SeedBroadcast

agri-Culture Journal

Cultivating Diverse Varieties of Resilience #11

11th Edition SeedBroadcast Journal

We would like to thank all who generously contributed to our 11th 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 12th edition that will be published in the Spring of 2019. Your submission could be a drawing, photograph, story, recipe, poem, or an essay, with relevance to the essence of seeds, seed saving practices, climate change 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.

THE DEADLINE FOR SUBMISSIONS IS

FEBRUARY 18TH, 2019

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 Littleglobe, the McCune Charitable Foundation, Robert Rauschenberg Foundation Climate Change Solutions Fund, Native Seeds/SEARCH, Albuquerque Museum, 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/Española-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, http://allspeciesprojects.com Ana Ruiz Díaz and Toña Osher for building our relationship to community actions and seed activists from Meso-America, Chalo for the ancient wheat, Rick Ferchaud for endless weeding and digging and to the many individuals for their continued support, Whitney Stewart for graphic design, Natalie Keys for transcribing and Cirrelda 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

SEED=FOOD=LIFE

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.

FOR MORE INFORMATION AND TO GET INVOLVED PLEASE CONTACT
SEEDBROADCAST@GMAIL.COM
TO FOLLOW OUR SEED PILGRIMAGES GO TO
SEEDBROADCAST.BLOGSPOT.COM

WWW.FACEBOOK.COM/SEEDSHARE

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

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Online donation:
seedbroadcast.org/SeedBroadcast/SeedBroadcast_Donate.html

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

With the increasing demands for SEED Action now, we need your help to ensure that we continue to expand our collaborations and activations. Your support will keep the SeedBroadcast agri-Cultural Journal free and accessible, nurture seed stories and keep them alive and percolating and allow our partnerships with Native Seeds/SEARCH and community activist organizations to deepen the focus on food and seed sovereignty. These are times of rapid climate and environmental changes that are causing devastation to our mother earth so we need to continue to sustain and deepen our efforts. 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.

- **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 Seed the Resilience: agri-Culture and Climate Change 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.

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

When seeds are buried in the earth, their inward secrets become the flourishing garden.

Rumi

SeedBroadcast

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Photo Credit: SeedBroadcast

Southwest Conservation Corps. Acoma, New Mexico

Healing Food Oasis, Española, New Mexico

WHAT IS SEEDBROADCAST PLANNING FOR 2018/2019?

Seed the Resilience: agri-Culture and Climate Change
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 bioregional 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 the Resilience: agri-Culture and Climate Change is a creative 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 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 the Resilience: agri-Culture and Climate Change* 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 a special edition of the SeedBroadcast agri-culture Journal.
See page 3.

•Share a Seed Story about a seed you admire and its extraordinaryresilience. These Seed Stories will be included in a sculptural installation in the *Seed the Resilience: agri-Culture and Climate Change* exhibition to honor these seeds and share their inspiration with others. Please make sure that your story is **between 80 and 100 words**. We will not be able to include longer stories. Also send us a few of the seeds that relate to your story, we will take care of them.

Send your story via email to:
seedbroadcast@gmail.com

Send seeds and snail mail story to:
SeedBroadcast, 615 Cortez Street,
Santa Fe, New Mexico 87505

Contact SeedBroadcast for more details about how you can participate:
seedbroadcast@gmail.com

DOES THE POD DETERMINE THE SEED OR DOES THE SEED DETERMINE THE POD?

"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

SEED LIBRARIES

BEVIN COHEN

As the movement toward increased food security and localized diet continues to grow, local control of our seed supply is a topic of significant relevance. One of the fastest growing facets of this movement is the seed library, a place where community members have access to a selection of seeds that they can "check-out" just like you would books from your public library. In fact, a number of these programs are actually housed within a local library. I always like to joke that if you want to see a librarian get excited just give them a new reason to use those old card catalogs! There is certainly something beautiful about those old drawers filled with packets of seeds eagerly awaiting a gardener to take them home and give them a grow!

To continue with the library book analogy, after a gardener checks out their seeds and takes them home, when the fall harvest is complete, participants are encouraged to bring their seeds back to the library to restock the supply. If properly executed, the seed library can become a closed circuit sustainable program offering its community a wide selection of regionally adapted, local seed. But it's this part of the program that has proven to be the most challenging.

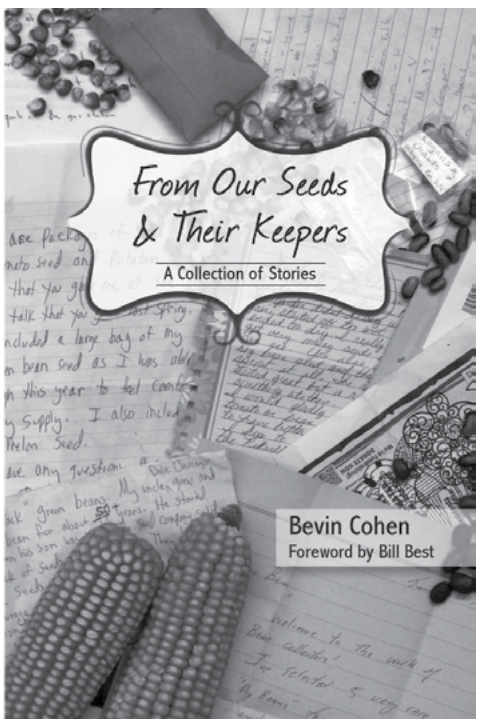
As of this writing, my home state of Michigan is actively involved in the seed library movement with nearly fifty of these seed sharing initiatives established state-wide. The general consensus among the directors of these programs is that getting community members to return seed at the end of the season is the most difficult challenge they face every year. Luckily, there are quite a number of commercial seed companies out there that understand the benefits that seed libraries bring to the table and are willing to donate seed every fall to help keep them operating. While this isn't a truly sustainable model (yet), seed sharing programs like these serve multiple roles in their communities and the benefits far outweigh the challenges that we face.

In my eyes one of the most beneficial aspects of a seed library is its ability to strengthen a community. When like-minded people gather together for a common cause, the friendships and relationships that develop have a value that's far too great to measure. If a seed library's sole accomplishment was to get people talking to their neighbors again, sharing seeds and recipes or even just their surplus zucchini, I would consider that a win. But what a seed library offers is also so much more.

Through these seed libraries, communities are now growing their own fresh produce and easing their dependence on store bought food. These libraries also offer educational opportunities on sustainable gardening methods, preserving the harvest and even the basic cooking skills that don't seem to be passed down generationally quite as often as they used to be. In addition, the libraries themselves benefit through increased community involvement as seed sharing programs are pumping new life into these old buildings and ensuring their relevancy in this quickly changing, technology forward world.

Seed libraries are on the forefront of the local food movement, empowering communities with the tools and skills they need to regain the independence we must have in order to live happy and healthy lives. Every neighborhood deserves access to locally grown and adapted seed; every neighborhood should be home to a community seed library program. Consider contacting your local library and if they don't already have a seed library in place, maybe it's time for you to plant that seed.

