

SeedBroadcast



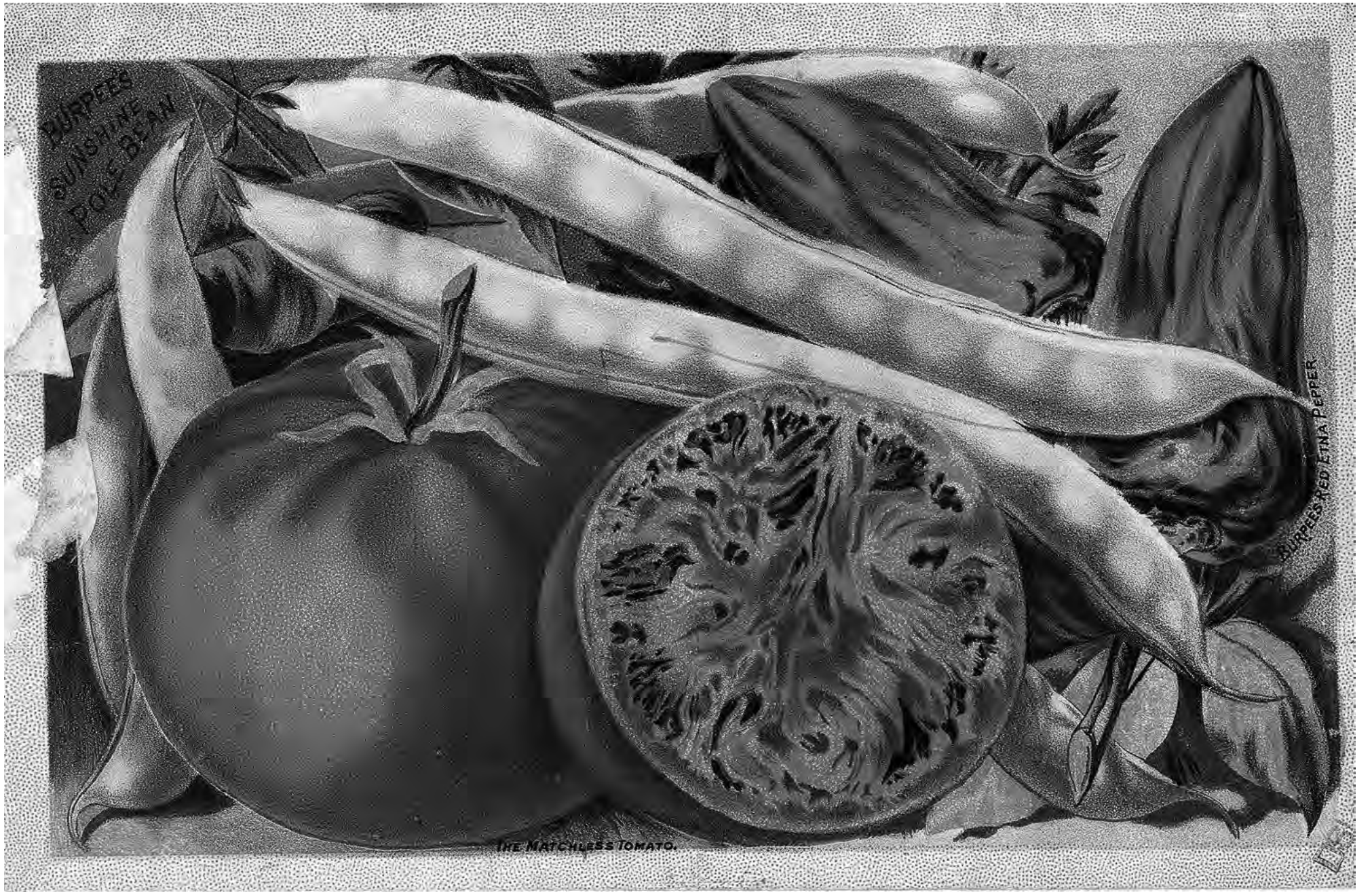
agri-Culture
Journal

Cultivating Diverse Varieties of Resilience #8

SeedBroadcast

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8th Edition SeedBroadcast Journal

We would like to thank all who generously contributed to our 8th edition of the bi-annual **SeedBroadcast agri-Culture Journal**. We are building from the soil up and invite all who read this to consider contributing to the 9th edition that will be published in the Autumn of 2017. This contribution could be a drawing, photograph, story, recipe, poem, or an essay, with relevance to the essence of seeds and seed saving practices. We are looking forward to hearing from you. Each of you holds a wisdom and it is this wisdom we hope to share.

Please include a short bio, images should be at least 300 DPI 6" x 8", and send us your mailing address as we will mail you a stack of printed copies to distribute in your own locale.

**THE DEADLINE FOR SUBMISSIONS IS
SEPTEMBER 1ST, 2017**

Send submissions to seedbroadcast@gmail.com

We will be on the road with the Mobile Seed Story Broadcasting Station so look out for us. You can keep up with our travels and encounters with other seed lovers at on our website www.seedbroadcast.org and follow our blog at seedbroadcast.blogspot.com

We want to thank our fiscal sponsor Littleglobe, the McCune Charitable Foundation, Robert Rauschenberg Foundation Climate Change Solutions Fund, Santa Fe Art Institute, to our SeedBroadcasting cohorts especially the farmers that have allowed us into their fields and lives, Aaron Lowden and the Southwest Conservation Corps Ancestral Lands in Acoma Pueblo, www.sccorps.org/join/ancestral-lands/, Dr. Larry Emerson and Jennifer Nevarez of Tse Daa K'aaan Lifelong Learning Community in Hogback, New Mexico, Beata Tsosie-Peña of Santa Clara Pueblo and the Española Food Oasis www.facebook.com/Espanola-Healing-Foods-Oasis-1697727540506515/?hc_location=ufi, Ron Boyd of Mer-Girl Gardens, in La Villita, New Mexico www.facebook.com/Mer-Girl-Gardens-295388580481343/. Also Rowen White, Sierra Seed Coop, sierraseeds.org, Marilyn McHugh at the Hummingbird project, www.hummingbirdproject.org, Native Seeds/SEARCH, www.nativeseeds.org, Rulan Tangen and Dancing Earth www.dancingearth.org, and to the many individuals for their continued support, Lacey Adams for graphic design, Natalie Keys for transcribing and Cirelda Byran for distribution. We extend a huge welcome to all of our local and national partners and to our seeds that continue to inspire and give us hope.

For a list of our partners go to: SeedBroadcast.org/SeedBroadcast/SeedBroadcast_Roots.html

SEED=FOOD=LIFE

SEEDBROADCAST IS A COLLABORATIVE PROJECT INITIATED BY CHRISSIE ORR AND JEANETTE HART-MANN. WE CAME TOGETHER THROUGH OUR LOVE OF SEEDS, OUR PASSION FOR GROWING OUR OWN FOOD AND OUR ARTISTIC PRACTICE. WE STARTED A CONVERSATION, WHICH HAS EXPANDED AND SPROUTED INTO THE SEEDBROADCAST COLLECTIVE AND NOW INCLUDES RUBÉN OLQUÍN.

SEEDBROADCAST holds the belief that it is a human right to be able save our seeds and share their potential, to be able to grow our own food and share this abundance, and to cultivate grassroots wisdom and share in its creativity. We seek to reveal the culture that has been lost in agriculture and believe that seeds are witnesses to our past. They have their own story to tell and it is up to us to listen.

SEEDBROADCAST encourages communities to keep local food and culture alive and vibrant through working together in creative and inspiring ways. We spend time with people on their farms, in their gardens, at seed exchanges and at community gatherings to dig deeper into the often unheard stories of local agriculture. Our traditional farmers, avid gardeners and local organic food growers are inspired by the seeds they sow and save, they take notice of what grows and what does not, they learn from the seasonal shifts, experiment with when to plant the first pea and when to harvest the seed for next year. This vital knowledge base of plant and human connection is what we seek to cultivate, disperse and nurture.

At the 1st annual Seed Exchange in Anton Chico a local farmer, who's family has been growing concha corn for many generations stood with his hand clasped around a corn kernel and spoke loud and clear "If we loose our seeds we will lose our culture."

Our ancient seeds and their diverse stories are in danger of disappearing. They are our lifeline to our past, present and future. Without these ancient, creative, and resilient seeds, we would lose our familial connection to the earth and its biota. So we invite you to hold a seed and listen to what stories it has to tell you, plant a seed and share its wealth. Then share this story with your neighbor and become an inspiration for others to join this radical seed sovereignty movement.

In the southwest our seeds are held in reverence as they hold nourishment not only for our bodies but our spirits. They store the stories that guide us through these vast fast-paced modern times and bring us back to our earth-based wisdom. With the rapid shift in our climate nothing is the same, our planting times are different every year, the pollination of the corn cannot be predicted, the monsoons perhaps will come or perhaps not, and with these changes we are losing some of our crop diversity and are wondering how we will continue to feed our families and communities. So we have to make sure that our seeds and our ways of growing food can have time to adapt to these changes. Our arid land farmers are aware of this and have been for generations, we have a lot to learn from them.

We continue to gather and disperse this wisdom, making sure that there is a connectivity between farmers, urban gardeners, schools, and the community at large to open up the conversation about our locally sourced food production, food security and climate change.

We are honored to be able to join with such dedicated communities in the continued action of resilience to save our seeds.

You too can be part of this action:

We ask you to find some seeds, it could be from a walk where you gather wild grass seeds, or from your garden or the local urban farm, hold them in your hand and feel what stories they are holding. Seeds hold a wisdom that we need to listen to and if we do they will guide our way. Then scatter those seeds and tend them well.

It is time.

FOR MORE INFORMATION AND TO GET INVOLVED PLEASE CONTACT SEEDBROADCAST@GMAIL.COM

TO FOLLOW OUR SEED PILGRIMAGES GO TO SEEDBROADCAST.BLOGSPOT.COM

WWW.FACEBOOK.COM/SEEDSHARE

"No hay pais sin maiz." Mexican saying

CALENDAR OF ENGAGEMENTS

Thursday March 2, all day

Mountain West Seed Summit
"Honoring Origins and Seeding the Future"
Tesuque Pueblo Seed Bank Field Day

Friday March 3, March 4th

Hotel Santa Fe and the Farmers Market
Pavillion Building
Santa Fe, New Mexico

Saturday, March 18, 11–2pm

Anton Chico Seed Exchange
Anton Chico Community Center

March 17–31
Open hours are 8–5 M–F

SWAP at UNM
"Re | Source: Unpacking the Archive"
Rainosek Gallery in Pearl Hall
UNM ALBUQUERQUE, NM
Panel/reception

Friday, March 31, 6 - 8pm

Friday March 3, March 4th

Hotel Santa Fe and the Farmers Market
Pavillion Building
Santa Fe, New Mexico

Saturday April 8

Pueblos y Semillas Seed Exchange
Abiquiu, New Mexico

April 22–23

Acoma Field Day

Saturday March 25, 10–4pm

Farmers Field Day
Native Seed/SEARCH Conservation Farm
Patagonia, Arizona

Sunday March 26, TBA

Gila Seed Event
Gila Community Center
New Mexico

Saturday May 20, 5–8pm

March against Monsanto
The Second Bees and Seeds Festival
Tractor Brewery Wells Park
1800 4th St NW,
Albuquerque, New Mexico

Saturday August 5, 10–4pm
Sunday August 6, 10–4pm

**"Panza Llena, Corazon Contento:
New Mexico Food Fest"**
El Rancho de las Golondrinas,
334 Los Pinos Road, Santa Fe, NM 87507

CHECK OUT WWW.FACEBOOK.COM/SEEDSHARE FOR UPDATES ON SEEDBROADCAST ACTIONS IN 2016.



PLEASE HELP US GROW!
Support SeedBroadcast with a
tax-deductible donation!

**TO MAKE A TAX DEDUCTIBLE DONATION TO
SEEDBROADCAST GO TO:**

Online donation:
[seedbroadcast.org/SeedBroadcast/
SeedBroadcast_Donate.html](http://seedbroadcast.org/SeedBroadcast/SeedBroadcast_Donate.html)

**Or contact our fiscal sponsor Littlelobe
for other payment options:**
Phone: 505.980.6218
Email: info@littleglobe.org

Your donation will help us keep the Mobile Seed Story Broadcasting Station on the road in search of Seed Stories near and far. It will help keep the agri-Culture Journal free and distributed from hand to hand. It will help sprout SeedBroadcast projects throughout 2017/2018 and beyond!

SeedBroadcast has been and continues to be funded by in-kind donations of time, labor, and money from collective SeedBroadcasters. Additionally, from 2012 – 2017 SeedBroadcast received generous grants from the Kindle Project Fund of the Common Counsel Foundation, McCune Charitable Foundation and the Robert Rauschenberg Foundation to support our yearly projects. We are also grateful to the individuals and institutions that have sponsored our participation in their public events helping to offset travel expenses. All of these funds are essential for the successful operation of SeedBroadcast.

With the increasing demands for SEED Action now, we need help to ensure that our 2017/2018 Mobile Seed Story Broadcasting Station Tours, the SeedBroadcast agri-Culture Journal, and that our partnership with Native Seeds/SEARCH will deepen the focus on food and seed sovereignty in times of rapid climate and environmental changes that are causing devastation to our mother earth. Your donation will help us to build the capacity to dig deep, sprout tall, and shout out for more action to plant the seeds of our ancestors across the land.

SeedBroadcast thanks you for your support and BELIEF in the power of Seeds, Stories, and agri-Culture!.

“Dryland farming is farming that is done without any kind of irrigation. It is just dependent on rainfall. On our ancestral homelands in Santa Clara Pueblo, there are still farmers that are planting up into the fields there. I have done some experimentation in the fields where I have just put seed to see if it makes it, so I do have some seed that I have grown that is rainwater only. I think you need the right seed. It has to be the seed that is grown year after year and has adapted through all of the changing climates, through all of the changing seasons. It also involves integrating our spiritual connection to seeds, and seeing the seeds that we are planting as our children and taking care of them in that way.”

Beata Tsosie-Peña

THE SYMPHONY OF THE SEED

PART 1: THE SPROUTING OF THE SEED

CASEY O'LEARY

At first, the process is intimate. You, alone in your greenhouse, bundled up against the cold, seeding alliums. Outside the window, the world is still sleeping. A brave bird calls forlorn, oddly exposed on a naked branch, perched over the patchy snow. You scatter a small scoop of hard little lumpy seeds across the top of each pot and cover it lightly. The whole thing just seems so implausible, flat after flat of plain brown soil stacking up on the shelves.

"There's no way this can work again!" you think.

You water and wait. A week goes by, sometimes more, and you've almost forgotten there was anything in those pots. But then, a single blade, bent against itself, pushes through the soil, like a lone oboe squeaking out clearly in a quiet theater while the entire orchestra waits in captivated silence behind it. It creeps taller, millimeter by millimeter, finally breaking free, heaving the shell of its seed out of the ground and lofting it overhead like a trophy. Others follow, first timidly, then boldly by the thousands, waving the black pompons of their seed skeletons in the air like chaotic fireworks dancing in chorus. Flat after flat, they sprout and grow--Brassicas, lettuces, tomatoes, peppers, filling the shelves and saturating our dull winter eyes with impossible vibrancy.

Of course, the real magic happened underground, before that first blade showed itself to the world above. As the water seeps in to soak the soil around the waiting seed, it begins to soften the seed's protective shell. The parched seed, which has lain dormant and thirsty for so long, starts to drink in water through its hilum bellybutton. As the water quenches the seed, its radicle root starts to grow, and soon it busts through the seed coat, springing the plant to life once again. That radicle plunges deep into the soil, anchoring it and beginning to slurp up food from the soil. The plumule shoots steadily upward until it bursts through to the light, unfurling its cotyledon leaves to bask in the sun and be nourished. And thus, the seed is born a plant.

Seeds have a way of knowing when the time is right. It's a matter of life and death, whether the world is ready to support the seed once it sprouts, so each seed carries a built in intelligence to know when it's time. Some seeds in the desert will lie dormant for months, years, or even decades, waiting for the perfect conditions to make a go at their one



CASEY O'LEARY, DIRT-WORSHIPPING SEED FREAK, RUNS EARTHLY DELIGHTS FARM IN BOISE, IDAHO. SHE ALSO CO-FOUNDED AND MANAGES THE SNAKE RIVER SEED COOPERATIVE.

WWW.EARTHLYDELIGHTSFARM.COM
WWW.SNAKERIVERSEEDS.COM

chance at life. Garden seeds, having co-evolved with dotting human caretakers, are more trusting. As long as we place them at the right depth, and provide them the right temperature and moisture, they'll sprout, throwing their survival into our hands. "I trust you," they say with each sprouting cotyledon. And so we engage in the centuries-old dance between faith and doubt that is agriculture, partnering across vast kingdoms of life to nourish another species.

It's happening outside now, too. Spring is the whole world waking up, sprouting seeds dotting every available surface, from the furrows in the fields to the cracks in the sidewalk. It's such a blindly optimistic thing to do, putting hard little lumps into rows of bare brown ground. Yet here they come, by the hundreds, then the thousands, almost invisible at first. Then one day you arrive at your farm and the whole thing wears a blanket of soft green. The symphony is in raucous crescendo now, all the horns and the toms and the violins have joined in fully and are climbing toward the joyful cacophonous climax of summer.

Charles Darwin once counted 527 individual seeds in a single teaspoon of pond soil, each with the potential to create millions more of itself over generations. Though each one is precarious in itself, as a whole, the process is unstoppable, seeds cracking open and leaves climbing insatiably forward, eating the sun and multiplying ever more surely as roots do the same. It's one of the grandest feats on earth, and one of the most miraculous for the gardener to behold--the humble seed splitting apart and

bursting forward into the light. As author Cynthia Occelli describes, "For a seed to achieve its greatest expression, it must come completely undone. For someone who doesn't understand growth, it would look like complete destruction."

And yet all around us, countless spring seeds coming undone bring the promise of another bountiful season. Thanks be to the sprouting seeds!



POEM OF THE SACRED SEED

ESTHER MARION

Like breath, so is the seed.
Given!

It is inseparable from us!
Words of wonder and mystery
Come through our sages, poets and visionaries.
Those who have seen, understood and embraced
vast concepts of creation, by holding and admiring a seed
in their hand, in the earth, in a clay pot or
a crack of a hard bolder, in a woman's womb.

Something so magnificently Divine speaks for the seed
that was about to fall into the folds of the earth
and become tree, grass, grain, vegetable, flower or vine,
become outrageous beauty or nutritious food or animal or human.

The becoming of something amazing is most often
The outcome of a ready seed.
These are the millions of years of change and refinement
of a creation story that never rests.
We have enhanced the seed's outcome, but not designed
the mater plan of such universal power!

The natural and the free seed
is designed to continue it's survival
for a very, very long time!

The natural and the free seed
is designed to continue it's survival
for a very, very long time!

But even for a seed,
there is now a question of freedom or violation,
sacred grounds and care taking hands,
or poisoned fields, cold machines and greedy interventions.
Even a seed, so innocent and powerful in it's sacred design,
guarded maybe by nature's and kind human ways,
could now be whisked away to strange labs

Where it is changes in ways - never before
imagined, intended or dreamed of!

Where it is changes in ways - never before
imagined, intended or dreamed of!

ESTHER MARION IS A FLAMENCO DANCER AND
PERFORMER WHO IS WORKING ON A DANCE-THEATER-
RITUAL PIECE CALLED PENUMBRA, OF WHICH THIS POEM IS
PART OF.

A BIASED MEMOIR OF SEED BANKS IN NEW MEXICO

BRETT BAKKER

Last November, filmmaker Taggart Seigel brought *Seed: the Untold Story* to the Guild Cinema in Albuquerque. Emigdio Ballon-- an old friend of mine featured in the documentary-- spoke afterwards. I hesitated but was called up with Emigdio, Siegel and Seed Broadcaster Ruben Olguin where we answered some questions from the audience and, more importantly, I hope we posed a few new ones. Despite being a seed saver for over thirty-five years, I have more questions than ever since I now realize that I actually know less than when I began. Knowledge works that way.

Seeing so many old friends and cohorts on-screen, I've been reminiscing about the seedy connections that happened in New Mexico three decades ago. What follows here is from my own faulty memory. Many other folks have their own versions to tell and I hope my mistakes are corrected accordingly!

In my early twenties, I was attempting a "back to the land" garden in the dry East Mountains area outside of Albuquerque. I soon found the need for adapted heirloom seeds, the existence of which I'd only recently become aware through the fledgling True Seed Exchange, now known as the Seed Savers Exchange. I located SSE through a battered copy of the Old Farmers Almanac in 1979, joined a year later (took me a long time to save up the ten bucks!) and was offering seed there in '81. Soon after, I became a supporting member of Native Seeds/SEARCH, which had recently spun off from a Meals For Millions /Freedom from Hunger Foundation nutrition project. Specializing in traditional Southwestern varieties, they sponsored the seminal 1981 Seed Banks Serving People Workshop in Tucson where I met my heroes: Gary Nabhan, Mahina Drees & Barney Burns, Kent Whealy, Cary Fowler, John Withee. Among the group was Forest Shomer of Abundant Life Seed Foundation in Washington. He had connections with an Oregon contingent of seed savers whom I had yet to meet.

The Pueblo of Okay Owingeh hosted the San Juan Pueblo Seed Project, from 1984 through 1986. Project Manager Gabriel Howearth brought with him the extensive seed collection originally assembled in Oregon by Alan "Mushroom" Kapuler and Al Venet. Kapuler entered Yale at age 16 and received his Ph.D. in molecular biology in the early '60s. He worked on early bio-engineering projects before dropping out to instead "work for the gene pool", as he used to tell us. Before it reached NM, the collection morphed through various company

incarnations, such as Stone Broke Hippy Seeds, Peace Seeds and (much later) SOW Organics.

While scrambling for a few dollars so I could afford to "hibernate" at my mountain cabin, I was working construction in Santa Fe during the winter of '84-85 when I crossed paths with Howearth and his partner Michele Rozbitsky. After volunteering during spring planting for the Seed Project, they found they couldn't get rid of me. I slept on their floor just so I could stick around and keep learning. I was eventually hired with funds generously provided by the Eight Northern Indian Pueblos Council through the dedication of Tribal Councilman Herman Agoyo and Tribal Planner Lynnwood Brown.

