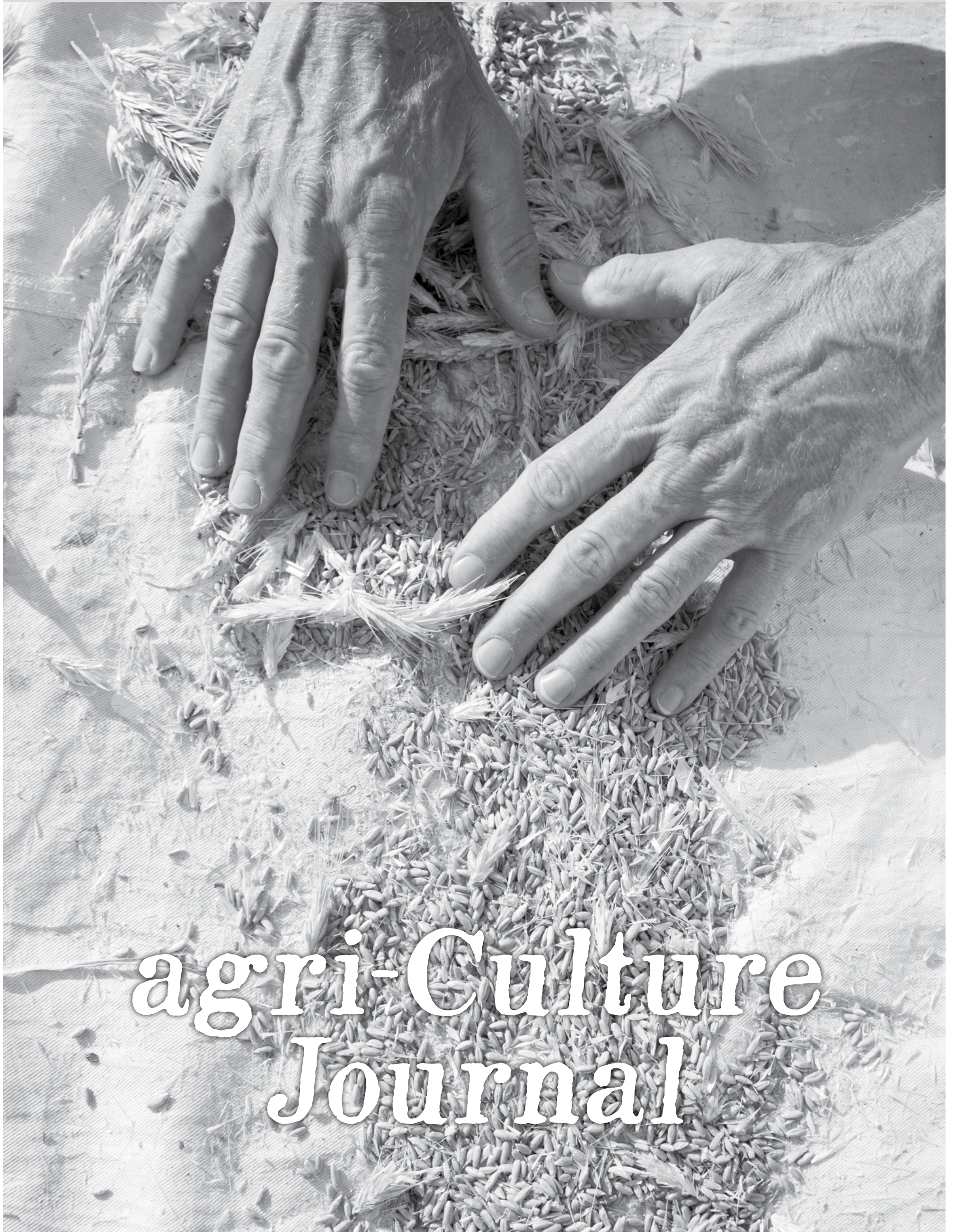


Seed Broadcast



agri-Culture
Journal

Cultivating Diverse Varieties of Resilience #10



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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.



10th Edition SeedBroadcast Journal

We would like to thank all who generously contributed to our 10th 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 11th edition that will be published in the Autumn of 2018. This contribution could be a drawing, photograph, story, recipe, poem, or an essay, with relevance to the essence of seeds, seed saving practices and food sovereignty.

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 4" x 6", and send us your mailing address as we will mail you a stack of printed copies to distribute in your own locale.

You can keep up with our actions and encounters with other seed lovers at on our website www.seedbroadcast.org and follow our blog at seedbroadcast.blogspot.com

THE DEADLINE FOR SUBMISSIONS IS SEPTEMBER 15TH, 2018

Send submissions to seedbroadcast@gmail.com

You can keep up with our actions 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 Littlelobe, the McCune Charitable Foundation, Robert Rauschenberg Foundation Climate Change Solutions Fund, Native Seeds/SEARCH, 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' aan Lifelong Learning Community in Hogback, New Mexico, Beata Tsosie-Peña of Santa Clara Pueblo and the Española Food Oasis www.facebook.com/Espaola-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, Cristobal Wells, allspeciesprojects.com Ana Ruiz Díaz and Toña Osher for building our relationship to community actions and seed activists from Meso-America and to the many individuals for their continued support, Whitney Stewart for graphic design, Natalie Keys for transcribing and Cirelda Byran for distribution, and to the amazing anonymous donors that continue to support our work. 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

“Whoever could make two ears of corn or two blades of grass to grow upon a spot of ground where only one grew before, would deserve better of mankind, and do more essential service to his country than the whole race of politicians put together.”

Gulliver's Travels, Jonathan Swift (1726)

As we all know these times in which we are living can feel like the upside down times. Our world is spinning faster and faster so it is hard to keep up with all that comes our way. What we have known, or feel we know well, is constantly shifting and changing, sometimes for the better and often for the not so good of this planet. All can be over whelming and out of balance. However there are meaningful ways to ground ourselves back into this world, these ways might be different for all of us but we at SeedBroadcast have been following the way of the seed and are dedicated to what they teach us and in return offer our support to keep their nurturing stories alive and in good health.

We too are seeds...

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.

WHAT IS SEEDBROADCAST PLANNING FOR 2018/2019?

SEED: CLIMATE CHANGE RESILIENCE

A CREATIVE ARTS AND COMMUNITY ENGAGEMENT PROJECT.

New Mexico agriculture and food production are under increasing threat by extreme drought and weather conditions. Seen through the lens of a rapidly changing climate, these issues are central to current debates about how to feed people in the not so distant future, when feeding people will hinge on whether or not agro-industrial technologies can adapt and prevail. The majority of political, economic, and technological efforts on this front, place human agency in the hands of agro-industry through machines, genetic engineering, deeper water wells, chemicals, geoengineering, and swaths of sterile farm land that resemble biological blank canvases where dreams of food security will grow. These are all top-down approaches that discourage working farmers, gardeners, and people who care to be agents of change in their own right and in their own communities.

What often takes the back seat in these conversations is the significance of historic farming methods, which are rooted in climate appropriate bio-regional sustainability and a deep kinship that connects people, land, and biodiversity through hands-on labor, empathy, and wisdom. As a resilient legacy, these traditional methods have been tested and refined over thousands of years with the intention to encourage biodiversity, which in turn, enables adaptation, to ensure harvest and food security in even the most challenging environments. New Mexico holds an important place in this regard. Indigenous communities and more recent acequia farmers across New Mexico have practiced arid-land agriculture for hundreds and thousands of years through stewarding environmentally diverse adapted crops and seeds, while carefully tending land, water, knowledge, and their agricultural practices. Over the last century these traditions have been displaced by industrial agendas and imported foods, consequentially leading to the loss of these significant practices as aging farmers are marginalized and their wisdom is lost. Currently however, there is a resurgence to reclaim these practices by New Mexico indigenous communities and acequia farmers who value their cultural significance and legacy as proven approaches to climate appropriate food production, land stewardship, and community health. These efforts are bringing back native seeds and crops, improving soils, conserving water, inspiring youth, gathering community, and teaching people how to eat the local food they grow.



Seed: Climate Change Resilience is a collaborative art project, which documents and shares the importance of these historic, yet re-emerging, traditional practices as they revitalize New Mexico agriculture and nurture community resiliency in the face of extreme weather conditions, environmental degradation, food insecurity, and marginalization of traditional ecologic knowledge. At the center of this impulse is seed. Seeds are what make food possible and seeds embody the long-view of what we call climate through the biodiversity they engender over time. They are what we know of change, possibility, and adaptation. For time immemorial people around the world have tended their crops with the knowledge and practice of seed saving. Year after year, and from hand to hand, seeds have sprouted to provide sustenance and life. Emerging in place, seeds have adapted to changing climatic conditions while teaching people how to grow food in relation to complex ecologic contexts. This interdependence between seed, people, and the land has deep roots in what we call agri-Culture. This term is not a play on the word agriculture. Rather, it is a reckoning. It is resistance to believing that farming, food, cooking, and eating are anything less than deeply embodied and creative processes cultivating a genius of place and relationships between all, both human and more. It is a life practice that draws together doing and knowing, knowing and doing. At its core is sensing the world, avowing its creativity, nourishing its stories, and laboring for its love.

New Mexico farmers and gardeners are stewards of resilient traditions and they are weaving the past, present, and future together to creatively tackle the most pressing issue of our time; asking how do we sustainably feed billions in a climate of global warming? In 2016-17, SeedBroadcast partnered with Native Seeds/SEARCH and Northern New Mexican indigenous seed savers, acequia farmers, urban-indigenous permaculturists, and youth to creatively explore Seed Resilience in the face of Climate Change. We began this project in 2016 with funding from Robert Rauschenberg Foundation Climate Change Solutions Fund and have since continued this important work with the support from many other organizations and individuals. During the initial process we followed four farm projects over the course of an entire year, from spring, through summer and autumn harvest. Over these seasons we interviewed these farmers and community members and used photography and audio interviews to record a multimedia timeline of seasonal happenings: from seeds, to cultivating, planting, tending, drought, locusts, hail, labor, struggle, harvest, and community. Since then we have worked with these partners to publish a series of photo essays in previous *SeedBroadcast agri-Culture Journals* *SeedBroadcast agri-Culture Journal #7*, pages 24 – 31, and *SeedBroadcast agri-Culture Journal #8*, pages 26 – 35 and are completing collaborative prints to be shared directly with these partners' communities in 2018.

We are now in the process of pulling this content together for an exhibition at the Albuquerque Museum of Art and History in order to inspire dialogue around global warming, local food, healthy communities, and the revitalization of bioregional indigenous agri-Cultural practices. Through collaborative and creative works, this project challenges the dominant view that food security can only be achieved through top-down approaches of industrial agriculture and technocratic solutions that are domineering, homogenous, impersonal, and impassive. As an alternative, Seed: Climate Change Resilience offers a counterpoint through creative art platforms that give voice to the many stories of land-based New Mexico farmers, the diverse traditions they are reclaiming, and the deeply intimate, inspiring, passionate, and nimble approaches they foster in their communities. As nurturing expressions, these stories reveal the essential connection between care, empathy, resiliency, and ecologic relationships, which no machine, technology, or industry can achieve. In this project, farming is also posited as an artistic endeavor itself, acknowledging the creativity, agency, artistry, and cultural significance traditional farmers and land-based communities employ. Furthermore, using art as a catalyst to "seed" this process, reaffirms this

co-commitment through bringing together artists and farmers to explore cross-disciplinary dialogue and creative collaboration in order to advance knowledge about historic farming practices, generate new forms of art, and instigate public awareness and conversation.

We are honored and excited to bring this project to life, share it with a diverse public audience, and stimulate conversations about bioregional farming, food security, and global warming. But we need your help! We are asking for your help to bring this project to fruition.

The exhibition will take place June 22 – September 29, 2019 in Albuquerque, NM.

Here's how you can help:

- We are seeking tax-deductible donations to support community engagement events, educational programming, and publication of a catalog for this exhibition. See donation info below.
- Share a Seed Story about a seed you admire and its extraordinary resilience.

These Seed Stories will be included in a sculptural installation in the exhibition to honor these seeds and share their inspiration with others.

CONTACT SEEDBROADCAST FOR MORE DETAILS ABOUT HOW YOU CAN PARTICIPATE: SEEDBROADCAST@GMAIL.COM

PHOTO CREDIT: SEEDBROADCAST
SOUTHWEST CONSERVATION CORPS. ACOMA, NEW MEXICO

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

www.littlelobe.org/portfolio/seedbroadcast

Or contact our fiscal sponsor Littlelobe for other payment options:

Phone: 505.980.6218

Email: info@littlelobe.org

Your donation will help us to keep activating local food and seed resiliency through community partnerships.

It will help keep the agri-Culture Journal free and distributed from hand to hand.

It will help sprout SeedBroadcast projects, such as expanding our relationship with seed activists in Meso-America and allow us to deepen our community-based responses to seeds and climate resiliency.

It will support the creation of installations of localized documentary images and text with community engaged actions in Acoma and Española, leading up to a Seed and Climate Resilience exhibition and community engagement in partnership with the Albuquerque Museum, Native Seeds/SEARCH and farmers in the Summer of 2019.

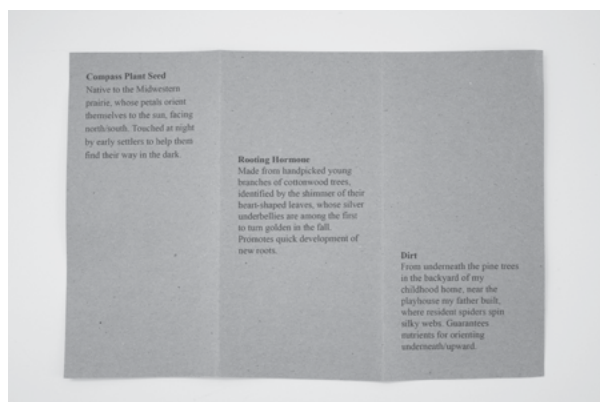
SeedBroadcast has been and continues to be funded by in-kind donations of time, labor, and money from collective SeedBroadcasters. SeedBroadcast has received generous grants from the Kindle Project Fund of the Common Counsel Foundation, McCune Charitable Foundation, the Robert Rauschenberg Foundation and anonymous donors that support our continued 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 2018/2019 plans can be put into action, the With the increasing demands for SEED Action now, we need help to ensure that our ever expanding actions and our partnerships with Native Seeds/SEARCH, the Albuquerque Museum and community activist organizations 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!

ORIENTATION KIT AMBER EVE ANDERSON

20 kits, each including 1 compass plant seed, 1 bottle of homemade rooting hormone, and dirt from my childhood home. I mailed one Orientation Kit to each of my previous 20 addresses in an attempt to orient myself beyond the directions of a map or the points of a compass.



AMBER EVE ANDERSON IS A MULTIDISCIPLINARY ARTIST WHOSE WORK USES IMAGES, OBJECTS, AND LANGUAGE TO RECONSTRUCT PERSONAL NARRATIVES IN AN ONGOING ATTEMPT TO UNDERSTAND THE MEANING OF HOME. SHE GRADUATED WITH HER MFA FROM THE MOUNT ROYAL SCHOOL OF ART AT MICA AND IS CURRENTLY A RESIDENT ARTIST AT SCHOOL 33 IN BALTIMORE, MD.

AMBEREVEANDERSON.COM

PHOTO CREDIT: AMBER EVE ANDERSON

HUNTER IS A POET MOST OFTEN INTERACTING WITH THE INTERSECTIONAL SUBJECTS OF CIVILIZATION, 'NATURE', 'THE WILD', DISCOURSE AND METANARRATIVE, PAN AND DIONYSUS, SEXUALITY, FOLK MAGIC, PSYCHEDELICS, AND PLANTS AND IS A VOLUNTEER WITH NATIVE SEEDS/SEARCH, IN TUSCON, ARIZONA

TOMATOES HUNTER DOUGLAS SMITH

Tomatoes: and I'm not just talking about the big, fat, and the shiny
beefsteak, roma

tomatoes that sit serried and glossy, sirensong red berries (the ones you buy buried in plastic in CarreFour). not talking about fruit eidetic of homicidal hydroponic baths and the Almerian conurbations of polytunnels and slums
my flashbacks in the supermarket.

I'm talking about *tomatoes*, san gorzano, penta pera,
the kind that scramble around the bases of young mulberry trees thick in growth
and up peaked *caña* structures, the horns of the Andes wreathed with the yellow roses of Bern.
that fall in your hands as you stoop and scrounge for tomatoes gordos in their summer
nightshade leaves,
like panning the headwaters of the Genal for plato de Algeciras.

yellow pentacle flowers. small green berries. ripening slowly
into reds.

(yes, but also)
yellows, purples, pinks, and the colors of the others
torpedo, plum, cherry, principe borghese
and, further, the varieties of which I haven't yet heard a word;

Cradle their *niñitos* in dry and warm places, fold them in paper envelopes the ambiguous
color of humus.

mucho miel tardio, cuelga
cup them as baby birds in your warm, living hands.

Carry on this beautiful, mixing miscegenation in melting pot gardens,
Continue the life of each subspecies, each variety, each variation and cross-bred misfit

¿green bell pepper? ¿pumpkin gordo?
those shapes and sizes and colors of the so many beings we call the tomato
plant.

*(Beefsteaks and Romas were all that was left in my nightmares, shelved on gleaming
racks in Mercadona)*

myopic profit-driven schemes with no foreseeing prophet,
what the hell will happen to the seeds?!

Press one finger gently, into the soil, and with the other
take the pale yellow drops of a tomato
Plant.

TO THE SEEDS (A LOVE POEM)

JIM VETETO

For Bob Rhoades, Virginia Nazarea, Gary Nabhan, Brian Campbell, Bill Best, John Coykendall, Wade & Troy McCoury, Lee Barnes, Zev Friedman, Joe Hollis, Arthur Hollifield, Ernie & Darick Bradford, Theron Edwards, Roy Lambert, Kevin Welch, Bill Moretz, Doug Elliot & Yanna Fishman, Jimmy Cooley, Christof den Biggelaar, Sally Bradley, Vandana Shiva, and all the other seed saving colporteurs of the world.

In the mountains on the way back from a Southern Seed Legacy seed swap at Hagood Mills Historic Site, Pickens County, South Carolina, where we shared hundreds of thousands of seeds with close to a thousand people.



I owe you everything,
my life.

Seed, sprout, sustenance
nourishment.