BEVIN COHEN IS A WRITER, POET, HERBALIST, GARDENER, SEED SAVER AND WANDERER. HE LIVES AND WORKS AT SMALL HOUSE FARM, THE FAMILY HOMESTEAD IN SANFORD, MI. BEVIN IS ALSO THE FOUNDER OF MI SEED LIBRARY, A COMMUNITY SEED SHARING INITIATIVE THAT HAS WORKED CLOSELY WITH A NUMBER OF COMMUNITIES TO HELP ESTABLISH SEED LIBRARY PROGRAMS ACROSS HIS HOME STATE AND BEYOND. HE SPENDS HIS TIME OUTSIDE OF HIS GARDENS OFFERING WORKSHOPS AND LECTURES ACROSS THE COUNTRY ON THE BENEFITS OF LIVING CLOSER TO THE LAND THROUGH SEEDS, HERBS AND LOCALLY GROWN FOOD. BEVIN FINDS HIMSELF AT HOME WHEREVER HIS HANDS ARE IN THE SOIL, SOWING THE SEEDS OF YESTERDAY TO REAP THE BOUNTIFUL HARVEST OF TOMORROW.



SEED CABINET

KATERIE GLADDYS, ANNA PRIZZIA

"Living democracy grows like a seed, from the ground up." Vandana Shiva

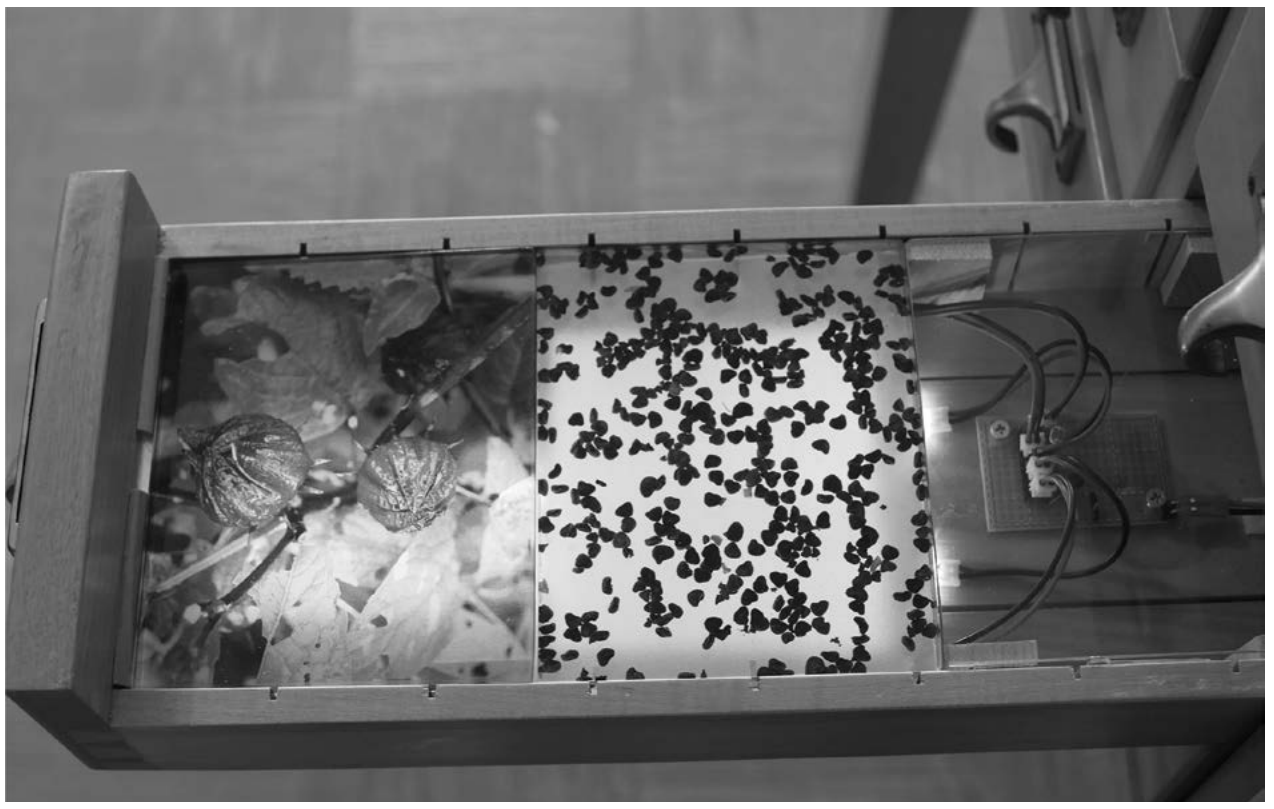
Seeds represent the essence of life. They contain all necessary information needed to feed a community. As food/vegetables move through different cultures, and ecosystems seeds become site-specific; the values and taste of the places where they are grown impact selection. Seed libraries protect seed varieties adapted to our region, and train community members and local farmers on seed saving techniques. Seed libraries function as repositories of genetic diversity and local knowledge, which is particularly important as society wrestles with food security and sovereignty.

Card catalogs, glass slides, and specimens are obsolete yet familiar cultural objects which, when activated by and hybridized with performance, video and electronics bring together multiple ways of knowing, disrupting and playing with the audience's expectations of library, archive, and machine. In the tradition of the Wunderkammer, the drawers of a repurposed "old school" maple card catalog are filled with seed specimens of regional heirloom fruits and vegetables and images printed on glass slides. Opening the drawers triggers the playing of poetic videos and audio narratives of our community's lived experience of these foods: their cultivation, preparation, and history onto a video monitor embedded into the top of the card catalog.

We will share a poetic experience of Seed Cabinet, curating images, fragments of video and sounds from the work's performative digital hybrid object through hypertext links within a pdf as well as writings about our experiences doing/performing community workshops on seed saving where Seed Cabinet is part of a roadshow/Chautauqua format at our rural county's public libraries as well as other community venues.

Seed Cabinet is a collision point that remixes the discourse of how technical information is dispersed, blending live "lecture" with digital re-presentation of oral history, filmic instructional media, cooking shows, experimental ethnography, animation, farmer's almanacs. *Seed Cabinet* includes facts but seeks to "resemble" the discourse of science" as a way to both share information about and problematize seeds, inviting the audience to dig deeper reflecting upon their role in global and local food systems.

Select images and video can be found here http://layoftheland.net/make/seedCabinet/seed_cabinet.html



KATERIE IS A TRANSDISCIPLINARITY ARTIST WHO THINKS ABOUT PLACE, MARGINALIZED LANDSCAPES, SUSTAINABILITY, MAPPING, CONSUMPTION, AND AGRICULTURE.SHECREATESINSTALLATIONS,SCULPTURE, VIDEOS, AND RELATIONAL PERFORMANCES. HER CREATIVE WORK HAS BEEN EXHIBITED IN THE US, UK, CANADA, GERMANY, SPAIN, AND CROATIA. SHE IS AN ASSOCIATE PROFESSOR AT THE UNIVERSITY OF FLORIDA. RECENT PARTNERS INCLUDE WORKING FOOD, A COMMUNITY RESOURCE FOR EDUCATING PEOPLE ABOUT SUSTAINABILITY AND LOCAL FOOD, FIELD AND FORK CAMPUS FOOD PROGRAM, UF SCHOOL OF FOREST RESOURCE AND CONSERVATION, UF OFFICE OF SUSTAINABILITY AND AND ALACHUA COUNTY PUBLIC LIBRARIES. HER WORK CAN BE FOUND AT HTTP://LAYOFTHELAND.NET.