To the Oregon collection were added traditional seeds from the Pueblo and surrounding communities; landraces I'd found in the East Mountains; and dozens of varieties Gabriel and I selected from piles of seed catalogs, using the first edition of SSE's Garden Seed Inventory as a guide. It was here at the Project farm that many people began to converge while trading seeds and ideas. The bank continued to expand.

Bolivian agronomist Emigdio Ballon had recently come to the US with his incredible collection of quinoa which, for research purposes, he planted in replications throughout the southwest, including the San Juan Project's three-acre farm. Most of us had barely heard of quinoa at the time and the seed was too precious to eat much of it. The color variation were overwhelming, like a New England fall: golden, magenta, green, crimson, pink. Emigdio spent his time driving around in circles. That is, he continually visited his many plantings from southern Colorado down to Albuquerque to see where each variety of quinoa grew best.

Rich Pecoraro (who later founded *Abbondanza Seeds* in Colorado) and partner Julie Spelitich had both worked with Kapuler and Venet in Oregon and joined us at the Project in 1986. We pretty much spent every waking hour in the field together. Filmmaker Kenny Ausubel visited to make a movie about the Project but became so enthused, he ended up assembling donors to found *Seeds of Change* when the San Juan funding ran out.

With half of the Seed Project collection, Gabriel moved to Gila, NM to establish *Seeds of Change/ Bioneers*. Sadly the other half of the seed bank, left behind at the Pueblo, was vandalized and soon dispersed. Emigdio and I then worked /lived in Espanola at the Talavaya

Center/Seed Company compound, started by New Buffalo Commune "refugee" John Kimmey and Carol Underhill. After a few years, Emigdio then moved to *Seeds of Change* which had relocated to El Guique, a few miles from the old San Juan farm. I moved to Albuquerque and worked there for Tucson-based Native Seeds/SEARCH. Traveling the back roads of New Mexico, I assembled a traditional Southwestern seed bank. Most of NS/S's NM accessions came from these trips as well as a few varieties from southern Colorado and the Tiguex Pueblo of Ysleta del Sur, Texas. Grow-outs were planted on an acre of land donated by The Shepherd of the Valley Presbyterian Church, quite close to the fields that later became Rio Grande Community Farm.

After leaving *Seeds of Change*, Emigdio managed the Tesuque Pueblo farm where a seed project had been started by Mark and Belle Rehder, whom we'd earlier met through the San Juan Project. Also at Tesuque, Clayton Brascoupe was already saving seeds with his family. We'd first met him when he came to visit the Project and share seeds from his Mohawk roots. Clayton directs the Traditional Native American Farmers Association which spun off from a project that I worked on with NS/S. Clayton also partners with Flowering Tree Permaculture Institute (which too has a seed bank) at Santa Clara Pueblo. Enlisting me for the board of directors, Joel Glanzberg (who also showed up early on at the San Juan Project) founded FTPI in 1987 with Roxanne Swentzell. The Institute later passed to her and her family at the Pueblo. I am still on the board as (we like to say) the "token white guy". Most recently, FTPI published *The Pueblo Food Experience Cookbook* which encourages Puebloans to eat (and grow) their ancestral foods with the implication that everyone can do the same within their own culture.

At about the same time the San Juan Seed Project started, OJ Lougheed moved from Washington to Ghost Ranch in Abiquiu with his outstanding collection of beans and small grains and founded the High Desert Research Farm. I'd "met" him earlier by mail. Back in the early days of SSE, there just shy of a hundred of us mailing seeds back and forth across the country. OJ was soon joined by Lynda Prim who added native Churro sheep to the mix. Here was a revelation since few of us had attempted to integrate livestock into our farms. This was a natural progression since domesticated livestock were a staple of traditional agriculture in the Southwest since the arrival of the



Spanish, whose own seeds -- many obtained during the Moorish (Muslim) period-- were integrated into the mix, becoming "native" in the process. OJ was a champion of seeds from the former Soviet Union nations and his efforts led directly into SSE's later collection trips there. He was also the one that hooked me up with the Church farm when I moved to Albuquerque from Espanola.

Lynda (who in 2015 managed the NS/S Conservation Farm in Patagonia Arizona) co-founded The Farm Connection, a pre-internet farmer meeting place and newsletter, with Sarah Grant (who co-founded The New Mexico Farmers' Marketing Association). The pair also founded the annual New Mexico Organic Farming Conference which later passed on to the New Mexico Organic Commodity Commission (which Sarah also co-founded!). NMOCC is now the New Mexico Department of Agriculture Organic Certification Program. Lynda and I were two of the three first organic inspectors. However, in 1989, using Talavaya Center as a base, Mark Rehder and I (and two others whose names I can't recall...help!) formed the first NM organic certification agency: a local Chapter of the Nebraska-based Organic Crop Improvement Association.

While all this was going on, a few other Pueblos had similar traditional farm projects. Zuni Pueblo's seed bank was coordinated by anthropologist Carol Brandt but this collection was held in reserve for use by tribal members only. Jemez Pueblo had a youth farm project where I made lifelong friendships. Taos Pueblo's Jimmie Reyna revived an old strain of his tribe's blue corn and was an early mentor of the Talavaya folks. Other Pueblo people were doing similar things but on a small, community-only scale.

After my decade of funding with NS/S ran out in 2000, I continued to work as an organic certifier/inspector for the state. The combination of a desk job and getting heavily involved with pirate radio and artistic, anarchist punk weirdos (some of my favorite people!) took me out of farming and —unlikely as it seemed— even gardening at all. Years went by and I found the need to take a "moral" inventory of my collection. It had been too long since I'd grown anything out, the ultimate disrespect. That's when I began to think about preservation vs conservation. Like lifeless butterflies pinned to cardboard, my collection was aging, attracting mice and meal-moths and doing no good for anyone. Preserved, like a mini-museum but not conserved, alive, for the future. It took a few days but after cleaning and rummaging

through the mess, a pick-up truck load of jars and boxes was bequeathed to Isaura Andaluz /Cuatro Puertas and Joshua Cravens/ Arid Land Seed Cache. Watching that truck drive away was like saying good bye to old and dear friends, muy triste.

Now, after almost another ten years, I'm happy to say I am reuniting with my old seed friends, both flora and (two-legged) fauna. Soon retiring from the state, I am once again "working for the gene pool", this time for Cuatro Puertas and the Cache. I'll be seeing ya'll around.

I'm sure there's many more local projects from those old days that I've forgotten because in that short span, it seemed like seed banks were popping up everywhere in New Mexico with cross pollination from the Pacific Northwest. We all knew and visited one another, traded seeds and stories, and began friendships that continue today.

A final note: many of us were credited in print and video with heroically "saving" seeds but we were merely the ones who were loudly evangelical about it. Tribal elders and Spanish viejitos were quietly saving their seeds here in New Mexico all along. Traditionally modest, they saw no need to promote themselves but it is to them (and elder farmers worldwide) that we should be most grateful.

BRETT BAKKER DOESN'T REMEMBER WHEN HE WAS BORN BECAUSE HE WAS JUST A LITTLE BABY BUT BY THE TIME HE WAS NINETEEN, HE FOUND HIMSELF LIVING IN A REMOTE LOG CABIN IN NEW MEXICO WONDERING HOW TO GROW FOOD WITH NO WATER. IN 1980 HE HOOKED UP WITH THE SEED SAVER'S EXCHANGE AND BEGAN PESTERING EVERYONE HE FOUND — PUEBLO AND HISPANIC— FOR TRADITIONAL CORNS, BEANS, SQUASH, MELONS AND CHILES TO PLANT.

NOW HE SPENDS HIS TIME AS A TOOL OF THE GOVERNMENT FOR THE NM DEPARTMENT OF AGRICULTURE ORGANIC PROGRAM CERTIFYING ORGANIC FARMS, LIVESTOCK AND FOOD PROCESSORS. THE FOOD WAS MUCH BETTER WHEN HE WAS DOING THE SEED STUFF WITH PUEBLO AND HISPANIC FARMERS, ESPECIALLY THE BONE STEW, CHICOS AND PRUNE PIE. IN DIRECT CONTRADICTION WITH ALL OF THE ABOVE, BAKKER ENJOYS LOUD OBNOXIOUS ROCK AND ROLL WITH PEOPLE HALF HIS AGE.

"As it went with the seeds, so it went with the people. As it went with the people, so it went with the seeds."

Hidatsa Red Bean, from the Mandan, Hidatsa, and Arikara Nation along the Missouri River, 'North Dakota'.

A LITTLE CORNER WITH A BIG HEART

JOI SHARP



The Western Slope of Colorado is a breathtaking landscape, filled with rugged ridgelines and lush valleys. It is also home to a growing population of diverse and progressive folks that are dedicating themselves to growing good organic food, and living a more sustainable lifestyle.

Tucked between two stunning mountain ridges lies the tiny town of Ridgway. It's a town built on ranching, mining and the railroad that used to connect the old mining towns. Much of the mining is gone now, and so is the railroad, but the town is still thriving in many other ways.

It's a diverse town. Old ranchers, and young families make up the majority, along with people that simply love the mountains. There is also another group of folks that are bent on thriving...gardeners and seed savers.

A few years back an old van rolled through promoting seed saving and the creation of seed lending libraries. They stopped in at the Ridgway Public Library, and presented the Director with the reasons why starting a Seed Library would benefit our community, and our world. (Our Director is very interested in these things). Because seed saving made so much sense, and its cause was so essential, the Ridgway Seed Library was born.

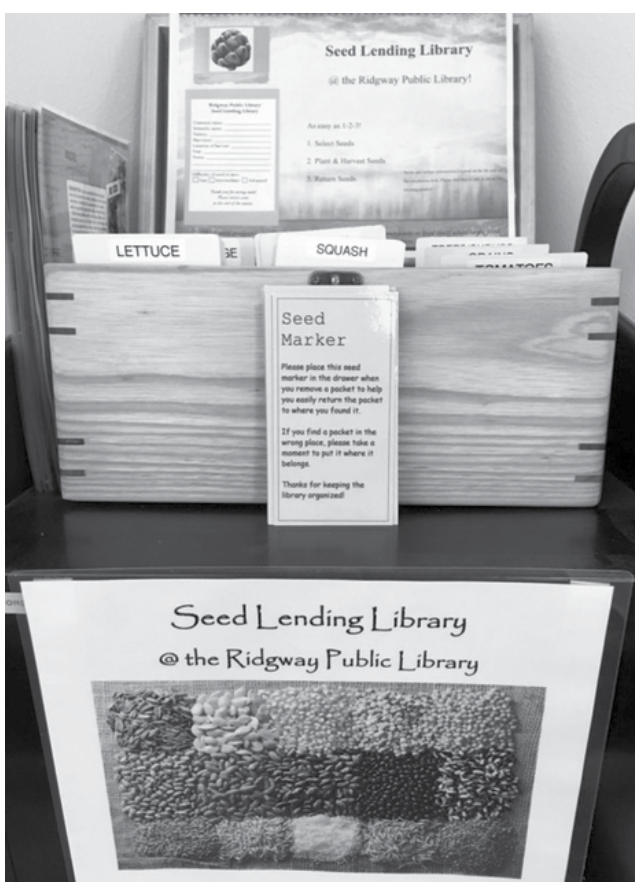
It's a small-scale library with a very big heart. It carries the precious seeds, grown locally, in little brown envelopes that present themselves for any well-intentioned seed saver to sift through and borrow. There are no prerequisites, no investments, no expectations placed upon the borrower. Only that he/she attempt to be a seed saver. Because, you see, the seeds are actually in charge, and they take care of themselves.

Such precious little beings of consciousness! The whole world is contained within them, so they know who to choose to plant them in the ground. They know if they will sprout, and produce sustenance, and they know if they will be allowed to share themselves by producing seeds!

Such wondrous little beings! The seeds

themselves truly are the originators of the Seed Library-those little sneakies. They know the exact date of when to have a seed swap too. They lie together with their little seed families, and call out to the ones that they want. They know, so much. And it is my job, as the caretaker of this little Seed Library, to listen to them. To feel their guidance, and to understand that my little mind can never understand the vast intelligence within the seed.

JOI SHARP IS THE DIRECTOR OF THE RIDGWAY SEED LIBRARY IN RIDGWAY, WESTERN COLORADO. AFTER BEING AN AVID GARDENER FOR YEARS, HER BOSS AT THE PUBLIC LIBRARY FELT THAT HAVING JOI TAKE CARE OF THE SEED LIBRARY WOULD BE A GOOD FIT. SINCE THEN, JOI SEES THAT THE IMPORTANCE OF SAVING SEEDS FOR FUTURE GENERATIONS IS AN IMPERATIVE. AND THE MORE SHE ALLOWS THE SEEDS TO GUIDE HER, THE MORE SHE IS INSPIRED TO GET THE WORD OUT. JOI, WITH THE SEED'S HELP, FACILITATES SEED-SAVING CLASSES, SEED SWAPS, AND JUST RECENTLY, THE RIDGWAY SEED LIBRARY IS LOOKING FORWARD TO HOSTING THE MOVIE SEED: THE UNTOLD STORY APRIL 1, 2017.

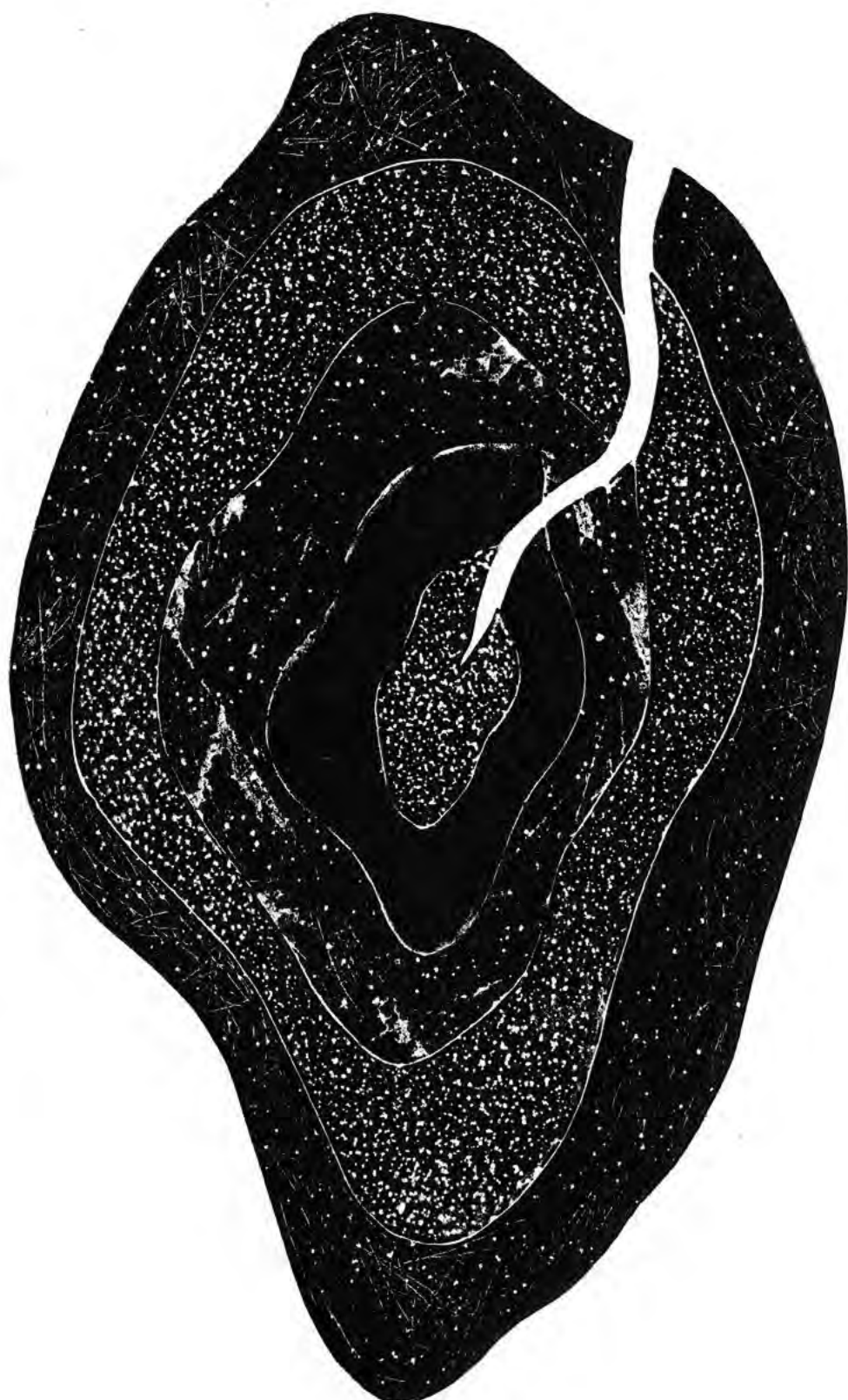




IAN KERSTETTER

cover crops: any number of hardy, slow-growing plants sown in the winter to protect and enrich the soil by providing a home for the bacteria and putting nitrogen from the air back into the soil

IAN KERSTETTER IS A QUEER ARTIST OF MIXED ONEIDA AND EUROPEAN HERITAGE, BORN AND RAISED IN NEW MEXICO AND WORKING IN CHICAGO. A PRINTMAKER, WRITER, MURALIST, AND INSTALLATION ARTIST, IAN WORKS FROM AN IMPULSE TO HEAL AND CONNECT SEEMINGLY DISPARATE ASPECTS OF SELF, CULTURE, AND HISTORY THROUGH RELATIONSHIP TO FOOD, LAND, AND OTHERS.



MELODY OVERSTREET

MELODY OVERSTREET IS AN ARTIST, EDUCATOR, FOOD GROWER AND SEED SAVER THAT IS INTERESTED IN THE MICROSCOPIC AND MACROSCOPIC DETAILS OF OUR WORLD, AND HOW THAT INFORMS OUR RELATIONSHIP TO EACH OTHER AND TO PLACE. WWW.VAPORYSEDIMENT.COM

TALES OF AGRI-RESISTANCE

JUMAN SIMAAN & VIVIEN SANSOUR



There is nothing quite like the smell of the brewing of Arabic coffee prepared on burning olive branches, just pruned during the olive harvest. The smell of heil (cardamom) cooked in coffee, and the aroma of the burning wood, are almost as delicious as the day's first cup sipped atop the dry limestone walls that separate the terraces of the wadi (valley).

It is mid-morning, early November in Wadi Fukin in the West Bank, Palestine. The family leave their olives on their trees until later in the season than most other farmers in the area, because Abu Nedal thinks it is better to leave the fruit of the baladi (native) variety to ripen longer and so produce more oil. The harvest here runs from mid-October to early November, after the first rains of the season have rinsed the long dry summer's dust from the trees.

Their terrace is located outside of the cluster of houses, the mosque, the main spring and the council building, towards the bottom of the wadi. The olives are picked mainly by hand in a movement resembling the milking of a goat. The fruit is dropped onto a tarpaulin sheet, collected into buckets, then into mesh sacks ready to be transported to the press in a nearby town.

Wadi Fukin is a village of about 1,200 residents, made up of a few extended families from two hamoulas (clans) thought to have lived continuously in these central hills of Palestine for thousands of years. Village families share an ancient system of irrigation sourced from natural springs, whose water is collected into pools from which tunnels transport water to the vegetable plots on the wadi's flat plains. The village recently lost several hundred acres of land to the expansion of nearby Israeli colony Beitar Illit, and its natural springs are drying up due to Israeli extraction and a drop in rainfall likely to be a result of global warming.

Abu Nedal has just returned to his village after several decades in a nearby town, where he was involved in various political and social activities, for which he spent some time in prison—the experience of almost half of the adult male population in the occupied Palestinian territories. While he was away his now separated wife Um Nedal and his son Nedal tended the land. Um Nedal is a member of a women's co-operative in the village, where they make foodstuffs such as hawthorn jelly and weave baskets from olive shoots. Nedal has a permit to work in construction in Israel, something granted to a number of the villagers by the Israeli authorities. He has a barbershop in the village, where he works evenings and weekends—a necessity for the main breadwinner of three households: his mother's, his father's and his own.

The family feel they are part of a revival in olive planting and growing since the 1980s, when illegal Israeli settler-colonies began to encroach on their land. Local committees have been established to support people in planting olive trees that require little care through the seasons, some of which live for thousands of years. For them this approach is crucial to preserving their connection to the land, because plots that go unworked for a number of years can be claimed by the Israeli authorities

using an Ottoman rule that is centuries old. It was a regulation aimed at expropriating communally-owned land in order to privatise it. The practice was continued by the British Mandate from 1918 to 1948, and now the Israeli authorities use it to appropriate land and water resources, as well as to expand existing settler-colonies and establish new ones. Villagers feel the ultimate aim of such measures is to make life in the village so unbearable and unviable that the indigenous villagers leave—a slower, more subtle expulsion than those carried out by the aerial bombardments by the Israeli armed forces that destroyed most of village buildings in the mid-20th Century. Following that catastrophe, and after years of resistance in exile, living in caves and refugee camps, the villagers negotiated their return to the village. This was an unusual outcome not shared by the 500 or so Palestinian villages that were ethnically cleansed in 1948's Nakba (catastrophe), and again in 1967 when Israel occupied more Palestinian land.

Village and family co-operation, combined with local and international solidarity from activists who organise to provide moral and physical support for farmers in the village, is central to this revival and to preserving the village's lands and ways of living. Um Nedal, Abu Nedal and the family have recently, with the help of the agricultural committee, rehabilitated a terrace on the western hill, renovating a well and planting grapevines. Such activities often come under attack from the Israeli authorities, which severely restrict construction on Palestinian-owned land; fortunately, the family's terrace hasn't yet attracted such unwelcome attention. Abu Nedal has built a grey-water treatment tank to irrigate the herbs and citrus trees in the family's kitchen garden. He often cites an old saying —“They who have a fig and olive will never be poor”—when reflecting on the value of these two native species in meeting part of the family's needs. Olives are eaten, oil is extracted, the dead wood is used for fuel, and soap is made from a by-product of the pressing. Some drink an infusion of olive leaves to treat ailments. Dried figs are dipped in olive oil and eaten for breakfast or as a snack when working in the fields.