In my early twenties
you grabbed ahold of me
changed the course of everything

Transfixed me
with your patterns

streaked, speckled, striped, mottled
cutshort, crowder
greasy, bunch, cornfield, pole

Grabbed me with your stories
your memories
your generations
and never let go.

Guided me
through three degree programs
seven farms
countless talks and presentations,
swaps.

The people I've met through you
fascinating, complex, deep, creative,
practical

colporteurs, farmers, professors, Indigenous
peoples, Old-timey Southerners, Mountain
men & women, orchardists, permaculturalists,
anarchists, campesinos, artists, musicians,
lovers, friends

Magnificent gardeners all
living the spark
got that smiling twinkle
in their eyes
even as wrinkles
overtake the edges.

There's something magic in a seed
and something magic
in the people who take interest in them,
steward them,
dance with them
season after season.

Every single spring
when I stick my hands in Earth
and drop your small, circular
living dormant forms
into soil
I wonder:

will you come up?
will you feed us?

is this miracle

possible

once more?

And then the tastes, flavors
subtleties, textures, juices
liquids, crunches, soups, elixirs, beverages
smiles, giggles, contented sighs, flowers
meals, feasts, potlucks, bbq's

out in the fields, inside the kitchens
morning, night, day, overnight

we play
we dance
we enjoy
we benefit
we live
you give

I wonder
if I really plant you
or have you planted me?

You've grown me from a young man
into adulthood
in your garden of earthly delights

fed me
nourished me

I save you
season to season
field to field
farm to farm
year to year
state to state
job to job
person to person
lover to lover
friend to friend
family to family

lives hurtle forward
turn over
like fresh tilled soil

and you never fail me,
ever.

I save you
carefully, gently, diligently
harvest you in time
sing to you
dry you
store you
swap you
spread you around
millions of seeds
countlessly passing hands
telling stories
making old men
young women
students
children,
making all sentient beings smile,
making them curious

feeding them abundance
you so selflessly give
—multiply,
one grain bears a thousand—
so that we may live

I save you
season to season
these twenty years
this love affair
of life well-lived,
we spend
meaningful time,
in meaningful places
creating
sacred spaces
with beautiful faces
benevolent teachers
elders
all sowing each other
reaping fellowship, communion
community
tenuous yet strong bonds

contained in what seems like
a simple seed
—just a simple seed—
yet you bind us all together

bind us to soil
to air
to wind
to water

you pass hands,
we pass generations,
lives,
centuries,
millennia,
you bind us all together
in cornucopia cycle
unbound

I plant you
save you
from year to year,
this life.

But it is you

who has

really

planted

me.

It is you

who has

saved

me.

JIM VETETO IS A LONG-TIME SEEDSAVER AND DIRECTOR OF THE SOUTHERN SEED LEGACY PROJECT. HE MAINTAINS A SEEDBANK WITH OVER 2000 SOUTHERN HEIRLOOM SEED VARIETIES AND A 100-TREE HEIRLOOM FRUIT ORCHARD AT THE APPALACHIAN INSTITUTE FOR MOUNTAIN STUDIES IN CELO, NC. HE HAS DONE LONG-TERM RESEARCH ON SEED DIVERSITY AND CULTURAL MEMORY IN THE SOUTHERN APPALACHIAN MOUNTAINS AND IS ASSOCIATE PROFESSOR OF ANTHROPOLOGY AND CHEROKEE STUDIES AT WESTERN CAROLINA UNIVERSITY.

PHOTO CREDIT: SEEDBROADCAST

SEED EARRINGS

BECCA VASQUEZ

SPANISH TRANSLATION BY ETHEL RECINOS CRISTALES



While visiting El Paso, Texas I noticed an alluring desert bush. It was attracting butterflies just outside a restaurant window. A fern lover, I stared curiously at the feathery fern-like foliage. I watched as the brightly colored, flaming orange and red clustered blooms with long stamens softly moved in the dry breeze. In the southwestern United States, this popular landscaping bush is a drought resistant perennial, that is commonly known as the Red Bird of Paradise (*Caesalpinia pulcherrima*). Although it likely evolved in the West Indies, after widespread cultivation around the world, its exact origins are unknown.

When the blooms begin to fade and fall, the seed pods (roughly 3-6 inches in length) twist, dry, and drop their seeds. The pods harden into a thick, tree bark-like texture. I saved some of the seed pods and their seeds, taking them home with me back to the Midwest. The pods are slightly poisonous containing tannin (aka tannin's), its' defense against predators, so when making them into earrings I coated them with a thick glossy finish. I stared at myself in the bathroom mirror and moved my head slowly, making the earrings twist and turn. The earrings are elegant and engaging. People are linked to history, as are plants, I wondered what sort of history the Red Bird of Paradise was tied to.

I came across a connection between the Red Bird of Paradise (the Pride of Barbados/Peacock Flower) and Maria Sibylla Merian, who was a naturalist and an illustrator in the 1600s and early 1700s. Merian sold her drawings to fund her travel from Europe to the Dutch Colony in Suriname, located on the northeastern coast of South America, to study tropical insects and plants in their natural habitat. While in Suriname, she interviewed indigenous people and African slave women who spoke of the injustices of slavery and how the Red Bird of Paradise/"ayoowiri" was used as an abortifacient—as form of rebellion against their slave owners. These accounts of injustices were published in her book called *Metamorphosis of the Insects of Suriname* (*Metamorphosis insectorum Surinamensium*) along with her detailed drawing of the Peacock Flower (Red Bird of Paradise). She recorded: "The Indians, who are not treated well by their Dutch masters, use the seeds to abort their children, so that they will not become slaves like themselves. The black slaves from Guinea and Angola have demanded to be well treated, threatening to refuse to have children. In fact, they sometimes take their own lives because they are treated so badly, and because they believe they will be born again, free and living in their own land. They told me this themselves." After making the Red Bird of Paradise earrings, I made earrings out of purple corn husks and radish seed pods that were grown in Cedar Rapids, IA by my friends and myself. The earrings are a conversation starter for seed saving topics. The act of sharing and saving diverse seeds, and sharing one's personal stories and ancestral history tied to those seeds helps to build community, food sovereignty, and environmental stewardship. While wearing the seed earrings, I feel the weight of their importance, and also their disappearance. It's a constant reminder of voicing the need to learn how to grow, preserve, and share the seeds, as well as their history and the deep connections they share with us.



BECCA VASQUEZ IS FROM CEDAR RAPIDS, IA. SHE IS CURRENTLY COLLABORATING WITH COMMUNITY MEMBERS AND NON-PROFITS IN LINN COUNTY TO HELP CREATE A SEED LIBRARY AND SEED BANK. SHE IS ESPECIALLY INTERESTED IN LEARNING TO SAVE SEEDS TIED TO HER MEXICAN CULTURE.

VASQUEZ.REBECCA.22@GMAIL.COM

Mientras visitaba El Paso, Texas me di cuenta de un atrayente arbusto desierto. El arbusto estaba atrayendo mariposas justo afuera de la ventana de un restaurante. Siendo un amante de los helechos, me le quede viendo con curiosidad al follaje plumoso. Observaba mientras las agrupaciones de floraciones brillantes de llameante naranja y rojo con estambres largos se movían suavemente en la brisa seca. En el sudoeste de los Estados Unidos, este popular arbusto de jardinería es una planta perenne resistente a la sequía, que se conoce como el Pájaro Rojo del Paraíso. Aunque probablemente evolucionó en las Indias Occidentales, después de un cultivo generalizado en todo el mundo, se desconocen sus orígenes exactos.

Cuando las flores comienzan a desvanecerse y caer, las vainas de las semillas (aproximadamente 3-6 pulgadas de largo) se retuercen, secan y dejan caer sus semillas. Las vainas se endurecen en una gruesa textura de corteza de árbol. Guardé algunas de las semillas y sus semillas, llevándolas a casa conmigo al Medio Oeste. Las vainas contienen tanino y son venenosas, es su defensa contra los depredadores, así que cuando los convertí en aretes, los recubrí con un acabado brillante y espeso. Me miré en el espejo del baño y moví la cabeza lentamente, haciendo que los aretes giraran y giraran. Los aretes son elegantes y atractivos. Las personas están conectadas a la historia, al igual que las plantas, me preguntaba a qué tipo de historia estaba conectada al Pájaro Rojo del Paraíso.

Encontré una conexión entre Pájaro Rojo del Paraíso y Maria Sibylla Merian, quien era naturalista e ilustradora en los 1600's y tempranos 1700's. Merian vendía sus dibujos para financiar su viaje desde Europa a la colonia holandesa en Suriname, ubicada en la costa noreste de Sudamérica, para estudiar insectos tropicales y plantas en su hábitat natural. Mientras estuvo en Suriname, entrevistó a indígenas y esclavas africanas que hablaban de las injusticias de la esclavitud y cómo el Ave



ETHEL IS CURRENTLY WORKING AS A STORYTELLER AND COMMUNICATOR AT A FOOD SECURITY AND INDIGENOUS RIGHTS ORGANIZATION IN THE WESTERN HIGHLANDS OF GUATEMALA.

Roja del Paraíso / "ayoowiri" se usó como una forma abortiva de rebelión contra sus dueños de esclavos. Estas injusticias fueron publicadas en su libro llamado Metamorfosis de los insectos de Surinam (*Metamorphosis insectorum Surinamensium*) junto con su dibujo detallado de la flor del pavo real (Ave del paraíso roja). Ella grabó: "Los indios, que no son tratados bien por sus amos holandeses, usan las semillas para abortar a sus hijos, para que no se conviertan en esclavos como ellos. Los esclavos negros de Guinea y Angola han exigido un buen trato, amenazando negarse a tener hijos.

De hecho, a veces se quitan la vida porque se les trata tan mal, y porque creen que nacerán de nuevo, serán libres y vivirán en su propia tierra. Me dijeron esto ellos mismos ". Después de hacer los aretes de Pájaro Rojo del Paraíso, hice unos aretes con cáscaras de maíz morado y vainas de semillas de rábano cultivadas en Cedar Rapids, IA por mis amigos y por mí mismo. Los aretes son un tema de conversación para temas de ahorro de semillas. El acto de compartir y guardar semillas diversas, y compartir las historias personales y la historia ancestral ligadas a esas semillas ayuda a construir la comunidad, la soberanía alimentaria y la administración ambiental. Mientras uso los aretes de semillas, siento el peso de su importancia, y también su desaparición. Es un recordatorio constante de expresar la necesidad de aprender cómo cultivar, preservar y compartir las semillas, así como su historia y las profundas conexiones que comparten con nosotros.

SEED REMATRIATION; BRINGING OUR SEEDS HOME

ROWEN WHITE

The seeds are coming home to us. Across Turtle Island, there is a growing intergenerational movement of indigenous people proud to carry the message of the grand repatriation of seeds and foods back into our indigenous communities. Some having been missing from our communities for centuries; carried on long journeys in smoky buckskin pouches, upon the necks of peoples who were forced to relocate from the land of their births, their ancestral grounds. Generations later, these seeds are now coming back home; from the vaults of public institutions, seed banks, universities, seedkeeper collections and some laying upon dusty pantry shelves of foresighted elders, seeds patiently sleeping and dreaming. Seeds waiting for loving hands to patiently place them into welcoming soil once more so that they can continue to fulfill their original agreement to help feed the people.

"Repatriation; This term describes an instance where land, air, water, animals, plants, ideas and ways of doing things and living are purposefully returned to their original natural context—their mother, the great Female Holy Wild. Like the repatriation of prisoners after years of war or millennia of unwilling slavery in service to an unconscious civilization, exploited and depleted for their wild vitality, any attempt to 'repatriate' them back to the Holy in Nature is the beginning of cultural sanity and healing" (Martin Prechtel, The Unlikely Peace of Cuchamaquic)

There is a healing and hopeful trend that is emerging at the cutting edge of the indigenous food/seed sovereignty movement and the social justice movement, which is in the Repatriation of Seeds. We are all familiar with the journey for the repatriation of cultural property within indigenous communities. Within native communities we are very familiar with the word Repatriation, which is the return of treasures, ancestral remains and sacred objects of cultural heritage to their communities of origin and their descendants. The displaced cultural property items are physical artifacts that were taken from this place and people of origin usually in an act of theft, whether in the context of imperialism, colonialism or war. The Native American Graves Protection and Repatriation Act (Public Law 101-601; 25 U.S.C. 3001-3013) describes the rights of Native American lineal descendants, Indian tribes, and Native Hawaiian organizations with respect to the treatment, repatriation, and disposition of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony, referred to collectively in the statute as cultural items, with which they can show a relationship of lineal descent or cultural



affiliation. In the seed movement, we have begun to use the word "Rematriation" as it relates to bringing these seeds home again. In many communities, including my own Mohawk tradition, the responsibility of caring for the seeds over the generations is ultimately within the women's realm. Both men and women farm and plant seeds, but their care and stewardship are part of the women's bundle of responsibility. So the word "rematriation" reflects the restoration of the feminine seeds back into the communities of origin. The Indigenous concept of Rematriation refers to reclaiming of ancestral remains, spirituality, culture, knowledge and resources, instead of the more Patriarchally associated Repatriation. It simply means back to Mother Earth, a return to our origins, to life and co-creation, rather than Patriarchal destruction and colonisation, a reclamation of germination, of the life giving force of the Divine Female.

Over the last few centuries of the disruption of our indigenous food systems, many of our traditional varieties have left our communities, only to be stewarded by non-native farmers or seedkeepers. In addition, many of these traditional seeds have been stewarded or stored within public or private collections, institutions and organizations such as public seed banks, universities, museums and seed companies. As a part of the indigenous seed sovereignty movement, we are recognizing the need for these seeds to be back in living context. In an era of displacement and acculturation, some of these varieties were completely lost in their communities of origin, and we are now locating derivatives of these seeds in such public and private collections. Some were carried on long journeys in smoky buckskin pouches, upon the necks of peoples who were forced to relocate from the land of their births, their ancestral grounds. Some of these seeds remained in the hands of our people, and some of the seeds left, sometimes by force or theft, and also by trade or gift. Seeds move and migrate, just like people do.

As it has been told to me by my elders, people who have taught me well, who themselves have learned from the seeds as teachers along this pollen path that we walk...the seeds are a reflection of the people...when the seeds are weak and struggling, it means our communities and nations and people are struggling...and when our seeds are strong, it means our nations and communities and people are strong and in good health. That these sacred and precious seeds carry our story, sprouting alive into new form to nourish us in many ways. Our beautiful seeds are deeply connected to lineage and specific lands of origin. These foods and seeds are our mirror, our reflection; their life is our life, we are intimately intertwined with their wellbeing. We are bound in a reciprocal relationship with seeds that extends past beyond living memory...these agreements between us and the plant kin-dom are imprinted into our cellular memory... These food plants and seeds have been with us all since the dawning of our creation stories..they are the extension of a thousands years old lineage of responsive and respectful seed stewardship; the seeds always adapting and responding to the changes in the face of our Mother Earth.

For this I deeply thank all of the foresighted elders and ancestors for keeping the seeds alive during times of incredible oppression and acculturation, without which we would not have these seeds today.

What an act of courage for our ancestors to keep the seeds protected and safe in the face of violent transitions, relocations, assimilations, and war. What an act of courage to think creatively and proactively in the face of disease, and look to food, agriculture and seeds as a vessel for our collective healing and transformation. What an act of courage to plant a seed and save it again for future generations.

Rematriation is deep and multi-layered. As we carry these sacred bundles of our seed relatives home to their mother communities, we re-awaken time honored relationships once again. When we come together to cultivate the Earth and sing our seedsongs and prayers on behalf of future generations, we embody the great generous and benevolence of our own beloved Mother Earth.

There is powerful healing work of reconciliation when we work cross-culturally to bring these seeds home to their communities of origin. We are working within the Indigenous SeedKeepers Network to assist communities who are working towards Rematriation of their precious seed relatives. We are working cross culturally with many stakeholders, including native farmers and gardeners and representatives from tribal communities, institutions and organizations who have such seed collections, and also other people who can help facilitate and lay out the needed framework to assist in these seeds finding their way home. We are working towards establishing the protocols and guidelines in this complex and healing work of seed reconciliation. There are deeply embedded cultural and spiritual aspects of these work, as well as legal and political aspects that directly address seed justice. "It is not enough to save heritage seeds. The culture of those people to whom each seed belongs must be kept alive along with seeds and their cultivation. Not in freezers or museums but in their own soil and our daily lives." (Prechtel, 2012, forward)

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



Here are two bags of corn seeds of two rare ancestral Haudenosaunee corn varieties, one of which had been lost in our Haudenosaunee communities. Iroquois Tooth corn on the left and Seneca Hominy on the right. Now I am helping to rematriate them back home in this project we are working with Indigenous SeedKeepers Network. I feel like this is such an honor to serve the seeds in this way, working with public and non-profit institutions such as Seed Savers Exchange to restore such varieties back into cultural contexts and tribal communities of origin. Thankful for the incredible resilient journey that these seeds have been on in the last many decades, and for all the hands which have kept these seeds alive amidst such transitions over the last several generations. We carry these seeds our relatives and ancestors back home to the feast table and community gardens. I feel as though my seed service is all for moments like this. It's deeply healing to offer these precious seeds entry back into living context outside the seed vault. It's emotional and deeply nourishing, working through intergenerational grief and trauma to work cross culturally to care for these seeds once again, cultivating and restoring trust and collaborative relationships where we all can honor our ancestral agreements to care for the seeds, and work together to heal the wounds of the past.

Part of this rematriation path, of finding our seed relatives and carrying them home, is reawakening the intertwined harmonies of seedsongs of our ancestors, ourselves and those yet to come. Whatever it takes, we must continue to carry our ancestors greatness into tomorrow, and our seeds are one of their precious gifts for us in this day... Inside those seeds, Our ancestors prayers are still protecting us. Our voices come together with theirs as we make the needed prayers for those yet to come. As we welcome the seeds home, we step into each day in ways that make our ancestors proud, may those songs of resilience that course through our blood and bones give us the strength to do what needs to be done to feed the children. Today we worked together to greet acknowledge the path ahead to uphold our responsibilities to our ancestors, our children and all our relations. I am thankful to have met so many amazing indigenous farmers and gardeners who are joining this seed revolution and bringing our seeds home. Pawnee seedkeepers bringing home seeds to ancestral soil, working hand in hand with settler descendants in a grand act of reconciliation to keep the seeds alive; Ponca farmers planting red corn in ancestral fields for the first time in 167 years since relocation; Mohawk farmers working in collaboration with farmers of many settler descendants to rematriate traditional seeds to ancestral farming grounds; heirloom beans and corn emerging from museums and seed bank vaults to the loving and calloused hands of native peoples, who see these seeds and foods as treasured relatives. Knowing that our hearts beat in promise to carry this bundle of seed gifts to share with the world, these seeds help us to hydrate the stories that make up the constellation of who we are. May we continue to be there for these seeds, as we turn our prayers into actions for this new day, may we remember we are the sweet water held in the snow, which will melt in time to bring the fragrant wild flowers in the coming season.