ANNA IS THE CO-FOUNDER OF WORKING FOOD, THE LOCAL NON-PROFIT THAT HOSTS THE SOUTHERN HERITAGE SEED COLLECTIVE AND SERVES ON THE BOARD OF BLUE OVEN KITCHENS. ANNA ALSO OVERSEES THE FIELD & FORK PROGRAM AND WORKS AS THE CAMPUS FOOD SYSTEMS COORDINATOR FOR THE UNIVERSITY OF FLORIDA. SHE HAS 15 YEARS OF EXPERIENCE IN SUSTAINABILITY AND FOOD SYSTEM EFFORTS, INCLUDING WORKING AS STATEWIDE COORDINATOR FOR THE FLORIDA FARM TO SCHOOL PROGRAM, MANAGEMENT OF SUSTAINABILITY EFFORTS WITH INSTITUTIONAL FOOD SERVICE AT UF, AND SERVING ON THE BOARDS OF SLOW FOOD GAINESVILLE AND THE ALACHUA COUNTY NUTRITION ALLIANCE. SHE IS THE PRESIDENT OF THE BOARD AND CO-FOUNDER FOR WORKING FOOD (FORMERLY FORAGE), A NON-PROFIT FOCUSED ON SUPPORTING AND SUSTAINING LOCAL FOOD EFFORTS IN NORTH CENTRAL FLORIDA.

MELISSA DESA IS THE CO-FOUNDER OF WORKING FOOD, A NON-PROFIT BASED IN GAINESVILLE, FL AND SEEDEO OF THE SOUTHERN HERITAGE SEED COLLECTIVE. MELISSA IS A SELF-TAUGHT GARDENER AND SEED ADDICT, TEACHING GARDENING AND SEED SAVING TO GROWERS OF ALL AGES. THROUGH HER WORK WITH WORKING FOOD, SHE ALSO HELPS PROMOTE THE ADVANCEMENT OF OUR LOCAL FOOD COMMUNITY THROUGH A VARIETY OF OUTREACH PROGRAMS AND ACTIVITIES. VISIT WORKINGFOOD.ORG TO LEARN MORE ABOUT THE ORGANIZATION AND MELISSA.

RESILIENCY RISING

BILL MCDORMAN, STEPHEN THOMAS

As another spate of unprecedented wildfires blaze around the world, some stark questions confront us. What kind of a future do we face? How do we plan intelligently? Can we prepare our institutions to deal with "unthinkable" scenarios, even as they become realities?

Since the Age of Reason, technological progress has always seemed to provide solutions to our compounding problems. Perhaps we could rest a little easier trusting that humanity's ingenuity will save us again, this time from environmental catastrophe. But even in this best-case scenario, our seed work should continue. Seeds and seed libraries will still be necessary and immensely valuable. They are becoming a proven way to build community and bridge cultural, economic and political divides. Underserved communities especially have the most to gain through seed saving—a major benefit in these vulnerable economic times.

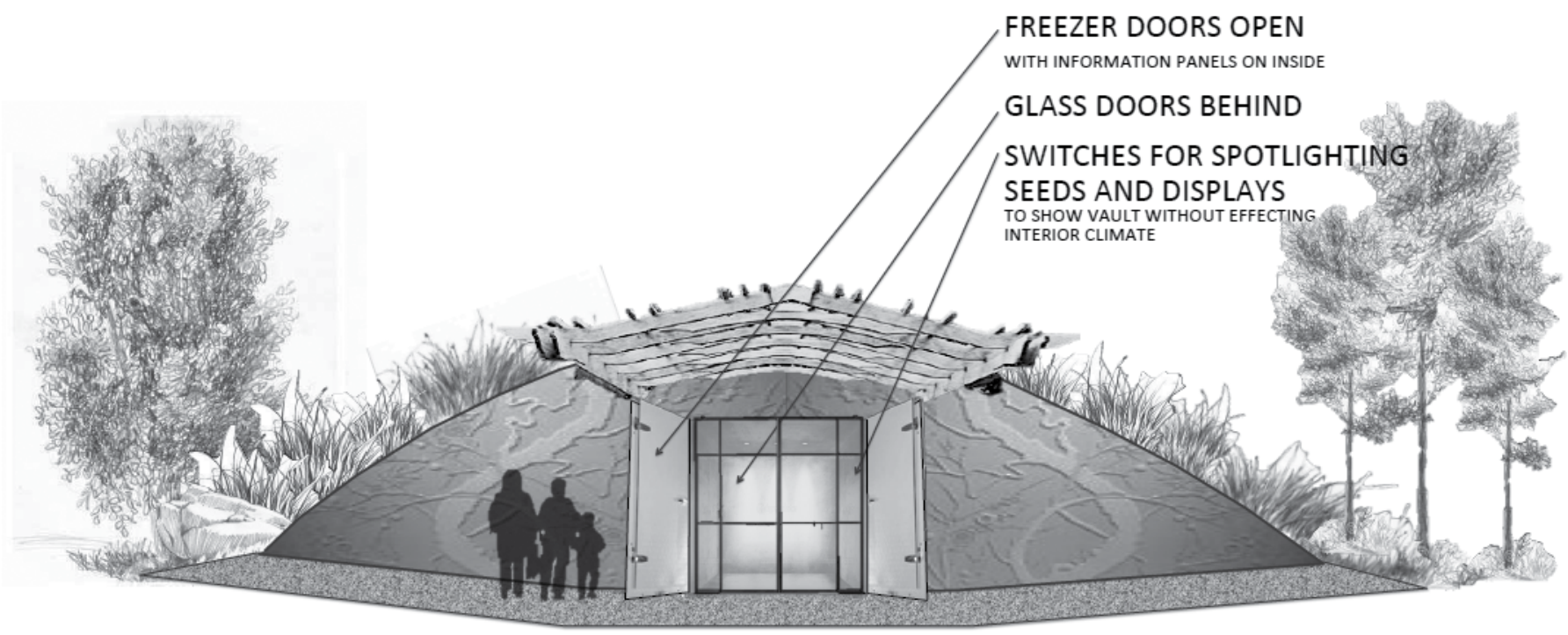
But what if the "black swan" events of climate chaos continue to arise, as we are seeing unfold today? What if those governments and large corporations around the world questioning the durability of their supply lines for food and essential goods have it right? What if industrial agriculture falls victim to extreme heat, drought, fire, and super-storms? What if the oceans do rise as fast as predicted and hundreds of millions of displaced climate refugees need to be fed?

Think for a moment about the difference it would make in these increasingly believable scenarios if each and every community had a seed library: a calm haven of hope and potential at the center of a roiling storm. Set aside the criticism sometimes leveled at seed libraries that "all the seeds aren't germ tested and might not breed true." How much worse off would a town or city be without a seed library in these worst-case scenarios? Cut off from an industrial food supply for months or longer, those communities with their own commonly held, locally adapted seeds will certainly have an advantage. They will literally hold the seeds of a new local agriculture in their hands. Uniformity and seed line purity for scaling up food systems can be recreated only if the startup seeds are available. In the meantime, we will be able to grow something to eat. Most importantly, possibly, we will have something to believe in.

Eight years ago, my wife Belle Starr and I hosted the first Seed School workshop at our home in Cornville, Arizona. These ecological concerns didn't seem as dire at the time, but they were on our minds and on the horizon even then. Similarly, the seed library movement was just beginning to germinate. It seems unlikely to be an accident that the exponential spread of seed libraries mirrors this increasingly volatile planetary moment. We like to think of it as resiliency rising to meet the storm.