Fellahi communities have faced land dispossession and alienation since the late 19th Century, when colonisation began to combine with the imported capitalist structures of land privatisation and agribusiness, and now climatic changes are emerging as a third assault upon indigenous ways of living with the land. The family, like others in the village, have (re) enacted creative means, some of which have been described here, to respond to these circumstances. These daily acts of resistance, known in Palestine as Sumud, are carried out to maintain not just their livelihoods but to express social, political and spiritual connections these communities have formed with the land, trees and animals they live among—a bond with pre-monotheistic origins, returning to these ancient hills to enable more than just survival. These daily acts also contribute to the enrichment of individual, family and community's wellness and self-determination.

Connection to community is not the only thing these acts of Sumud are bringing forth.

Palestinians, despite their harsh political realities, are reaching out to the world with initiatives that attempt to highlight their role and contributions to the global community. The Palestine Heirloom Seed Library was recently launched in the village of Battir, a few kilometres to the north-west of Wadi Fukin. As a response to the rapidly depleted biodiversity, the library, which was conceived by Vivien Sansour and supported by A.M. Qattan Foundation, is doing its part in reinforcing this ancient relationship between culture and nature as a part of a wholesome ecosystem. Vivien says, “In Palestine, we face both a challenge and an opportunity. Our challenge is how to save our biological and cultural diversity in a context where we lack political autonomy. Our opportunity is the wealth of a still alive ancient agricultural knowledge and seed, which hold the DNA of our cultural and biological heritage.”

While the olive trees are directly threatened and attacked by both state and settler violence, heirloom seeds are under threat due to a growing agribusiness industry and a policy of transforming the Palestinian farmer from an independent and productive entity to a dependent and helpless consumer. As a way of insisting on life, the seed library team is operating as seed detectives, excavating through elder knowledge of the old varieties and the stories that go with them. In anticipation of the opening of the library, a plot of land in Battir was planted with heirloom varieties, including a disappearing white cucumber forgotten by the young generation, and an old watermelon variety called Jadu'i. The seed library holds workshops in which students have been actively involved in learning and in creating knowledge.

Miss Hayat is a school teacher who works with refugee children. She has been a committed participant in the workshops the library has been offering. One of Hayat's students filmed a conversation with her grandmother when asked to collect information from elders. Reflecting on the task, the student told Hayat, “I had never thought to sit and talk to my grandmother [in this way]. This was the first time. I didn't know she had so much knowledge”. Such experiences remind us that the seed is a catalyst for new life—a life that is reweaving itself every day.

Through such efforts—seemingly so small—power is found in the simplest and most profound of things. In the form of the heirloom seeds that are the product of tens of generations who have carefully selected and propagated our daily bread and our heritage. These seeds have for millennia been the gift from which sovereignty—over land, heritage and food—is gained and regained. The mere act of saving a seed becomes a subversive act of, as Vivien terms it, ‘agri-resistance’ that generates a sense of resurrection of the spirit of a people buried and at the same time sprouting hope in the most essential of ways. Olive planting and growing by Um and Abu Nedal's family, like collecting and preserving seeds by the library team, offer a particular Palestinian contribution to the global food sovereignty movement.

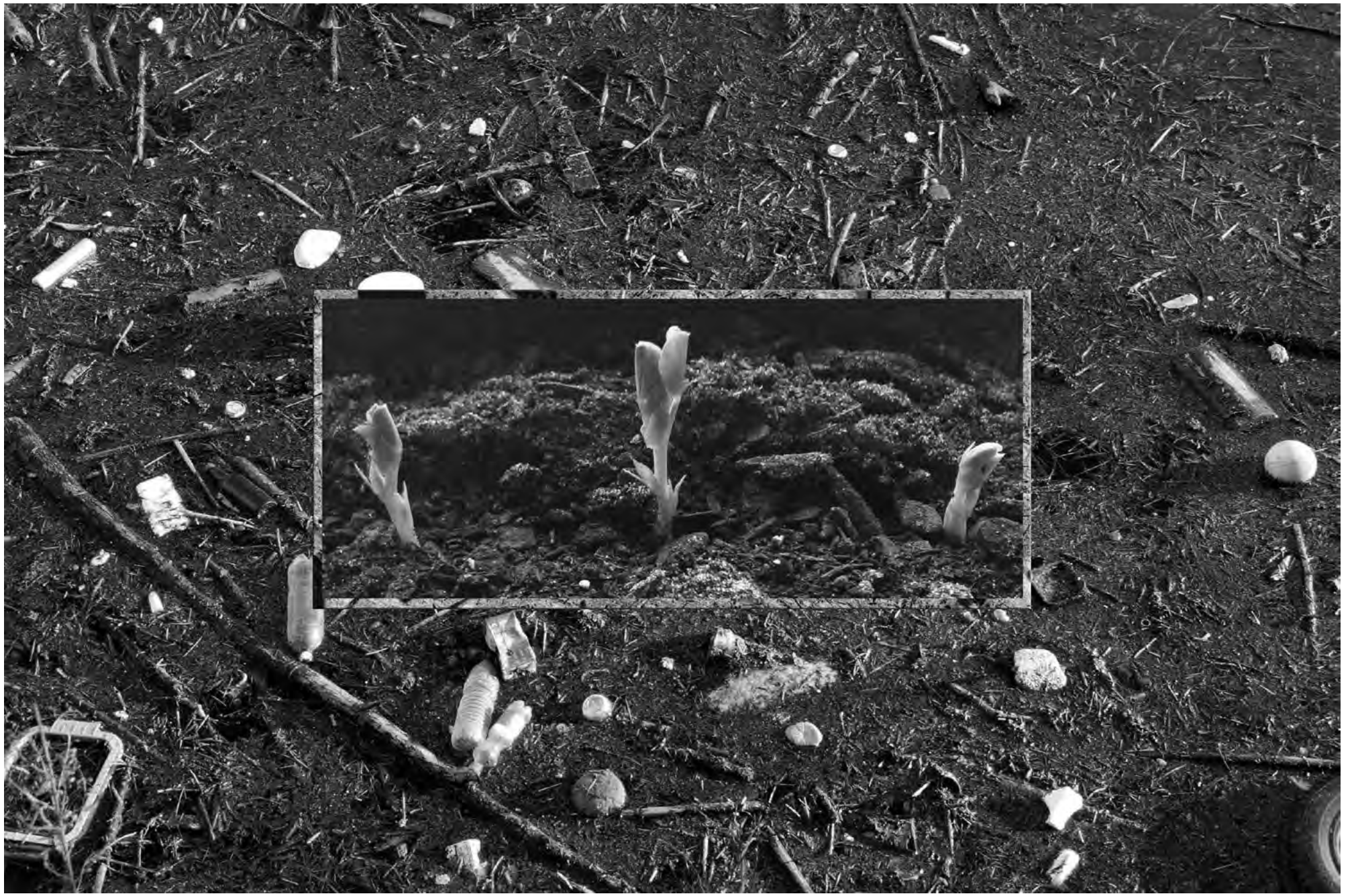
VIVIEN SANSOUR IS THE FOUNDER OF THE PALESTINE HEIRLOOM SEED LIBRARY. TRAINED IN THE FIELD OF ANTHROPOLOGY, VIVIEN WORKED WITH FARMERS WORLDWIDE ON ISSUES RELATING TO AGRICULTURE AND INDEPENDENCE. HER SOLO SHOW, TERRAIN: PALESTINIAN AGRI-RESISTANCE, CREATED A COLLECTION OF PEOPLE AND LANDSCAPE PORTRAITS OF AGRI-CULTURAL PALESTINE. SHE WAS A SELECTED ARTIST FOR CONFRONTATION THROUGH ART RESIDENCY IN NICOSIA, CYPRUS WHERE SHE WAS PART OF THE COLLECTIVE EXHIBIT, “WHERE THE SKY AND THE EARTH TOUCH”. AS PART OF HER WORK ON SEED AUTONOMY, VIVIEN IS CURRENTLY DEVELOPING THE SEED LIBRARY PROGRAM WITH A.M. QATTAN FOUNDATION. VIVIEN HAS A B.A. IN POLITICAL SCIENCE AND THEATRE ARTS AND AN MA IN INTERNATIONAL STUDIES WITH A CONCENTRATION IN ANTHROPOLOGY FROM EAST CAROLINA UNIVERSITY.

JUMAN SIMAAN IS A PALESTINIAN LIVING IN THE UK STRUGGLING TO NEGOTIATE LIFE BETWEEN CULTURES AND ENVIRONMENTS. HE IS CURIOUS ABOUT THE RELATIONS BETWEEN NATURE AND CULTURE AND THIS RELATION'S ROLE IN POST-COLONIAL AND POST-CAPITALIST COMMUNITIES. AS AN ACADEMIC AND RESEARCHER JUMAN IS INTERESTED IN THE EVERY-DAY ACTIVITIES OF COMMUNITIES AND THEIR RELATION TO THEIR ENVIRONMENT. HOPING TO LEARN FROM THEIR VALUES, WAYS OF KNOWING AND WAYS OF DOING. JUMAN DREAMS OF LIVING ON, AND WORKING IN, THE LAND USING OLD AND RENEWED MEANS SUCH AS GROWING ORGANICALLY, COLLECTING AND SWAPPING SEEDS, AS WELL AS APPLYING PERMACULTURE METHODS.

PALESTINE HEIRLOOM SEED LIBRARY: WWW.FACEBOOK.COM/PALESTINEHEIRLOOMSEEDS

JUMAN SIMAAN & VIVIEN SANSOUR

ILLUSTRATION BY GRAEME MCGREGOR



REFRAMING EDEN
BEVERLY NAIDUS



**ARTIST'S STATEMENT, VALISE
GALLERY, VASHON, WA,
JANUARY 2011**

Several years ago, I asked my mother what inspired her to garden, and she told me the story of when she was little girl, living in a cramped, tenement apartment in the Washington Heights neighborhood of Manhattan, and how much she wanted to grow things. She saved some tomato seeds, got some dirt from the park, planted the seeds in a wooden cream cheese box from her father's grocery store and put the box out on the fire escape. She watered it regularly and waited. Little seedlings emerged, but no tomatoes; still the magic of the sprouting seeds got her hooked.

I grew up with two people who spent their weekends and every daylight hour that they weren't at work, planting, weeding, pruning, watering, harvesting, composting and canning. My parents were very scientific and practical people, and had no patience for religion or mystical thinking. Yet I became convinced as an adult that their commitment to growing things and putting healthy food on our table was a spiritual practice. Kneeling on the ground and believing in the miracle of seeds, and the interconnectedness of light, water, soil, seasons, is a faith.

So in this time of continual ecological disasters, I felt it would be important to call on the people who subscribe to this faith, whether or not they think of it as spiritual, and hear their stories. This is part of the remediation that needs to happen. It will give us the courage to keep organizing to resist corporate control of every aspect of our lives. Like mycelium (fungus) and certain plants have the ability to heal toxic soil, the people who grow things have a wisdom that can heal us on multiple levels.

Perhaps living on Paradise Ridge on Vashon Island is part of the inspiration for creating work

that investigates notions of Eden or utopia. As someone who spent several decades focused on the problems of the world, and trying to awaken others to those challenges, I have learned that people (including myself) become more effective as activists if they have a vision of what they are working towards. In Social Ecology this is called the reconstructive visioning process. What do we want our communities to become as the old, corrupt system collapses around us?

It is hoped that this exhibition will spark the imaginations of my Island and off-Island neighbors and inspire more eco-art and remediation projects here and elsewhere. If you have any questions about the work on display, don't be intimidated, just ask. I'll be around all month long.

By the way, at 92 years young, my mom is still growing tomatoes.

Beverly Naidus 2011

UPDATE (2017)

Although I no longer live on Paradise Ridge or on Vashon Island, I am still engaged with the miracle of seeds and remediation in my new garden in Tacoma. My mom is no longer growing food in her outdoor garden, at almost 99 years old, but she still lovingly cares for her African violets and other indoor plants.

Where my gaze is focused right now is upon the seeds of revolution sprouting in the resistance movements all over the world, but particularly in the US. We are confronting a fascist regime whose impact may destroy any chance for humanity to survive on this planet (not to mention all the other species). With courage and resilience, we will rise up, build strong coalitions of progressives and make a harvest of justice, love and equity for all.

“We have planted seeds all across the world and inspired and awakened people to see water in a new way.”

Lyla June Johnston Standing Rock, 2.23.17



A STORY OF RESISTANCE AND “BIG BEAN” RELIANCE IN THE RIO GRANDE VALLEY, JAMAICA

JOHN DANIEL GALUSKA

I was born in a suburb of Chicago and have lived in the Midwest almost all of my adult life. I discovered as a teenager a powerful attraction to forests and mountains. I currently live in Bloomington, Indiana near some beautiful state and national forests, but not having mountains in the Midwest has always been a bit of dilemma for me. Whenever I journey outside the Midwest I find myself seeking out new forests and mountain ranges to explore. Over the years this drive as led me to experiences in tropical rainforests in Belize and Jamaica, alpine lakes and tundra in Colorado, the badlands and Black Hills of South Dakota, and the high desert forests and mountains of Arizona and New Mexico. All of my experiences in the arid Southwest have been meaningful but also short-lived. On the other hand, my experiences in the wet, misty, lush rainforests and mountains of Jamaica have been long-term and ongoing. These experiences evolved over multiple years as I spent time living, studying, and teaching in Jamaica. The places and people I encountered in Jamaica's Blue and John Crow Mountains powerfully shaped the course of my personal and professional life. More specifically, it was my interactions with traditional farmers in the Rio Grande Valley of eastern Jamaica that altered my perspectives on sustainable agriculture and cultural resiliency.

Since 2004 I have been honored to work with the Bowden Pen Farmers' Association (BPFA) in Jamaica, an active multigenerational rural farmers' collective. The individual members of the group herald from small communities in the lower and upper regions of the Rio Grande Valley in the parish of Portland. Many of these farmers are the descendants of Jamaican Maroons. Maroon communities and cultural practices were forged out of resistance to enslavement and the oppression of colonial regimes (first the Spaniards then the British). Starting in the mid 1600s and continuing in the 1700s, Maroons successfully fought British colonial forces using a range of guerrilla warfare tactics. While some fighting and major revolts took place near large plantations and coastal areas of the island, most battles happened in more remote and mountainous regions. Over the decades two primary Maroon groups, the Leeward Maroons and the Windward Maroons, emerged. While the Leeward Maroons established strongholds and settlements in Jamaica's Cockpit Country (parishes of Trewlany and St. Elizabeth) the Windward Maroons established communities in multiple mountain ranges in areas within the Rio Grande Valley (parish of Portland).

Jamaican Maroons were able to maintain their long-standing colonial resistance and to survive (even thrive) in Jamaica's mountainous interior regions in large part because the cultural practices they created and maintained. These included rich spiritual, verbal, musical, and agricultural traditions—traditions that were intimately linked with the natural resources and environmental features of the areas they inhabited. Many traditional components of Maroon culture, including small-scale subsistence gardens and farm sites, continue to be practiced today. Indeed, many of the farmers in the Rio Grande Valley I began working with in 2004 were themselves Maroon



descendants. With their help I created an interdisciplinary experiential-learning program for undergraduate students at Indiana University that combined perspectives on Jamaican history, expressive culture, agriculture, and ecotourism. Throughout our partnership I have always been both intrigued and inspired by ways in which the farmers' cultural life and environmental interactions were blended and intertwined. Like their ancestors, the members of the BPFA collectively maintain a deep and intimate living knowledge of such things as: local medicinal and edible plants, endemic flora and fauna, trail systems and historic sites, watersheds, rivers and river life, seasonal weather patterns, soil qualities



and optimal farm sites. Such knowledge is not separated and subjugated out into cultural and environmental spheres. Farming practices are shaped by cultural traditions as much as the Rio Grande Valley's distinct environmental features (i.e. two distinct mountain ranges, a high number of endemic species, and an abundance of small rivers, streams and waterfalls regularly feed by the region's heavy rains). In the same fashion, Maroons long-standing historical dependency on key environmental resources for their subsistence and survival shaped their cultural practices and beliefs.

One of the most memorable and meaningful examples I can cite to illustrate this interdependency relates to a large “sea bean” found widely throughout the mountains, rivers, and streams of the Rio Grande Valley. The seed *entada gigas*, commonly known by some as the “sea heart” or “monkey ladder,” is a member of the legume family (Fabaceae), and grows inside large seedpods that are often 3-4 feet in size. The seedpods can contain 10-15 seeds and grow on very large liana (vines). A durable, thick pod and internal hollow cavity give these seeds the ability to float over long distances—including

multi-year ocean travels as they are spread intercontinentally by waves and currents. The beans are widespread in the tropical forests of South America but also commonly found within Central America, the Caribbean and Africa. In Jamaica, Maroons refer to the seed as carcoon (or cacoon). Traditionally, carcoon beans were gathered, soaked, processed, and cooked for use as a wild edible to provide nourishment. The bean was also used to make beverages, medicinals, toys, purses, jewelry and other items. Perhaps most importantly though, carcoon vines were widely and very successfully used by Maroon freedom fighters as a form of camouflage in their guerrilla warfare with British soldiers. Having such effective camouflage in their arsenal of guerrilla tactics further heightened the ability of individual Maroons to ambush their opponents at close quarters.

In November 2016 I was able to spend two weeks in New Mexico while I attended the Quivira Coalition and Biodynamics conferences. As part of the Biodynamics conference I had the opportunity to briefly share the story of the Maroons and the significance of the carcoon bean with SeedBroadcast. Over the years and multiple trips to Jamaica I have built up a collection of carcoon beans. I often give them to students at

Indiana University and I normally carry at least one bean with me wherever I go (they fit quite nicely in the watch pocket still found on some pants and jeans). I brought multiple beans with me to New Mexico in November in order to share. Some found their way to individuals in Albuquerque, some to SeedBroadcast, and a few to other individuals I encountered in Santa Fe. Every time I share the “big bean,” as I sometimes refer to it, I not only describe where it came from, but the deep cultural and historical significance it carries. The Windward Maroons' long-term colonial resistance, subsistence, and survival in the remote mountains and lush rainforests of the Rio Grande Valley were all directly supported through the regular use and reliance on the carcoon bean and the vine its seed pods grow on. I believe we can all learn something from the deeper story of this rather large seed/bean and what can quite accurately be called “big bean” reliance. The story of the cultural resiliency of Jamaican Maroons over hundreds of years is certainly inspirational. Likewise, it has been inspirational to work with and to learn firsthand from modern day Maroons and farmers in rural Jamaica who continue to celebrate and maintain traditional practices that benefit both humans and the ecosystems they intimately depend on. I share this story with the hope that it inspires other lovers of seeds, wild edibles, and resilient farming communities.

JOHN D. GALUSKA

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PHOTO 1: DINE BLUE CORN, SAN FELIPE WHITE CORN AND PINK CORN FROM NORTHERN MEXICO ARE PREPARED TO BE SAVED FOR SEED

PHOTO 2: ZUNI GOLD BEANS FROM ZUNI PUEBLO, NEW MEXICO

PHOTO 3: A RAINBOW OF TRADITIONAL POPCORN VARIETIES GROWN IN NAMBE, NEW MEXICO

PHOTO 4: HERITAGE NEW MEXICAN BOLITA BEANS BEFORE PLANTING

PHOTO 5: NAMBE, NEW MEXICO RED CHILE PODS AND SEEDS

EMILY ARASIM IS A YOUNG FARMER AND SEED GUARDIAN FROM TESUQUE, NEW MEXICO. SHE CURRENTLY WORKS AS COMMUNICATIONS DIRECTOR FOR THE WOMEN'S EARTH AND CLIMATE ACTION NETWORK, WHILE WORKING ON THE PATH TOWARDS HER DREAM OF COLLABORATION WITH COMMUNITIES ACROSS NEW MEXICO IN THE PROTECTION OF TRADITIONAL AND INDIGENOUS SEEDS AND FARMING CULTURES.

MY HANDS WILL NOT BE THE HANDS THAT FORGET

PHOTOS AND POEM BY EMILY ARASIM



My hands will not be the hands
that loose the winding thread of life
within these ancestral seeds.

Passed from mano to calloused mano
across generations
between peoples
through fires of colonization
and in spite of the false fronteras that divide the land.



My hands will not be the hands
who consume carelessly
that which is not mine to take.
Who do not ask permission
before entering your fields
before undressing your husks
and loosening your seeds of life into my basket.

My hands will not be the hands
that forget that maíz es vida
that we are nothing without the kernels of hope
that grow on your stalks, swaying and speaking with the wind.



My hands will not be the hands that forget.

My hands will be the hands
that plant jewel like seeds in our high mountain soils.
That carry water to your thirsty sprouts.
That work steadily to accompany my singing
as your roots grow deep.

My hands will be the hands
that shuck blue corn until my fingers ache.
That sprinkle seeds of our resistance
into searching palms, hearts and minds.
That strive to lift the weight off our elders who cry out
wondering if there are any hands left to carry these sacred seeds.



My hands will be the hands that listen to
the stories of the land and the Original Peoples who tended you.
That raise with a clenched fist to make clear
that when I leave this world behind
a little clay jar of blue corn seeds
will be waiting for the generations to come.

My hands will not be the hands that forget.



COMPONENTS OF DROUGHT: LOOKING AT MORE THAN RAINFALL

PETER CALLEN

I've been recording this data on a daily basis, then looking back over each month and assigning a number between -2 and +2 as a summary for each month. I then tally those up for the year and carry over the total to the next year. The monthly number is a reflection of how the surface soil moisture is doing. If there is moisture in the soil (a dark, moist band at least 2" thick in the top 6" of soil) and that has held steady for the month, then that month gets a "0", meaning soil moisture is holding steady, not increasing or decreasing. These past 10 years or so, I've considered a "0" month to be pretty good. If that band of moisture has not held up for the whole month, then it gets a -1, if there is no soil moisture along with hot, dry, windy conditions, or those conditions have resulted in the loss of an inch or more/month then it gets a -2. (Soil moisture always migrates from wet to dry, so moisture under the surface will be pulled up and out of the ground by hot, dry, windy conditions at the rate of an inch or more per month). Conversely, if the soil gains moisture depth (in which several inches can appear in one day) of more than a 3" wide band in the top 6" of soil, then the month gets a +1. If more than a 4"

Digging in the ground is something I do on a regular basis, from planting trees, gardening, and making swales, to digging fence post holes, foundations and road repair. I've also done hundreds of soil moisture measurements as part of a "citizen science" project with Pathways: Wildlife Corridors of NM as part of regularly monitoring wildlife presence. This is to see the effects of rainfall upon the plants which all wildlife depend. What I've seen and felt over the past 15 years is the weather getting hotter and drier. What I've measured in the way of soil moisture is getting less and less, more marginal, more tenuous.