Each one of us reading this has the ancient and cellular memory of being a seedkeeper; the communities we descend are resilient and tenacious survivors. Just like our seeds, we have overcome so much adversity.

In the kernels of these red corn seeds being rematriated to ancestral homes and hearths there is a seedsong and story.

This is a story of healing through many generations.

A great-great-granddaughter who is allowed to speak her language,

This is the story of a mother who sings the songs of the sacred corn to her children.

This is the story of children being proud of who they are, where they come from.

This is the story of my great-great-grandmothers dreams and wishes coming to life,

In the beat of the water drum and the seeds of the rattle.

This is the story of intergenerational resilience coming alive to dance into another day.

The seeds are the witnesses of the past, and also the hope for the future. I'm so thankful these seeds have endured. I promise to carry them well to hands of children and grandchildren who love them like family members.

We all carry rivers of the fierce love of so many strong women in our blood...deep seeded love which has whispered to our own hearts how to care and nurture, how to love and protect, how to carry a heavy burden with laughter and hope in our heart, how to make sacrifices to do what must be done to feed the children. We descend from women, from the dawning of our Creation story, when Original Woman shuffled her feet upon the Earth, carrying seeds in her hand and singing the world awake...all of us, we descend from those kind of women; creative, fertile, fierce, loving, complex, insightful, wise, resourceful, and ever-changing. The infinite faces of the feminine, we honor you. As a Mohawk SeedKeeper, I am thankful to dance through life in this same manner, in a continuation of this Creation story, which never did end...it is kept alive in the small loving acts of mothers caring for children, in women's hands planting seeds, in the soft lullabies sung to newborns, in the fierce determination of a mother working the night shift so she feed her babies, women standing on the front lines to sing songs for the waters and the earth, women's hands making art, writing stories, playing music, building homes, oh the creative and healing hands of women. I am thankful that a day without women is not possible, that our lives are infused with the rich and earthy presence of women of all colors and creeds. I am thankful for all the women in my life, who inspire me each day to stand up in honor of Life. "And so our mothers and grandmothers have, more often than not anonymously, handed on the creative spark, the seed of the flower they themselves never hoped to see - or like a sealed letter they could not plainly read."

**The Seeds are coming home to us.
They are helping us to heal.**



WE GARDEN UNDER BLUE LIGHTS

KAREN BRAU, EMILY C-D

Poet Karen Brau and artist Emily C-D came together in 2016 to publish *We Garden Under Blue Lights*, a collection of hopeful verses and watercolors about transforming blocks of Baltimore into greener spaces of grace. The book is inspired by Ed Miller and his work in Baltimore neighborhoods for over 15 years.

Supported by the nonprofit Civic Works, Ed has led a Community Lot Team that has practiced gardening in areas the Urban Dictionary calls “Blue Light Districts”—places in Baltimore City where blue police lights cover the top of street lights in order to monitor crime and violence using cameras that record all street activity. The urban matrix of neighborhoods crumbling physically, families strained by slim economic opportunity, and ongoing violence makes for a turbulent existence in Blue Light Districts.

The Community Lot Team has made way in the midst of turbulence. Organizing people and physical resources in creative ways marks the Community Lot Team’s work. They listen to the wisdom and dreams of residents, unearthing the stories of the space. The team uses the means of gleaning, foraging, and sifting to gather materials that have been cast off—marble steps, cobblestones, iron grates, bricks—to work with neighbors to create new stories of beauty and promise together. Brick by brick, tree by tree, and person by person, Ed Miller brings forth the inherent beauty of a city that the blue lights would condemn as forsaken.

The poems and illustrations from the book *We Garden Under Blue Lights*.

CHLOROS PRINTS

Chloros
the word is "green"
in Greek
green markings
plants sprouting
trees blooming
sunflower faces beaming
space vibrant
with nature life.

How do we mark Chloros
in our inner city Baltimore
where footprints of death
parade across the necks
of neighbors
and toxic spirits
leach lead
into broken hearts?
Chloros prints rise
when nature and people
team up.

A collaboration
of time and sweat
unhinged guerilla gardening
for a chloral juggernaut
of green grace
hopping in and out
of common life
in desolate stretches
of urban landscape.

Chloros prints in a broken Baltimore
the reality is grim
yet the forecast
is hope.



KAREN BRAU HAS SERVED AS AN URBAN LUTHERAN PASTOR FOR OVER 25 YEARS, 18 OF THOSE YEARS IN THE INNER CITY OF BALTIMORE. SHE BEGAN WRITING POETRY IN SEMINARY, AS SHE FOUND IT EXPRESSED HER ONGOING INTEREST IN GOD'S RELATIONSHIP TO PEOPLE AND PLACES. SHE LOVES TO SING, DANCE AND GARDEN – AND SUNFLOWERS ARE HER FAVORITE! KAREN CURRENTLY SERVES AS THE SENIOR PASTOR OF LUTHER PLACE MEMORIAL CHURCH IN DOWNTOWN WASHINGTON DC. SHE IS MARRIED TO ED MILLER.

EMILY C-C IS A MURALIST, ILLUSTRATOR, AND COLLAGER OF CONSTRUCTIONS MADE WITH THE THINGS OTHER PEOPLE THROW AWAY. SHE HAS WORKED WITH DIVERSE COMMUNITIES TO TRANSFORM WALLS, FLOORS, FENCES, BRIDGES, AND RIVERS IN BALTIMORE, WASHINGTON DC, MEXICO, AND COLOMBIA. EMILY HOPES TO INSPIRE PEOPLE TO USE THEIR IMAGINATIONS TO COOPERATE IN THE CREATION OF A MORE VIVID, JUST, AND LESS WASTEFUL WORLD. SHE CURRENTLY LIVES IN MEXICO WITH HER SON. WWW.EMILYCD.COM

THE BOOK "WE GARDEN UNDER BLUE LIGHTS CAN BE ORDERED FROM SUNFLOWERBRAU@HOTMAIL.COM

WE GARDEN UNDER BLUE LIGHTS

We garden under blue lights
affixed to a 30 foot pole
the blue lights flash
specially marking
our inner city acres.

To get blue lights
a street needs to have
enough gun shots
enough drug deals
enough walking dead
(hungry ghosts).

At these blue light places
we garden
first collecting pieces
of blue light toxic waste
needles, chicken boxes, mattresses,
rat carcasses, Colt 45 cans, sofas,
toilets, crack vials, bullet casings,
dirty diapers, broken barbies
carting them all away
in contractor bags
and dump trucks
replacing now vacant space
with organic matter
hummus soil
layering in life-giving compost
making a base for something new
with paths, trails, labyrinths
we mark a wandering course
of serenity and delight.
It's slow going
under the blue lights
they've presided over so much death
but the resurrection

is buds of brilliant blue
stems and stalks decorated
with rainbow petals
sunflowers towering
their faces of a thousand seeds
follow the sun
rocks smooth stones
in an imaginary river bed
boulders jut from deep-dug holes
secure in their new home
bushes creep around trees
slowly growing a canopy beauty.

After long hours
sweaty dirty work
sisters and brothers
young and old
gaze
at our blue light special
still remembering what was,
charmed by what is.



FARM STORIES FROM ESPAÑOLA FARMERS MARKET

SABRA MOORE

These three farm stories were collected at different periods by three artist-participants in THE FARM SHOW, a project I organized in two manifestations in 2014 and 2003. I was interested in the affinity between artists and farmers and liked the idea of artists going to the farms and farmers coming to the museum. Bobbe Besold interviewed Gloria and Noel Trujillo, growers she already knew from the Santa Fe Farmers Market who occasionally also sell in their home community in Espanola. Julie Wagner interviewed Eppie Martinez in 2003, a long-time grower at Espanola Farmers Market. I felt nostalgic re-reading Eppie's story. Eppie had been a cafeteria worker in the public schools, amassing a loyal coterie of friends who gathered to visit on Market Mondays. She has been dead for many years, but I can still picture her at the Market surrounded by her daughters and attentive companions. Gabriela Silva interviewed Margarito Hernandez, a man most popular at the Market for his chile.

As we enter a period of great climate uncertainty and approach spring here in New Mexico after an almost snowless winter, I remain grateful for this community of farmers, people who pay close attention to the land and know how to strategize during lean and turbulent times.

SABRA MOORE IS AN ARTIST AND WRITER LIVING IN ABIQUIU, NEW MEXICO. THIS IS HER NINETEENTH YEAR MANAGING THE ESPAÑOLA FARMERS MARKET. SABRA HAS ALWAYS WORKED WITH OTHERS AS PART OF HER ART PRACTICE. SHE WROTE *OPENINGS: A MEMOIR FROM THE WOMEN'S ART MOVEMENT, NEW YORK CITY, 1970-1992*, HER NARRATIVE OF MAKING ART AND ACTIVISM WHILE LIVING IN BROOKLYN IN AN EARLIER PERIOD OF HER LIFE.

BOBBE BESOLD IS AN ARTIST/ACTIVIST AND A GRANDMOTHER WITH FIERCE LOVE FOR LIFE ON EARTH. YOU CAN LEARN MORE ABOUT HER ON HER OUTDATED WEBSITE WWW.BOBBEBESOLD.COM

PHOTO CREDIT: NOEL AND GLORIA TRUJILLO.
BOBBE BESOLD



MARGARITO HERNANDEZ

When you first see Margarito he seems like a very serious man. He is working very hard to set up his booth especially since he has people waiting for him to just unload. He is doing business as he is setting up with no time to talk or get better prices. You take it or leave it. He is firm on his prices but the produce you buy is well worth what you pay.

Margarito Hernandez is one of our very well-known farmers at the Espanola Farmers Market. He is originally from Urida Guanajuato, Mexico. He has lived here in Los Luceros near Alcalde for more than 22 years.

Margarito has farmed all his life. He gives credit to Joe Casados for teaching him what he knows. He takes no credit for his great *chile* and the many other varieties of produce he grows, such as corn, cabbage, onions, garlic and much more. The *chile* is his favorite crop even though he has problems with wilt this year.

Margarito has farmed mainly to make sure that his family does not have to suffer because they come first in his life. He said that even though he has no schooling, he has been able to put his four kids, two boys and two girls, through school. He believes that giving them what he was not able to do will make their lives better.

His advice to new farmers is to work hard, dedicate yourself to what you do, and you will do well. If you do not dedicate yourself to your work, you will suffer. This comes from a man that has much experience and is very well known in the valley for his very delicious *chile*.

Interview by Gabriela Silva, 2014

GLORIA & NOEL TRUJILLO

Gloria and Noel Trujillo farm *Vigil's* Chimayo Produce, was named for Gloria's Dad, Robert Vigil. After arriving home after World War II, Robert planted 1,000 fruit trees: apples, pears, peaches and apricots. Looking beyond the orchard, Noel points to a beautiful hill, "Do you see that hill? That is *Tsimayoh*. It's one of four sacred hills to the Tewa. The *Santuario* is at its base."

"Chimayo was a traditional farming community. The people grew produce for their families, and to sell. Severo (Gloria's Grandfather), and others, had orchards and gardens. In addition, most had livestock, cows, sheep, pigs, lambs, for food. Robert started his own orchard, but there were many orchards in Chimayo. For the most part, the people of Chimayo were self-sufficient. Of course there were some staples they couldn't grow and would have to buy. Imagine going in a wagon to Espanola or Santa Fe...it was a full day and more to get supplies and staples, like coffee."

Both Gloria and Noel earned their masters degrees and worked in the schools, Noel as an English teacher and debate coach: "I taught the classics, Huck Finn, Moby Dick, Don Quixote. Now I am a 10 o'clock scholar, that's me!" Gloria was a librarian. "I have an affinity for children's books...maybe I'll write one."

"Gloria is a *Chimayosa*...her family goes back... what? Eight generations?"

"I sold *chile* door to door."

"Gloria's mission is maintaining the Chimayo *chile* (which is their biggest crop) – by saving the land race seed. This is the original seed that was brought up from Mexico, carefully saved for generations: seed adapted to the special water, soil and climate of Chimayo. That plus maintaining the *acequias*, and the traditional, sustainable way of growing in Northern New Mexico."

"Gloria just loves to plant. She got mad at me for putting the road in there. We used to have to carry the vegetables all the way from the back of the field to the truck. Now we can drive down there. She said, "I could have put in 3 or 4 more rows of vegetables!"

"I do the heavy labor on the farm but when it comes to hoeing, Gloria is a hoeing machine!"

"People don't realize how hard farming is – we're up at 4:30 am to go to market. Friday is our busiest day: we irrigate, harvest, wash the vegetables, organize and load the truck. Sometimes we don't finish until midnight, last week it was 1:30 am, then three hours later we were up and on the road to the Saturday market."

"Most people can't afford to farm full time anymore, they all have other jobs."

Interview by Bobbe Besold, 2014

EPIE MARTINEZ

Eppie Martinez started selling her farm-raised vegetables at least 20 years ago, taking them door-to-door in Santa Fe with her mother-in-law. Her parents owned land in Chimayo and used to go to Moriarity and spend the weekend selling their vegetables. Now the land in Chimayo has been divided between Eppie's siblings and the water level has risen so much it is not good for growing any more.

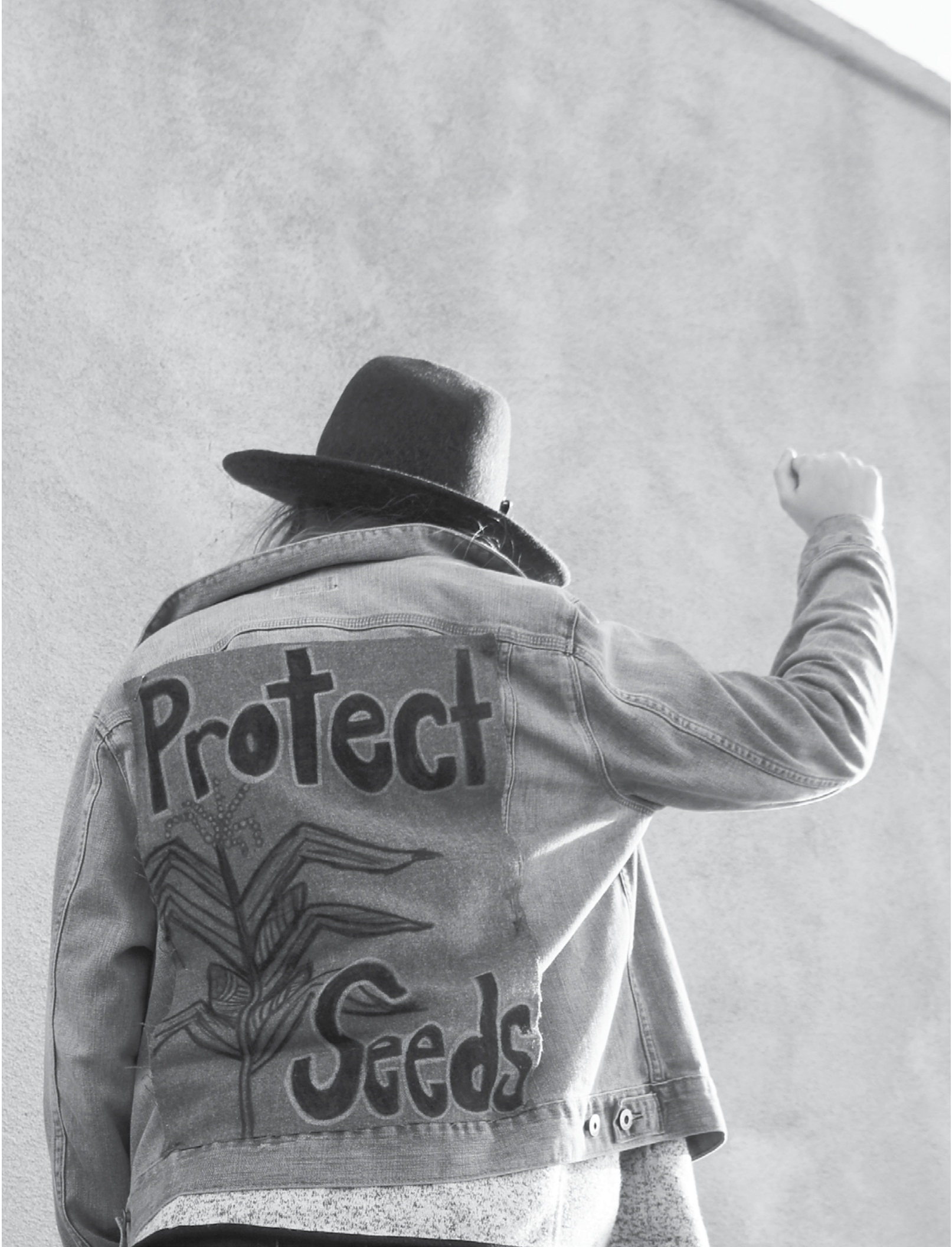
Eppie and Jesus have about 2.2 acres of land in Tierra Azul and farm another two acres in Nambe. In Tierra Azul, they draw water from the acequia for a drip irrigation system. They grow chile, corn, peas, green beans, pinto beans, Anasazi beans, cucumbers, squash, sugar baby and honeydew melons, arugula, lettuce, dill, kohlrabi, carrots, beets and turnips. They have about 40 young chickens and 3 cows, 2 calves and another on the way. They sell at the farmers' markets in Espanola, Los Alamos and Santa Fe.

Eppie likes going to market for the social contact it gives her. She loves talking to people as much as she enjoys the selling.

Her favorite crops are chile, corn, and the chicos they make in their horno, which they had built by Miguel Chavez of El Guique. The hardest thing about farming is dealing with drought, wind, and heat. She finds farming very interesting and has loved growing things. Her health has begun to make it harder for her to continue, but she is still doing what she can.

Both Eppie and Jesus worked at other occupations, but she had to retire from her job working as a cook at a school since she finds it hard to stand for long periods of time.

Interview by Julie Wagner, 2003



Young farmers around the world are learning day by day to uphold their responsibilities to the seeds, and are standing up to continue the work of countless generations of guardians - for food justice, for seed sovereignty, for healthy communities and lands.