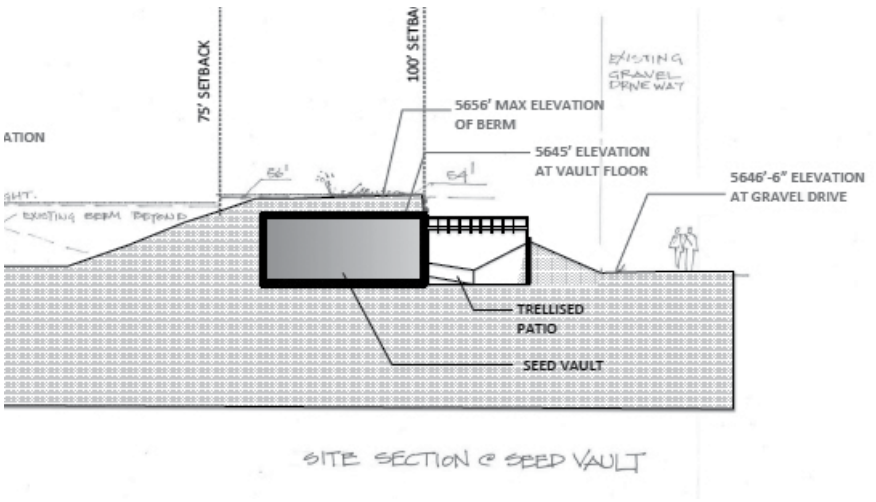
As the seed library movement continues to grow, perhaps an important next step is to see them successfully networked to other seed libraries close by. Not only would this be optimal for the almost-immediate sharing of successful varieties, it would spread cautionary news of the most spectacular failures. As a wise seed elder once remarked: "Saving seeds is powerful, but sharing them is profound." Local networks of seed libraries have begun springing up all over the continent as a way to share seeds and successes. The Bay Area, Tucson and Toronto are some prime examples. Nothing like having a close neighbor to call when you face a challenge similar to one they have just
been through.

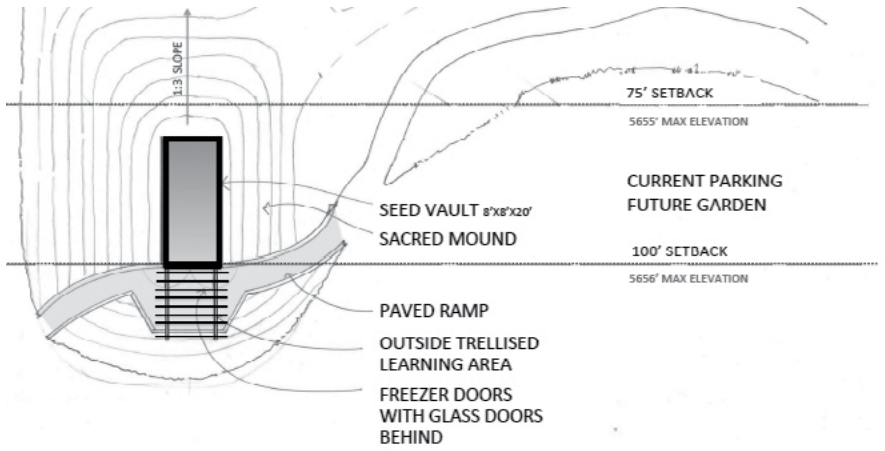
Larger, regional seed conservation organizations have a role to play here as well, especially in taking on tasks too expensive or time-consuming for seed libraries themselves to tackle.



4. SEED VAULT ELEVATION

SEED VAULT PROJECT
ROCKY MOUNTAIN
SEED ALLIANCE





At the Rocky Mountain Seed Alliance, (RMSA), one of our goals is to expand the number of seed libraries and seed library users. We continue to teach and build on our Seed School courses. This program has evolved into a diverse series of educational offerings, including one-day, six-day, fully online, and specialized courses such as Grain School. We recently added a Seed School in a Day for Ranchers in collaboration with the Quivira Regenerate Conference. We also offer a Seed School Teacher Training to spread seed knowledge exponentially and sponsor a Mountain West Seed Summit every other year so we can all meet and exchange seeds and stories. Our next seed summit will be at the Institute of American Indian Arts, Santa Fe, New Mexico, February 21–23, 2019.

Our hands-on, immersive courses serve as incubators and training grounds for the seed savers and seed librarians of the future. With an eye to the future, they also emphasize the need for redundant, regional backups of all seed collections (including seed libraries!) to prevent against catastrophic loss from floods, fires, and political unrest. Climate change threatens to make all of these extreme events increasingly possible. RMSA is working on establishing its own regional seed vault for the Mountain West and is happy to share with other communities the architectural renderings: a seed bank made from pre-cast septic tank parts!

If you can find a local seed library association in your area, join it. If you are lucky enough to have a regional seed conservation organization like RMSA serving you, find it and support it. For those living in and around the Rocky Mountains, we have developed searchable online directories to link and connect you with other seed libraries, seed stewards and seed teachers near you. Now is the time to build regional seed hubs of all kinds. We have so much to share. If you are interested in starting your own regional seed organization, big or small, we are happy to share what we have learned.

Not that long ago, before World War II, the United States had an interconnected, community-supported system of seed production and seed saving, state-by-state, region by region, community by community. Our vision to return to this system isn't far-fetched—it's part of our country's DNA. An ideal scenario includes independent, bioregional seed networks like RMSA linking together local seed libraries, seed savers, and small seed companies for resource sharing and seed solidarity.

In light of the challenges we face, if we are to have a truly sustainable agriculture (and I would argue, a functional civilization), seed libraries will be an essential element. The more seed savers we create, the more diversity we will have. This is a biological truth. The more diversity we have, the better our chances of surviving changing conditions, be they flood, drought, or disease. No top-down institution can do this for us. As the saying goes, we are the ones we've been waiting for—all of us seed lovers banding together in our backyards, our neighborhoods, and our regional communities. The seeds are showing us the way. May their roots spread strong, wide and deep, connecting us all.

Rocky Mountain Seed Alliance

August. 10, 2018

BILL IS A SEED SAVER, WRITER, AND EDUCATOR BASED IN CORNVILLE, ARIZONA. HE IS CO-FOUNDER OF THE DOWN HOME PROJECT, GARDEN CITY SEEDS, SEEDS TRUST, HIGH ALTITUDE GARDENS, THE SAWTOOTH BOTANICAL GARDENS, SEED SCHOOL AND THE ROCKY MOUNTAIN SEED ALLIANCE. HE IS AUTHOR OF THE BOOK BASIC SEED SAVING. BILL IS THE FORMER EXECUTIVE DIRECTOR OF NATIVE SEEDS/SEARCH AND NOW IS THE EXECUTIVE DIRECTOR OF THE ROCKY MOUNTAIN SEED ALLIANCE.

STEPHEN IS A WRITER AND COMMUNITY ORGANIZER WITH A PASSION FOR ENVIRONMENTAL ETHICS AND CONSERVATION. ORIGINALLY FROM THE SOUTHEAST, HE IS A CO-FOUNDER OF EVOLVER ATLANTA, A GRASSROOTS GROUP DEDICATED TO CONNECTING PEOPLE AROUND SUSTAINABILITY AND CONSCIOUS LIVING. STEPHEN ENJOYS LENDING HIS WRITING AND COMMUNICATION SKILLS TO SUPPORT NONPROFIT DEVELOPMENT, ENVIRONMENTAL ACTIVISM, AND TRANSFORMATIONAL CULTURE AND IS GRANTS AND COMMUNICATIONS ASSOCIATE AT THE ROCKY MOUNTAIN SEED ALLIANCE.