Usually the only cited and most heavily weighted measurement is total precipitation over the month or year, but as important as this is, there are many other factors that contribute to that elusively defined condition known as drought. The one question that is obvious, but not asked, is "for whom is this a drought?"

We can assume it is for us humans, since we care to do the "work" of measuring, but drought for us may be different than for the wild and domestic plants, animals, and soil life. To narrow down that range of who the drought is affecting, and by how much, I have been referring to the soil moisture at two different levels. One, from the surface to 6" deep, and the other at a depth of 2 and 1/2 feet down. Both of these are measuring surface or agricultural soil moisture as opposed to deep aquifer or hydrological moisture, which I won't go into here.

droughtmonitor.unl.edu

The drought monitor website originally had the symbols "A" and "H" to differentiate between Agricultural and Hydrological drought. Now they've changed to "S" and "L" for Short term (described as Agricultural) and Long term (described as Hydrological).

In estimating surface level drought, I think rainfall and snowmelt has been overstated -- depended upon too much in isolation from other factors. Like looking at only the income side of a balance sheet and assuming the debits will remain the same, this will eventually lead to some unpleasant surprises. Especially when the following factors contributing to moisture loss have been increasing year by year.

In the category of precipitation, whether it is rainfall or snow water equivalent, one of the first ancillary factors is how much precipitation fell in a twenty-four hour period. If it was less than 1/10th of an inch, in general, that won't do much for the surface soil moisture. Instead of looking at rainfall amounts, I look to soil moisture following precipitation events. I ask,

1. Is it there? (Presence/absence).
2. How deep does it go? (Penetration or permeation).
3. How long does it last? (Duration).

So what factors affect surface level drought? (To a depth of 2 and 1/2 feet below the surface) See tables below:

PRECIPITATION	
Negative soil moisture factors	Positive soil moisture factors
<i>Amount</i>	
below 1/10th inch/24 hrs	above 1/10th inch/24 hrs.
less than 1"/month	more than 1"/month
<i>Timing</i>	
more than 1"/hour	an inch in 24 hrs. or spread over 4 days
<i>Duration</i>	
one or two days/month	two weeks worth of rainy days/month
SOLAR RADIATION	
Negative	Positive
<i>Temperature</i>	
Summer >90°F. day, >70°F. night	Summer <90°F. day, <70°F. night
Winter >50°F. day, >30°F. night	Winter <50°F. day, <30°F. night
+/- 2°F. can make the difference between rain and snow in winter	
<i>UV Index (0-15) "www.epa.gov/sunsafety/uv-index-1%23day4" UV Index</i>	
8-15 for > 4 hrs./daytime	0-7 for > 4 hrs./daytime
WIND	
Negative	Positive
Speed/Duration: +15 m.p.h. > 8 hrs./day	0 - 15 m.p.h. < 8 hrs./day
Exposed location	Sheltered location
RELATIVE HUMIDITY	
Negative	Positive
RH < 30% for > 8 hrs./daytime	RH > 30% for > 8 hrs./daytime

"We will guard the shades of our figs

We will guard the trunks of our olives

If we are thirsty we shall be quenched by the rocks

If we are hungry we shall be fed by dust

And we shall not move

Because here is our past, present and future"

'Here we stay'

Tawfik Zayad

band of moisture holds in the top 6" of soil for the month, then it gets a +2.

At the end of the year, I sum the months and get a final number, say +1, and then carry that over into the new year.

Reality: 2010 (+1)
2011(+1 -6 = -5)
2012 (-5 + -6= -11)
2013 (-1 + -11= -12)
2014 (-12 + -3 = -15)
2015 (-15 + 4 = -9)
2016 (-9 + -2 = -11)

So what do all of those compounding negatives mean? Well, there is still soil moisture in the top 6" of soil, so it doesn't mean that it is all gone, but to know its source we must return to the other measurement I mentioned earlier: the degree of deeper soil moisture at 2.5' below the surface. There used to be soil moisture at this depth. The last time moisture was driven down several feet deep in this area was 2006 - a huge monsoon season followed by a decent snow pack in the following winter. Since then it has been migrating to the surface, Surface level soil moisture has benefitted from that deeper soil moisture in every year since 2006 as the moisture is wicked toward the surface. In the period of 2010 - 2014 it was entirely pulled out and has not been resupplied. So we may keep track of the top 6" of soil and see that moisture come and go, but when the deeper reserve of soil moisture has dried out, that presents, literally, an underlying problem. Such that, even though 2015 ended with a positive note of +4, there was an underlying -15 of deeper drought from the previous four years.

It will probably take a significant shift toward wetter years and cooler, less dry, hot and windy conditions before that deeper moisture bank is restored. Those conditions are not predicted to happen under the current yearly increases of greenhouse gasses accumulating in the atmosphere. The difficult reality is that we have only a thin band of fluctuating soil moisture in the top 6" of soil. Soil life depends on soil moisture. The only thing keeping our thin soils from blowing away and creating sand dunes are the grasses and perennial plants, and they are alive because the soil is held together by the microorganisms that live there. This micro-life of the soil in turn depends on soil moisture, without it the soil crumbles and decomposes, turning to powder and is then susceptible to being picked up by the wind and blown away.

The past year has been somewhat of an improvement; it was what I would call just regular

drought, as opposed to the extreme drought of 2011-14. 2015 was supposed to be a record El Niño year, and it was, but that didn't translate into a record wet year for us. One month (December '15) was, but one month does not a winter make, nor a drought break.

With the current La Niña and ENSO neutral situation coming up, precipitation doesn't look good for the southwest and southern plains, so there is a good chance that the heat and dryness will continue and increase in 2017.

We used to get winter storms from the Gulf of Alaska that would impact us from the NW, but those don't seem to reach us anymore, or they barely skim northern NM and give us a big dose of cold wind. No, our moisture has mostly come from the east in the way of "backdoor" cold fronts moving east to west from the plains, or even in the winter now, in the form of tropical moisture coming up from the south.

So the whole pattern has been shifting, and I would say we are still going to get large wet storms, but at odd times of year. Like the 1"+ of rain we just got in November, and again with another 1"+ of rain in December. We have to be ready to receive this "odd water", anytime of the year, because that is becoming the trend. I hear people bemoan the large storms, saying "the water just runs right off the land". Well, we have to adapt to that, prepare for those big rains, because that may be all we get. Whether its catching rain in barrels or swales, diverting it to areas where it can slow down and soak in, or preparing the ground to receive large amounts of water all at once by planting trees with large basins, sheet mulching hard ground, or a combination of methods - there are ways to take advantage of big rainstorms and keep that water in the ground nearby where it falls. Another way to connect with a greater "on-the-ground" reality is to join CoCoRAHS, the Community Collaborative Rain, Hail and Snow network of people with the same back-yard rain gage. It's a nation-wide network, and you can view each day's results of approx. 10,000 individual measurements here: www.cocorahs.org. This gives you a way to see how rainfall and snow melt is spread across the land where you live, where your neighboring towns and villages are, and not just at the airport.

Another area of confusion I would like to clear up is the measuring of mountain snow-pack to determine if we are in a drought or not. This is an important measurement, and snow-pack is vital to our survival in the desert southwest.

It is deceiving though in two ways: First, the snow itself is not what ultimately counts; it's

the water that comes from melting. That melt water generally runs down from the mountains in the form of creeks and rivers, and feeds the underground water table, which supplies perennial springs. The way this "spring runoff" has been measured is by looking at the volume of man-made lakes or "reservoirs". While this may be a fine way to determine water supply for commercial agriculture and city supply, it doesn't necessarily translate into "drought or no drought" for areas not supplied by this runoff.

The second way snow-pack measurements can be deceiving is the direct loss of snow-pack from sublimation. Sublimation is the evaporation of snow directly into the air, without melting into water. This happens quite often in New Mexico, as the winter days with full sun and dry air attest. When the spring winds start to blow, generally in February, and continue through March and April, this accelerates the sublimation at a time when we would expect all that snow to be melting into water. To measure the loss of snow water due to sublimation is difficult for an individual to do, but there are satellite measuring data of sublimation, snow melt, and snow water equivalent available on a large landscape scale here at the National Operational Remote Sensing Center: nohpsc.noaa.gov.

With all of this high-tech measurement capability and so many people concerned about our water supply, why then the deception and confusion? Sound bites, news bits, a snatch of information here, a report there, first one story, then another conflicting one ~ sound familiar?

What I've tried to describe here is an on-going process, changing from month to month and even day-to-day, with lots of moving parts and contributing factors. Drought is hard to describe because it is not uniformly spread across the land. It can keep coming back when we think it should be over, and can seemingly disappear with days of flooding or with widespread snowstorms. We remember those floods, those big snow storms, but we don't pay attention to all the sunny days in a row, we hide from the wind, and then the dryness is suddenly upon us and we say, "but what about all that rain?"

LIVING IN THE HIGH DESERT, DOING RESTORATION WORK, GARDENING AND ORCHARD TENDING, WILDLIFE RESEARCH AND LEARNING THE LAYOUT OF THE ENTIRE PLANT "KINDOM" IS WHAT OCCUPIES MY YEARS.

PETER CALLEN

PATHWAYS - WILDLIFE CORRIDORS OF NM
PATHWAYSWC.WORDPRESS.COM

CORN-MOTHER'S BLESSING

ROWEN WHITE

Midwinter is the beginning of our agricultural cycle, the time when the seeds lie dormant, just like the seeds in the dark of the soil before the spring sprouting. Winter is the sacred season of story and dream. Midwinter is the time of seed-dreaming...for some this comes in the form of gathering the stack of seed catalogs that arrive daily in our mailboxes...for some it is digging into their treasure box or shelf of saved seeds from previous seasons...tiny little gems of seeds that hold such embodied potential... Winter is the sacred season of story and dream. For my ancestral people, the Haudenosaunee, Midwinter is a time for sacred beginnings, when the infinity loop of time resets and the sacred fire must be put out and rekindled with prayers and hopeful new intention.

It is when we see ourselves as seeds in the moist and dark earth, allowing our seed coats of imbibe the StoryWater of Life and begin to crack open in anticipation of the coming spring...As told to us by our elders, it is part of our responsibility to seed our prayers well in advance of the sprouting of the Earth; to nourish and feed the keepers of Life. It is an honor and privilege to tend this exquisite tension of Life wanting to bound up and bless us with abundance.

The palate of seeds for my garden design for the season ahead admittedly comes from both sources...I have treasured seed varieties that I bring out of our living seed bank, the kiva; old trusty friends who grace our gardens and tables each season. Sacred Mohawk Red bread corn that looks like juicy pomegranite gems; blue corn whose kernels are lined up in 8 neat rows of shades of grey, slate and nearly purple; multi-colored Calico corn whose pearlescent seed-coats that catch the light of the eastern morning sun; shiny spiralling Chapaloté corn cobs that look like they are sculpted of iridescent Tiger's eye stone. Piles of beans, some speckled and resembling orca whales, others earthy and mimic soft buckskin.

All these indigenous seeds invisibly pulsating with the dynamic life energy that infuses us all. Each one of these varieties I know with an intimate reverence...they have fed my ancestors, my body, my children, my friends and community. Their seed song will live on in our blood and bones as we pass along life from one generation to the next. These seeds have become one with the land here, having grown them here for over 7 plant generations, they are now at home here in this earth. They are heirlooms of the future.

Each year as we make our field plans and preparations, we take the time to sing to the seeds to waken them from dreaming. . We make a mixture of cornmeal from our last good crop and mix it with native tobacco. We sing and spread this blessing upon the soil as an offering to the ancient ones. To bring us back into balance with the original instructions of our roles as Seed Keepers. My daughter and I do that each year, and it brings great joy to pass these teachings on to her, as she moves from being a young girl into womanhood, she will understand what it means to uphold her responsibilities as human to our plant relatives.

We watch the children growing, another season of seeds turning the cycle again, and new babes being born and other beings crossing



over towards rebirth. The natural thread between all of this is the ancestors. As the seasons turn, we see all the cycles of sprouting, flowering, going to seed, and rebirth... As we have watched friends and family merge into becoming ancestors within the measure of one last breath, it becomes clear how precious life is. And that we too one day will join the sacred chain of ancestors. As we felt the heavy reverberations of watching a friend become an ancestor much too young, I was recently reminded of this quote:

"Our greatest responsibility is to be good ancestors"- Jonas Salk

What does it mean to be a good ancestor? What are we doing in our life's work that will have long standing positive ripples generations from now? How do we walk in this life with our work truly being an offering in service of Seven generations ahead, and honoring the Seven generations that came before us?

In these times of powerful prophesy and change, we must continue these earth in hand prayers of keeping the seeds alive. It is time to stand with our own two feet on the sacred Mother Earth beneath our feet, and use this grief and these salty tears that flow like springs from our eyes as a catalyst to wake up and lean into this new challenge. We have to continue the good work of watering those seeds of hope with our songs, our salty tears, our laughter, our stories. We are much stronger than this. 500+ years of resistance and resilience growing strong.

I call on you in this time to keep your hands and heart and feet firmly planted in the soil of our indigenous ancestors, this magnificent Turtle Island. Find hope in the despair. In fact the seeds are the most hopeful talisman that I can imagine being with at this dark hour. They know what its like to be in dark soil, to come completely undone in order to become something

new. Let's imagine for a moment that is where we are at as a society. We are seeds of hope in this soil, and may we compost these past failures, the sadness, the hatred, into rich soil that will bring about the sprouting of the world we know in our heart of hearts is possible.

I pray daily, through actions and words, that somehow this fiasco we are watching is some mythological cleansing, that this will somehow shake us awake from the distractions of the modern age to find ways to Re-Story and see ourselves as agents of change, of Saying "Enough is Enough" to the guiding narrative that is destroying this planet, and is creating such inequities between people. This is a potent time we are living in, and even though my heart and my mind wants to turn away and "news fast," now more than ever we need to resist that urge and listen. Take action. Spread the story of Hope and Faith. Niawen. Thank you. We need each one of you and the magnificent feeling hearts inside your chests to speak for those yet to come. We should hope that future generations should look back upon the legacy of the work we did here with our time on this sacred earth, and find it worthy of emulation.

This Midwinter we do the work of taking down our braids of flour corn, and tenderly undo the beautiful strands, to shell the cobs for food and seed. They have been hanging to dry in our home, listening and watching over us as we cook and eat, laugh and cry, sing and dance, and do what needs to be done to feed the children; they are our form of living prayer flags; blessings of life in tightly woven strands. When we work with the braids of corn, I get this overwhelming tender feeling that I am braiding Corn Mother's hair. Many times my hands have braided the hair of my daughter, and it is with this same loving care that I braid the ears of corn together. Just as my ancestors did. As we pull the husks away from the ears and shell the seeds into wooden bowls, we still sing the

ancient songs, our hands re-awaken to the old muscle memory of ancestral agreements.

I am grateful that my children will have the memories of sharing in our family's commitment to upholding this old tradition. They will always remember the fragrance and aroma of corn as a perfume of their childhood. She fills our table with her nutty richness, with her hearty sustaining kernels turning into bread, tortillas, tamales and soup. This is Corn Mother's blessing.

"Under reverent, patient care, the wild seed gradually relinquishes its protective husk and entrusts its reproductive life to human hands....(thus) this sacred law and covenant with Mother Earth; Respectful care brings abundance. If you take, you must give back-Return the gift." -

Marilou Awiakta

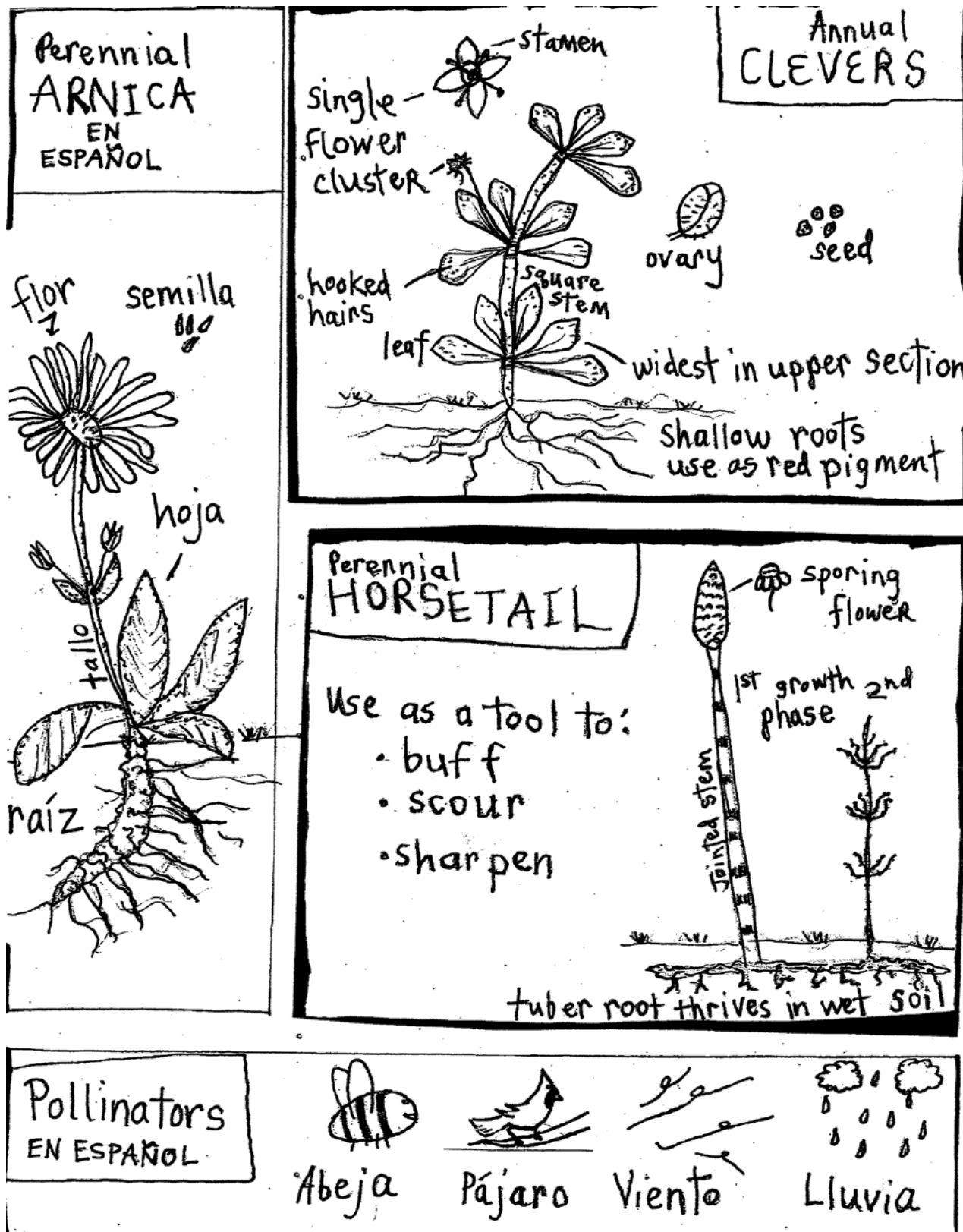
Some of the most potent forms of protest is in the planting of seeds, cultivating food, strengthening community and cultural connections, breathing new life into our ancestral ways of living close and in balance with our Mother Earth. Our protest is rooted in rendering the current system obsolete by following the green flowering pollen path of sustainable and traditional lifeways; restoring our power as people who love the Earth as Mother, who honor the feminine life giving force.

Making prayers with our hands in the Earth helps us heal the wounds of disconnection that arise from this modern way of Life. The map has been written in the seeds, the soil, the waters, the cycles of Life, in the relationships of the grand family all around us. Our Mother will show us the way through these times.

The inception of women's March was when our foremother, original woman, shuffled her feet upon the Earth and sung the seeds and the life into being. May we be strong in our conviction and may our hearts beat fiercely in promise to uphold those agreements to be a part of that continuous life affirming creation and symbiotic dance with our Mother Earth.

Stand in the Prayer. Take action inspired by your heart. Plant seeds of hope that will feed those beyond a time of your own. We stand together.

ROWEN WHITE IS A SEED KEEPER AND FARMER FROM THE MOHAWK COMMUNITY OF AKWESASNE AND A PASSIONATE ACTIVIST FOR INDIGENOUS SEED SOVEREIGNTY. SHE IS FOUNDER OF SIERRA SEEDS, AN INNOVATIVE ORGANIC SEED STEWARDSHIP ORGANIZATION FOCUSING ON LOCAL SEED AND EDUCATION, BASED IN CA. ROWEN IS THE CURRENT NATIONAL PROJECT COORDINATOR AND ADVISOR FOR THE INDIGENOUS SEED KEEPER NETWORK, WHICH IS AN INITIATIVE OF THE NATIVE AMERICAN FOOD SOVEREIGNTY ALLIANCE, A NON-PROFIT AIMED AT LEVERAGING RESOURCES TO SUPPORT TRIBAL FOOD SOVEREIGNTY PROJECTS. SHE TEACHES AND FACILITATES CREATIVE SEED STEWARDSHIP IMMERSIONS WITHIN TRIBAL AND SMALL FARMING COMMUNITIES. SHE WEAVES STORIES OF SEEDS, FOOD, CULTURE AND SACRED EARTH STEWARDSHIP ON HER BLOG, SEED SONGS. FOLLOW HER SEED JOURNEYS AT WWW.SIERRASEEDS.ORG



EDUCATIONAL ILLUSTRATIONS

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BEES AS SEEDS: HOW WINGED MIDWIVES NEED SAVING, TOO.

MELANIE MARGARITA KIRBY

Many a moon ago, our ancestors discovered the joys of growing food and medicine through observation. They learned from Mother Nature's symbiotic relationships with landscapes through Father Time to nurture cultures and traditions steeped in a mosaic tapestry of sights, sounds, perfumes and flavors. Many of these intrinsic sensations are connected to food through the act of foraging, growing, and harvesting wild and cultivated nutrients for mind, body and spirit.