PHOTO CREDIT:
EMILY ARASIM, NORTHERN NEW MEXICO

“We are soil. We are earth. We are made of the same five elements — earth, water, fire, air and space — that constitute the universe. What we do to soil, we do to ourselves. And it is not a coincidence that the words “humus” and “humans” have the same etymological root. All indigenous cultures recognized that we are one with the Earth, and taking care of the soil is our highest duty.”

Vandana Shiva

THE GATE

SARA WRIGHT

I walk through the creaking gate
 under a predawn sky
 Ice cracks,
 splits still air.
 Ducks rise up
 above serpentine waters.
 Geese gather in v formations.
 Every tree
 spreads her crown of bare branches.
 The sky begins to shiver.
 I breathe in golden
 crystals of New Born Light.

WORKING NOTES:

Every morning finds me at the river's edge in the inky darkness of a pre dawn sky giving thanks for the return of my joy and the gift of living in such a hallowed place.



SARA IS A WRITER, ETHOLOGIST, AND NATURALIST WHO HAS BEEN A GARDENER ALL OF HER LIFE. SHE HAS (NORTHERN TRIBAL) PASSAMAQUODDY/MALISEET INDIAN ROOTS, WHICH MAY BE WHY SHE FEELS SUCH A RESPONSIBILITY TOWARDS NATURE. IN HER WAY OF THINKING CARING FOR TREES, PLANTS, SOIL, AND CREATURES IS ALSO TAKING CARE OF OURSELVES. HER FERVENT HOPE THAT SOMEDAY WE WILL ONCE AGAIN CREATE A LAND ETHIC THAT WILL SUSTAIN OUR PLANET AS INDIGENOUS PEOPLES WERE ABLE TO DO.

DESERT SNOW

Shark gray clouds
 swim across the sky
 before daybreak.
 Is the river holding her breath?
 Prickly cholla is gesoed
 pearl white.
 Desert sage and scrub wear
 tender winter coats.
 Raccoon 's midnight identity is
 revealed through
 sharply etched foot prints
 circling the Russian Olive.
 Bird hieroglyphics
 create patterns – a new language
 written in wonder
 on wet ground.
 In the distance higher mesas
 accumulate thick layers
 of silver light.
 I sweep away an inch of fluff
 from my door –
 no backbreaking shoveling here,
 just my joyful heart singing...
 High desert
 soaks up sweet moisture
 plumping out withered limbs,
 her thirst quenched for a moment
 as cottony clouds slide by.
 A few star filled snowflakes drift
 by my window...
 Even the patches of blue
 breaking through
 a thick gray dome
 cannot dim my enthusiasm
 for this watery gift at dawn:
 Blessed, Desert Snow.

SOMOS SEMILLA

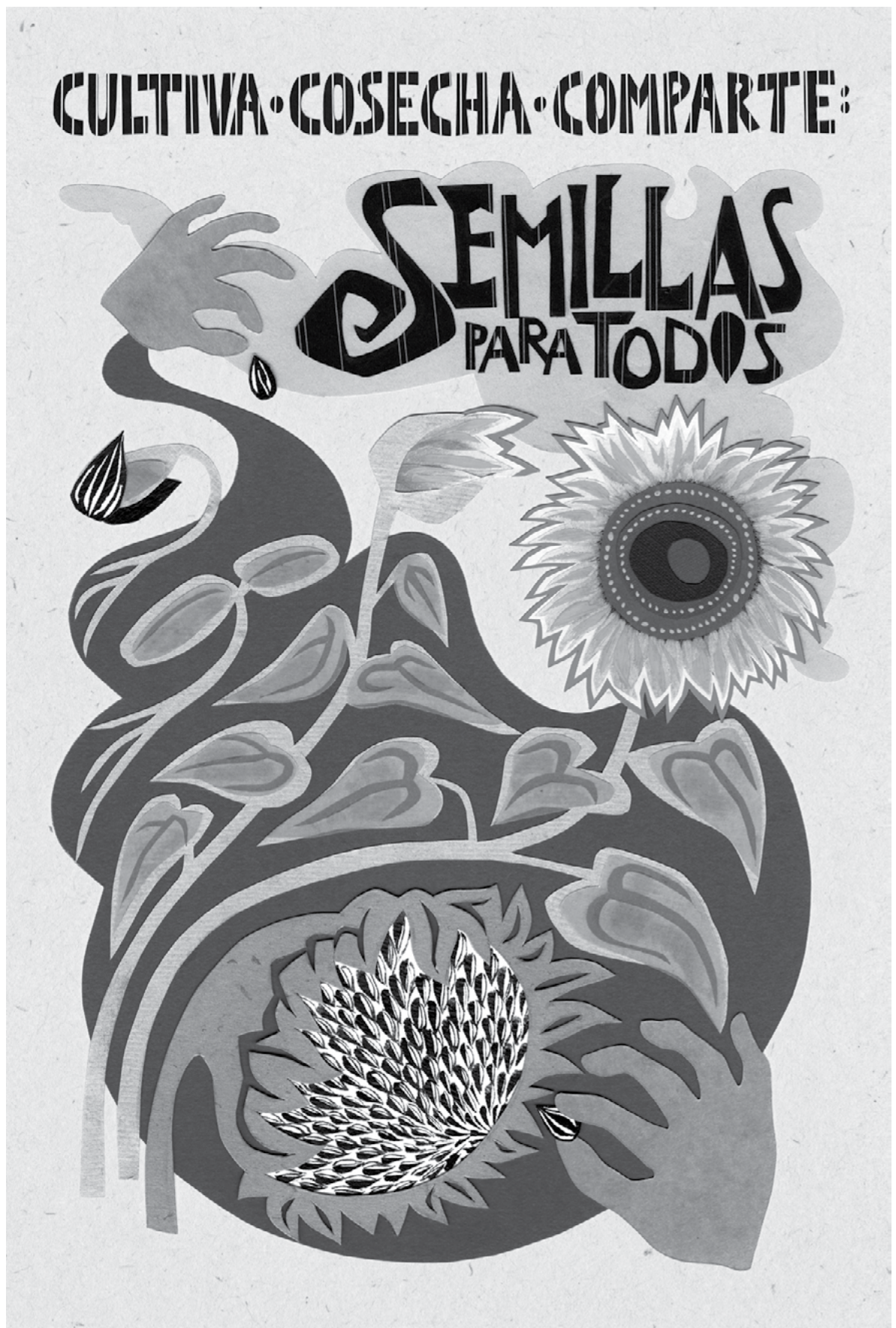
SOMOS SEMILLA is a community-based seed library in San Miguel de Allende, Mexico that has provided the community with open pollinated seeds adapted to the local conditions since 2015. It fills an important need, as quality organic seeds adapted to this climate are difficult to find. Worse, important indigenous foods that originated in Mexico centuries ago—such as corn, beans, squash, chili peppers and tomatoes—are endangered by urbanization, monocropping and GMOs that contaminate local crops. Through the borrowing and returning of seeds, the library helps safeguard local farmers, as well as preserving Mexico's biodiversity and distinctive culinary heritage.

A frustration over the lack of illustrated seed saving materials in Spanish inspired Somos Semilla to publish last year the manual GROW-HARVEST-SHARE: SEEDS FOR EVERYONE. It includes tables, explanatory illustrations, and thirteen botanically correct prints of common crops, along with technical data on seed production, propagation and seed saving. The book also explains how to set up a seed library within your own community. The text was written by biologist Sole Saburido and agroecologist Jenn Ungemach, coordinators of Somos Semilla, with support from Ricardo Romero, Program Impact Manager of the non-profit Sustainable Harvest International. The manual is visually stunning thanks to Somos Semilla artist Emily C-D, who was responsible for illustrating and designing the book in its entirety.

Somos Semilla hopes their book will have far-reaching impact within Spanish-speaking communities throughout the Americas. We are excited to share here a sneak peak from the manual, the seedsaving tables for the three sisters: corn, beans and squash.

Please visit somossemilla.org to learn more about the seed library and follow us on Facebook(SomosSemillaSMA) to learn about all our activities. If you are interested in acquiring the manual GROW-HARVEST-SHARE: SEEDS FOR EVERYONE, please contact us via email: somossemillasma@gmail.com or visit the online store on our website. We have special offers for wholesale purchase.

SEEDS FOR EVERYONE!



MAÍZ ELOTE, CHOCLO *Zea mays*

NIVEL ● Difícil
FAMILIA 🌿 Gramíneas
CICLO DE VIDA 🔄 Anual
POLINIZACIÓN 🌸 Flores incompletas
Polinización cruzada mediante viento

VIDA MEDIA DE LA SEMILLA 🕒 2-3 años

DISTANCIA DE AISLAMIENTO 📏 250-800 metros

TAMAÑO DE POBLACIÓN 🌾 10 para semillas viables
50-120 para mantenimiento varietal
200 para preservación genética

COSECHA Y LIMPIEZA 🖐️ Para limpiar la semilla podemos agarrar los elotes o mazorcas secas y retorcerlas, permitiendo que los granos caigan en un recipiente. Los restos de paja se pueden eliminar con aventado o con ayuda de un ventilador.



FRIJOL COMÚN

FREJOL, POROTO, HABICHUELA
Phaseolus vulgaris

NIVEL	●	Fácil
FAMILIA	🌱	Leguminosas
CICLO DE VIDA	🔄	Anual
POLINIZACIÓN	🌸	Flores completas Autopolinización. Algunas variedades presentan polinización cruzada mediante insectos.
VIDA MEDIA DE LA SEMILLA	🕒	3-4 años
DISTANCIA DE AISLAMIENTO	🌱🌱	3-6 metros
TAMAÑO DE POBLACIÓN	🌱🌱🌱	1 para semillas viables 5-10 para mantenimiento varietal 20 para preservación genética
COSECHA Y LIMPIEZA	👐	Deja que las vainas se sequen en la planta y ten cuidado con las lluvias, pues con la humedad pueden aparecer enfermedades rápidamente, o las semillas pueden comenzar a germinar dentro de las vainas.

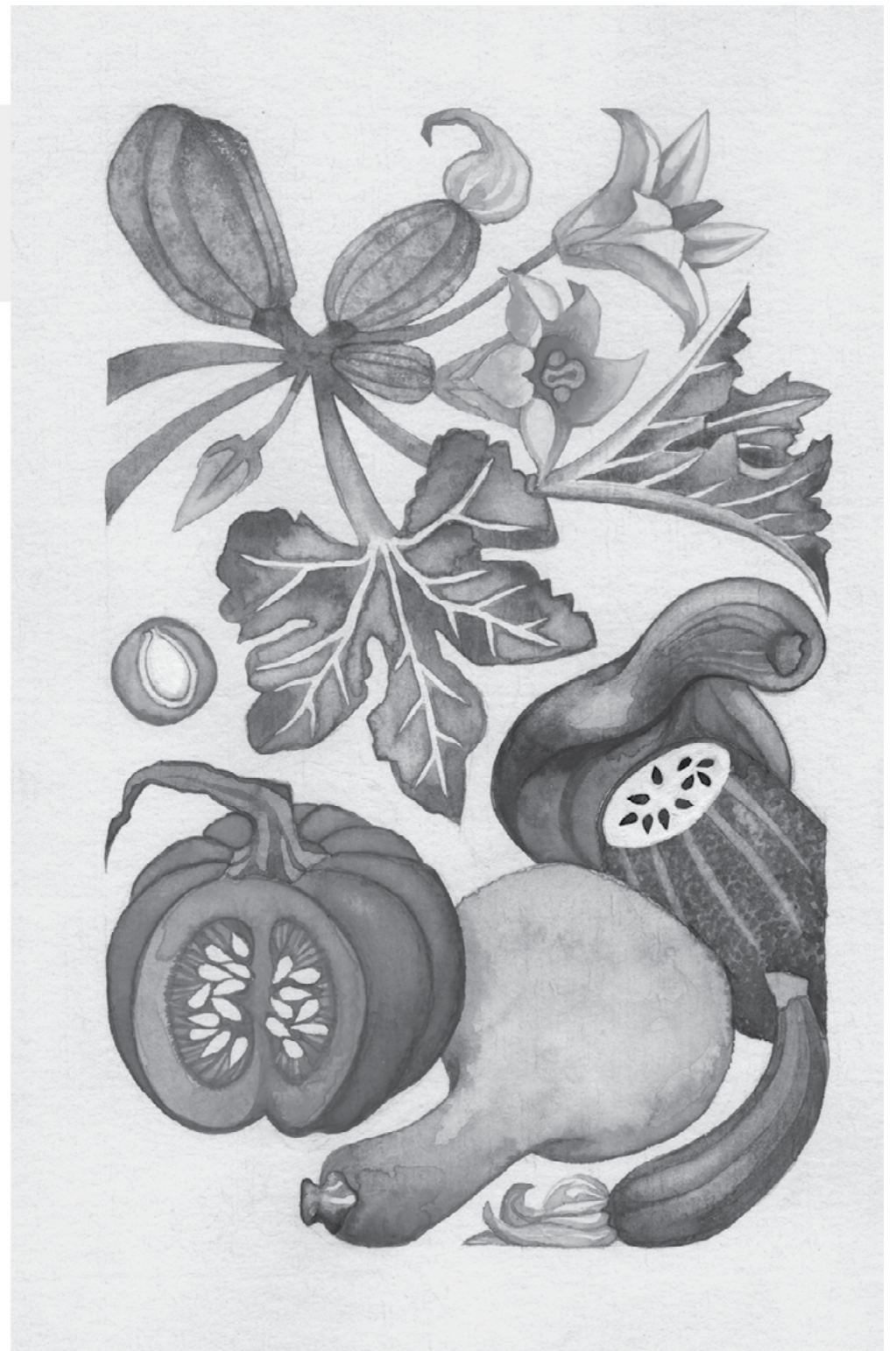




Las CALABAZAS

CALABAZA, ZAPALLO, CALABACITA,
CALABACÍN, MENSEJO, AUYAMA,
CHILACAYOTE, PIPIÁN
Cucurbita spp.

NIVEL	●	Difícil
FAMILIA	🌿	Cucurbitáceas
CICLO DE VIDA	🔄	Anual
POLINIZACIÓN	🌸	Flores incompletas Polinización cruzada mediante insectos
VIDA MEDIA DE LA SEMILLA	🕒	6 años
DISTANCIA DE AISLAMIENTO	🌿..🌿	250-800 metros
TAMAÑO DE POBLACIÓN	🌿🌿🌿	1 para semillas viables 5-10 para mantenimiento varietal 25 para preservación genética
COSECHA Y LIMPIEZA	👤	Las calabazas pueden pertenecer a las especies <i>C. máxima</i> , <i>C. moschata</i> , <i>C. pepo</i> , <i>C. ficifolia</i> , o <i>C. argyrosperma</i> . Las variedades dentro de cada una de estas especies se cruzarán, pero no las especies entre sí.



SOMOS SEMILLA

SOMOS SEMILLA es una biblioteca comunitaria de semillas localizada en San Miguel de Allende, México. Desde 2015 brinda acceso a la comunidad a semillas de variedades de cultivo de polinización abierta y producidas bajo condiciones locales. La biblioteca de semillas satisface una necesidad importante, ya que las semillas orgánicas de calidad adaptadas a este clima son difíciles de encontrar. Peor aún, los alimentos originarios de México—como maíz, frijoles, calabaza, chiles y tomates—están en peligro debido a la urbanización, monocultivos e introducción de transgénicos que contaminan los cultivos locales. A través del préstamo y devolución de semillas, la biblioteca ayuda a proteger a los agricultores locales, así como a preservar la biodiversidad mexicana y su patrimonio culinario distintivo.

La falta de materiales ilustrados en español relacionados con la conservación de semillas, inspiró a Somos Semilla a publicar el año pasado el manual CULTIVA-COSECHA-COMPARTE: SEMILLAS PARA TODOS. Contiene tablas didácticas, ilustraciones y trece láminas botánicas de cultivos comunes en los huertos de todo el territorio americano, con fichas técnicas sobre producción, propagación, y conservación de semillas. El libro también explica cómo establecer una biblioteca de semillas en tu propia comunidad. El texto fue escrito por la bióloga Sole Saburido y la agroecóloga Jenn Ungemach, coordinadoras de Somos Semilla, con el apoyo de Ricardo Romero, Gerente de Impacto de la ONG Sustainable Harvest International. El manual se enriquece al contar con la visión de la artista de Somos Semilla que se encargó de dibujar, ilustrar y editar el libro en su totalidad.

Somos Semilla tiene la esperanza de que su libro tenga un gran impacto en las comunidades de habla hispana de toda América. Con mucho orgullo y esperando despertar su curiosidad, les compartimos las fichas técnicas de las tres hermanas: maíz, frijol y calabaza que forman parte del manual.

Por favor, visite somossemilla.org para conocer más sobre la biblioteca de semillas y siganos en Facebook (SomosSemillaSMA) para conocer todas nuestras actividades. Si estás interesado en adquirir el manual CULTIVA-COSECHA-COMPARTE: SEMILLAS PARA TODOS, contáctanos vía email: somossemillasma@gmail.com o visita la tienda en línea en nuestra web. Ofrecemos facilidades para compra de mayoreo.

¡SEMILLAS PARA TODOS!

HERB (AND WILD GREEN) SALAD

DEBORAH MADISON

2 cups butter lettuce leaves

2 cups mixed greens, such as amaranth, orach, young spinach, watercress

½ cup purslane sprigs (preferably from an upright variety)

A handful or two of musk mustard leaves and blossoms, if available or arugula leaves

2 tablespoons basil leaves

½ cup celery leaves

Several small, tender lovage leaves

½ cup parsley leaves, plucked from their stems

Sea salt

Good olive oil or fresh walnut oil in the fall

Apple cider vinegar

Herb blossoms, such as rosemary, chive, or thyme

Tear the greens into bite-size pieces. Keep the marjoram leaves whole and tear the basil leaves, unless they're the tiny Piccolo Verde Fino variety. Tear the celery, lovage, and parsley, keeping them in fairly large pieces. Snap the purslane into clumps and wash it well, especially if you're using garden purslane that creeps across the ground. It can be sandy.

Toss all the leaves in a bowl with a pinch of salt and then again with just enough oil to coat. Season with vinegar to taste, check the salt and then toss again with the blossoms.

Of course there's no one way when it comes to salads, but there are combinations of flavors and textures that are especially pleasing. Here are some I enjoy.