Reprinted from Cool Beans, Seed Library Newsletter
http://seedlibraries.net/

Don't miss:
Seed School in a Day:
Seed Literacy for Western Ranchers and Sustainable Farmers
Saturday, November 3, 2018, 9 am - 5 pm.

Desert Oasis Teaching Gardens – Albuquerque, New Mexico
https://rockymountainseeds.org/attend/seed-school-in-a-day/albuquerque-ssiad

The 2019 Mountain West Seed Summit
"Reunion of the Radicles"
Institute of American Indian Arts
Santa Fe, New Mexico
February 21 – 23, 2019
Rockymountainseeds.org/attend/mountain-west-seed-summit

GREENS

CINDA KELLY

CINDA KELLY IS AN ARTIST WHO WAS BORN, RAISED & LIVED IN NEW YORK CITY FOR MANY YEARS. AS A CHILD THERE WAS ONLY A SMALL GROCERY STORE AROUND THE CORNER, WITH FEW FRESH VEGETABLES AND LITTLE VARIETY. HER FATHER PLANTED MORNING GLORY SEED IN A WINDOW BOX EVERY SPRING, BUT IT WASN'T UNTIL SHE WAS 16 THAT SHE WATCHED IN AMAZEMENT THE GRASS COME UP AFTER THE SEEDS HAD BEEN PLANTED IN A BROAD LAWN. IN HER TWENTIES THERE BEGAN TO APPEAR FARMER'S MARKETS IN THE CITY AND WITH THEM A WONDERFUL VARIETY OF FRESH VEGETABLES.

SHE MOVED IN HER FORTIES TO ROCHESTER, NEW YORK WHERE SHE ENCOUNTERED A LONG-STANDING AND BURGEONING FARMER'S MARKET, THE ROCHESTER PUBLIC MARKET. AT THAT MARKET SHE WAS THRILLED TO DISCOVER VEGETABLES SHE HAD NEVER MET BEFORE, FOR EXAMPLE, RAMPS.

ABOUT 6 YEARS AGO SHE MOVED TO NORTHERN NEW MEXICO WHERE SHE FOUND THE DELIGHTFUL ESPAÑOLA FARMER'S MARKET, WHICH EXTENDED ONCE AGAIN HER EXPERIENCE OF VEGETABLES. DURING THE WINTER SHE FOUND FRIENDS WHO GREW & SOLD A GREAT VARIETY OF GREENS FROM THEIR HOT HOUSE.

SHE HAS RECENTLY EMBARKED ON A SERIES OF PRINTS OF THE BEAUTIFUL GREENS SHE HAS ENCOUNTERED OVER THE PLACES AND YEARS.

BREAKFAST BREAD

DEBORAH MADISON

6 to 8 tablespoons butter, cut into pieces
plus more to serve, or use olive oil

2 heaping teaspoons minced rosemary

Finely grated zest of 1 large lemon

½ cup of honey

1 cup diced currants

1 cup buttermilk

2 large eggs

2 cups flour (whole wheat, white whole wheat, all-purpose, or a mixture)

1 teaspoon baking powder

1 teaspoon baking soda

¾ teaspoon sea salt

1/3 cup pine nuts

Butter and flour a 9-inch springform pan. Heat the oven to 350 F.

Melt the butter with the rosemary, lemon, and honey in a small skillet. If the currants are hard, cover them with hot water, let them stand until they soften, then drain and squeeze out the excess water. Beat the buttermilk and eggs together. Combine the flour with the baking power, baking soda, and salt in a spacious bowl.

Make a well in the flour, add the milk and egg mixture, and quickly bring the ingredients partially together with a fork. Pour in the melted butter mixture, add the currants and continue mixing with a light hand until all have come together. Turn the batter into the prepared pan and toss the pine nuts over the surface.

Bake until risen and browned, 35 to 40 minutes. Remove from the oven and let stand for at least 10 minutes, then carefully loosen the rim of the springform pan. Slide the bread onto a serving plate and serve warm, with soft butter.

DEBORAH MADISON, WHO 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

Photo Credit: SeedBroadcast

A GARDEN TBA
AT THE ALBUQUERQUE MUSEUM

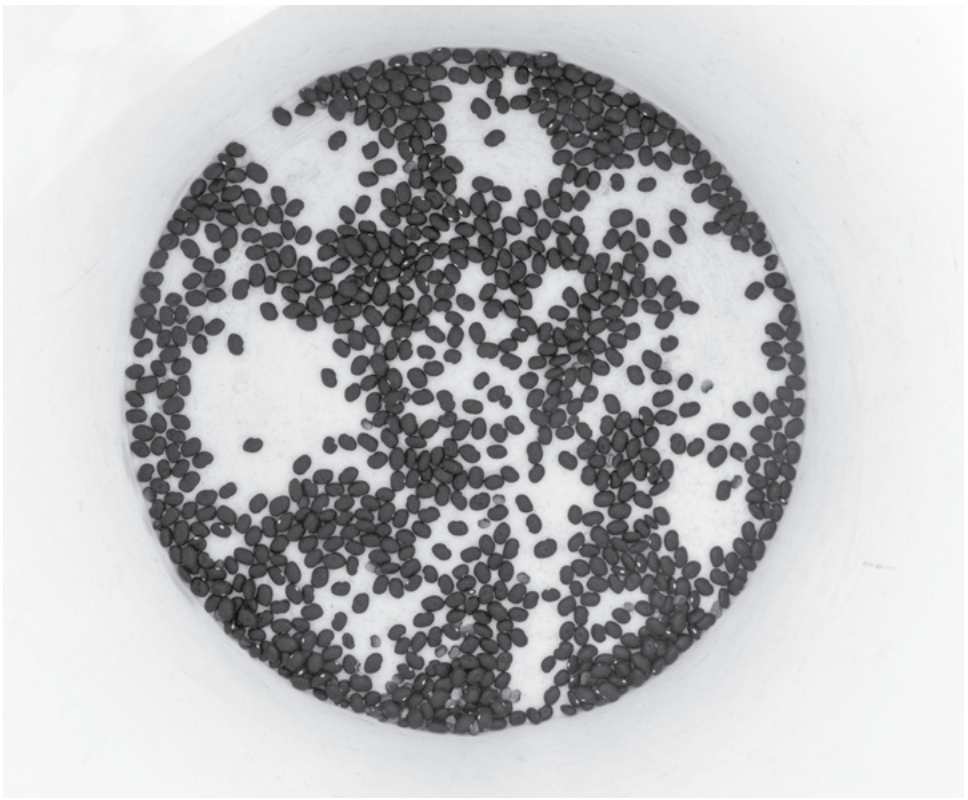
A Garden TBA is a collaborative garden intervention in conjunction with SeedBroadcast *Seed the Resilience: agri-Culture and Climate Change* at the Albuquerque Museum. This project brings together visiting artist Christine Mackey, local farmers Tiana Baca and Sarah Montgomery, Land Arts of the American West at UNM, and Intermediate Art & Ecology Students to create a public earthwork on site at the museum. It will take place beginning August 2018 and ending October 2019.

The garden will have many interwoven agri-Cultural ecologies, timelines, and public presentations from initial research into the history of the site and gardens as art, to a living multi-season garden spanning colonial winter grains to indigenous resistance amaranth. As a group of co-conspirators, we are approaching this project, less as an end result, and more as a process of creative curiosity towards ecological relationships through time, place, and climate. We will share more of this project soon and announce public events as they grow. But for now, we are organizing our first event as a public symposium, with accompanying performances, on December 6, 2018 at the Albuquerque Museum, in Albuquerque, New Mexico.