It is through and with food that we find our individual persons nourished and our social animal genes are encouraged to feast with each other. We discover which foods we like; to the extent that over time, we begin to share these foods and their ingredients with other families and communities. We begin to source these foods; and in so doing, begin saving seeds, cultivars and cuttings to exchange.

These seeds hold many a story that has been passed down from one generation to the next-season after season. Sculpted by the raging winds, the torrential downpours, the driest of droughts and the almighty Zia sun- radiating down to caress the growth of Mother Earth's dynamic manifestations. And it is with Mother Earth's midwives, that these seeds are able to manifest. They are able to continue a legacy of sharing stories sculpted through the seasons: from the highlands to the lowlands, from forested lands to farms.

Some of these midwives are fuzzy with six legs and striped bodies. They, and others pollinators like them- participate in a communal dance orchestrated by the spinning and tilting of Mother Earth's axis. They, too have stories to tell and share. Their stories have been sculpted through dynamic landscapes that Mother Nature and Father Time have seasonally impressed upon them. They, too deserve to be nurtured and to be saved, like seeds- to share with families and communities.

My life as a professional beekeeper began 20 years ago. I was born and raised in the southern Rocky Mountains- near the border. My family's affiliation with Tortugas Pueblo initiated me into the sacred acts of reverence and tradition as the root of heart; and the heart of life. For what is life if we cannot pass along its blessings? And what are blessings if we do not recognize our role as symbiotic caretakers of creation?

Over the past decade and then some, I've been focusing my apicultural efforts on finding, propagating and nurturing quality bee-seeds (bees as seeds) in the northern Rio Grande corridor of New Mexico and beyond. Me and my winged midwives are nectar nomads. We traverse the diverse and adverse topography of this Tierra encantada, enchanted landscapes, to be nurtured and tortured into stronger beings of resolute absolutions.

I humbly try to observe and select naturally strengthened pollinators for sharing with stewards around the nation. I follow the bloom and collaborate with other pollinator stewards- from the shores of Lake Superior in Michigan, to the everglades of Florida, the northern coastal mountains of California, to the banks of the Rio Grande in Nuevo Mexico and the Big Island of Hawaii. Little do folks recognize that not all bees are the same. Not all are able to

acclimate to such a challenging climate. And not all imported strains are healthy.

Finding bees that are able to adjust and that are naturally resilient is a challenge that not many have even heard about. The trend for beekeeping has created a demand that surpasses supply. Unfortunately, this demand is seemingly insatiable and has created other dilemmas such as importation of unforeseen pests and more virulent pathogens. This creates a problem that not only affects what has been brought in, but also affects what already exists.

It is this dilemma that my small queen honey bee breeding farm has been trying to address for the past 12 years. And more recently, has been trying to encourage additional beekeepers to join the journey for creating and nurturing local to regional pollinator resources for growing food, feeding families, and supporting positive land stewardship practices. The more stewards who join the journey, the better able one's local site and communities will benefit.

The ability to grow cultivars that have better developed seed set- the better the potential germination. And the better potential germination- should the season prove conducive, the more valuable. By finding acclimated bee-seeds; and allowing Mother Nature and Father Time to sculpt them, we can encourage the biorhythmic fluctuations of our crenulated landscape- from the desert to the tundra terrains and help to secure local to regional food production and security.

The winged midwives are worthy of finding. They are worthy of conserving. They are worthy of nurturing. And worthy of sharing. Their connection to landscapes is paramount. It not only signifies the interconnectedness of life; but also of the importance of habitat. Habitat health displays itself in its ability to host organisms. Healthy habitats that can support diverse pollinators and also support human communities can be mirrored.

This mirror effect is also known as biomimicry and biodynamic philosophies. Recognizing that our landscapes feed our mind, body, and spirits will enlighten us to act more fully as caretakers of creation. If we can caretake our lands, our lands will take care of us. If we save seeds, and bees, we can nurture life. If we can value the medicinal aspects of space- and promote healthier land stewardship practices, we can ensure that forage will be healthy for the midwives of agriculture. We can nurture our own health; and in so doing, nurture our children's futures, and their children's futures.

Many seeds exchange pollen for life. The bees do as well. They have been nursing themselves through the elixirs of starlight: nectar and pollen, water and propolis. They have long understood that food is medicine, and medicine is food. Current research into the collapse of pollinators has yet to yield a single smoking gun.

However, it is becoming more and more apparent that the underlying cause of alarm rests in nutrition and forage (habitat). There are projects around the nation that are looking at pollinator health and promoting efforts to encourage healthy habitat. One such farmer led research effort will begin this spring- looking

at the high mountain medicinal herb, Oregon de la Sierra (*Monarda fistulosa*) as a healthy promotion for landscape enhancement and beneficial value-added product potential.

Check out www.herbs4bees.com to learn more about this project. It is the first investigation led by a consilient group of farmers and researchers that intends to develop into a broader review of additional native medicinal herbs for pollinator health. A free field day for the community is scheduled for June with guest lecturers from around the nation. To support your area's winged midwives, plant seeds! Through conscientious approaches, each individual and community can nurture acclimated pollinators. Their conservation, propagation and dissemination needs you! Seeds for bees=Bees as Seeds.

ABOUT THE AUTHOR:

MELANIE MARGARITA KIRBY ESTABLISHED ZIA QUEENBEES FARM & FIELD INSTITUTE (WWW.ZIAQUEENBEES.COM/ZIA) TO BETTER SUPPORT REGIONAL POLLINATOR PROPAGATION AND CONSILIENCE (MULTI-DISCIPLINARY) RESEARCH. SHE FIRMLY BELIEVES IN FOOD AS MEDICINE AND VALUES BIODIVERSITY AS A MEANS TO SUSTAINABILITY. SHE SERVES AS THE EDITOR OF KELLEY BEEKEEPING FREE ONLINE, MONTHLY NEWSLETTER. SHE CAN BE REACHED AT ZIAQUEENBEES@HOTMAIL.COM



SOWING THE REVOLUTION

LUPITA SALAZAR

Nestled at the foot of the Pueblo de Abiquiu rests the Northern Youth Project's garden. Biding its time awaiting the spring, the garden straddles generations of history and tradition. Through the phases of time, one thing remains. The importance of growing our traditional foods, and passing that knowledge on to the youth.

The group was organized in 2009 around a small garden to provide a safe space for youth to grow and be. Now we continue to integrate art and agriculture as we mentor the youth to be community leaders. From a summer garden internship, to cooking classes, farm fieldtrips, and a dynamic found objects sculpture project that brings awareness to the importance of acequias in our community. We continue to provide an integrated approach to building a stronger community from the ground up.

There are many problems that face our rural northern New Mexico communities. But by drawing upon a beautiful and integral part of our culture, saving and planting the seeds, we are sowing the revolution. By planting our seeds we are declaring independence from the status quo and encouraging our youth to stay rooted while allowing them to soar. If you are interested in our programming and our events, please stay connected through our website northernyouthproject.org and via facebook.



LUPITA SALAZAR IS THE AGRICULTURAL PROGRAMS DIRECTOR (OR GARDEN FAIRY) FOR THE NORTHERN YOUTH PROJECT. SHE STRIVES TO LIVE WITH THE RHYTHMS OF THE EARTH, MAINTAIN HER FAMILY'S RANCH, AND TO WORK TO BUILD COMMUNITY AND BRING OPPORTUNITIES TO THE YOUTH.



GUT OF THE EARTH

STACY DERMONT

I
The time has come to beat
my sword into a plowshare,
though I have no sword.
I have only
two hands and sweat,
head and heart
to guide.

My heart is not
a pump. It is
moved by blood.
Small parts
govern the large.

Furrowing the soil
with bare hands,
moisture pulls
from my skin.
Excreta to excreta.

I am forced to give
as I take.
I am forced.
I am force.
I force.
I am.

At the seed exchange,
everyone gives away
embryos and endosperms,
seed coats of many colors.

I am clothed in home
for the first time
since before birth.
A seed remembers.

STACY DERMONT IS ABOUT TO COMPLETE HER FIRST NOVEL, *MERRY MARY*, WHICH TELLS THE STORY OF A POWERFUL SHINNECOCK WOMAN AND HER SEED-SAVING JOURNEY. STACY GREW UP BAREFOOT ON HER GRANDPARENTS' DAIRY FARM IN NORTH OTTO, NEW YORK, WHERE APPALACHIA OVERLAPS WITH THE RUST BELT. WHEN SHE'S NOT WORKING FOR DALE & BETTE'S ORGANIC FARM IN SAG HARBOR, NEW YORK, SHE WRITES HER WEEKLY "HAMPTONS EPICURE" COLUMN FOR DAN'S PAPERS, A REGIONAL MAGAZINE BASED IN SOUTHAMPTON, NEW YORK.

PHOTO CREDIT: LOCAL FARMERS/EDUCATORS AT THE FIRST ANNUAL SEED EXCHANGE IN AMAGANETT, NEW YORK: JON SNOW (HAYGROUND SCHOOL), SCOTT CHASKEY (QUAIL HILL FARM) AND DALE HAUBRICH (DALE & BETTE'S FARM) ENJOYING SEEDBROADCAST!

ANGIE'S CHOW-CHOW RELISH

EVANGELINE GRIEGO TAPIA

Makes 4 pints.

BRINE

1 cup white distilled vinegar

½ lb. ground sea salt

6 cups water to top off the bowl until veggies are submerged

SPICE BLEND (you can also buy piccalilli spice blends)

1 tbsp. mixed pepper corns, crushed

1 tsp. coriander, crushed

1 ½ tsp. brown mustard seed, crushed

¼ tsp. turmeric for color

½ tsp. chile pequin, or crushed red chile (optional)

1 tbsp. dried chopped garlic

CHOW-CHOW

- 8 Cups chopped end of season vegetables

- 2 jalapenos finely diced (optional, but recommended)

- ¼ cup sugar

- Spice blend bundled in Cheese Cloth tied shut. Saving some on the side.

- 3 cups Red wine vinegar or cider vinegar

Chow-Chow, Piccalilli relish, or Farmer's Relish, is a pickled slaw of end season vegetables. This is an old farmer's relish for preserving over-ripened, or under-ripened vegetables or whatever is leftover after the harvest. This usually includes green tomatoes, root vegetables sensitive to cold, chiles, cucumber, squash, onions, bell peppers, etc. My grandmother has been making Chow-Chow as she calls it, as long as I can remember. She puts it on hot dogs, breakfast eggs, egg or potato salad, or just about anything you want to have a bang of flavor and a helping of vegetables.

Canning your own vegetables is a great way to keep your garden long after the season has ended, and can usually keep for up to 9 months. Canning involves filling Mason Jars with vinegar and salt brine, spices, and some vegetables. Lids use a wax liner to heat seal to the jar for preserving goods.

Start by chopping the vegetables, course or fine depending on preference. Grandma Angie says course chopped is Chow-Chow, and finely chopped is Piccalilli Relish. Make brine by adding water, vinegar and salt to a large bowl and mix until salt is dissolved. Add chopped vegetables to the brine and soak 3-24 hours. Strain vegetables and add them to a pan and heat until wilted. Then add cider vinegar, sugar, spice bundle, boil ~10-15 min. Scoop vegetables evenly among sanitized jars, and then add loose spices to the remaining liquid and pour evenly among the jars. Place closed jars in boiling water or pressure cooker leaving a fingers width between each jar and boil about 20 min. Remove jars using oven safe glove or tongs, and place upside down on a wooden surface or heat safe cloth until cool. Store in cool dry dark place.

EVANGELINE GRIEGO TAPIA, WAS BORN IN LA CIENEGA, NEW MEXICO, IN 1947 AND LIVED IN BERNALILLO AND LA CIENEGA DURING HER CHILDHOOD. THE DAUGHTER OF ELISA AND ANTONIO GRIEGO, A BLACKSMITH AND FARMER, SHE GREW UP EATING MOSTLY WHAT THEY GREW ON THE FARM. HER FAMILY IS FROM LA CIENEGA, THE RAE'L'S, MIGRATING DURING THE BOSQUE MIGRATIONS FROM SPAIN IN THE LATE 1700'S.

SPINACH ENCHILADAS

TIM CROFTON

My son Rex and I stream a live cooking show on Facebook called "Cooking With The Croftons". We're both a couple of insatiable hams and so the show allows us to do the two things we enjoy most – cooking and being silly. What makes it especially fun is that our friends from around the state and world tune-in, often to make fun, but also to share some of their favorite recipes from home. We have cooked dishes from all around the world, but we always come back to New Mexico – Rex and his brother and sister grew up with green chile and whenever left to pick a favorite food, the dish will invariably include chile in some shape or form.

So here's a particular favorite. Even though our kids are keen meat-eaters, they love these vegetarian Spinach Enchiladas from the "At Home with the Range Café" cookbook – testament to quite how divine the recipe is. I recommend doubling, as it freezes well but also because once cooked, these babies go fast. So here we go...Spinach Enchiladas.



FOR INGREDIENTS, YOU'LL NEED:

12 corn tortillas

10 cups fresh spinach, washed and stalks removed

1 cup fresh green chile–roasted, peeled and chopped

3 cups Cheddar cheese, grated

2 cups whipping cream

½ yellow onion, chopped

3 cloves of garlic, minced

½ cup tomatoes, chopped

Bunch of cilantro, chopped

1 can corn

2 jalapenos, chopped

2 Tbls butter

2 Tbls vegetable oil

2 Tbls flour

Juice of one lime

Salt and pepper

- In a bowl mix half onion with tomatoes, corn, jalapenos, cilantro, lime juice, salt and pepper.
- In a large saucepan heat spinach until wilted. Squeeze out all excess water.
- In a saucepan melt butter and fry remaining onion until soft. Add flour and stir. Add garlic and chile and stir. Add cream and season with salt and pepper. Cook for five minutes until mixture thickens. Add corn and tomato mixture.
- Fry tortillas at medium-high heat until soft – a matter of seconds.
- To each tortilla add ½ cup of spinach, 2 Tbls of cream sauce and 2 Tbls of cheese. Roll and line enchiladas in a casserole dish. Pour extra sauce over enchiladas.
- Cover with foil and cook for 20 minutes. Uncover and sprinkle with remaining cheese.
- Cook for another 10 to 15 minutes.
- Once cooked leave to sit for five minutes before eating. Divinity.

Hope you like it and check out our Facebook page "Cooking With The Croftons".

REX IS THE SIXTEEN-YEAR-OLD SON OF TIM CROFTON. BOTH ARE ANGLO-CANADIAN-AMERICANS WHO HAVE LIVED, WORKED AND COOKED IN ENGLAND, CANADA, MALAYSIA, CHINA AND NEW MEXICO.

RECIPE FOR WONDER AND JOY

IREN SCHIO

Fold a recycled newspaper page into a seed pot

Fill with soil

Plant a seed or two or three

Water

Wait and observe

Be amazed

Enjoy

Repeat often



How to fold a starting seed pot from one page of Seed Broadcast

adapted by Iren Schio from a youtube video (<https://m.youtube.com/watch?v=YOTQyy9ukl8>)

MARKET STORIES SABRA A

THE FARM SHOW was organized in two manile-lations in 2014 and 2003 by artist and market manager Sabra Moore to collect and honor the stories of growers Moore had gotten to know at the Espahala Farmers Market in Espahala, New Mexico. There are 31 stories collected from these two projects and the stories for this segment bring us past slightly half of this documentation of a community. New farmers keep arriving at Espahala Farmers Market, and each person brings a complex story about their relationship to the land and the cultural layers that go into the methods of planting or the selection of seeds or the ways a farmer trains a younger relative or friend. Two of the farmers...

How long have you been farming?
I have been farming for many many years. For all my life it seems. My father and mother would take me out to weed as a child and help with the sheep.

What is the hardest?
Of course I enjoy picking the fruits of our labor. Picking and enjoying the vegetables is the best part of farming. The hardest part of farming is the weeding and the hoeing. That is very hard work.

What is your favorite crop?
Chile is my most favorite crop. It is also one of the hardest to grow.

Who works with you on the farm?
The only person who works with me on the farm is my wife, Luz. She and I work together. She has some knowledge of how things work at in the morning, she works hard with me in the

fold it in half, crease

turn and fold in half again

fold in half once more

open at fold and press down the top crease on one side

flip and repeat on other side

flip the sides

fold all 4 outer edges to the center, crease

repeat on other side

fold the top edges down to hold the pot together

open your pot



SEED: CLIMATE CHANGE RESILIENCE

SEEDBROADCAST REPORT #2

During 2016 and 2017, SeedBroadcast continues to partner with Native Seeds/SEARCH (NS/S) and farmers across New Mexico to creatively explore bioregional seeds and climate appropriate agri-Culture. Through seasonal photo essays and audio interviews, SeedBroadcast has been working with local New Mexico farmers to share their stories about agri-Culture in a changing climate while cultivating seed, food, and community resiliency.

We began this project in Spring 2016 while collaborating with NS/S on several regional Seed Sovereignty Growers' Gatherings and Farmers' Field Days at Tesuque Pueblo and Acoma Pueblo. At each of these events we conducted Seed Story Workshops, compiled photo documents, and recorded Seed Stories. You can read more about these events, look at pictures, and listen to these Seed Stories at:

seedbroadcast.blogspot.com/search/label/Seed%3A%20Climate%20Change%20Resilience

We have completed spring, summer and autumn visits and interviews with four regional farmers, Ron Boyd, Aaron Lowden and the Acoma Farm Corps Program, Beata Tsosie-Peña, and Larry Emerson. The idea was to meet with each farmer once per season over an entire year to learn about what they do, why they do it, and how these actions affect their communities. We also wanted to bare witness to the real-time challenges each of these farmers face in a changing and extreme climate. This year in New Mexico was no exception with intense drought, heat, water contamination, hungry wildlife, and locusts.

Our visits were arranged around each farmer's schedule with the intention to be present while the day's work was happening and record everything photographically. These day's labor included planting indigenous seeds with a youth farm crew, preparing soil and water catchment at an urban garden site with community volunteers, Mother's Day corn plantings with a gathering of friends, and tending an indigenous permaculture swale with students from New York City, harvesting blue corn from dry land fields, shelling and sorting Glass Gem corn and celebrating the years farm work.

In the following pages you will find the second



series of edited oral transcripts and photographs that we selected from our summer and autumn visits with these inspiring, dedicated, and courageous farmers. The first series can be found in the SeedBroadcast agri-Culture Journal #7:

seedbroadcast.org/SeedBroadcast/SeedBroadcast_agriCulture_Journal_files/SeedBroadcast%20%237%202016%20WEB_1.pdf

We will do more interviews with these farmers the spring of 2017 as we complete the cycle, and we will continue to share all of this over the next year in the agri-Culture Journal and in a final creative publication and exhibition. We are planning to have a series of smaller participatory exhibitions in Acoma and Española in 2017 and a larger more comprehensive exhibition in 2018. We are presently in conversations with the Albuquerque Museum and the Center for Contemporary Arts in Santa Fe.

This project is made possible through the Robert Rauschenberg Foundation Climate Change Solutions Fund, McCune Charitable Foundation and our partnership with Native Seeds/SEARCH. Many thanks to Aaron Lowden and the Acoma Farm Corps Program and Crew, Beata Tsosie-Peña and the Healing Food Oasis Larry Emerson,

Jennifer Case Nevarez, Ron and Deborah Boyd of MerGirl gardens, and all the indigenous and regional farmers who are keeping seed and local food alive in their communities.

INTERVIEW EXTRACTS FROM 2016 SUMMER AND FALL CONVERSATIONS

WITH AARON LOWDEN WITH SOUTHWEST CONSERVATION CORPS, ANCESTRAL LANDS PROGRAM /FARM CORP AT ACOMA PUEBLO, NEW MEXICO.

DRYLAND FIELD, ACOMA PUEBLO. | SUMMER
We are right in the valley of Acoma, old Acoma. These are the areas where there used to be dryland farming, but if you look all around us, there is nothing but old, down fencing, and old fields filled with grass, blue gramma and full of salt brush. Nothing has grown here for many, many years, and really no one dryland farms anymore.

Right now, where we are standing at a plot that my family used to use. The last time it was planted was at least 15 years ago. They used to plant beans and corn here. But ever since the elk moved in and they overpopulated the area, and people, I guess, just gave up. A lot of people gave up on it. As one of our elders, said, "All they grow out here is weeds and dust." A lot of people resorted to just irrigated farming.

This field was all done by hand. We cleared out the weeds all by hand and by hoes and by shovels, and it took a lot of work. It was quite a deal of work actually. Right now, you can still see all of the weeds around we had cleared out, that we had left there. We were told that in dryland fields you leave weeds in the field because they will actually help retain the moisture too. So, we left them there because we figured we would try that out. It seems like it is working. It seems like the area where there is the most concentration of weeds is where it did really well, as opposed to this other area over here, we do not see much over here.

We planted a whole little section over here; say it is maybe about 40 feet or so, 40 feet across, 40 feet wide. Like I said, only half made it, but

rainstorm was a few days ago. That is sad. But as I said, we will take what we get.

Right now, we are staring at the field, the leaves just moving in the air, it is beautiful. You see nothing but dry desert all around you, but then you look at these and you see this rich beautiful greenery right there, just sitting there. It is amazing. It really is. One of the things I have been trying to think about too is, when we approached this field, there were nothing but old ways. No plowing, everything is done by hand. No machines were used at all in this field. Not even a tiller or anything like that. No auger for the post. So I put a lot of love into this field. A lot, a lot of hard work into this field.

The seeds that we do have here, I am definitely going to save. I am holding onto these seeds for dear life when they come on, so that we can plant again next year and hopefully get an even better crop, and mix some seeds in there next year of the varieties that we have.

Everything that we do here, in this area is all for rain. You can see why, because look at these plants. They do not have water to irrigate from, all they are doing is relying on rain, and rain

That is the one I am not going to shell, I am not going to save the seeds from that. I am just going to keep it because that is a special one right there. That is going to be a good reminder. I am going to show the kids that, next year, once we are ready to plant them again.

A little less than half of the field we did, did not make it all the way through. It was an unusually bad planting year, and there was hardly any rain at all. Usually we get [rain] in early July. This year we had hardly anything in July. I remember on the 25th is when we got our rain here. That is really, really late for the monsoon season around here. If we are really lucky, sometimes it comes earlier than that, in late June.