- Parsley, dill, basil, cilantro (plus green coriander seeds, watercress and mint)
- Thai basil, perilla, lemon verbena, chives, cilantro leaves, and green coriander
- Chervil, chives, parsley, tarragon, and salad burnet or the mild musk mustard
- Arugula, mink, basil, lemon verbena, anise hyssop and a little curly cress
- Dill, salad burnet, tarragon, red sorrel leaves for appearance, and green sorrel, torn into small pieces, for flavor



DEBORAH MADISON, HAS LIVED IN NEW MEXICO FOR THE PAST 27 YEARS. SHE IS THE FOUNDING CHEF OF GREENS RESTAURANT IN SAN FRANCISCO AND THE AUTHOR OF FOURTEEN COOKBOOKS, INCLUDING LOCAL FLAVORS, VEGETABLE LITERACY, AND HER MOST RECENT BOOK, IN MY KITCHEN. SHE SERVED ON THE BOARD OF THE SEEDSAVERS EXCHANGE FOR SIX YEARS AND IS NOW ON THE BOARD OF THE SOUTHWEST GRASSFED LIVESTOCK ALLIANCE. SHE WRITES, GARDENS AND SAVES SEEDS IN GALISTEO.

DEBORAHMADISON.COM.

CADENCE

JAMIE FIGUEROA

Black birds toss up
 from resting fields
 like cracked pepper corns,
 and the women
 gather their children
 to keep them
 from chasing after.
 A red faced moon rises
 illuminating dormant fields
 pregnant women, and
 temporary children—
 that like birds and moons—
 change shape and disappear.

The women hold
 to waxing and waning hopes,
 to children yet unborn
 relieving the incessant memory
 of children past, who, no longer
 leap through fields,
 having slipped
 from their childhood skins
 like snakes shedding.

There will be more babies,
 blessings and naming—
 wet and slow—
 moving like turtles, and more babies
 traversing the rivers
 of blood deep inside
 their mothers' bodies
 toward the luminescent light
 of heavy lidded moons.



JAMIE FIGUEROA (TAÍNO) IS BORICUA BY WAY OF OHIO AND LONG TIME RESIDENT OF NORTHERN NEW MEXICO. SHE EXPLORES IDENTITY, FAMILIAL RELATIONSHIPS, PLACE, CULTURE, AND ANCESTRY. A TWO-TIME GRADUATE OF THE INSTITUTE OF AMERICAN INDIAN ARTS, (BFA AND MFA IN CREATIVE WRITING), SHE PUBLISHES ACROSS GENRES INCLUDING FICTION, CREATIVE NONFICTION, AND POETRY. HER COLLABORATIVE COMMUNITY WORK FACILITATES AN ENGAGEMENT WITH UNDERREPRESENTED VOICES AND HIGHLIGHTS INTERGENERATIONAL, MULTI-RACIAL & MULTI-ETHNIC, GENDER & SEXUALITY DIFFERENCE, AND EQUALITY. CURRENTLY, IN ADDITION TO ADVISING IN THE MFA-INTERDISCIPLINARY ARTS PROGRAM AT GODDARD COLLEGE, WITHIN THE INDIGENOUS/DECOLONIAL ART FOCUS, JAMIE FACILITATES MODERN MYTH MAKING FOR PERSONAL AND COLLECTIVE RESTORATION AND HEALING.

PHOTO CREDIT: SEEDBROADCAST



CERTIFIED ORGANIC, OPEN-POLLINATED, UTILITY PATENTED SEEDS

BILL MCDORMAN

"Growers of conscience" help us resist a threat to our precious and expanding seed diversity movement. The National Organic Program (NOP) mandate to use certified organic seed when possible in organic operations has fueled an increase in the availability of certified, organic seeds. This is good. However, larger commercial breeders, especially from Europe, are now supplying patented seeds for this rapidly growing niche market. As a result, certified organic seeds sold in some of my favorite seed catalogs now carry utility patents, the most restrictive form of intellectual property protection. Adding insult to injury, the majority of the new varieties protected by utility patents are open-pollinated (non-hybrid), the most favored and easiest category for beginning seed savers.

The appearance of these utility-patented varieties in our catalogs is threatening. Utility patents make seed saving completely illegal for the first time. The original and only seed patenting legislation passed in the U.S. in 1970, the Plant Variety Protection Act (PVPA), allowed a seed saving exemption for seed breeders, farmers and gardeners. Utility patents do not extend this exemption.

Making matters worse, lists of utility-patented varieties are difficult if not impossible to find. My own searches using variety names on government patent websites were largely ineffective. A search using variety names on the Plant Variety Protection, www.ars-grin.gov/cgi-bin/npgs/pvp/pvplist.pl, and the U.S. Trade and Patent Office, <http://patft.uspto.gov/netahtml/PTO/search-bool.html>, websites revealed only 9 of the 40 varieties I knew were protected by

patents. I next turned to my favorite seed companies for a complete list of utility-patented plants. I was told no list could be provided, even though I had found some patented varieties labeled in their catalogs and some that were not labeled.

After more than 40 hours of research matching known lists and catalog lists, I found at least 32 utility-patented lettuce varieties now available in U.S. seed catalogs, and I doubt if this list is complete. This is up from the 23 varieties I found last year. I also found evidence of patented basil, peppers and tomatoes.

Ask your commercial seed supplier if they sell utility-patented seeds. If they say yes, ask for a complete list of varieties covered by utility patents. Seed savers need to know which seeds they cannot save, especially when looking for certified organic and open-pollinated seeds. They need to know who sells them. Help us demand openness, honesty and transparency from commercial seed suppliers and seed catalogs. You can find updates and place to share what you find here: rockymountainseeds.org/patents.

BILL MCDORMAN IS EXECUTIVE DIRECTOR AND CO-FOUNDER OF THE ROCKY MOUNTAIN SEED ALLIANCE (RMSA), A SEED CONSERVATION NON-PROFIT CREATED TO TO ASSURE A DIVERSE SUPPLY OF LOCAL SEEDS FOR THE ROCKY MOUNTAIN REGION THROUGH COMMUNITY-BASED SEED STEWARDSHIP. BILL HOLDS A B.A. IN PHILOSOPHY FROM THE UNIVERSITY OF MONTANA. IN 1981 HE CO-FOUNDED GARDEN CITY SEEDS IN MISSOULA, MONTANA. IN 1984 HE STARTED SEEDS TRUST/HIGH ALTITUDE GARDENS, A BIOREGIONAL, MAIL ORDER SEED COMPANY HE RAN SUCCESSFULLY FOR 28 YEARS. HE AUTHORED THE BOOK, BASIC SEED SAVING, IN 1994. FROM 2011 UNTIL 2014 BILL AND HIS WIFE BELLE SERVED AS EXECUTIVE DIRECTORS OF NATIVE SEEDS/SEARCH IN TUCSON, ARIZONA. IN 2010 THEY FOUNDED SEED SCHOOL, AN INTERNATIONALLY RECOGNIZED EDUCATION PROGRAM NOW WITH MORE THAN 1,000 GRADUATES FROM AROUND THE WORLD. BILL REMAINS A PASSIONATE AND KNOWLEDGEABLE PRESENTER WHO INSPIRES HIS AUDIENCES WITH THE IMPORTANCE OF GRASSROOTS SEED SAVING AND URGES EVERYONE TO LEARN TO SAVE THEIR OWN SEEDS.

SEED QUILT

ADELE ARDENT

It seems strange to call it illumination—the thoughts and feelings that wash in on 4 a.m.'s dark tides, when insomnia and anxiety prick the mind to wakefulness. Still, that is what I hoped for—insight, illumination—when I spread the Seed Quilt over my bed.

Last year, in the fall of 2017, I participated in the University of New Mexico's Land Arts of the American West program; herein, a group of graduate and undergraduate students from various disciplines investigate the American Southwest for six weeks, base-camping at sites of biological or cultural importance, creating photographs and paintings, recordings, writings, and performances that respond to the spirit of the place.

One such locale was Mergirl Gardens in La Villita, New Mexico, a traditional farm fed by the willow-entangled waters of the Rio Grande. Here Ron Boyd and wife Debora grow heritage crops, nourished with the customary arteries of acequias. Our time at Mergirl was bookended by time spent at sites and communities misshapen and ill-used by the workaday effects of mining, or fracking, or dam-building. On Ron's farm, however, I would not have been surprised to find that a hundred years had passed in the outside world, during the space of our handful of days; the towering cottonwoods ringing the farm seemed to mark the edges of an enchanted screen projecting a vision of impossible harmony and peace: we bathed in a river screened by wild-growing grasses, threshed rye with dancing feet, plucked beetle larva from the undersides of leaves eaten down to lace, and rustled through green-glowing avenues of corn and sunlight.

As we left, Ron gifted our class with cobs of Glass Gem corn, the variety bred by Oklahoma farmer Carl Barnes to revivify the food staples which had nourished his Cherokee ancestors in body and spirit. This gift was more than a souvenir; this was a charge and an obligation, which I felt the full weight of—the seeds were living beings with a history of their own. Nestled in a vented plastic coffee bag and tucked under a seat in the van for the rest of the trip, the colorful cobs went (briefly) missing in the unloading chaos back in Albuquerque, and I felt stone-sinking anxiety in the pit of my stomach until I was re-united with my charges. It was clear that the Glass Gem cobs needed a special place to overwinter, and this got me thinking about the ways that Westernized humans are encouraged to detach from our animal life... from our food, our water, our communities, our families, even our bodies.

Our food staples—the things that literally pin our bodies to this world, to physical existence—have little claim left on our ritual, spiritual lives. Though the ancestors on my mother's side farmed the land in upstate Pennsylvania just a few generations ago, our family food-traditions tended to the store-bought and can-opened. Most of us embedded in Western, mechanized culture, no longer have intimate knowledge of our crops' ways of being. We've lost touch with the way that survival has shaped us to each other, as well as any lessons these plants can teach us about how we, as humans, work. Humankind's food staples are as much of us, of our bodies, as is our hand or our heart, but in the space when these plants are insensate to us, until the act of eating weaves the molecules they gift to us into the feeling flesh that we know for our own... in this space, we forget how to be of them, as well.

Inviting these seeds back into the resonant domestic spaces where deep feelings of familial connection are free to sound pointed towards a bridge over this gap in empathy. In considering winter as one long night, when plant rest corresponds to the same need animal life experiences daily, it



occurred to me that our domesticated plants sleep exactly as we sleep. Our mutual history is one of control, as humans culled plant ancestors and shaped them to our use. Yet, because our predecessors bred them to thrive by spending the winter inside a cool, dark, and dry human-made space, it seemed possible for plant and human to share the comfort of a single bed.

To aid our connection, I stitched together a Seed Quilt where crop seeds could rest over the winter, close to the hands of the companions that will bear them into the damp sun-warmed ground this spring. I created a grid of fabric with nine pockets to hold both the seeds themselves, gently wrapped in breathable mesh fabric, as well as planting guides that indicate the proper spacing of plants in the garden. Rather than an artistic artifact, a reliquary where the living seeds become mere objects of decoration, I tried to make the Quilt a comfortable place for the Glass Gem kernels (and for corn's partners, bean and squash, as well as six other heritage and locally-adapted seeds) by using recycled cotton fabric and earth-pigment dyes to represent the decaying organic matter and soil that nourish plants, while referencing the domestic folk-art traditions of quilting, providing both human and plant symbioses with a sense of hominess.



The Seed Quilt has been resting on my bed over the past winter months; during this time, I had hoped that the Quilt would provide an invitation to greater intimacy with these organisms, that by syncing their long seasons of rest to my daily ones, I would come to understand our shared beingness in some more fundamental way than I had before. And I have indeed had a revelation of sorts, although it seems inaccurate to call it illumination; it feels more like the seeking of roots after water, blind but true-pathed in the dark ground.

I've struggled with depression throughout my life, a less colorful inheritance from my ancestors than the Glass Gem corn provided to Barnes. More and more, researchers are finding this shadowed emotional territory isn't so much a disorder or a disease, as it is a sometimes necessary defense activated in childhood, a self-protective drawing inward when the world turns unaccountably hostile, and we are small and powerless in the face of it. This is one of the oldest lessons that other organisms have to teach us: bacteria form endospores, lying dormant for years; plants and insects secure seed and egg against the winter, leaving these small, encased cells with minimal metabolic machinery ticking quietly over through the long, dark nights when the warmth of living bodies would crystallize under the cold stars.

But this drawing inward isn't about giving up or giving in... it's about strategy. The life-force is a little fire inside the cells, a combustion of breath and body that creates movement, heat, purpose, the will to survive. But its light is a little light, easy to snuff out. Survival requires the ability to bank the coals of anger, of pain, of desire, and to find a way to protect that small ember, to endure without letting that spark go out or letting it flare up in a useless burst into the cold, dark stillness.

Especially now, it can feel impossible to endure when anxious inner voices promising disaster seem less like delusion, and more like prophesy, as civilization dives headlong into fear, hatred, and environmental catastrophe. And even though bright times don't come for keeps, even though seasons of darkness follow seasons of warmth, the enduring seeds remind us that there are moments when action is fruitful, times when the hard earth thaws under nourishing sun and gentle rain, and the warm and beautiful things of this life can take root. In the night, when both the memory and anticipation of pain presses close, I've found it comforting to consider these lessons. I run my fingers over the kernels of the Glass Gem corn, a rosary whose benediction is open to any faith, and ready for our moment, ready for the thaw.



ADELE ARDENT RETURNS AGAIN AND AGAIN TO THE PLACES OF TENSION IN RELATIONSHIPS, WHICH IS ANOTHER WAY OF SAYING THAT SHE COMES BACK TO PLACES OF MOVEMENT—PLACES WHERE NEEDS AND DESIRES CONFLICT OR COALESCE, WHERE THE THREAD OF CONNECTION MAY SNAP ENTIRELY, OR PERHAPS, WHERE LIVING BEINGS MAY BE KNIT INTO TIGHTER INTERDEPENDENCY. NEVER DWELLING EASILY INSIDE DISCIPLINES WITH LIMITED SCOPE, SHE IS CURRENTLY PURSUING A SECOND DEGREE IN ART & ECOLOGY AT THE UNIVERSITY OF NEW MEXICO, MOVING AWAY FROM EXPLORATIONS IN PAINTING AND PRINTMAKING INTO PERFORMATIVE WORKS CONCERNED WITH PHENOMENOLOGY AND RELATIONAL AESTHETICS. SHE FIRST EARNED A BACHELOR'S IN BIOLOGY AT VASSAR, AND HAS A PROFESSIONAL BACKGROUND IN BOTH CLINICAL GENETICS AND IN MUSEUM ADMINISTRATION. HER CURRENT FOCUS DELIGHTS IN THE FACT THAT NO SUBJECT IS OFF-LIMITS TO THE FIERCE CURIOSITY OF THE ARTIST, AND THROUGH THE STUDY OF ART & ECOLOGY, SHE IS SEEKING TO MOVE HER WORK EVER-DEEPER INTO INTERDISCIPLINARY TERRITORY, WHERE THE COMPLEX ENTANGLEMENTS OF LIVING THINGS CAN BE FELT RESONATING IN THE BODY.

SEED MATTER

CHRISTINE MACKEY

I am presenting here through text and corresponding images a series of works that relates together my investigation of the history, politics and biodynamic ecologies of plant life through the subject of the seed. The earliest endeavor began in 2010, in Svaldbard and came under the title of Seed Matter. Seed Matter was a series of evolving art-works, sited projects and exhibitions that culminated as a publication, which took at the core of its research the politics of seeds, and which continues today to inform my practice.

The work encompasses a narrative structure that outlines key research material, sites of interest and the active and creative involvement of other voices.

1. SVALDBARD

My journey begins on a remote island in the Svaldbard archipelago, halfway between mainland Norway and the North Pole and the reason was to research and visit the Global Seed Vault, which had opened in 2008.

2. THE VISIT

In 2010, I secured visiting rights through Professor Roland von Bothmer who then worked as public relations officer for NordGen an international organization responsible for the daily operations of the Vault. {NordGen or the Nordic Genetic Resource Centre}

3. BEHIND FROZEN DOORS

I was interested in this particular seed-bank not only because of its location sited 120 metres (393.7 feet) deep into hard rock but also as to why it was established, and for whom? This prompted a series of questions, which informed the basis of a conversation with Professor Bothmer around issues such as seed security, food production, access and ownership.

4. THE BOOK

This conversation (AMONGST OTHERS) was later transcribed and printed for the SEED MATTER PUBLICATION and also informed other creative explorations of Seed Banks and Seed Savers around the world.

5. THE VAVILOV RESEARCH INSTITUTE (1921) VIR

Being in Svaldbard, brought my attention to one of the oldest seed stations in the world the Vavilov Research Institute where the Russia botanist and geneticist Nikolai Vavilov (b. 1887-1943) worked.

He carried out important seed collecting missions in Russia, United States, Europe, the Middle East, Afghanistan, North Africa and Ethiopia.

Vavilov had envisioned a future in which new strains of crops would be cultivated in an effort to end hunger world-wide. Unfortunately he fell out of favour with Stalin who falsely accused him of working for the American government. He was sentenced to prison where he died of starvation.

6. THE SEED AMBASSADORS

I was unable to travel to Russia, however I came across the Seed Ambassadors - Sarah Kleeger and Andrew Still who describe themselves as



'devoted seed labourers'. They have travelled Europe and further afield visiting a range of seed saving organizations and scientific institutions. With their permission images and text from their journey to Russia were used in the SEED MATTER publication.

7. REPATRIATION

Subsequently, at a community seed exchange meeting, I met farmer Kevin Dudley who presented and distributed samples of peas, which interestingly had been in his words 'Repatriated' back from Russia to Ireland via Seed Savers in Clare.

The name of this Pea was the Daniel O' Rourke Pea. With the few seeds that Kevin gave me, I planted, grew, cared for and saved those seeds, which were embedded into the work as primary source material.

At this point, I made contact with key staff from the Vavilov Institute in particular Elena Semenova who furnished new data on the lineage of the Daniel O'Rourke pea with images of the seeds and growing trials at the Research Station.

8. AN ENDURING MONUMENT

The accumulation of research material based on the Daniel O'Rourke pea was assembled for the construction of an alternative knowledge bank in homage to this pea.

This sculptural work is devised as a three-tier archival viewing system placed on an upside down table with mirrors, glass shelving, controlled temperature unit and lights.

The actual sections are built from an existing propagating seed unit used in the growing of various seeds throughout the development of this project.