TO LEARN MORE ABOUT THIS PROJECT AS IT GROWS SEE THE LAND ARTS OF THE AMERICAN WEST BLOG: UNMLANDARTS.BLOGSPOT.COM OR CONTACT LAAW DIRECTOR, JEANETTE HART-MANN AT HARTMANN@UNM.EDU

Ancestral Lands Program of the Southwest Conservation Corps, Acoma, New Mexico.

Photo Credit: SeedBroadcast



WOMBS AND OTHER PLACES CALLED HOME

JAMIE FIGUEROA

Silver cup,
    ceramic ladle,
        coconut husk bowl

vessels to hold
what is too weak
to keep its own
shape.

Basket of orchids,
    basket of vines,
        basket of ribs

interlaced,
    interwoven,
        knitted
together.

A conch shell,
    a clam shell,
        an oyster shell

wombs like watery
melons, fat and ripe,
stitched with seams of green,
blue and purple veins.

Extension cord,
    umbilical cord,
        rope hanging
            from a tree,
                from an anchor
                    a belt,
                        a braid,
                            a strand
                                of hair.

BEND TO LIGHT

Deep as a mouth, sand against
bone, this was once
the bottom of the sea.
Rocks hold water, scrapes
sky, bloom blood
red cacti.

The Rio Grande,
damned and
twisting, spits at
swallows—arrows of wing,
carve air.

A sleeve caught
on fist, what we can never
remove—rain from clouds, brown
cow in road, rum from the crust
of female ponderosa,
starlings.

We are bone chipped and wind
worn, 'This way,'
climbing up. 'This way,'
falling and falling
down. 'But could you love him
if he were different,'
you ask.

Scurfy peas, a cadmium
promise. Carcasses of Piñon,
their tangled branches
grown stiff
with gripping.

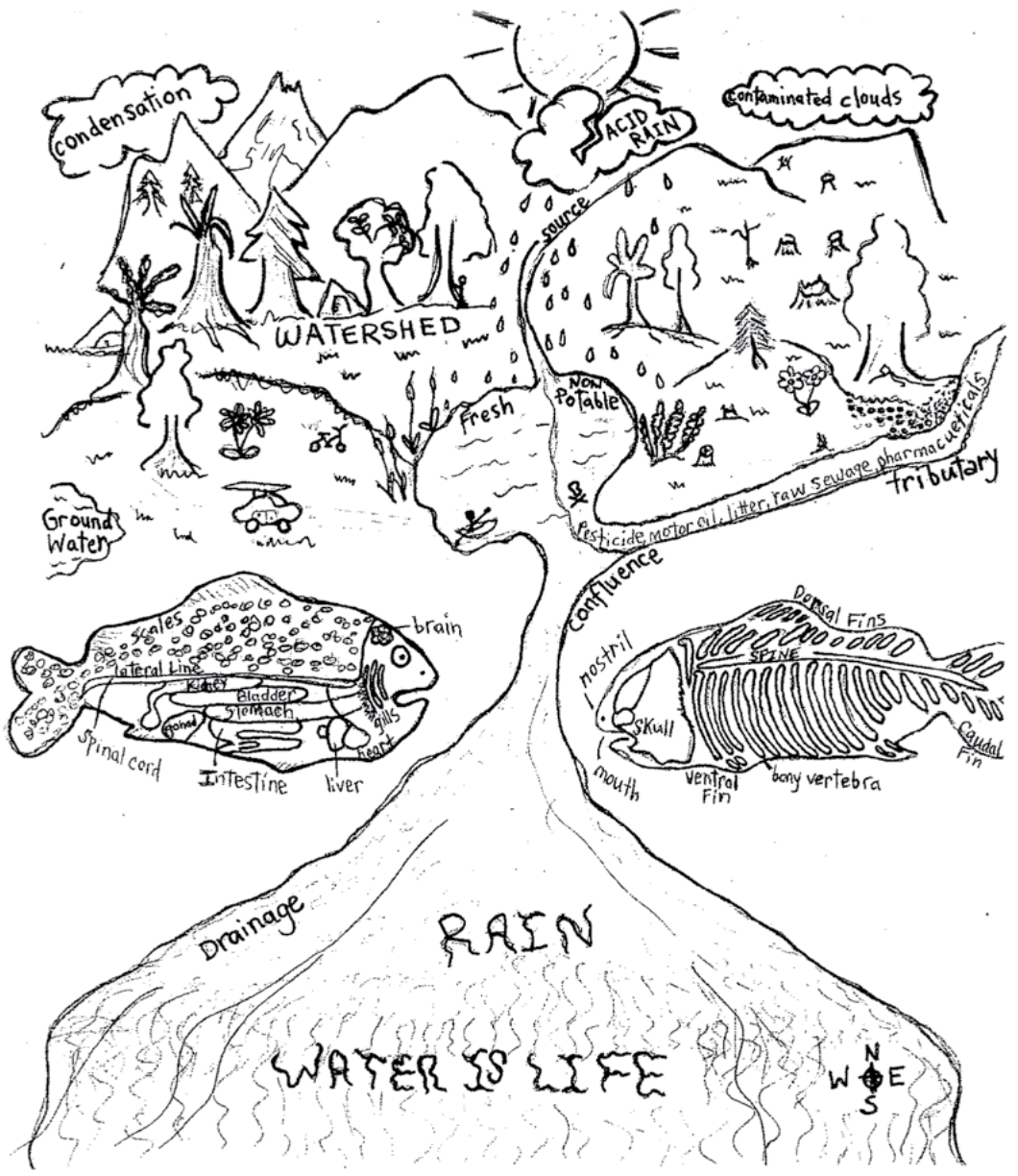
JAMIE FIGUEROA (TAÍNO) IS BORICUA BY WAY OF OHIO AND LONG TIME RESIDENT OF NORTHERN NEW MEXICO. SHE EXPLORES IDENTITY, FAMILIAL RELATIONSHIPS, PLACE, CULTURE, AND ANCESTRY. A TWO-TIME GRADUATE OF THE INSTITUTE OF AMERICAN INDIAN ARTS, (BFA AND MFA IN CREATIVE WRITING), SHE PUBLISHES ACROSS GENRES INCLUDING 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.