This corn, two months without rain. It rained the very beginning part of it before they were planted. We dug them about twelve inches in the ground, some a little less than that. Those are the ones that did not make it, the ones we did not plant as deep, so that is another learning lesson right there.

It was an amazing experience just getting this going. We are rebuilding this experience so that we can relearn this technique of farming.



the parts that did make it are doing pretty well. They look healthy and they look pretty dark. Which is amazing to see because it has barely even rained at all this whole summer. It is amazing to see how resilient they are. I was amazed myself, even when it popped out of the ground, I was amazed.

We put them in about 12 inches; we got some advice from some of our Hopi friends. We got the seeds from Hopi as well. They are dryland farm seeds. It is blue corn so we tried it out, and we took their advice. He said, "Put them in about 12 inches of ground. Just dig until you get to the moist soil," and we put them pretty deep. The ones that seem the deepest do better as well. The ones that we left a little shallow, maybe about eight inches in the ground or so, did not seem to fair as well.

I came back here after about a week and a half, after we planted and was amazed to see that they had even sprouted. It amazed me, and I was excited. I was so happy to see that. I mean, I was positive. I was hopeful, but I was a realist too. I was trying to be a realist too and say, "Maybe they will not want to come out" because I did not want to get my hopes too high.

Then, my hopes got a little further down when the rain was not coming at all. It just did not come this year, not until now. Now it is the beginning of August. We barely got any rain, just barely and only this last day of July, which is very, very late for us. The first significant

for us is faith. It takes a lot of faith to run these gardens, to have these gardens in here. I am keeping faith, and hopefully the rains keep coming and these crops mature and grow and we get something out of them.

Our old ways are good ways to go with. It was not by chance that our people survived in the desert for hundreds, maybe thousands of years. It is not by chance at all. Our people are resilient. They are smart people, very bright people, and they survived out here because they were hard workers, also because they were very clever.

Everything that you do in the field, I found that out, the way you act, the things you do the mindset you have is how your field is going to come out.

I said, "Maybe I need to have a little more faith in our seeds and our ways."

DRYLAND FIELD, ACOMA PUEBLO. FALL

I think this is a reacquiring of old knowledge... just because no one does this anymore. Right now, we are the only ones who have planted successfully in the Acoma Valley, which has been historically dryland farmed. It is a miracle to see, once I peeled back that corn and saw how beautiful it was, and to find a complete corn in here, a mother corn. One that is complete all the way to the top of the cob. That was something to see! Like I said, another little miracle in there, finding that. I think that was a good sign for us. I am going to keep that one.

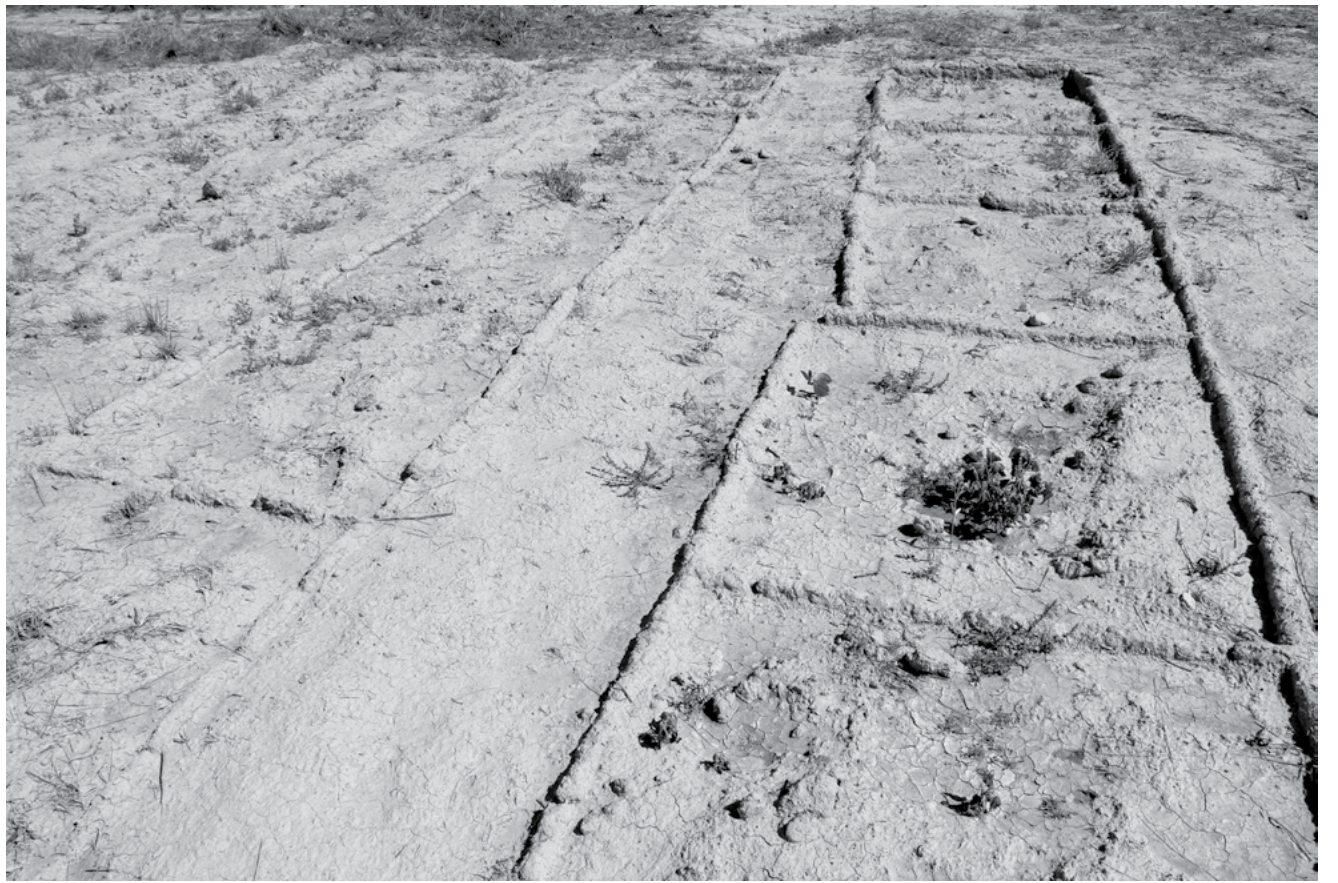
Once the rain started coming, the crew, one of the leaders, went up to those bluffs up there, those mesas. They were looking from the top; they were looking at where the water comes from and where it channels. They even made a little diversion, when it comes down off those mesas from the south, so that the water was channeled down here. That is another thing we are told they used to do as well. I did not tell them to do it either. They just took the initiative. This is the form of farming in my language: nibama. Nibama is specifically dryland farming.

I said, "We did not even think it would come up at all." We found out a week later, when they came up out of the ground, 12 inches deep. No rain; no irrigating. To see them survive throughout the summer... I was gnawing at my fingernails, hoping we would get some rain, and hoping they do not all perish. The ones that did make it, they are beautiful. The tallest one looks like maybe about four feet. It is still... I cannot really convey into words how amazing it is to see this. I am really happy.

Maybe this was a test, to see how serious we were about doing this and reviving it. Some days I feel like we are always being tested!

This is a plot that my family had planted for quite a long time, and then they just stopped, because of the elk and the dryer climate that happened. People just kind of stopped, they gave up on it. If the corn did grow, and it was a nice year, then the elk came and they just

munch it all up. One of my grandfathers said, "Well, I grew up there. You are going to grow dust and weeds." I think we are going to prove him wrong right here. Even this, I just took a picture and I am going to post it and say, "This is possible. We can do this again." Hopefully we can inspire more people to do this again, like my mom. We came up here and I showed her our field. She was surprised to see, she was like, "Wow. You grew corn, it made it?" I was all, "Yes, the kids' corn made it." We were driving back, and she was looking at everything to the north of here, all of the sunflowers over there. She was all, "This used to be all fields, just acres and acres of fields. No one plants anymore?" She said it like a question, she said, "No one plants anymore?" I told her, "No, we are the only ones down here, even the traditional fields did not make it. She was pretty shocked to see that nobody plants anymore. I replied, "We will save everything we have here and try to plant again next year." Hopefully get better and better at it, building our craft.



I am not sure we planted those beans right, so we need to make sure we figure that out. I am not sure if the season changes down here too. We are at a little lower elevation compared to Acomita. I am not sure... One thing we look for when we are growing beans is the cholla, a cactus, and when its flowers bloom, that is bean-planting time, that is what my uncle always told me. But yes, they did not fare too well this year, with the rain and on account of it being too late, they did not have much of a chance to germinate. We dig them as deep as right here, because the whole idea is to get them as deep as you can so that you can get to the moisture, and they use that to germinate. I do not know, just keep going at it, just reinforcing what we learned this year.



Just like our corn, we are resilient people. We just saw the beating this field took from the sun. Our people have quite a bit of trauma in their backgrounds, in their histories. Personal too, back to those historic traumas that effect us still yet today. From the highest rate of diabetes out of any minority, any ethnicity, highest suicide rates, highest obesity rates, and I just see so many people passing away before their time, alcoholism. It is still all there, so we do not realize how strong we are; I really do not think we do. I did not realize how strong these corn were until they grew in the middle of nowhere with no water. We are just like the corn. We are strong and resilient too; we need to remember that.

IRRIGATED FIELDS AT ACOMITA AND MCCARTY'S VILLAGE. SUMMER

It definitely seemed that winter came late this year, and since it stayed late, it stayed late for a long time, and then it seemed like even spring, even spring came late this year and it was a very cold spring. All of a sudden it just got hot, it just got very, very hot. That is pretty much how it has been so far, and the monsoons; they came really late. It seems like we are barely getting them now. We had our first significant rainfall just a few days ago. That was the end of July, so it is definitely an odd year so far. It has definitely been the hottest year so far. The weather is just strange this year. It is definitely not the normal, what we have been dealing with so far, and I think definitely it has had an effect on the crops. I can see it in them.

We had some pests in the [field] earlier that were nibbling on the crops, especially the corn, so it kind of stunted their growth. They are a lot shorter than we have seen in the past. Last year they were fourteen feet tall, this year about half of that, but they are still maturing. It seems that is how everybody's corn is this year. I am not sure if it had to do with the season,

how unusually hot it has been or how unusually cold. It was just so hot once the summer came and stayed hot. We have not gotten much rain.

The growth has not been as great as it has been in the past for us, especially as far as the corn. Everything else has been fine; the bean is coming out great. Like I said, the melons are actually coming out really well this year.

The Acoma melon is really cool. We just heard today that there is a method for saving or preserving those melons for the future, for the wintertime. Apparently you dry those, you skin them, and then you can drill, take a little hole at the bottom and take out the seed, and then hang them, they said from the branches of trees. They say you can dry it like that and then later in wintertime... I think they said slice it up too. So they slice it up too, like melon slices. Then, once it is all dried and sliced up, then they preserve it like that. Then they boil it and it comes back to life, almost like a regular melon. So they can have melon too in the winter, which is really interesting.

I think we are on the verge of harvesting for melons. We are just waiting for them to ripen yellow. Right now, they are a green color; when they are ripe, they turn a really bright, pretty yellow. That is the best part of the Acoma melons,

they smell so good when they are ready they smell like flowers almost. You can just smell that sweetness in them. That is one of the things that I am looking forward to...hopefully... I am really hoping that these melons ripen before the members have to leave, at least the majority of them, before Tuesday next week, so they can at least get a taste of their melon. That is what I am looking forward to. That is what I am most looking forward, for them to experience their first melon, how sweet that hard work tastes.

McCarty's Village; that one [field] we have not been so fortunate. Elk have come in there numerous times. At first, it was when they were very young, and they kind of nibbled on them a bit. We thought they were going to make it, yet they came back and they came back pretty strong. We thought they would be okay for a little while, and then those darn elk come in again and start nibbling on them again. You look everywhere up there, the grass is so dry; there is no water around, so of course they [elk] are getting desperate. Now, they are coming down from the mountains, the mesas, coming down into the streams, the Rio San Jose, to get water to probably graze as well. They are taking out people's entire crop now, so it is getting pretty bad.

I think it was last week, they came in again and they took down pretty much the whole stock. It



is pretty disappointing, because that was our red corn. We were hoping to grow those seeds that we have been saving for so long. So that was a heart breaker right there.

We tell everybody that you are taking a chance at farming. Think of all the things that could possibly go wrong with your field? Over watering, under watering, floods, hail, pests, elk, deer, the rabbits, insects, anything, the crows. There is so much that can go wrong with your crop, but you are really fortunate to have, if you do have a crop, if you have something produced at the end of it, you are very fortunate.

Squash bugs now are starting to get to them [squash] too. We are doing our best to keep them from getting to our entire crop, because that is another rare variety there that you do not see too often in Acoma. We call them banana pumpkins around here. They are a type of Hubbard pumpkin, I believe. We planted those, and hopefully we can at least have a few. I just want some seeds; that is all. So, if we can get those seeds, hopefully we can keep that variety growing. It seems that they are really sensitive to those squash bugs. The other variety of Acoma pumpkins, they are not the Hubbard; I forget what type. They are mostly darker green and have little patches of yellow or orange in them. They are really strong

and they are really resilient. The squash bug, we thought we took them all out, and then the vine dried up. Then they came back. That squash came back stronger than ever. I went, "Whoa; that is really cool to see."

But the heat, I guess. It has just been getting to everybody. It has been so hot during the summer. I think this is definitely one of the hottest summers we have had so far at the program and everybody just comes back sunburned and burnt out, every day. They come out, -they jump out of the van and say, "It is so hot out there." The sun has been beating them down, and it was wearing down the crew for a bit, but then we had to bring them back and remind them what they are doing, what they are doing it for, and hopefully cheer them on in the right direction, inspire them to keep going and keep working. Make sure that we note their successes and tell them that they are doing great, motivate them. It has been a little tough. Definitely one of our more challenging seasons, but I think I said before, the most challenging times is when you learn the most. I definitely learned a lot of lessons this season myself,

Usually we irrigate every week, week and a half or so. I would say that is about right, every week and a half because it has just been so dry. You irrigate one week, it is dry and you

come back at the end of the week, and they are already getting dry. You can see that they are thirsty and parched. Look at those crops and they will tell you. Most of the time they will tell you how they are feeling, looking at them. Normally they will guard themselves during the day. They will kind of close themselves up a bit, especially the corn. If they are really, really dry, you can notice it. At one point, we will let them go just a little too far without getting them watered. You can see the tips start to burn up a bit, the very ends of it. They shrivel up and look so parched and dry and they kind of get a lighter color as opposed to a healthy green.

This is centuries of knowledge that is passed down. I think I told them at the beginning of the season that there are things about language loss or cultural loss, well, this is cultural loss right here. If we do not carry this on, there goes centuries of trial and error and lessons learned. If we lose this there goes a whole huge aspect of our culture. I am really happy these young people are taking in this knowledge that it is going to be passed on and these conversations are starting to happen now, especially when they sit down with the seniors at the Center.

IRRIGATED FIELDS AT ACOMITA AND MCCARTY'S VILLAGE. FALL

...golf-ball sized hail. It took out, shredded the corn pretty badly and took out the melons. The melons are pretty sensitive, so they did not make it. We were hoping they would, but it looked like someone had taken a lawnmower to all of them. They were pretty bad, so badly shredded, the only thing you could see were tattered pieces of the vines left. The melons did not make it, which were probably a quarter of the field. So we are pretty sad about that. But we were able to harvest some melons and we gave some to the members. They got to taste some of the melons they grew, so they were pretty happy about that, especially the watermelons.

Before the hail hit, it was right before the corn silk started forming. The corn still grew, the corn silk still came out. They were pollinated pretty good. The ones I have been picking lately, we tested a few they are pretty complete. I have not seen any that are naked at all, so that is a nice amount of pollination. We hand pollinated a few of them ourselves and collected some of the corn pollen, which we, again, use for spiritual purposes as well. Right now, we are just waiting for the corn to dry and the beans to dry too, the cobs to dry. What we are looking at right now is the corn and the stalk to completely dry. Once that is done then it is harvest time for us.

We do not like to pick when it has rained, especially if we cannot get to all of the corn right away. We would rather wait for them to dry a little bit more. We will get the former members, the alum, out from the last season and invite them on the weekend, and have them come in and help harvest.

We will go through with wheelbarrows and start pulling down the corn and then laying down the corn too and the rest, so we took out the corn itself and lay down the stalk. Our plan is to haul them over to the senior center so they can help out with the husking of the corn.

The seniors actually asked us last year, "Why didn't you bring them over? We could have helped you." Then they told us that, back then, it was a big community approach; people would help each other plant, weed, irrigate, all that stuff, and they would just be there to help each other out all the time. Same with harvesting; when it came time to harvest, they

would also invite the community members, family members, usually extended family members or people who lived around the area to help them harvest. So, basically they would all go out—each of the men would be out here taking the corn off the stalk and then laying it down—then they would gather it and take off to the ladies: they would be in a little area with all their knives and stuff like that, in a little semi-line just cutting right below where the cob starts. You can just take the cornhusks pretty easily and fold them into a big bundle, tie them all together and save them. Then they get to take some corn home with them and take those cornhusks along with them too. It is a lot, and everyone around here needs those for nutritional cooking as well as spiritual purposes.

So what we are hoping to do is just gather them up and haul them off to the senior center so the seniors can help us husk the corn and take most of it home—we want to take some for seeds next year, but they are going to get to take all that home. Especially white corn—white corn is probably one of the most prized ones around here because, again, this is the main one we use here for our spiritual purposes, as well as cooking. The majority of the people, they will not save for seed, yes, I can definitely tell you a majority of them will not save for seed. They will grind it down because they need it for, like I said, traditional cooking purposes. We just want to save a bit, you know, probably less than a quarter of it for seed so we can plant next year. We can plant them and if anybody else asks for seed, we can give it to them.

That is another big part of the growing, is the community aspect that is being lost as well. You would help each other out all of the time, like if you did not have a tractor, you would ask someone else if they had a tractor or a plow. If you needed help planting, you would invite your neighbors, your extended family, if you needed help weeding, irrigating, that sort of stuff. You help each other out. "We will help you over here." "We will help each other out, and we can get paid in the end through some food that you will need later on too." Anyways, that is what we hope to do this year, bring a piece of that back.

We are just waiting for the corn to dry. It is very soon. Thankfully, the crows have not gotten here either. I think our scarecrows are working pretty well. Before we put those up, actually the crows were coming and attacking this place like crazy. They actually took a bunch of the old melons, which is fine. You give it back to them, and that is the idea; you make a deal with them. As long as you do not mess with our field while it is growing, you can come in and we will give you some apples after this... you are saying this to the animals that come in and eat your crop. You make a deal with them and you cannot get mad at them either, so it is only if you get mad at them, they will come back and get mad at you too and take even more of our crop. That is something, little tips we hear from our community members that have experience in this. That is one of the traditional sayings around here. They start coming in and taking the melons, which is fine with us because

they are going pretty rotten and were pretty badly punctured with the hail.

This is one of our flood-irrigated fields, so the corn did pretty well. That is another thing. I wonder if the corn has become intuitive. I would suspect it has been or it is. This corn we have been planting is the seed we have been saving. We have been saving the best of the best, so seeing the ones that grow the best, and the ones that have the most ears of corn on a stalk. The ones that look the greenest and the healthiest, so those are the ones we have saved. They have been growing really tall ever since. This year has been different. They did not grow very tall at all, most of them about six feet at the tallest. Last year we had them up to about fourteen feet, which is pretty huge. I feel like it is intuitive. I feel like they knew what



kind of season they were in for, the fact that we did not get hardly any rain this summer, and then when the monsoons did not come, they came late, and with very little rain. I think they adjusted for that, as well as the sun.

This year the fall season came a little early and it got colder quicker. That is one thing I have noticed. It was cold right up to the edge of spring, and then when summer came it felt like someone had turned up the oven and it started roasting. Out here, no rain; then, like I said, the fall came. It came quick and it came pretty cold at that, so I was pretty surprised to see that. I think the corn knew that too. I think it knew it was going to be a short growing season this year. I think it knew what it was in for. Same with everybody else's corn. Some people grow tall corn around here. I see them growing really nice corn, but this year it was different. I think that just goes to prove how valuable these seeds are that we have been saving for hundreds of thousands of years.

These seeds originally came from my uncles, my family... I do not know how long that has been. I have never seen anyone use any outside corn out here. It is definitely heirloom; it is definitely old. I do not know; I cannot even say how long these have been planted or how long these... what generation they are at. I would say they are pretty ancient seed.

We saved from at least 50 different plants, so we will be selecting from at least 50 of these. The ones I look for are ones, like I say, that grew the most corn on each stalk. The ones that were the most resilient, those were pretty much the ones that grew the best out here, the ones that had that really nice green color consistently. The ones that produced the nicest ears of corn, the ones that grew the best, I would say. That is pretty much what I am looking for, whatever did best in this field, especially with this challenge. The ones that did the best are definitely survivors, and definitely really resilient.

People are pretty happy about what we have done here with this program. Parents are really happy. One member in particular... He started farming, making his own plot. I remember he showed me pictures this past summer. He showed me his plot. He has his own field; he has his own garden. He is using all the seeds that we have given the members to plant. He is planting all of those same seeds that we have been planting for these past couple of years; and he is growing it and doing the same thing. He is giving it out to his family, his community, his neighbors. He is doing really great.

His mother came by at one point too, after the season had ended. She told me "Wow! I like what you are doing. I was really sad when that hail came through too because it ripped up all of our crop." I replied, "Yes, I was really sad." She was saying how she uses it to cope with her personal issues too. This garden has helped her a lot as well. She said that they were able to harvest, still harvest a good bunch. She said she cried when the hail came through and took out a lot of her crop, but I did too, honestly. That is how I felt, like, "Ah man, all of our work."

But, we can always try again next year. Farmers have got to be resilient too, like their crop. We have got to try again next year if it does not work again next year. We will just keep plugging away; we will not give up.

Yes. I am just excited. I feel like this has been one of our most accomplished years so far, just in the amount of work we got done and the enthusiasm the members had from the get go about planting their fields. I think that was due to our having a strong intent: telling them what they are doing, why they are doing what they are doing, and why we have a program. Why are we farming? Why are we doing this in the first place? It is really nice to see that all of them really took that to heart, and they are really taking care of the fields, they are really showing initiative.