In fact, most of the materials and structures in related art-works had been previously modified from everyday equipment in the seedling and planting process.

This archival viewing table contains an assemblage of material for example an illustrated drawing of the Daniel O'Rourke Pea by Charles

Darwin, published in his book *The Variations of Animals and Plants under Domestication* (1898);

Images of the pea from the Seed Bank in Russia and the Iraqi Gene Bank, Archival information that included maps/text/newspaper clippings on the possible migratory roots of the pea from Cork to America to Germany to England to Russia and the various Seed Men that may have been involved in these vast seed travel net-works

And an original Seed Catalogue by Thorburn and Co. produced in 1890, which listed amongst other diverse varieties the Daniel O'Rourke Pea.

9. THE CAST

In tandem, a specific monument to the pea itself was constructed.

A pea specimen was cast in gold and placed under a bell jar atop of a Roman Doric Column moulded in concrete.

This mock-display points to the vital if uncelebrated importance of this humble pea.

10. THE POT GARDEN

Running concurrently was the development of a series of 12-framed works titled THE SEED BOARDS. The SEED BOARDS began as a collection of homegrown seeds, in other words I planted the source material from which the works evolved – materially, conceptually and creatively.

This was an important ethical step in the authenticity of the work.

11. PRESSED PLANTS AND SEED BAG SAMPLE

During the second year of growth, each plant produced long stemmed flower heads that were cut, pressed and dried while others overwintered in order to produce seeds for collection at a later stage.

These were then presented in seed bags made from semi-translucent paper onto which a drawing of each key plant was made.

The plants investigated and grown were heritage seeds sourced from independent seed savers

(included for example - Rye, cabbage, beet-root, borage, Brussels sprouts, rocket, radish).

12. FIELD CONVERSATIONS

Throughout this process, I actively meet a diverse range of people involved in food production, but I also connected with people through social media and email.

This involved carefully orchestrated and recorded conversations around such issues as plant hunting, allotments, indigenous agricultural practices, seed saving, land-use and plant resources.

The use of social media extended the practice - opening it to different fields of knowledge and relationships to the wider world.

13. COMPOSING THE BOARDS

These conversations provided both the textual information and the image gathering activities needed in order to materially compose each Seed board with key related issues.

These texts outline in factual details the species and the date the seeds were planted, when they were collected and how they were saved.

The final part of the text section comes under notes explores a related issue specific to each plant.

14. IMAGING: CO_OP/DISTRIBUTION OF FOOD MAP

The digital images for each seed board operated on a wider context for example alluding to a particular happening locally such as the closing of our co-op shop in the town of Manorhamilton during the recession or

15. IMAGINING: COLLECTING MISSIONS SANAA

Making a connection to the seed collecting missions as then currently practiced by Sanaa from the Iraqi Seed Bank (which no longer exists).

16./17. FRAMED SEED BOARD - CLOSE UP

In conclusion - of the SEED BOARDS it was my intention to make visible complex exchanges in an attempt to connect common matters of concern through an assemblage of visual, textual and material processes

CHRISTINE MACKEY IS AN ARTIST BASED AT THE LEITRIM SCULPTURE CENTRE, IRELAND. SHE WAS AWARDED A 6-MONTH FULBRIGHT SCHOLARSHIP AWARD, WHICH SHE WILL UNDERTAKE IN SPRING OF 2018 AT THE UNIVERSITY OF NEW MEXICO. CHRISTINE WOULD BE INTERESTED TO HEAR FROM PEOPLE AND COMMUNITIES INVOLVED IN SEEDS AND BIOLOGICAL PLANT MATTER AND CAN BE CONTACTED AT MACKEYCHRISTINE@HOTMAIL.COM

LEFT PAGE: SVALDBARD.
PHOTO CREDIT: CHRISTINE MACKEY

RIGHT TOP: AN ENDURING MONUMENT ARCHIVAL INSTALLATION,
PHOTO CREDIT: CHRISTINE MACKEY

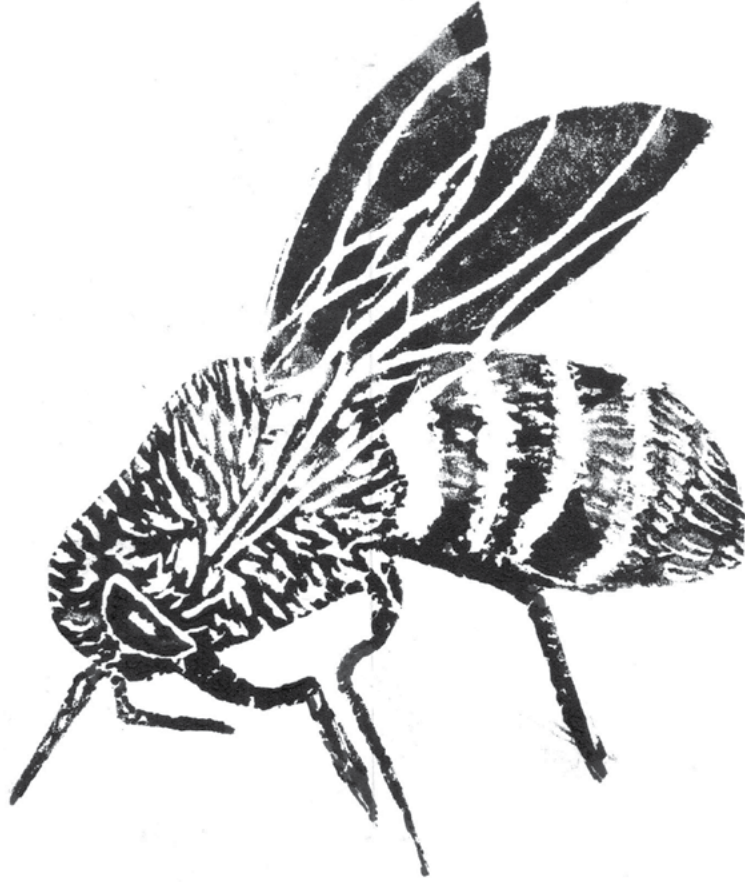
RIGHT BOTTOM: THE POT GARDEN.
PHOTO CREDIT: CHRISTINE MACKEY



NATIVE BEES OF NEW MEXICO

SARA WRIGHT

ILLUSTRATED BY IREN SCHIO



Honey bees and wild native bees pollinate almost 75 percent of the fruits and vegetables grown in the United States. Because of the honey bee scarcity (Colony Collapse Disorder) we are turning more and more to native bees as pollinators. Currently, New Mexico's State University and the New Mexico Plant Materials Center are collaborating in testing more than 200 species of Native plants for their survival, ease of cultivation, and ability to attract and sustain native bee pollinators.

Some of the bees, like the European honey bee, were introduced to pollinate crops/create honey because they live in large social groups and can be managed by bee keepers who take the hives to the orchards, for example, for pollination purposes. In contrast, native bees do not make honey and live more solitary lives. They nest and raise their brood alone or live in small colonies like the bumble bees (*Bombus*) do. It is important to remember that bumble bees, like other native bees, are more efficient pollinators than honey bees.

Many native bees nest in the ground (as bumble bees do) excavating tunnels that may reach a foot or more below the surface of the soil. Others use existing holes in dead wood or hollow plant stems, and these bees plug their entrances with mud. The bees typically provision each brood cell in the nest with a ball of nectar and pollen on which their larvae feed and develop.

Some native bees are generalists, visiting many types of plants and trees, but others are more specialized, having a longer tongue that can extract nectar from penstemons, for example.

When planting for pollinators we want to include a broad range of flower shapes, sizes and colors. Native plants are excellent because our wild bees are already well adapted to them. Hybrids are to be avoided, if possible, because they don't attract our native bees. Flowers that bloom both early in the season and late in the fall are particularly valuable.

Any garden can be made more inviting for bees and beneficial insects. One caveat: Even organically approved insecticides can be toxic to wild species, so it is prudent not to spray flowering plants when pollinators are active.

Providing a source of water in a shallow dish filled with pebbles so that the bees have a place to land is a possibility for some dedicated gardeners but may not be practical for others. I keep a water bowl filled for the birds and place a stone in the center where bees and butterflies can land for a drink. Changing the water daily to avoid insects like mosquitos that breed quickly is a necessity for the health of both birds and insects.

Nesting habitat for ground-nesting bees can be provided by maintaining at least one area of bare soil that remains undisturbed all year.

More than 4,000 species of native bees occur in the US and most of these are found in New Mexico.

One of my favorite bees is the miner bee, who is one of the first to appear in the spring. Since the adults are only active in the early spring (the rest of the life cycle is spent underground), it is important to provide early flowering plants for this diverse species.

The largest family (Apidae) includes honey bees, bumblebees, long-horned bees, squash bees and digger bees. Bumble bees (*Bombus*) are my favorite bees of all. There is a bumble bee app called "Bumble bee Watch" that I use frequently to help me identify the individuals that visit my plants during the growing season. Mated bumble bee queens hibernate over the winter (the remainder of the colony dies) and begin a new colony in the spring. These furry friends are excellent pollinators of tomato plants.

One New Mexico species, the plasterer bee "buzz pollinates" the flowers of tomatillo by grasping the pollen bearing structures with her legs, and then rapidly vibrating her wings to shake the pollen free.

Sweat bees, some of which are metallic blue-green, are important pollinators of alfalfa seed crops, commercial sunflowers and watermelons.

The bee assassin bug is worth looking up. This "sit-and-wait" predator ambushes bees as they visit flowers.

According to the *Pocket Guide to the Native bees of New Mexico* there are many choices for bee-friendly, butterfly and predatory wasp plantings. A good planting mix should include species that flower at different times of the year, as well as provide a diversity of flower shapes, sizes, colors and structures. Some suggested pollinator plants include spring flowering shrubs, native willows, skunkbush sumac, American plum, New Mexico olive and chokecherry.

In the summer, plant annuals like Prairie sunflower, Rocky Mountain bee plant (these can be dug up in dry washes or simply collect the seeds as I



did). The blue-headed gilia (one of my personal favorites) blooms from early spring to late fall. Golden crownbeard, lavender, basil, and the many varieties and shades of penstemon are other choice plants.

Summer flowering perennials like the blanket flower, various mints, white prairie clover, golden eye stiff greenhead, showy golden eye, fernbush and Mexican hat are also bee favorites.

In the late summer and autumn, globe mallows are sought-after flowers along with sneezeweed and native goldenrods—also beneficial to bees.

I prefer a wild landscape, one that uses native trees, wild grasses, scrub and wildflowers to cover the ground—plants indigenous to the high desert. I have been here every month but July and have noted with wonder (because in Maine there is a terrible bee crisis) how many different kinds of bees visit the wildflowers that grow in washes and along roadsides during the spring, summer and fall seasons. I have collected many wild seeds and plan to scatter them around where I live, but I understand that this is a matter of personal preference.

I would also add: be sure to plant many different kinds of fruit trees including crabapples because I noted last spring that the deep magenta, rosy pink, and white blossoms of my neighbors' trees were loaded with honey bees, bumble bees and blue orchard bees.

A visit to the Espanola Wildlife Center should give the gardener a wealth of creative ideas for natural plantings that benefit our wild bees. Remember that gardening with bees is gardening for "Life" for us all.



SARA IS A WRITER, ETHOLOGIST, AND NATURALIST WHO HAS BEEN A GARDENER ALL OF HER LIFE. SHE HAS (NORTHERN TRIBAL) PASSAMAQUODDY/ MALISEET INDIAN ROOTS, WHICH MAY BE WHY SHE FEELS SUCH A RESPONSIBILITY TOWARDS NATURE. IN HER WAY OF THINKING CARING FOR TREES, PLANTS, SOIL, AND CREATURES IS ALSO TAKING CARE OF OURSELVES. HER FERVENT HOPE THAT SOMEDAY WE WILL ONCE AGAIN CREATE A LAND ETHIC THAT WILL SUSTAIN OUR PLANET AS INDIGENOUS PEOPLES WERE ABLE TO DO.

IREN SCHIO ILLUSTRATED SARA WRIGHT'S TEXT WITH STYROFOAM PRINTS, WHICH SHE BELIEVES TO BE ONE OF THE BEST USES FOR THIS ENVIRONMENTALLY UNFRIENDLY MATERIAL SHE LIVES AND WORKS IN ABIQUIU, WHERE SHE LOVES TO HIKE, GARDEN AND PURSUE HER ART.



KORBIN LYN PAUL HAS WORKED ON THE FIELD REGENERATION CREW AT THE SEED SAVERS EXCHANGE SINCE 2014. SHE IS A TRI-STATE MIDWESTERNER (WI, MN, IA) AND LOVES THE OCEAN. SHE IS A PROUD AUNTY BLESSED WITH A BIG FAMILY AND LOTS OF RELATIVES.

SQUASH WISDOM

KORBIN LYN PAUL

Rays of low November sun glint through greenhouse glass. The air outside is crisp and smells of Earth going to sleep. Leaves blanket the ground in beautiful, bronzes, ambers, and rusts. In the warmth of the greenhouse, I methodically scoop the hull-less seeds from the squash named 'Buschol Kurbis', *Curcubita pepo*. My skin is layered with that of the squash's. There is a reverence in my heart. I think about this squash's season growing out in the field on the ridgetop, across from the tree where the eagles perch.

How many sunrises and sunsets, how many moons did she greet? How many drops of rain did she drink, of dew did she hold? How many bluebirds sang to each other as they flew over? How many turkeys did she see strut by, tail feathers fanned? How many other flowers were born within the same garden, belonging to all the other crops? How many wild seeds fell to the ground in the woods around her this season?

My coworkers have gone to lunch. Here in the solitude of my thoughts I breathe in slowly, taking in the sounds of the old ceremony songs playing from the speaker. Soon I come to realize the thoughts passing through my mind are born not from me, but from the squash.

She says "You and I are subject to the same laws of Creation. In many ways, we are the same."

"You, the midwives who helped usher my embryo into the next phase of childhood in the spring, you are carried in different vessels than I, yes. Yet we are related. Life is mysterious and complex and there is also a simplicity to being alive. Listen to the energy of life around you."

"When I reached adolescence, you planted my feet in the Earth. With each passing day of sweet summer, I came into adulthood. All of my kin and I were planted next to each other in a row and bloomed together. Our bodies are dual, both male and female. My thin male blossoms laden with pollen burst forth from stamens as my turgid female flowers bearing receptive stigmas unfurled. The dual life generating essences united to create. Together we created the children you uncover from the valley of my body."

"All of this was orchestrated within the web of life. The insects helped manifest my next generation. We traded in service to one another - nectar for pollen transfer. My fruit you hold in your hand began as one of my female flowers who became fertilized in some manner. Perhaps it was a bee, perhaps my brother wind carried the fertile pollen to my stigma. There is all manner that life comes into the world."

"Some of my flowers were not fertile at the right time to be pollinated. Some of them did not get fertilized. Still, I became what I already was. Because of that the next generation is here, the seeds in your hand."

"Surrender and become what you already are. Do not panic about your course, just stay on it. You will always have what you need; it's all charted in the stars for you. Do not worry my relative, you and I are alive in this good life together."

My heart feels as if a new cavern was carved in it, a new cavity to hold love and wonder for our world. So much wisdom, holding so much complexity and simplicity all in one, was shared. It makes me wonder something about the knowing that this precious plant exchanged with my own heart. How much is the world around us teaching, all of the time? What multitudes of knowledge can we learn from our plant relatives? How many knowings rise in our heart that we dismiss or ignore? I vow, not only to do my part in protecting the plants and the Earth, but to humble myself to be a student of them, always.



EXCERPT FROM TALE OF WEEPING KUWA JASIRI TYOMBE INDOMELA

EDITING, AND RESEARCH BY

JOE-ANNA, AUSTIN, RAPHAEL, NATHAN,
CAROLION, OWEN, MELANIE,
MICHAELA, ROZEMARIE

As a magickal caretaker I show up writing. A melodic attempt to educate others through sharing the experiences of witnessing our species depleting the habitability of our life-giving Planet, Earth. Brace yourself for the inherent emotional, physical, and spiritual intersections that ensue.

THE UTE TRIBES ARE ORIGINAL PEOPLES OF TURTLE ISLAND

Journeying down the three-million-dollar-a-mile-highway, Seep Ridge Road. We arrive at *Weeping*. Our name for the Bryson 4 tar sands test pit. An operation established in the 1980s on Sovereign Ute Land, southeast of US Oil Sands Canadian owned mining facility. These are generational hunting grounds now stripped away by colonizers who suppress governance by Indigenous Tribal Councils, and Elders.

The companies that pierced *Weeping* evaded "Utah" mining regulations usual permits, and bonds that provide the structure, and money to pay for the promised reclamation. In 1987, *Weeping* is left dejected by profiteers, and sold as a private residence to an owner who stated "I see more value in the property with the tar exposed." This is supported by "Utah" Governor Gary Richard Herbert, and the political designation of the East Tavaputs Plateau as an "energy sacrifice zone".

Weeping. Repeatedly neglected by industry, avoided on company tours, we visit often. We are absolute about honouring, stewarding, and sustaining a relationship with *Weeping*. First Nations, Hunters Against Seep Ridge Road, Elders Rising, mountain bikers, Canyon Country Rising Tide, Living Rivers "Moab", and many others unite advocating for clean Air, accessible drinking Water, pure food, industry accountability including restoring the birthrights of Indigenous, and the diversity of plants, and animals.

I am descending the road to the belly of *Weeping*, with comrades drawn here for different, yet similar reasons. I am letting *Weeping* know the Seed regeneration plan. I see the gravel belly, and immediately feel the unspoken words of *Weeping* communicating clearly, urging me to, "quiet, be still". I lay pressed against *Weeping*, and wait. Flowing in, and out of patience I experience the sacred rhythms that are *Weeping*.

Birds, Beetles, Rodents, Butterflies make the buzzing, humming breath of *Weeping*. I smile big, recognizing the pollinators as necessary components of our ecosystem. *Weeping* reaches out through multiple precipitation puddles. The replenishing germinator, Rain, creates these tiny aquatic environments, supplying liquid to the thirsty. The pollinating ebb, and flow of Wind

chills me to an alert position, a reminder to stay present in every moment. I am attentive to the fully formed Seeds in all directions, boldly beneficiaries.