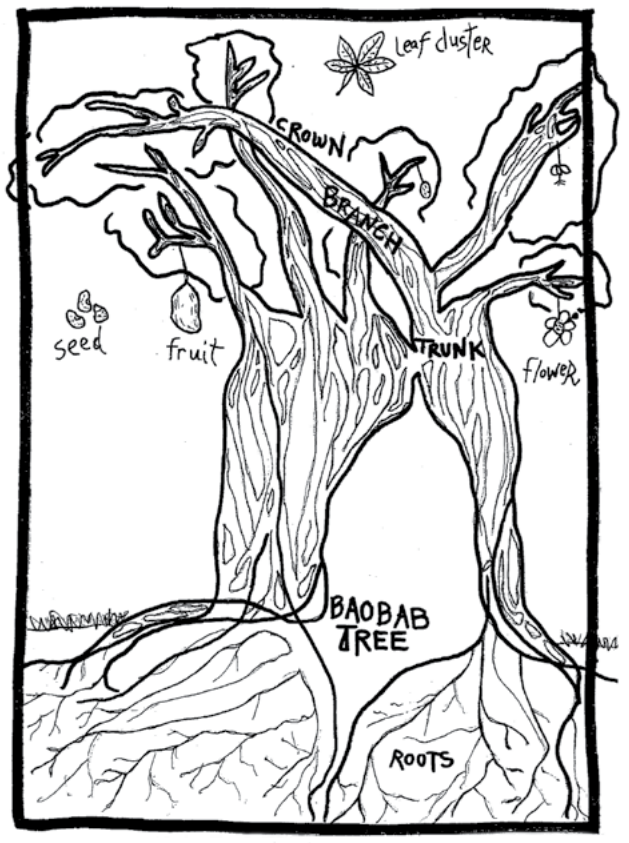
Photo Credit: SeedBroadcast

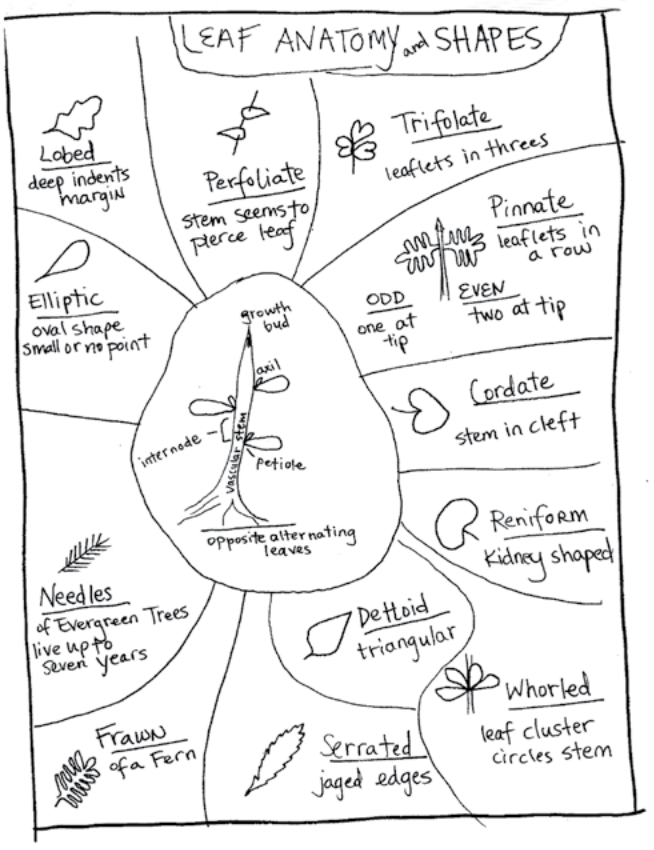
EDUCATIONAL ILLUSTRATIONS

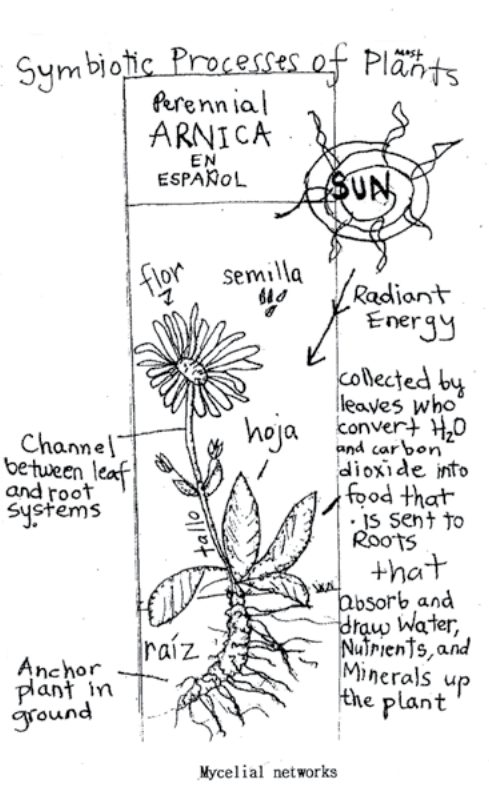
KUWA JASIRI TYOMBE INDOMELA

Baobab Tree
Leaf Anatomy and Shapes
Watershed
Symbiotic Processes









KUWA JASIRI TYOMBE INDOMELA (PRONOUNS: THIS ONE THAT ONE) EDUCATES WITH AND ABOUT NATURE. CHECK OUT OUR WEBSITE @ ARTISTIC APOTHECARY.WORDPRESS.COM AND JOIN OUR MOONLY NEWS LETTER.

PLANTCRAFT: MEDICINAL BOTANICALS OF NEW MEXICO

JOANNA KEANE LOPEZ

PIÑON

PINYON
PINUS EDULIS
PINACEAE FAMILY

DESCRIPTION
First off, the piñon is the state tree of New Mexico! It is a drought resistant tree native to the Southwest. It grows in a distinct community of plants with its friends juniper, chamisa and sagebrush in elevations between 5000-7000ft. The tree produces an edible piñon nut, that is fully developed in late August. A bumper crop of a productive harvest can only be expected every 6 years. Trementina de piñon is the fresh white pitch that is extracted from the piñon tree.

MEDICINAL USES
Trementina de Piñon, the sap of the piñon is made into an astringent and anti-inflammatory salve that promotes the healing of small cuts, scrapes, boils, bug bites and eases soar joints and muscles. It treats sunburns and acts as a preventative.

The pitch or salve is useful in extracting splinters or thorns embedded in the skin. Heat the raw pitch and spread it over the foreign body lodged in the skin and after several applications it can be removed. Although be careful to not burn your skin.

The pine needles of the tree are medicinal. A simple pleasant tasting tea can be made that acts as a cough remedy and a diuretic.

The piñon nuts are extremely nutritious, high in protein and healthy fats. They are a good source of vitamin E, vitamin A, thiamine and minerals such as phosphorus and potassium.

Piñon pollen contains natural testosterone. It can be used to treat hormonal imbalances. The pollen should be collected before the strong winds of February.

TRADITIONAL USES
Trementina has been a sacred resin used by Native Americans of the Southwest. The incense aids in healing, balancing and clearing energies. It is known as a spiritual aroma and produces the enchanting piñon fragrance of the high desert.

Nuevo Mexicanos have been known to mix the trementina with native tobacco and salt and place it on the temples to relieve a headache.

The piñon nuts of *pinus edulis* were traditionally eaten raw, roasted, or pounded into a butter called “atlhic” by the Diné.

CONTRAINDICATIONS
Be careful when applying hot sap to skin. As a tea and taken internally it is not recommended for those with kidney inflammation. Piñon nuts, if not roasted, can give some people stomach aches.