A large majority of these young people are in high school and middle school. A few of them just graduated this year, and a few of them are...just a couple of them are out of school already, so we are going to lose the majority of

them because they need to go back to school. I am a little sad to see a lot of them go. I definitely get this feeling whenever we come back and they are not all here, just talking to each other at the beginning of the day. They are the reason why I am here. It is our youth, our young native youth that I am here for. I love working with these young people. They inspire me so much to make me take a hard look at myself and see what I am doing right, see what I can do better.

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PHOTO CREDIT : SEEDBROADCAST

INTERVIEW EXTRACTS FROM 2016 SUMMER AND FALL CONVERSATIONS

WITH BEATA TSOSIE-PEÑA AT THE
HEALING FOOD OASIS IN ESPAÑOLA,
NEW MEXICO.

SUMMER

We are here at Valdez Park, at the Española Healing Foods Oasis in Northern New Mexico. We are getting close to the end of August, and right in the middle of monsoon season. We have been getting lots of nice rains. So far, the garden has been going pretty steady. We have probably close to 200 plants in the ground already, with another 70 that we plan on putting in the ground with the big Community Workshop Planting Day. Then we are going to have Regeneration Festival Española in celebration of the youth of the community, and doing some ceremonial tree plantings and a memorial tree planting for a youth we lost a couple of years back.

The garden is designed to catch rainwater off the parking lot above, what we would call an urban water shed, so it can percolate down to the lower soils. We did not know how it would hold up and we had a lot of rain last couple of weeks so have some washouts. We have had to raise some of the berms a little higher, but it has been pretty minimal work that we have had to do, nothing that could not be fixed with some shovels and people power. It is hard work; it is sweaty work. It is middle of the summertime work, so we have got to pace ourselves.

It is good to see how the water flows at this early stage so we can make adjustments as needed. It has been interesting to see what makes it and what does not. We had some plant die off, but that I think that is normal with any site. I would say maybe about 90% of the plants made it, but we have a little bit to replant.

I am actually glad this is happening now while we are building the garden instead of having to come in later and undo things that have already been done. I think it is good. I have come out here when it has rained, and it just makes me so happy to see those soils so full of water.

Eventually we will get a timer on there, but that has been interesting, to observe how much water we have actually had to use to water, and that was mostly in July, when it was really hot. We had to come and water.

We are using less water than I thought we would have to. We were only watering about once a week for about two hours. Originally,

we thought it would have to be twice a week, but the way it is designed, and with all of the heavy mulching, once a week has been lasting pretty good.

I have noticed a lot of life coming back into the space; little lizards and birds and pollinators buzzing around there already, so that is exciting.

We have a little patch of amaranth on the upper slope that our friends from Quachuu Aloom/Madre Tierra Association in Rabinal, Guatemala came and planted in partnership with the Garden's Edge in Albuquerque. We do a cultural exchange with them every year. It is one of the plants that we are trying to revive as part of our pre-contact diet here in the Tewa world. It is a nutritious super food.

Just the potential for amaranth in feeding people, and the nutritional value in proportion to small farming plots, is huge. It's something that people can get a lot of out of a very small space. I see the plant's personality come through every year. It wants to be celebrated, and it wants to help feed the people. It grows amazingly well here—it's made to grow here. We are hoping some seed will just drop and it will come up on its own, but it is one of the things



we want to plant every year to help educate people around, and because it is so nutritious and so beautiful. It also really makes me happy that those paths of migration and those ancient roadways are still being followed with our brothers and sisters from the South. It is because of those roadways that we even got the corn here that is so sacred to us and special. It is really healing to have those connections be maintained and seed shared up to present day at different gardens. It is the first plant that we put in with seed, in the garden, if you think about it. That is a good metaphor, that it has ties to the Northern and Southern Indigenous people. That was a good accidental first choice for a seed plant to get put in.

We have had volunteers come all summer long, about five different youth groups from middle school on up and a lot of inter-generational planting days all from the tri-cultural communities.

It is impossible not to learn something while

you are working on this garden. It is like you just learn a little bit from everybody.

The heat spell that we had in July, those heat spells are getting hotter and hotter. We never would get in the hundreds in Española before. Now we are in the hundred-and-twos and hundred-and-fours. I was really concerned about some of the plants, but they did okay. Some of them like the heat. A lot of them are drought tolerant plants, so I guess they can stand it, but I think the heat spells before the rains came have been really intense. That is what I have noticed in this area, and then everyone is talking about the grasshoppers this year, but we did not really have that problem at this site.

I think there is a lot of value in community ownership and the educational piece, for example the workers who are out here today said, "I did not know you could use cardboard for weed suppression."

We are laying down double layers of cardboard that we have been collecting from different businesses in the area. The first layer was a bunch of green chile boxes. That was exciting. It was like, "Oh, it is perfect." We put cardboard down and then we got some crushed base coarse rock, it is gravel and sand mixed together. This was donated from the Transit Company here in Española. We did not originally plan on all of this stone at first, but it adds an important element to the site.

There is no turning back and it is only going to get more beautiful, and it is going to help get people excited for the next phases, I think.



FALL

This year, 2016, was a very eventful year for the Española Healing Foods Oasis Project. We definitely exceeded my expectations of what could happen there, what was possible. The amount of resources and help that came from the community, was really inspiring and made the hillside come to life with that community energy and community support. Looking back on a lot of the workshop days, it looked like we had over eight community workshop days on site, where we were planting, building soil, or working with youth programs. We clocked in over 900 community volunteer hours—close to 1,000 volunteer hours—so if you turn that into money, that's a lot of resources and energy and time going back into our community. The fundraisers and sponsorships continued throughout the year, and we continued to get donations—monetary, time, labor, volunteering, material donations—it's just been amazing. I think we set out everything we intended to do, as far as getting the soils planted, getting the grading done, getting the pathways done, getting the steps in, getting the drip line system in. We had a couple of pretty good monsoons where we were able to test the rainwater harvesting on site and tweak it a little bit where there were drainages and spillovers, and we got to really observe how it works this year too, which is really valuable knowledge. Now that we've moved into the wintertime, we're starting to document the uses of the plants and focus on that time of the stories that they hold.

Phase 3 is a really important because it's the most accessible portion of the garden. It's also the transitional area into the hillside slope. It's also the most expensive phase of the project, so the first part of it entails building some curvilinear retaining walls with built-in bancos. Then inside those retaining walls we're going to be planting a lot of the wildflower and pollinator gardens and more fruit trees. We're also dreaming big in hopes of installing a subsurface drip system, which is a state-of-the-art drip system for water conservation because there's pretty much zero evaporation with that system. Again, for that demonstration piece of showing people what's possible when you combine traditional knowledge with modern technology as a solution-based approach to water conservation and climate change adaptation.

I think The Healing Foods Oasis has taken on a life of its own to where I'm at its service. There have been a lot of ceremonies and prayers put into the site. It has a heart that needs prayers

and spiritual feeding. I think when you have this kind of reciprocity in a place it's like what you'll give, you'll get back. I have a lot of hopes about the word, "healing," within this garden because of its location within our tri-cultural community here in Northern New Mexico. I think its capacity for unification that's similar to what's happening in Standing Rock, and how it's bringing people together around our plant relatives, around that spiritual movement of reconnecting our love and respect for water and what that looks like, as far as harvesting, conservation, and as a resource that we can't live without. It's in places like this that, no matter what happens on a national level, our communities here historically have always been able to come together in the spirit of survival, resistance and resilience to the dominating powers. If we can hold true to those core principles as far as land, seeds, air, water, people I think we can weather the storm of what's coming. I know that our ancestors are supporting us in endeavors like that. What I really see is that bridge between Native, Hispanic, and Anglo communities, coming together around water and building off that movement. We have a lot of issues here in Northern New Mexico, the very real threats to our water and the very real threats to our land through oil and gas, through chemical and radioactive contamination, just the whole energy complex and how

it's encroaching everywhere. We have these small pockets of pristine places, and even in places where it's not so pristine, there's always that hope of healing that plants can offer even through bioremediation, and that plants can offer by strengthening our own immune systems and our bodies so that we're stronger and able to adapt to what we're exposed to on a daily basis, and what's accumulating in our bodies and in our lands.

Evolution doesn't stop happening just because it's not really written in books yet.

We don't know the long-term picture of humanity and how we're evolving but I do know that we cannot lose our humanity in regards to our place as stewards of the environment and stewards of place. Yes, this is the United States, but this is first and foremost Tewa land, and we're in Tewa territory here in Northern New Mexico. I know my role in this place and in this territory, and it's to bring love, and my whole self into this spirit of place. If I do that, and people start coming together to do that, then Mother Earth will continue to take care of us.

I just think there are a lot of prayers for our relatives at Standing Rock, and I draw a lot of hope and inspiration for the continued unification of native tribes all over the country. I think that's key right now in this political climate. That unity has to continue to grow and build, and our young people need to see that they need to continue to grow and build so that empowerment can continue to be uncovered by young people, native women and girls, and that that leadership of women and girls can continue to come forward in a place where it's been so absent, as far as in decision-making, regarding the wellbeing of future generations, so I just really hope that that can continue to rise and be lifted up in all places.

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PHOTO CREDIT: SEEDBROADCAST



INTERVIEW EXTRACTS FROM 2016 SUMMER AND FALL CONVERSATIONS

WITH RON BOYD AT MER-GIRL GARDENS, LA VILLITA, NEW MEXICO.

SUMMER

Let us begin over in the raspberries, because that really was disappointing, discouraging. The raspberries are less than 10% of last year's harvest. The first pick was pretty good, I mean, we knew the grasshoppers were pushing us hard, we had been toasted and hot and the new growth had come, but there was forty percent of the leaf loss just to the grasshopper.

We have used Nolo Bait consecutively every year for the last ten years, we see grasshoppers; we put the control out. When the berries came on, they started eating the tops, particularly on the top where they are just drying out. Before they mature they are tiny-winy, and before they are finally mature they are just dehydrated, the whole top of the berries. There is nothing to harvest. You know, grasshopper comes along and goes nibble nibble, nibble nibble, nibble nibble.

After Nolo Bait, Semaspore comes, because it is a lot more cost efficient. It is a bacteria that diminishes the grasshoppers, and as they slow down more will pass on the bacteria to others. I am out here every other day sprinkling this bran, it is in wheat bran, so their first priority, for grasshoppers, they say the first one besides raspberries apparently, is grain cereals. There is a little bran over there and they go over there. Amazing. What is it? What is it? Is it the vibration, the frequency, the color, the sound? What do we not hear that they hear? I started addressing my grasshopper problem at the site of the problem, but really they came from the borders and from the alfalfas and the grasses on the edges. That is where I should have started my defense. By the time I was working on this they were multiplying over there and coming in as fast as they could. I should have started my defense over there. You know, those are the things we say, "Well, if I knew grasshoppers were coming on again, and I followed the same ways I did this year, I would be making a mistake." The first time I got educated. It is only



a mistake the second time you do it.

This makes me incredibly aware of our food system, looking back to those years when you felt, "What is my family going to eat this winter?" It gives me the shudders. "Green revolution", here we come. [chuckles] It reminds me of conventional farmers of the fifties and sixties, when they saw disease and plague and drought damage a crop, and the mortgage was due. The guy at the feed store says, "Hey, I have got this magic stuff called 2-4-D or Malathion or Sevin. "If you use it, it will work." And it did. He made the mortgage and he farmed again, I can see the evolution from "old time" to modern conventional chemical dependent farming and how people got there, you know, Yes, those awarenesses, to see this, that lack of control that we have. We are doing half the job and then the rest is spin the wheel, totally spin the wheel.

We definitely saw increased numbers of pests last year. Of course, cyclically as they are, seven or seventeen year cycles on a lot of pest things. But the warm winter, I think, had a lot to do with it.

The raspberry leaf is pretty medicinal. I know it is used after pregnancies and there is a lot of restorative medicine in the raspberry leaf.

The grasshoppers do not seem to be interested right now in the blackberry leaf because they have got this, but blackberry leaf is not used as medicinally in the same way either, so maybe they are medicating themselves.

We are organic farmers, so we think, "Okay, OMRI has approved it. It is the latest, it is a bacteria, the advertisements look good and certifications will allow it. I will use it." Then what? Is it true in ten years, the silly things, like universities will have overlooked a thing or two and it actually is a little bit more damaging than we thought? Spinosad is beginning to be in that category where it is dangerous to bees, and it does take extra care.

It has been over ninety degrees every day, for over three weeks, high nineties a lot of it. I saw a hundred and four one afternoon then the next day at a hundred and three, I really felt pretty worked out. Like we say, even chasing water around most years, the water systems that we have and the volumes that we have are great and abundant, but just keeping the system going fast enough to keep up with the water demands this year has been a challenge. Man, am I glad we have it. the water.

I wonder what more can I do? What more can I do? Is there anything that I am not paying attention to? Boy, that fine balance between having a production that pays a sustainable paycheck! That critical part of the sustainable farming system, the paycheck.

Somewhere between production and sustainability. A lot of sustainability has to do with not demanding as much from the farm. With the corn I can see the difference. I can see the difference in planting densities quite a bit. One planting density is telling me that I have asked too much from the soil. It will not be a problem right now; it will be a problem to do it again next year. I am just getting educated this year, it would be a mistake not to learn from this year.

This is really creepy. Look at the tops of these apple trees. First, the hail beat the shit out of them, and the grasshoppers have been really hard working. I think I have still got some crop left, so it could be worse. I hope that my control measures are having some effect. It is just hard to really see it or to know.

In the last few years, because the perennial fruit crops have been a hit and a miss, as much



as I enjoy it, I look at it a little bit more as a pleasure event. I am not depending tree and vine fruits for an income. At some point I have choices of where I put my energy but I will get there before it dies? Like I say, we are eighty percent complete on half of our projects.

The corn is as good a crop as I have ever seen. Fast, you know when they say "knee high by fourth of July", we will be waist high at fourth of July. This is a tall corn by and large, I mean, there are some shorties in there, but it has really been racing. The color is a little less green than I would like to see. I think we were a little high density on the planting, but the planting was so successful, I mean, two kernels in every hole, 16 inches apart. In the rows where we didn't get finished planting because it started to rain, I went back in with my new mechanical Hoss tool planter. I love it, but it was the first time I had used it and it was my operator error that left a few holes in the rows. It looks great and it has just now tasseled this week.

Oh look, wow, this is curious to see the silk before tassell! You know, midway last season, before I had any awareness of this Glass Gem corn, I was really scratching my head thinking this corn is really unusual.

This year I also planted the Hopi Turquoise corn, I had just got a heavy irrigation on it, the next day an incredible heavy wind blew and the corn lodged, it came back and stood up pretty good anyway, I have always planted corn in a sequence that you put it in the ground pretty deep.

The Glass Gem germination was incredible this year. It tested out at 98% germ test, the state tests. Yes, it was really good.

I want to run with inter-planting or control crop or green manure, whatever words, you know, in the row where I am using grass. As long as I can keep it mowed and controlled, it works really well, green manure, just soil biology diversity with pioneer native plants. Here, there comes a point when it wants to seed out, regardless of mowing it..

Anyway, so it comes to the point where it is going to go to seed and you cannot mow it down, so that is the point to scrap it out, especially for melons. Then I can just spread melons out across the rows.

The first ready dry corn for harvest will be middle of September, and there will be some of it that will not finish until the middle of October. I hope. I am really going to need a crew for harvest. I am imagining some kind and gentle gypsies that come in a caravan and stay for five days and make beautiful music and harvest the corn. [laughs]. What a joy, at harvest time to see the results of that we'er doing.

A lot of modern farms get laser leveled. That is just the way you start off, and then you use the soil as a medium for conventional farming, and it works. The original top soil works pretty well, just do not screw with it, just work with it. Honor the soil. It feeds you. It houses you. It clothes you. Disregard it and you die. It is said much nicer than that, but you know. [laughs]. I think it was one of those cool, old Vedic smart sayings. I am forever learning how to be a better soil husband.

I am really curious what it would be like to feed ourselves if we needed to, if we had to. Would we have seed? I really enjoy producing seed and it tickles the dickens in me to see our seed go around the world, and it is the source of food for other places. Yes, I think dependency on fossil fuels puts us in a really delicate

dependency for our food system. I think about how much water, how do we use the water, how do we use amendments, how do we demand fertility and productivity? How do they all balance? What would it take to feed us if we really had to feed our selves. If we really needed good food produced.

This is Valencia onion. It is a delicious, sweet yellow onion. It came out of the Rocky Ford or Arkansas Valley area. Dan Hobbs has been working with it a lot, and so it was his bulb that I put in the ground. Onion is biennial, takes two years to make a seed crop. Put the bulb in the way you would plant deep corn, put it in the furrow. When the sprout comes up, cover it up because that top-heavy seed head really wants to fall over when it gets loaded up. Hence, we'er trellising them this year.

Yes, other things we have learned this year... Boy, I am really grateful that I have had several choices for irrigation techniques, between drip, that I am not crazy about, to micro-sprinklers, impacts and flood. It has taken a little bit of each method to keep pest control in place. I have not had to use so many different methods in the past. Micro-sprinklers have done a great job overall, but this season has been more challenging.

This is the other Glass Gem field. We are contracted for 1,250 pounds this season, and I am hoping that between these two patches, we can harvest between 2,000-3,000 pounds. You know, moon cycles? You would have to do it for a lot of seasons to really say there was any effect, but astrologically I am not sure that we were as lined up here as we were up at the top field. For one, the day we planted the upper field there was some good love and good corn planting Juju.

Here, about ten days after I seeded, I realized that the operator of the seeder must have made a mistake, because I had some pretty bare spots, and these rows were so bare that it was too late for any reseed of corn so I planted the Blue Speckled Tepary bean.

Again, I want enough room for the crop so there is not competition. I want the green aisle in place, I have a set of disks for the wheel hoe that go right over the top of the corn for early cultivation. We have six or seven acres of irrigated field, that is all I can do without a tractor.

You asked about help. I said we had four days help earlier in the season. I think Gregory is going to be with us for the week. Then again, at harvest time, I am going to have to look for some help. Otherwise, Debora keeps it all happening because she keeps all the infrastructure of me being able to do this going. Yes, yes. There is no way in the world that I would get this much done without her backing the program up.

The North Field, the field we all planted together on Mothers day. It is beautiful, and it looks good and I think it is okay. It is mostly the color that just looks more vigorous. Although you know, the crops have not been as good this year, but the community and the social spaces that have come around the farm have been...we need it. We really need it. In a year of crazy, what the hell, I need those... I feel validated that way. The paychecks have not been very validating, but it has been cool to connect the dots and share with folks, what we'er working on.

FALL

Now it's the second harvest moon and I pulled the first colorful ears out on September 10 and 11. So that was the earliest harvest we could get out. We were bringing in 50 pounds

at a time two weeks ago. This past week we were harvesting in the lower field, and we just cleaned it out. A 1000 pounds, I hope, is what I got out of there. And now we are beginning in the north field, where it looks like another equal amount, probably another 1000 pounds of Glass Gem Corn.

The Starlings came by the hundreds. They kind of puckered me up a little bit for about a week or so, just kind of wondering how long they were going to stay. In the end, I do not think they took more than two or three percent of the crop. It was a challenging season. You know, the grasshoppers came in biblical proportions, and they were all through the corn, and that made me nervous. In the end, the grasshoppers probably did a little bit more munching on tassel than they did anything else—and the leaf—but they did not touch the ears. I do not think they diminished our crop by anything significant.

Hail got us twice; it was here the week after we planted. No, it was just before we planted that first field. The hail came first, and that was hard on the fruit, apples and peaches. Then we had another hail, it was August 20, and that shredded the corn. The corn looked pretty beat up,



but I do not think it diminished it too badly. The leaf has kind of a cool way of being able to get shredded and still do its job. So yes, it was a challenging season between grasshoppers, heat, and hail.

I am really grateful that it made a good crop, and grateful again that I have had so much help harvesting. In the spring, when Debora said, "What are you going to do at harvest time?" I said, "Well, we will figure it out." And through the season I kind of poked around to see who I could hire and how I would do it. But since the harvest has been ready, the pickers have come. And mostly, thank you, thank you, thank you, just to enjoy the picking. It has just drawn that kind of attention. The corn, has a voice; it has a song. People just want to come and help harvest. So we have had great help getting it in. The weather has been good although we did have a windstorm. That was probably three weeks ago, and it was wind like I have never seen. 10 percent of it blew down. That was a little bit of a challenge. It would have been a

bigger challenge if we were combining, but for hand-harvesting we just had to stoop over to get some of it. With this quantity that we planted this year, about an acre and a quarter, there has just been more diversity. Last year, we planted a quarter or a fifth of what we planted this year. But this year the diversity of colors and kernel shapes and cob shapes has been incredible. We noticed sequence's like runs of pink, pearl and blue kernels, that we called "Barbie Corn." Then there is another sequence that is "Mardi Gras," which is green, purple and gold. Another sequence is "Carnival," and that is just bright oranges and yellows. I think the least appearance of colors I have seen are red and green. They do show, but not as much as blues and yellows and whites, those seem to be the dominant colors... But they express themselves in every shade. It is just to say if were talking about yellow, we've got mustard yellow, to pale yellow, just everything in between. Oh, I saw "Root Beer" the other day. There is another set of colors—we've kind of called it "Denim"—shades of blues.

We saw "chinmarks", maybe 15 or 20 cobs out of the whole crop show the "chinmark", those little starburst streaks in the kernel. It has just

will go through the sheller. I have got these two old-timers for shelling. New technology from the early 1900s [both laugh]. Then, out of the sheller it will go to the clipper. The clipper is a vibrating screen and winnowing fan. That tool is a little bit newer than the shellers, but only by another 20 years newer. Out of the clipper, it will probably get hand picked through there as well, because I want to be sure that it is really clean seed before it goes to the buyers. I hope that then we will ship by mid-November to Baker Creek and Aaron Whaley. As soon as I can, I will just go through with mower or the brush hog and lay the stalk down that way, and then determine if I need to gather roughstock or if I can just turn it in till or plow and get a cover crop on the fields before the acequia dries up. That means before Thanksgiving. So, the next six weeks—well, I have got another month to ship—so the next month is really a pretty fast sprint. And, again, there has been a lot of help around to make it happen.