I notice *Weeping* gazing at me triumphantly displaying fortitude, leading me. Twenty feet away, down a slope, a large gash oozing tar contains a Chipmunk, and Mouse struggling to gain autonomy. This harsh fragrance irritates the nostrils. My privilege allows me to move away. Beyond me are the vivid voices, tracks, and scat of Ground Squirrel, Hawk, and Bear, all feeding, drinking, and breeding. I humbly give gratitude to the large, old being wrapped around the fragmented scene, Aspen, rooting into the tor. I am in awe as the pebbles warm me from the bottom up.

After observative listening to the fullness that surrounds me, I lift to the sky gifting a dance. Movements inspired by lingering clouds filled with moisture, then a surging impulse resonates as vocal vibrato. I rejoice spinning like a leaf in a gust, a prayer forms from my heart. I give thanks to the flowering perennials Rose, Grahams Penstemon, Skyrocket, and Serviceberry, to name a few, and honour Snake, Cougar, Elk, and Ant who roam this greenery. As a confident defender of natural beauty, I blossom into laughter.

THE EAST TAVAPUTS PLATEAU: A LAND FIGHTING FOR SURVIVAL BY: MELANIE

In 2014, we decide the only way to truly intertwine our fates with this vista is to create a vigil encampment Summer through Fall. Without lineage I cannot call this series of gorges home. Instead curiously willing we gather, meeting these cliffs extinguishing our estrangement. Absorbing the wonders of this abode, we connect through the natural cycles amplifying our stake in this scramble for collective survival. We are self-assured of our dynamic obligations to defend what we love recognizing she loves us too.

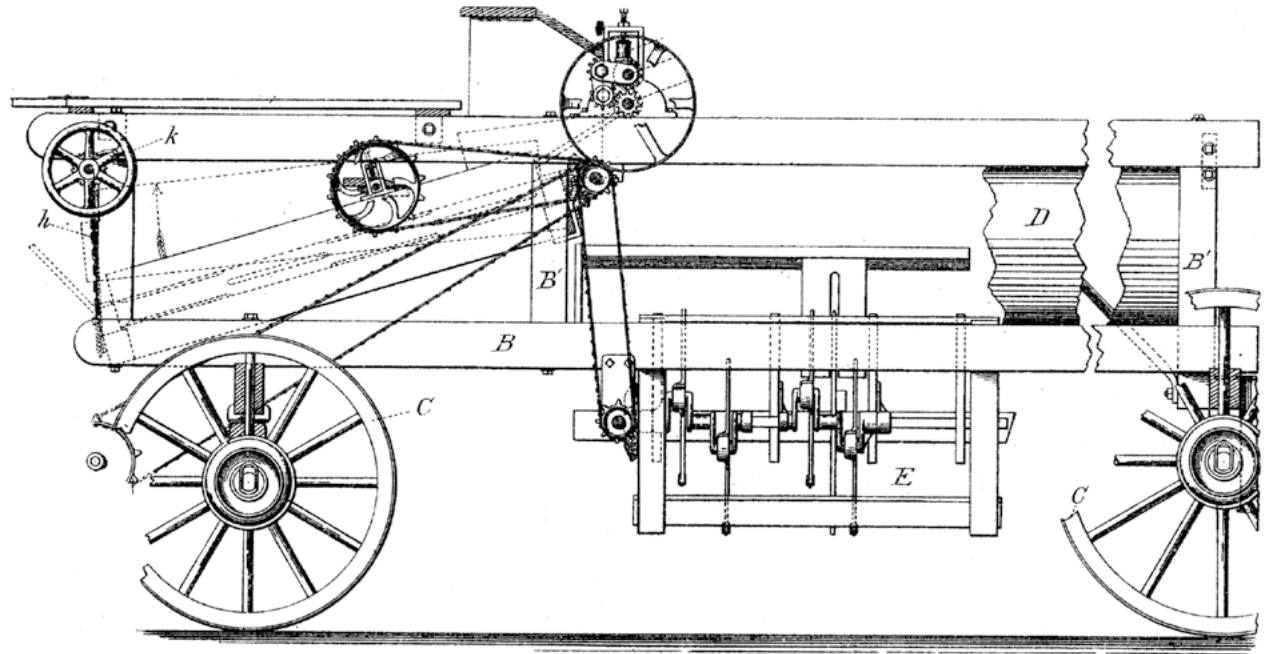
My talent is wild harvesting, while learning their true names, and following the protocol of our Elders. In collaboration with the Seeds I tell their virtuous stories. I let a friend know I am going down the Turkey trail to the North, and will loop around to meet up again. The aroma in the Air, brilliance of flowers, or a tingle in my skin changes my direction, and I am immersed in bramble filled with feasting thrush. Roving, the chorus of a Mullein song calls to me; I skip towards the tune joyously humming the parts I know that pertain to medicinal properties. Arriving at a magnificent stock, I give my own ballad that features a superb mix of gratitude, and a humble request to harvest. Twin fawns bounce by, and I interpret that as a definite yes.

Loyally, I take what I will use from the forth hearty stock I harmonize with. Only then do we sway together uttering the delicate words of our Ancestors. I fumble in my pocket to leave a Chalcedony I found at Weeping. After kissing the edges, I lay the gemstone on a loamy mound. I turn, sensing the adolescent Deer. I stroll the path behind them attentive to their juvenile chants. Gathering a stone to recoup my pocket of rituals, these young Guardians scamper off. A Fly lands on a fallen Juniper Berry prompting me to involuntarily pick up seven. Instinctively I know how vital my connection to wildness is.

More than catchy phrases. Greenhouse gas, global warming, noxious gases, climate change, and mass extinction are the symptoms Earth endures for the price of heavily subsidized oil. Facing mainstream nostophobia, the need for justice is illuminated. Collectively, we have the opportunity to revive our ancestral cultures that visibly live kindred within the animate world. Currently, this linkage that values both the physical, and spiritual is tattered yet repairable with the ubiquitous crafts of our great-grandparents. To rejuvenate this lifestyle we must relinquish our need for stuff, and once again replicate natural cycles that see self, society, and ecology as sacred.

UTE PEOPLE SPEAK SHOSHONEAN DIALECT OF THE UTO-AZTECAN LANGUAGE

AS A DEFENDER OF NATURAL BEAUTY, KUWA JASIRI, EDUCATES THE WORLD ABOUT PRISTINENESS INCLUDING ANCIENT LIFEWAYS, AND IS CURRENTLY LIVING IN NUEVO MEXICO BOOSTING SEED INITIATIVES. A TALE OF WEEPING IS A SHORT STORY ABOUT MINE RESTORATION PRACTICES, AND IS SELF-PUBLISHED BY AUTHENTIC CREATIONS. TO LEARN MORE OR GET ACCESS TO THE LIBRARY OF AUTHENTIC CREATIONS PUBLICATIONS EMAIL LITERATURE@RISEUP.NET



A CORN HUSKING MACHINE HAS A HOLLOW CYLINDRICAL DRUM. THE DRUM WALL HAS AT LEAST ONE APERTURE THERE THROUGH WHICH IS SUITABLE FOR UNHUSKED EARS OF CORN TO PASS THROUGH FROM THE OUT SIDE THE DRUM TO THE HOLLOW INTERIOR OF THE DRUM.

GOVERNMENT PRINTING OFFICE THE OFFICIAL GAZETTE OF THE UNITED STATES PATENT OFFICE

(WASHINGTON, DC: GOVERNMENT PRINTING OFFICE, 1895)

THE RAVEN

ELIAS ATTEA

I think of the raven, overhead

who took that choice

to leave, loud and victorious

into the freedom of the air

Flying now to the beat of strong music, wings

cutting through the harsh wind, and cries

of laughter—I think, or maybe is it of remorse

for the dead it must now consume; not to call it

anything less than human,

but to call each supposed victory by its real name—

as if being animal is any commutation for being human

as if desire is reason enough to depart for a life more simple

and free. All the ravens, there

in the tree, some sleeping this day

and others that slowly return

to the earth, slowly coming to pick up

what they left behind.

ELIAS ATTEA (THEY/THEM) WAS BORN UNDER NEW YORK NEW MOON ON ONE OF THE COLDEST PERIODS IN BUFFALO, NEW YORK'S HISTORY, OR SO THE LEGEND GOES. ATTEA CURRENTLY RESIDES AND WORKS AS AN APPRENTICE AT A QUIET FARM-SCHOOL IN NORTHERN NEW MEXICO, SHOVELING SNOW, SHIT, AND SOIL WHIST WORKING ON THEIR PRACTICE AS AN EDUCATOR AND WRITER (AND PAYING THE BILLS, SOMEHOW).

ATTEA'S RECENT WORK FOCUSES ON HEALING AND GROWTH THROUGH THE MIRRORING AND THE SYMBOLIZING OF THEIR COMMON ENVIRONMENT AND NATURAL WORLD. THESE POEMS ARE REPRESENTATIVE OF THE TEACHERS FOUND IN THE QUIET PLACES OF THE EARTH. ATTEA OFFERS WEEKLY MUSINGS OF THE WORLD THROUGH THEIR FLIMSY AND OFTEN-DUCT TAPED WORDPRESS BLOG, IN SEARCH OF EVERY HORIZON'S SUN.

MAIZE

ELIAS ATTEA

In what is now dry and forgotten—
what you used to be—can be heard
taking what you knew we would want
and leaving the rest behind.

Something is shivering from over there,
from that naked deserted body
I know you know to be.



COYOTE

ELIAS ATTEA

It's okay to admit there's a wild side in us
that we feel unfamiliar with—
like hearing the coyotes in the distance,
how their howl, of all the voices we know,
can somehow seem so close and familiar.



PHOTO CREDIT: SEEDBROADCAST

POEM

WHITNEY VELEZ

however concrete the jungle becomes
never forget
how to lay your body down on the earth
child
and rest your bones

not the abstract earth
i mean real grass and dirt
a quiet place beneath a tree is best
but any old turf-builder lawn or
highway median will do...

get real still and
a rest deeper than sleep
will come upon you

you may hear the wind in the trees or
the rushing of cars on the highway
and she may whisper to you too like
'baby everything's gonna be alright...'
and you may question her in your mind like
i do:

'is it mama? is it really?'
and like all mothers
who have ever gathered their daughters in
she doesn't know
what matters is not
the truth of the statement
(which comes through not as words
at all but more
a sensation of relief
as the clouds float by...
the flooding of oxygen
back into the veins
the dropping away
of a leaden anvil from the heart probably
who knows?
dropping down into the womb of her
magnetic field
to her molten core
where all things will be recycled...)
what matters is the close, dark soil
quietly nourishing the seed.....



THE MOON (SUN) ON OUR FACE

SIMONE JOHNSON

I went through an instagram portal, into another instagram portal, and found myself learning about moon cycles, plant kinship, seed stories and songs, the origins of diversity and piecing together my family constellation in order to locate any familial/ancestral seeds...and more. This is a seedpod carrying Rosso di Lucca Bush Beans that I bought from Adaptive Seeds earlier last year and grew in a community garden. Last season was my first time learning about and saving seeds. This seedpod was the last of my bean harvest. I would like to say Thank You to Rowen White, a seed keeper and farmer based in California, for putting me on to SeedBroadcast and her beautiful presence in the world.

A SEED SONG FOR MY BROTHER AND SISTERS, AND THEIR CHILDREN

Sung by Simone Johnson and her grandmother Elaine Brost

spread your roots, deep down, deep down and reach up

feel the moonlight (sunlight) upon your face

and the water conjure in your veins

and we'll be here, thank [God] you're here

spread your roots, deep down, deep down

and reach up

we're gonna greet you with

reach up

we're gonna greet you with

reach up

we're gonna greet you with

reach up

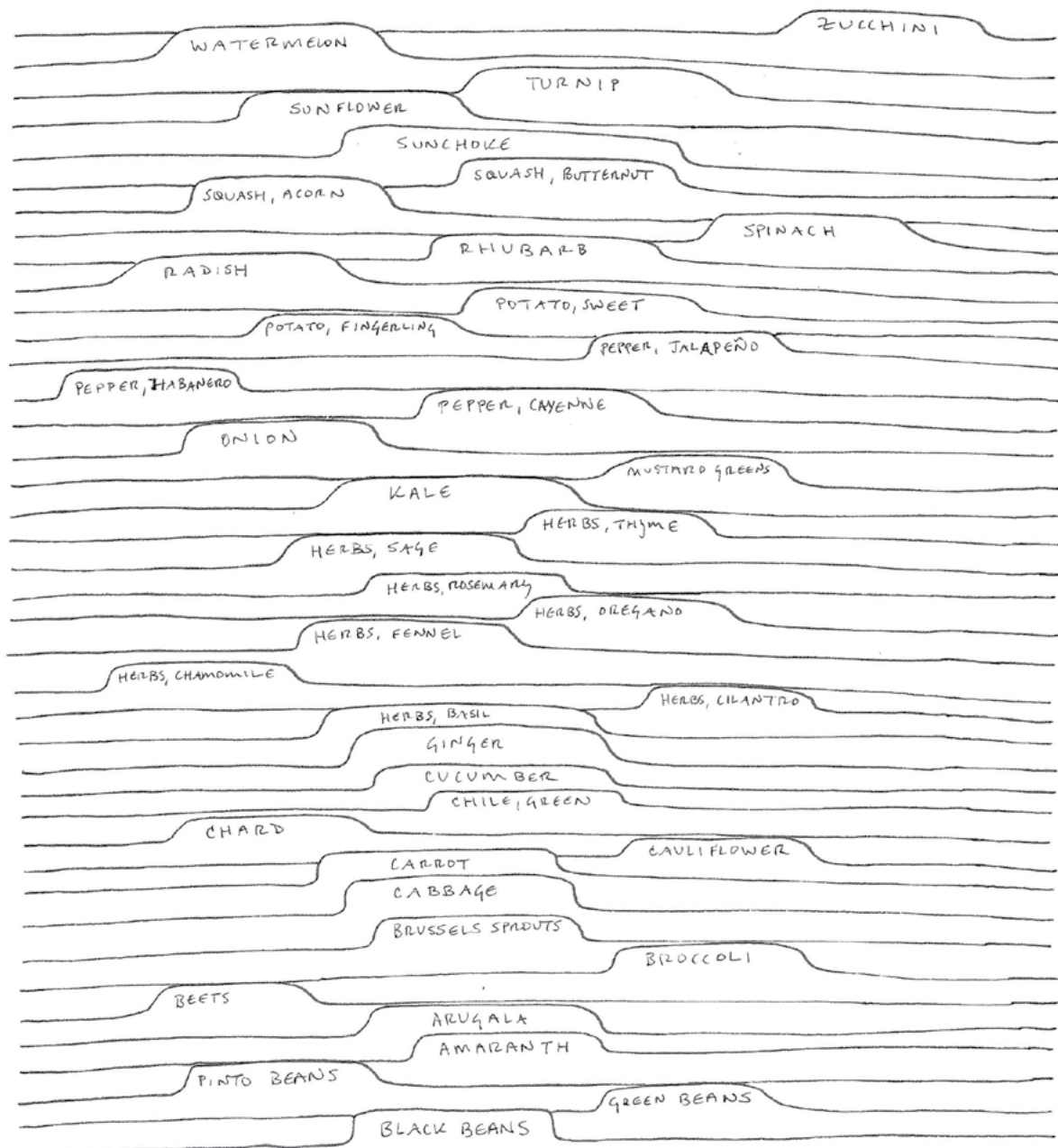
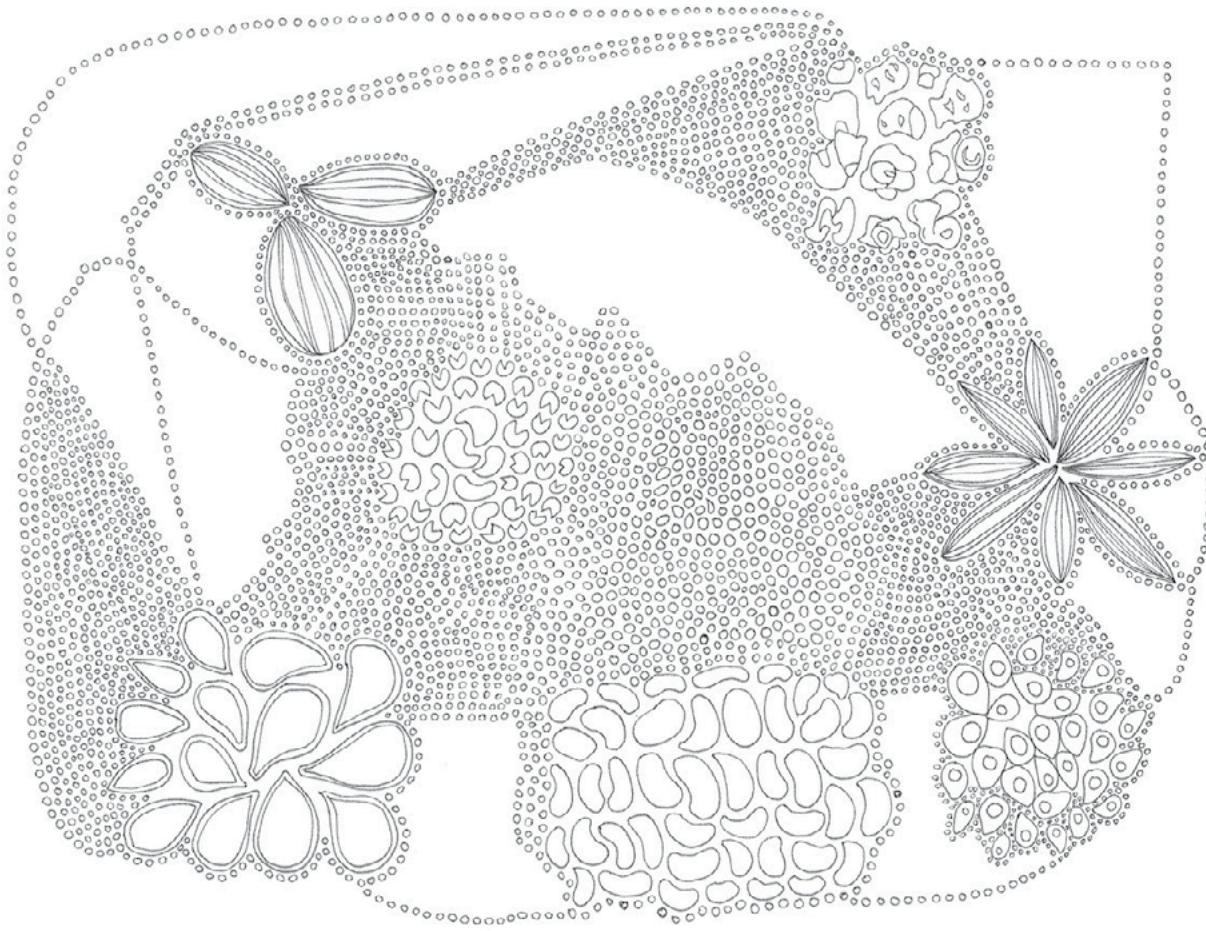
we're gonna greet you with looovvvee

TO HEAR SIMONE AND HER GRANDMOTHER SING THIS SONG GO TO: [SOUNDCLOUD.COM/SEEDBROADCAST/SIMONE-JOHNSON](https://soundcloud.com/seedbroadcast/simone-johnson)

SIMONE IS A BEGINNER (TRAVELING, DANCING) FARMER AND ENTREPRENEUR. SHE'S ALSO A COLLABORATIVE MOVEMENT AND VISUAL ARTIST. CHECK OUT WHAT SHE'S WORKING ON AT [WWW.DANCINGNOMADVA.COM](http://www.dancingnomadva.com)

SEED DRAWINGS

LIZ BRINDLEY



"SEEDS," INK ON PAPER, 2016
 "FILING SEEDS," INK ON PAPER, 2017

LIZ BRINDLEY IS A SANTA FE PRINTMAKER AND ILLUSTRATOR WHO CREATES ARTWORK ABOUT FOOD TO INCREASE AWARENESS OF THE CONNECTION BETWEEN HUMANS AND THE LAND. LIZ IS THE FOUNDER AND LEADER OF PRINTS & PLANTS, A MOBILE ART AND ECOLOGY WORKSHOP THAT TRAVELS AROUND NEW MEXICO TO TEACH ABOUT LOCAL AGRICULTURE THROUGH HANDS-ON ART ACTIVITIES.

