultivating Leaders through Arts & Culture" Performance, meal. MOVINGARTSESPANOLA.ORG

#### OCT. 2-5

#### 25TH ANNUAL AMERICAN INDIAN TOURISM CONFERENCE

Choctaw Casino & Resort, Durant, Okla. "We Are Still Here." https://www.aianta.org/aitc/

#### OCT. 13-15

#### **ANNUAL NM NO FALSE SOLUTIONS GATHERING**

NM Highlands University, Las Vegas, NM

Presented by NM No False Solutions and NMHU Sustainability Conservation Committee to learn about demands for corporate accountability, fossil fuels, protecting the sacred, building a regenerative economy, etc. <a href="https://www.nofalsesolutions.com">https://www.nofalsesolutions.com</a>

#### OCT. 19, 6:30 PM

### PUBLIC INTEREST IN MIDDLE RÍO GRANDE WATER MANAGEMENT

With county commissioners and water officials Barbara Baca and Eric Olivas. Hosted by Middle Río Grande Water Advocates.

#### **NOV. 1-DEC. 15 APPLICATIONS ACCEPTED**

#### **QUIVIRA COALITION NEW AGRARIAN PROGRAM**

8-month, full-time, paid apprenticeships (March/April–Nov. 2024) on working ranches and farms practicing regenerative agriculture in NM, Colo. and Montana. Housing, education stipend. Kick-start a career in regenerative ag. <a href="https://www.quiviracoalition.org/Newagrarian">www.quiviracoalition.org/Newagrarian</a>

#### FEB. 7-8, 2024

#### **NATIONAL NATIVE SEED CONFERENCE 2024**

Onlin

Native seed production, seed-based restoration with an emphasis on Indigenous knowledge and climate change <a href="https://appliedeco.org/NNSC24/">https://appliedeco.org/NNSC24/</a>
Presented by the Institute for Applied Ecology

#### **THROUGH SUMMER 2024**

#### **ARCHAEOLOGISTS IN GLEN CANYON (EXHIBIT)**

Museum of Northern Arizona, Flagstaff

#### THURS-SUN. 10 AM-4 PM

#### **BOSQUE REDONDO MEMORIAL**

Fort Sumner Historic Site, Fort Sumner, N.M. Exhibit, 30 years in the making, tells the story of 'The Long Walk' and the Bosque Redondo. \$7, children 16 and younger, free. N.M. residents with ID free first Sun. each month. <a href="MMHISTORICSITES.ORG/BOSQUE-REDONDO">MMHISTORICSITES.ORG/BOSQUE-REDONDO</a>

#### SUSTAINABLE BUILDING TAX CREDITS

NM residents can apply for tax credits to make homes and businesses more energy efficient. There are extra incentives for upgrades that reduce energy use and lower utility costs in affordable housing or homes occupied by low-income residents. https://www.apps.emnrd.nm.gov/ecmd/ecpsubmissions/



BUILDING NEW
MEXICO'S SMALL SCALE
FARMING ECONOMY
THROUGH SUSTAINABLE
AND REGENERATIVE
FOOD JUSTICE.
EST 2009

WORKING WITH OVER 70 FARMERS AND RANCHERS IN 13 COUNTIES IN NEW MEXICO







CONTACT PRODUCE@AGRI-CULTURA.ORG FOR INFORMATION ON WHOLESALE PURCHASES AND CSA SHARES. CONTACT HELGA@AGRI-CULTURA.ORG FOR INFORMATION ON OUR ADVOCACY AND ACTIVISM EFFORTS.