Next year, I will not be able to plant the same volume of corn, because I will have to rotate, and I put the corn in my biggest fields this year. I will have reduce the quantity that I can plant next year. Depending on what Baker Creek

I use the term, "Let us make our food great again" to semi-quote some of the current politics. Even though it was a really challenging year with environmental things that we could not control, hail, hoppers, and heat, it inspires me more to go forward and persist because I like food. While the national scene of politics seems wigglier and stranger, I feel more inspired to do the little bit that I can do.

I am given land and water, and I feel like it is the way I can contribute the best. When people say, "hard work"—the hardest work I do is the paperwork. The rest of it is just joyful days spent doing what I love. So, there is labor, and lift, and sweat, but I might be crazy and sick or ill if I did not do this kind of work. There is the story about the ostrich that likes to put its head in the dirt. I really feel even more relieved to have a place where I can put my head in the dirt.

Gosh, we eat good. There is a good apple crop this year, and that means some good cider to get us through the winter. There will be more spoon carving, and all that time to think about learning to feed ourselves again. I think that is kind of the basis of it all. I think we just forgot how to feed ourselves. I am learning, were all learning, learning how to feed ourselves.

The thing that really sticks in my mind this season is...well, the only way I know how to describe it is, the delight of hearing such a strong voice from this corn. Of all the crops we have had, and all the crops we have enjoyed and shared, no other crop has called people to its self, with delight and twinkled eyes as the Glass Gem Corn has. It is really strengthening and empowering and encouraging to be hearing the voice of the crops, the plants. That has been exciting.

I think I am hearing the voice of this corn a little clearer, and for that I am grateful.



been really incredibly diverse. I think in the end we will see a couple thousand pounds. It just goes on and on with shapes and colors, and row form. We see straight rows, just perfectly straight, like ten-row cobs. Then that spiral form where it is a straight spiral going up the cob, with a little bit of "shoepeg". Then sometimes straight rows and "shoepeg" kind of mixed up together. I saw more queen ears—I have heard them called that way—where the tassel is four or five inches on top of the cob. And then, there are very few mother ears, or mother cobs, where it has completely filled out. I am sure there would have been more filled out, but worm took a little bit—just corn silk worm—it was not too bad.

We are husking most of everything as we harvest it. It is just a little simpler to leave the husk in the field rather than bring it in. It comes in husked, and then we put it on the drying racks. It will spend a couple weeks on the drying racks. I have got a fan on it just to get it good and dry. Then once it is off the dryer racks, it

wants, I would like to keep going on the Glass Gem. I would like to do some more selection, particularly color selections. I would like to see how repetitive sequences can be. I have got a couple idiot books for genetics, and this corn really opens up a lot of opportunity to see how dancing with the genetics can come about. The Hopi Turquoise corn that we planted this year will probably be the bigger of the crops next year. We have been selecting for this truer turquoise color in that corn, and we want to go further with that. It did really nice too. Then there's one more, maiz morada, that comes from Peru. There is a neighbor here who has been growing that for past several years, so I want to see if I can get some of that in too. It is going to take a winter of dreaming to see what kind of reality we can come up with next year. More beans next year. I think there will be a lot of beans following cornfields. Then, I have got some new garlic to put in also. I am letting go of my old garlic stock and opening up a new field to see if we can reduce some mite problems in the garlic.

RON BOYD IS A FARMER, SHOEMAKER AND HE CARVES SPOONS AS HIS MEDITATION AROUND LEARNING TO FEED OURSELVES AGAIN. HE BELIEVES WE HAVE IN THE PAST 50 OR SO YEARS FORGOTTEN WHAT IS GOOD FOOD, WHERE IT COMES FROM AND HOW WE PROVIDE IT FOR OUR FAMILIES OR SELF. "FOR MANY OF US THIS IS THE TIME TO BRING LOCAL FOOD SYSTEMS BACK HOME AGAIN IS REALLY IMPORTANT NOW. ON THIS FARM PRODUCING OPEN POLLINATED SEED TURNS ME ON AND I FEEL LIKE A VERY RICH MAN TO RUN MY HANDS THROUGH PILES OF SEED".

WWW.FACEBOOK.COM/MER-GIRL-GARDENS-295388580481343/

PHOTO CREDIT: SEEDBROADCAST

FARM STORIES FROM ESPAÑOLA FARMERS MARKET

SABRA MOORE

February 2017

A Few Comments: All three-farm stories were collected in 2003 for the first manifestation of THE FARM SHOW, a collaborative art project that I organized between farmers at the Española Farmers Market and local artists. There are 31 stories collected from these two projects; this year I plan to collect more stories from some of the new vendors. It feels a bit nostalgic to re-read these stories. All three-farm families were original members of the market when I started working as market manager in 1999. Agnes Jaramillo is now in her late eighties and suffering from ill health, but I still remember greeting her one day at the wheel of her truck hauling some of her beloved cows to summer pastures in the mountains. Lawrence Lucero died the year after this interview with Laurie Tumer, but his wife Susie still comes to the market to visit. For many years, Susie sold her jams, pastelitos, cota tea, and vegetables. Her entire family would come with their prized chile to roast during our annual Labor Day Free Chile Roasting celebration, donning plastic gloves and sitting at Susie's table to peel the freshly roasted chiles and pack them for freezing and winter consumption. I have now worked with this same group of farmers for seventeen years and some of the children who chased and laughed during Market Mondays are now themselves grown. But the core values in these stories remain for all of us, the idea of proportionality and living within the constraints, enjoyments, and blessings of the growing season.

AGNES JARAMILLO

Agnes Jaramillo was raised on a ranch in La Villita, near Velarde, in the 1920's, to a full-time ranching and farming family. She remembers her four aunts living nearby, and how everyone in the family would pitch in to help each other's farm in turn. Her aunts planted a lot of chile and they would make over 100 ristras to sell each year. Agnes learned early to tie the chiles into ristras, and how to store them properly, hung outside under the eaves, to avoid infestations.

In the 1930's, her father bought the land in Chili, and moved the family there when Agnes was still a child. He brought along the cattle and the horses, and upon obtaining grazing permits in Canjilon mountain area, was able to herd sheep as well. He started planting orchards of peaches, apples and apricots, and one of the original apricot trees, over 60 years old, still stands today. They grew so many vegetables, and some years would harvest so much fruit, that Agnes' mother opened a farm stand out front, on the road to Tierra Amarilla, the count seat. Occasionally, Agnes would catch her



mother napping on the bench behind the stand, and jokingly tell her of all the customers she had missed.

Agnes married, and she and her husband both taught school, first in Coyote, then later in the Espanola Valley, which they both enjoyed very much. They would teach all day, then for a time, had to take classes to receive their teacher's certification by night and in summer school, always ending their gardens and orchards, and the farm stand on Saturdays.

Agnes spent many years caring for her elderly mother, and then her husband, when a fall from a ladder left him with permanent brain damage, so that he couldn't speak again, and had difficulty keeping up with what he did before. She has two brothers, who have gone on to other business, neither was interested in the farm or ranching. She has since bought her mother's home, and younger brother's land bordering her own, and her nephew and son live nearby with their families. Her son owns the Chevron station across the highway, and it is her great grandson that appears to have inherited the love for the farm, already decked out in his high top rubber boots and overalls at two years old.

Besides being a renowned orchardist and gardener, Agnes is a dedicated and award-winning cattle woman, and still cares for a herd of cattle, which roam the upper Canjilon meadows in the summertime. She goes up every week to check on them, and once had to spend the night because they were not all accounted for by sundown. She successfully

combines the worlds of livestock and orchards and gardens.

"Cows love apples. And the horses," says Agnes, "they love them because they're so sweet. The horses want the golden delicious and red Delicious. I have mixed them up with early tart apples, and they pick out the sweet ones."

Nine chickens and a rooster patrol the large garden, with cucumbers, squash, tomatoes, chiles, onions, beets, and the newest addition, watermelon, all for selling at the farmers markets. There is a large glossy grape vine on the border of her patio, which came from her grandfather's homestead in Villita, and is so vigorous she once tried to cut it out. But it wouldn't die, and still produces many bunches of the old-fashioned white seeded variety of grapes. "My grandfather's spirit is living through it. He wants it to be there," she chuckles.

She has a helper to prune, irrigate and hoe the orchard (of over 100 apple, apricot, cheery, peach, plum and pear trees) and the large garden, although Agnes oversees the operation and does all the seed planting herself. She uses a traditional method of planting the seed in row ditches, irrigating only every four or five days, even in the heat, and thins and transplants the abundant seedlings to other rows, as the season progresses. She doesn't plant her sweet corn until the 4th of July, to avoid the worms that find their way into most other organically grown corn. She has been slowly replanting trees in the orchard as they die out, although there are still some 50-year old cherry trees near the house, loaded with cherries and the birds

always get their share, the trees are so lofty. The apples are sorted and stored out in the orchard in large wooden crates under the trees, staying fresh for market each week.

Her wry advice to young farmers and ranchers: "You can't win in anything. If you have cows, you have to take care of them, otherwise they'll die; they have to have certain vaccinations, and all that. If you have trees, you have to take care of them, and if the freeze comes, that's it. If you have cut grass (hay) and the rain comes, it ruins it. I mean, it's good enough for the cows to eat, but if you want to sell it, you can't. Everything is a risk."

But all is cozy and glowing in the den of the yellow stucco hacienda with the red tile roof, surrounded by flowers, orchards and fields. Agnes is proud of the many photographs of her large family and circle of friends, and basks in the gleam of awards and plaques attesting to her dedication to her cows. Agnes agrees that love for the land and animals is what keeps her going, and is the only way someone young can sustain the hardships of farming and ranching.

She laughs softly when she mentions her son pleading with her to sell cattle, "Then what would I do? I enjoy myself here by myself."

INTERVIEW BY MAUREEN HAVEY, 2003.

LAWRENCE & SUSIE LUCERO

Lawrence and Susie Lucero live in Dixon in a house they built together. Here they raised their two daughters, Rayette and Patricia. The acre they farm is an enchanted few minute walk from their home down a narrow tree-lined road that has not changed much in decades. This land was given to Lawrence by his parents. His father grew chili, corn, and other vegetables for this family. Lawrence learned to farm from his father and grandfather.

"There's nothing like fresh vegetables."
Lawrence Lucero

Susie also comes from a family with a long history of farming. She is from Velarde, Se remembers as a child, in the late 1940's, how her father took what he grew to Taos, going door to door, selling his medium-sized cucumbers for 5 cents, and bartering for bars of P&G soap.



"I could live on spinach every day. Just boiled. Maybe with a little butter. Or with a little sautéed onion." Susie Lucero

About six years ago, the Lucero's had so many tomatoes that Susie convinced Lawrence to take them to the Española Farmers Market to sell. He found he liked it- particularly visiting with other farmers and they have been participating in the market every year since.

Last year, water was scarce and many of their crops didn't make it. This was the most difficult year they can remember. However, they did manage to bring to market the very few tomatoes and cucumbers that survived. Along with the spinach that actually did well from early in the season. With these and the fruit their cousin gave them to sell, they were in business!

"Water is the matrix of culture, the basis of life."
Vandana Shiva

Susie and Lawrence would rather be outside than inside. These days they do most of their farm work in the early morning and late afternoon when it is cooler. When they were younger, the heat didn't bother them as much as it does now. There was a time they could be found outside all day. Susie's least favorite chore is thinning because of the discomfort of her hip, which was replaced in the 1970's. While indoors, she crochets blankets, makes quilts, and embroiders tea towels with images often of the vegetable she grows.

"This is the tree where we rest."
Susie Lucero

Before her hip replacement, Susie worked as a nurse's aide at the Embudo Hospital, in the alcohol treatment center. Lawrence worked for many years with Stanley Crawford, author of *A Garlic Testament: Season on a Small New Mexico Farm*. He helped Stanley with all aspects of his farm, from plowing, irrigating, and picking. Both Susie and Lawrence are mentioned in Stanley's various books. He acknowledges them for their friendship and invaluable assistance.

"To dream a garden and then to plant is an act of independence and even defiance to the greater world." Stanley Crawford

When I asked what their favorite crop is, they both at the same time said, "Chili!" Susie says that probably that is because she can't eat a meal without it! Their red chili powder is labor intensive though, because of its exquisite taste, it is, according to Susie, "worth it!" Most of the chili they grow is for their family, their daughters and Susie's sister in Ogden, Utah. They only sell about 5 lbs. at the market and often bring last year's chili powder at the beginning of the season when most of their vegetables are still growing.

Susie and Lawrence have always farmed without synthetic pesticides or fertilizers. They only put down manure to fertilize the soil. When I asked why they didn't use these chemicals, there was a long pause as if any other way of farming was unimaginable and the question didn't exactly require an explanation. When I pressed them, they said that they simply didn't believe in it. They expect a certain percentage of their crops to be eaten by insects. Period. And, they have never had any serious infestations either and whatever wilt has come; it has naturally gone away without any help from chemicals.

Susie asked me, "What do you do about these ants?" We passed many ants and many very large anthills. I told her that on several occasions I'd used baits, thinking she would next ask what sort of baits I used. Instead, she went on to tell me that what they do about ants is sit on their porch, throw crumbs to them, and for pure entertainment, watch the ants bring the



crumbs back to their anthill.

"No matter how dangerous, annoying, or economically detrimental a "pest" appears to be, we are not wise enough to safely conclude that we would be better off without it. Some fierce and dangerous pests inhabit extremely delicate and environmentally valuable areas. Eradicating them might do the world immeasurable harm." Ellen Sandbeck

When I asked Lawrence what advice he would give to someone who wanted to get into farming, he said, "I'd say, come over and see how to plant and take care of a farm." His 22-year old grandson, Adrian L. Gonzales, who currently lives with them, has become very interested in learning to farm. So the Lucero farming tradition continues.

INTERVIEW WITH LAURIE TUMER, 2003

EVELYN FERNANDEZ & OCTAVIO FERNANDEZ

Evelyn and Octavio Fernandez are setting up their farm stand, and Octavio has devised a method of attaching a series of plastic trays so they can display the vegetables at an angle from each side of the table, with bulging squares of squash lined up in two colorful rows.

The effect is dazzling; mounds of golden squash interspersed with small green calabacitas and onions nestled against the brightly flowered oilcloths. Evelyn is calling to the customers who stroll by; to come and sample her newly picked vegetables. Other family members start arriving to help, usually her son Freddy and her daughter Rosabella accompanied by her husband and the three children. Soon the children are off playing games with other growers' children. It's another hot market day and we are all hope that the fierce dusk devils won't blow our canopies again. It's been hard this season. Evelyn goes to two markets, the Española market and one in Santa Fe, and this summer, she's also working at Walmart. Evelyn finds a break and we sit down to talk.

"How did you learn to farm?"

"I grew up on a farm, and my grandmother, Beroniz Martinez, was a full-time farmer." Bernoniz was a single mother who farmed in El Guache. She grew chile, onions, and all kinds of vegetables, raised sheep and chickens. Evelyn's mother grew up there; her father, Esquipulo Espinoza, was from Chimayo, where Evelyn lives now. Chimayo is famous for its

red chile and that was Esquipulo's main crop. Evelyn still grows her chile from her family's heirloom seeds, which each generation has saved. She has farmed Tina's Farm since 1995, the land her mother Tina Trujillo inherited. Tina lives with Evelyn and her family. They plant a little over two acres in squash, chile, onions and other vegetables. Evelyn and Octavio have devised an efficient irrigation system where the water is funneled from the ditch into a series of plastic pipes that drain straight into each row of plants.

"How did you meet Octavio?"

"We met in Española; he's from Chihuahua. When we first got married, we traveled to Washington State for seasonal work. We picked apples, cherries, and pears, worked with the potatoes. I enjoyed it." Evelyn and Octavio have three children, all grown. The two youngest accompany them to the market. The oldest is named for his father Octavio.

"What advice would you have for a young farmer?"

"You need 100% support from your family. One family member will need to work outside the farm while you are getting started.

INTERVIEW BY SABRA MOORE, 2003

SABRA MOORE IS AN ARTIST AND WRITER LIVING IN ABIQUIU, NEW MEXICO. SHE THANKS FELLOW ARTISTS LAURIE TUMER AND MAUREEN HAVEY FOR THE FINE INTERVIEWS THEY MADE IN 2003 DURING THEIR PARTICIPATION IN THE FARM SHOW. MOORE'S BOOK, OPENINGS: A MEMOIR FROM THE WOMEN'S ART MOVEMENT, NEW YORK CITY, 1970-1992 WAS RECENTLY PUBLISHED BY NEW VILLAGE PRESS.

PHOTO CREDIT: COURTESY OF ESPAÑOLA FARMERS MARKET.

BRAIDS

TANNIA ESPARZA



The brown of this land lives
 A brave kind of brown
 A brown that settles in hip bones and stays
 Lingers on your lips long after she kisses you
 Leaves hope in thirsty soil, falls in love with the skin it lives in

A brown like this is a tender mixing of long ago
 A brewing in ancestral memory
 An aching in our bellies
 An urgency under persistent feet

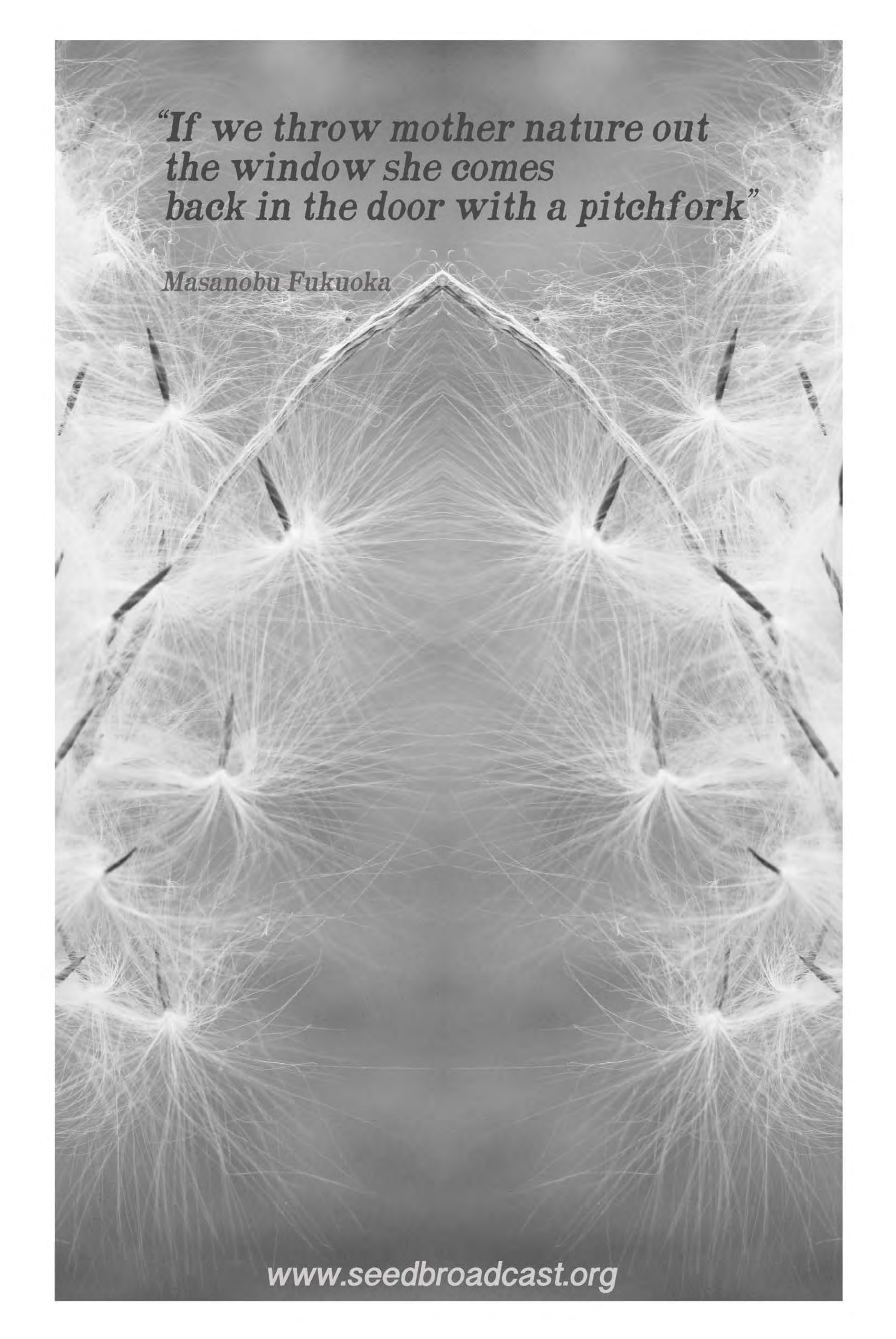
Es un gran amor no correspondido
 Un pedacito de tierra pa' cultivar
 Un cachito de sol que apartar para la larga noche
 Una mirada de ti bajo la luna

The brown of this land is an herencia of our grandmothers
 What they sprinkle in the dreams we conjure with chile
 What they braid in our trenzas when we cross that border
 It's the prayer they sent with us to school every day in the morning
 "Tu puedes mija, they said.

Because our abuelas could, because our babies will, because we've been"

The brown of this land lives
 In our daring to exist

TANNIA ESPARZA IS A QUEER XICANA FROM SANTA BARBARA, CA WHO IS PROUD TO COME FROM AN IMMIGRANT FAMILY OF STRONG, DETERMINED WOMEN. FOR THE PAST FOUR YEARS SHE HAS BEEN HONORED TO HAVE FOUND HOME IN THE BRAVE, RESILIENT BROWN OF NUEVO MEXICO. SHE IS THE EXECUTIVE DIRECTOR AT YOUNG WOMEN UNITED (YWU), WHERE SHE LEADS POLICY, COMMUNITY ORGANIZING AND CULTURE SHIFT STRATEGIES TO BUILD COMMUNITIES WHERE ALL PEOPLE CAN MAKE REAL DECISIONS ABOUT THEIR OWN BODIES AND LIVES SHE IS A WRITER WHO RECLAIMS STORYTELLING AND EMBODIED KNOWLEDGE AS TRAUMA HEALING TOOLS IN HER REPRODUCTIVE JUSTICE WORK.



*“If we throw mother nature out
the window she comes
back in the door with a pitchfork”*

Masanobu Fukuoka

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