IMAGINE INSTEAD

PETER CALLEN

A person who sees a way forward through the lack of funds, the lack of water, lack of seed and gasoline. Maybe not gasoline. But the other things which are lacking, this person, this imaginative person, sees with a vision that goes beyond the material not present to the material which is. What do we have too much of? Leaves? Time? Clothes?

There is something to do today, something which will advance our agenda toward a springy green carpet of flowers, drenched in soft, elusive scent which changes every 7 steps, our heads turned to the rustle and peep over right shoulder, and then back and up to the song starting in the trees before us.

Your person with this imagination may see a large rock, a ledge of granite slowly rising out of the ground like the back of a grey whale. Imagine, see, how the water is going to react with this rocky place; how are the plants growing there now? What is it that we are allowed to do with this land? By what mouthful of food may we be fed? How much for us, how much for the life below ground, for those 4 leggeds, and for those who hover and fly over the tops? Increase food for us, do you too increase food for all of the above and below?

Imagine this land taking care of those who live here, and imagine too what she would need, what would make her happy. Follow through on this image to experience what it really takes to accept this love and return it to the land and this knowledge of actual experience will be stored in your heart.

Spending a lot of time looking at the bare trees in winter, having this time to look at each branch, seeing how branches are strong and have space around them to grow, all of this gives me time to see the ones to cut out, the bark that needs the Kaolin clay, the soil that could use a mulch of shredded leaves, the spaces to grow a ground cover of peppermint and agastache, maybe some arugula, maybe I've already got enough of that. Taking this time now to plan for the season to come and all of the tasks to come is important. It gives me time to think and make decisions, because soon I will have to prune, and then a thousand things to do, and stopping to think won't be one of them. The care of an orchard, the care of a garden, only you know how much work that is, to the visitor, they see only the beauty, the fruit, not the trees. But like the performer of music or dance, the audience sees and hears one thing, the performer something else. The lessons you receive by doing your art, your craft, are invaluable to you, you've probably paid more for them than you'll want anyone to know. You will either continue to do your art, your gardening, farming, growing, or you will quit and find something else to do. But once the love is exchanged between you and your hands and the land and the love you receive, when your heart is full like that, you will not stop doing your art, your gardening, your farming, your growing.

Next time you see the love in a garden or orchard or farm, realize that you are seeing something that isn't there, something invisible. What was imagined by the grower has been proven by experience. As the witness, as the visitor, you're seeing a thousand miracles, all hiding in plain sight. The simple act of being given a handful of white Concho corn by Jeanette is full to the brim with impossible dreams and miraculous evidence. Thank you, Jeanette, thank you for performing, for doing your art, and for giving us this forum in which to speak of seeds and growing them.

Imagine the possibility of people in love with the land here, learning by their own experience and the experience of other lovers, growing their way into a life that sustains their hearts.

Farming is more than tilling a field and planting seeds, in fact, that is only about 1/10th of 1% of what farming is, yet the audience, the visitor, thinks this is 100% of what farming is. Also, there are lots of ways to farm, it may be that instead of tilling, you'll be cover cropping and crimping, then drilling the seed. Or maybe you'll have a polyculture with perennials and trees and be planting seeds by hand with a planting stick. But when you are listening to what the land wants and what the land has to give ~ can you imagine that you are part of what is growing too? Everyone who has planted something has learned something too - and I know some of you go right to, "I have a brown thumb, its so-and-so that has the green thumb". Well that's an easy out, and you can be sure that every farmer, gardener and "green-thumb" person has had a 100x more failures and mistakes than the "brown thumb". But to listen to what the land has to give, that is the work we all have to do. So imagine, see, what that is for you, learn from those who have gone before you, and you will not fail to learn.



AS THE CHAIRMAN OF THE NON-PROFIT PATHWAYS: WILDLIFE CORRIDORS OF NM, PETER ENCOURAGES CITIZEN SCIENTISTS TO GET OUT AND DOCUMENT NATURE, ESPECIALLY THE LARGE MAMMALS, AS IT MAY BE A LONG TIME BEFORE WE HAVE AS MUCH WILDLIFE DIVERSITY AGAIN AS WE DO RIGHT NOW. HE ENCOURAGES EVERYONE TO SUPPORT THEIR LOCAL NON-PROFITS, SPEND TIME WITH THEM PRESERVING AND RESTORING THE NATURAL WORLD. YOU MAY LEARN THAT PEOPLE CAN BE A POSITIVE FORCE FOR NATURE, AND CAN LIVE IN HARMONY WITH NATURE, NOT JUST BE THE CAUSE OF DISRUPTION AND POLLUTION. GROWING SOME OF YOUR OWN FOOD WITHOUT USING POISONS IS A BIG PART OF LEARNING ABOUT THAT HARMONY!

PLANTCRAFT: MEDICINAL BOTANICALS OF NEW MEXICO

JOANNA KEANE LOPEZ



CHAMISO HEDIONDO

SAGEBRUSH, BIG SAGE
ARTEMISIA TRIDENTATA
ASTERACEAE FAMILY

DESCRIPTION

This native sagebrush is highly pungent, hence its Spanish name "chamiso hediondo". The strong aromatic odor is especially palpable after a summer rainstorm. Interestingly, chamiso hediondo is not a true sage, or salvia, but is an Artemisia and is related to species such as mugwort and wormwood. It is a silvery-grey shrub that dominates vast acres of plains and mountainsides. Sagebrush grows at a height of 3 feet and lives around the altitude of 4000ft and is common in the northern Rio Grande Valley, especially in the Taos Mesa.

MEDICINAL USES

Chamiso hediondo is antimicrobial and antiseptic. The herb can be heated with lard or beeswax and made into an ointment for disinfecting the skin and inhibiting growth of bacteria and fungi. It is a diaphoretic, promotes sweating and is helpful for colds and breaking fevers. As a bath it can be used to reduce fever and mild rheumatism. As a carminative it is a good bitter tonic to stimulate digestion in the form of a cold tea infusion. Due to the aromatic oils, including camphor, it can be used as a decongestant when boiled in water and inhaled.

TRADITIONAL USES

The dried branches of *chamiso hediondo* are used as smudge sticks to purify and cleanse people, homes and spaces. To many Native Americans tribes *chamiso hediondo* has been used as a panacea herb for indigestion, stomach pains, cold symptoms, fevers, an external antiseptic and as a hair rinse for dandruff. It is used in sweat bath ceremonies to cleanse the body by helping to excrete wastes and toxins through the skin. Inhaling the smoke has been used to alleviate occasional bouts of depression. A wash from the leaves has been used as a household cleaner and insect repellent. *Chamiso hediondo* also creates a golden yellow natural dye.

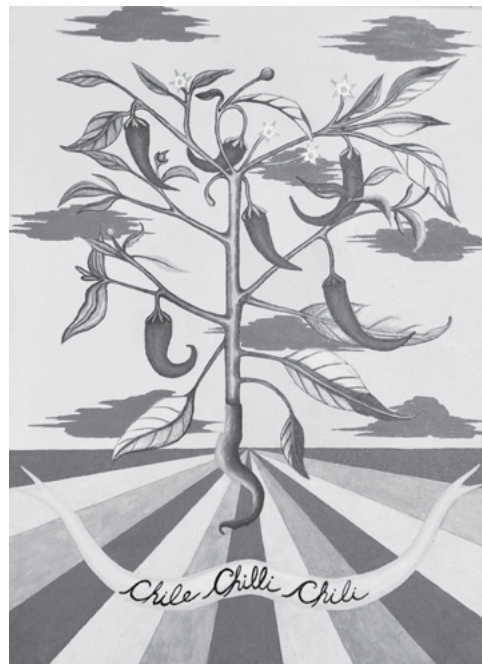
CONTRAINDICATIONS

Not for use during pregnancy, emphysema or bronchiectasis. Because of foul taste and if used in excess can cause gag-reflex, so use sparingly.

DOSAGE

Internally as a sun-tea of 1 tsp herb per cup of water.
 Externally as needed.

JOANNA KEANE LOPEZ WAS BORN AND RAISED IN ALBUQUERQUE, NEW MEXICO. SHE GRADUATED WITH A BFA IN STUDIO ART AND A SECOND MAJOR IN SPANISH WITH THE HONORS OF SUMMA CUM LAUDE FROM THE UNIVERSITY OF NEW MEXICO. SHE WAS SELECTED AS A SURFACE: EMERGING ARTIST OF NEW MEXICO FROM THE HARWOOD ART CENTER. JOANNA WAS A PART OF THE LAND ARTS OF THE AMERICAN WEST PROGRAM THROUGH THE ART & ECOLOGY DEPARTMENT OF UNM. AS AN ALUMNI OF LAND ARTS OF THE AMERICAN WEST, SHE RECEIVED AN INTERNATIONAL RESEARCH GRANT THROUGH THE ANDREW W. MELLON FOUNDATION. FOR MARCH 2017, SHE DID A WORK TRADE RESIDENCY WITH A-Z WEST IN JOSHUA TREE, CALIFORNIA. IN JUNE 2017, SHE BEGAN WORKING AS A VISUAL ARTS TEACHING ASSISTANT WITH THE OXBOW SCHOOL IN NAPA, CA. WWW.JOANNAKEANELOPEZ.COM



CHILE

CHILI, CHILLI
CAPSICUM SPP.
SOLANACEAE FAMILY

DESCRIPTION

Chile is a native plant of Mexico and northern Central America and was originally introduced to the Spanish by the indigenous people of ancient Mexico. It has been used as a traditional staple in the gardens of the Rio Grande Pueblos alongside other food crops such as corn, various squashes, and beans. It is planted as seeds in March and April and tended indoors to germinate. The seedlings are transplanted to the open gardens by early May and begin to ripen by the middle of September. If left on the plant a little longer they turn scarlet and are hung to dry in the sun. If not eaten, they become ristras (strings of hanging chile).

MEDICINAL USES

The active chemical component in chile is capsaicin, which is antibacterial and anti-inflammatory. It is helpful with treating digestion problems, such as intestinal gas, diarrhea, upset stomach and cramps. It is known as an effective pain reliever.

The higher the heating unit of chile creates for more medicinal effects. Chile thins out thick blood, increases blood circulation and can be helpful in impeding heart attacks and strokes. It is preventative against respiratory infections when taken internally and clears congestion. *Chile* acts as an internal disinfectant and helps to detoxify the colon. It contains high vitamin C and strengthens the immune system. The chile seeds and veins also can be burned and used as an insect repellent.

FOLK USES/ MEDICINAL USES

In 1651, a treatise published in Rome entitled "Rerum Medicarum Novae Hispaniae Thesaurus Sev Plantarum Anumalium Mineralium Mecicanorum" retained much of the medicinal knowledge of the Aztec. In this ancient book there were seven varieties of chile recognized by the ancient Mexicans as remedies. Their Náhuatl names were *quauchilli*, *milchilli*, *zenalchilli*, *tlalchilli*, *tefochilli*, *chiltecpin*, and *chilocoztli*. The varieties of chiles were used medicinally for purges, inflammation of the kidneys and brain, lung afflictions, heart pains, bad blood, diarrhea, and internal tumors.

Chile smoke is used to smudge out curses and/or possessions of people and physical spaces.

If unfortunate to become the victim of *brujería* (witchcraft), chile can act as a remedy. Tie two large nails into the shape of a cross with wire. Put this in a fire. When it is red hot place in the center of the cross a small string of "hearts of chile". Sprinkle it with Mexican rock salt with a motion of the cross. Increase the fire and the consequent flames are intended to burn up any *brujería* that may have come your way.

CONTRAINDICATIONS

Do not use capsaicin on broken or damaged skin.

DOSAGE

Internally as needed.



TOLOACHE

JIMSONWEED, FLORIPÓN, SACRED DATURA, ESTRAMONIO
DATURA WRIGHTII
SOLANACEAE FAMILY

DESCRIPTION

Toloache is native to northern México and the Southwestern United States. Originally, the perennial was known as toloatzin by the Aztecs and later became modified to toloache as an encompassing name for several species of *datura*. It can be identified by its sprawling form, large leaves and 6 to 8 inch trumpet-shaped sweetly scented white flowers. It grows mainly in desert-like spaces even though it resembles a "fugitive from a tropical rainforest". The poisonous beauty lives in habitats almost exclusively created by human or natural disruption such as roadsides, slopes, washes, drainage areas, vacant city lots or eroded arroyos. This vespertine blooms at night and grows all throughout the Southwest up to 6500ft in elevation. The flowers are bewitchingly fragrant while the leaves are foul smelling.

MEDICINAL USES

All nine species of *datura* are some of the most toxic of all plants in the deserts of the Southwest. Each part of *toloache* comprises highly concentrated poisons and is classified as a deliriant and an anticholinergic. The alkaloids in Toloache can produce a numbing effect or even death. Externally the antimicrobial and analgesic leaves can be made into compresses or salves to aid in pain relief for hairline fractures, intense headaches, menstrual cramps, soar joints and muscles. Internally the plant produces unpleasant hallucinations and may cause death in large doses. Although on a brighter side, there are new studies suggesting that the lectins, a vegetable protein found in *datura* have demonstrated potential in destroying malignant tumor cells.

FOLK/TRADITIONAL USES

Toloache has been important in ceremonies for various Indian tribes in the western United States. The Zuni Indians have employed *datura* as a narcotic, anodyne and an anesthetic. The powdered root has been used by the Zuni and administered by rain priests to cause one to go to sleep or see ghosts. In México it has been sold as a love potion.

Datura is used as a flower essence for meditation, connection with spirits and to treat insomnia.

Traditionally it has been used to alleviate many external bodily pains. By grinding the roots, leaves or flowers and applying the powder to wounds or as a poultice it treats skin infections as an analgesic and anesthetic. The ground seeds can be made into a salve and applied to body lice. Sometimes combined with tobacco or marijuana, the flowers and leaves are made into a bath for arthritic pain or pain from falls. It is advisable to leave the bath before becoming too relaxed. During the first World War, *Datura* was cultivated in the United States as a substitute for atropine.

CONTRAINDICATIONS

Do not take any part of this plant internally. It can lead to blindness and nervous system derangements. Not for topical use with pregnant or breastfeeding women. Too frequent or excessive external applications can induce dry mouth or blurred vision.

DOSAGE

Externally as a topical compress, wash or ointment, no more than 2-3 times a day lightly applied.



OSHA

CHUCHUPATE, BEAR ROOT, PORTER'S LOVAGE
LIGUSTICUM PORTERI
APIACEAE FAMILY

DESCRIPTION

Osha is one of the most widely used medicinal plants in New Mexico. It is a highly valued mountain herb with a pungent smell reminiscent of celery and licorice. This member of the parsley family grows all throughout the Rocky Mountains and can be confused with poison hemlock. A distinguishing feature is that poison hemlock has purple splotches on the leaves, while osha does not. The roots are primarily used as medicine, although the leaves and seeds are edible as well and added as a seasoning to meats, stews, beans and chile. The plant can reach a considerable size of up to 7 feet in height and grows at elevations of 7000 to 10,000ft. It is said to harvest osha in the afternoon in order to avoid the bears that visit the plant in the morning time.

MEDICINAL USES

Osha has many uses. It is effective in treating colds and loosening phlegm for lung infections. The tea, a chewed root or a candied root soaked in honey act as an anesthetic and disinfectant for soar throat. The root is an effective disinfectant as a mouthwash for cleaning the teeth and gums and as a skin wash. Chewed or brewed in tea osha stimulates sweating. It is an excellent stomach bitter and carminative.

FOLK/TRADITIONAL USES

Osha root is considered a talisman and is often carried around as a good luck charm. It is worn close to the heart for protection. Like Cachana (*Iliatris punctata*), it is supposed to ward off witches' spells. It is also thought to be effective in warding off spiders and rattlesnakes. Pueblo Indians place the root in acéquiás (irrigation ditches) to discourage cutworms and other larvae.

A paste made of the root powder has been used on snake and black widows bites to draw out the poison. One recipe for a salve is beeswax, trementina, manzanilla (chamomile), osha root, and contrayerba to treat sores, cuts and bruises. Osha has been used for stomach gas, flatulency, colds, soar throats, cold syrups and as a bitter tonic for indigestion. It is an all around panacea herb of the Southwest.

CONTRAINDICATIONS

Osha should not be confused with the similar appearance of poison hemlock. Poison hemlock is highly poisonous to animals and people and can cause death. Osha contains oxytocin and should not be ingested by women who are nursing or pregnant.

DOSAGE

Internally, tea as needed (suggestion: 1tbsp herb to one cup water), chew/eat root as needed (candied root soaked in honey is tastier).

"This time may be dark, but all regrowth starts in the darkness of a seed."

Daris LaPointe