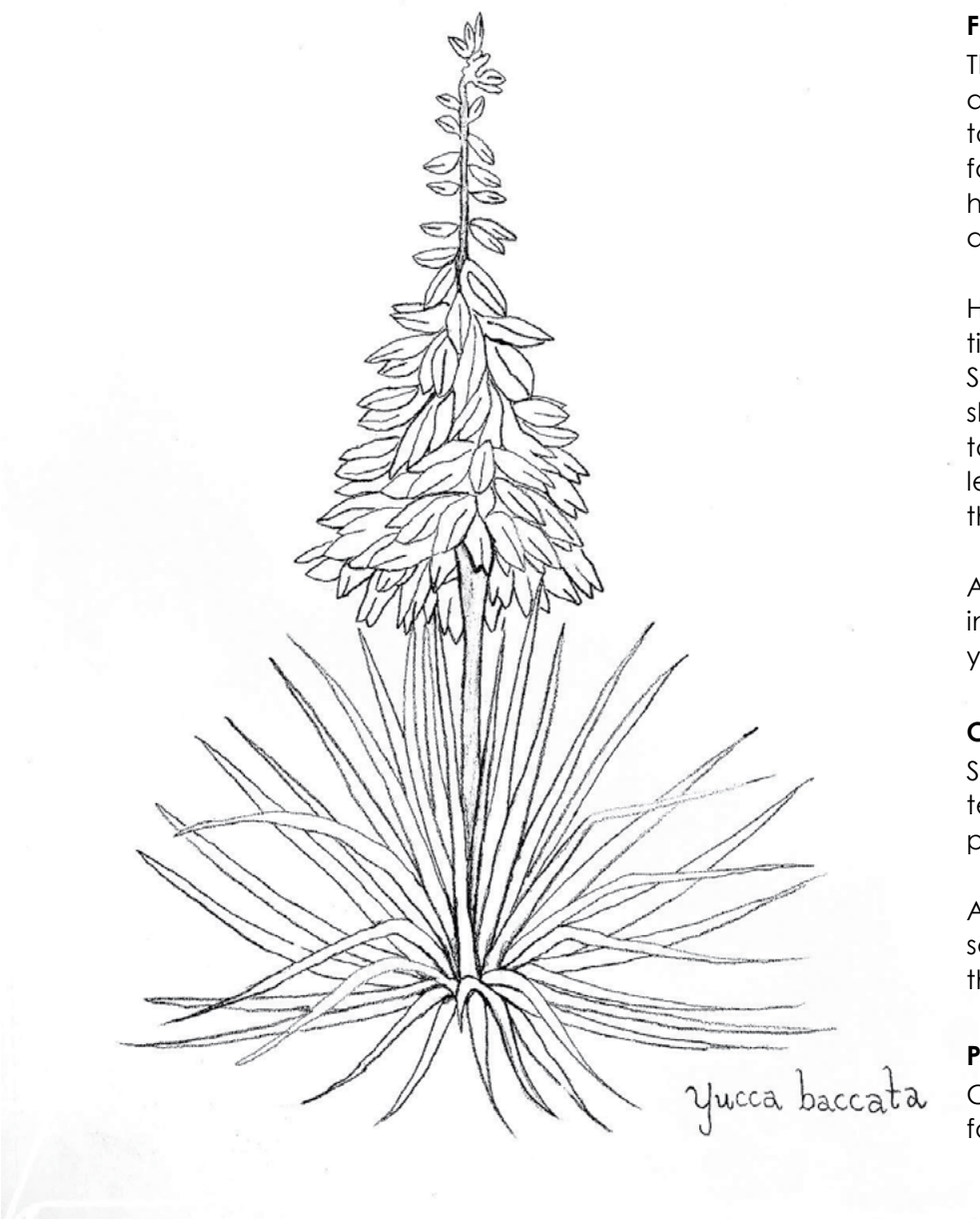
DOSAGE
Internally, a tea of needles to taste. Pollen usage is roughly 1/8 tsp a day. Externally, a light application of salve as needed.

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

AMOLE

YUCCA, PALMILLA, SOAPROOT
YUCCA BACCATA
ASPARAGACEAE FAMILY



DESCRIPTION
Amole is the state flower of New Mexico! It grows in grasslands, rocky slopes and arid plains in the piñon-juniper ecozone and blooms in towering shafts of creamy white flowered beauty in late spring. The flowering stalks have been called Our Lord's Candles. Amole is native to the deserts of the southwestern United States and grows 4 to 6 ft in height. The roots are best harvested in the fall.

MEDICINAL USES
The yucca root is mainly used as a shampoo for the hair or as a soap of any kind. The fresh root (preferable to dried) is shaved or sliced and simmered until rich and foamy, then cooled, and the tea is used as a wash. Other botanical ingredients can be added, such as manzanita (chamomile) and yerba de la negrita to the amole root elixir to give hair extra body and shine.

FOLK/TRADITIONAL USES
The saponin-rich amole root has been used as a form of soap for all washing purposes. Many Native American weavers use amole to clean their rugs and blankets. It is known as an excellent wash for linens and wools. It is said that amole root is what gives black hair a glossy richness, strengthens the strands, keeps the color and prevents baldness.

Historically, Native Americans also have used amole for purification and ceremonial cleansings. It is said after having driven the Spanish out of New Mexico in 1680, tribes took to the rivers and shampooed themselves with the root of amole to remove the taint of baptism. After the resettlement in 1692, the Spaniards learned to use the root for laundry work, especially for washing the wool of the churro sheep.

At San Idelfonso the pulp was mixed with chokecherries and made into a cake. The fruit pods of amole can be boiled or roasted and yield a food similar to a sweet potato in flavor.

CONTRAINDICATIONS
Since yucca is the state flower of New Mexico, it is highly protected and there are large fines for harvesting the plant in public places.

A small number of people may be allergic to the amole as a soap, so it should not be used if it causes a rash. Do not consume the roots.

PREPARATION
Clean and slice amole roots, bring to a boil, simmer until rich and foamy, then cool the mixture and use as needed for external use.

Declaration on Seed Freedom

by Dr. Vandana Shiva

Seed is the source of life, it is the self urge of life to express itself, to renew itself, to multiply, to evolve in perpetuity in freedom.

Seed is the embodiment of bio cultural diversity. It contains millions of years of biological and cultural evolution of the past, and the potential of millennia of a future unfolding.

Seed Freedom is the birth right of every form of life and is the basis for the protection of biodiversity.

Seed Freedom is the birth right of every farmer and food producer. Farmers rights to save, exchange, evolve, breed, sell seed is at the heart of Seed Freedom. When this freedom is taken away farmers get trapped in debt and in extreme cases commit suicide.

Seed Freedom is the basis of Food Freedom, since seed is the first link in the food chain.

Seed Freedom is threatened by patents on seed, which create seed monopolies and make it illegal for farmers to save and exchange seed. Patents on seed are ethically and ecologically unjustified because patents are exclusive rights granted for an invention. Seed is not an invention. Life is not an invention.

Seed Freedom of diverse cultures is threatened by Biopiracy and the patenting of indigenous knowledge and biodiversity. Biopiracy is not innovation – it is theft.

Seed Freedom is threatened by genetically engineered seeds, which are contaminating our farms, thus closing the option for GMO-free food for all. Seed Freedom of farmers is threatened when after contaminating our crops, corporations sue farmer for "stealing their property".

Seed Freedom is threatened by the deliberate transformation of the seed from a renewable self generative resource to a non renewable patented commodity. The most extreme case of non renewable seed is the "Terminator Technology" developed with aim to create sterile seed.

We commit ourselves to defending seed freedom as the freedom of diverse species to evolve; as the freedom of human communities to reclaim open source seed as a commons.

To this end, we will save seed, we will create community seed banks and seed libraries, we will not recognize any law that illegitimately makes seed the private property of corporations. and we will stop the patents on seed.

VANDANA SHIVA IS A PHYSICIST AND FOUNDER OF NAVDANYA IN INDIA, AN ASSOCIATION DEDICATED TO PROTECTING THE DIVERSITY OF THE COMMONS, PROMOTING ORGANIC AGRICULTURE AND FAIR TRADE; FOR TWENTY YEARS NAVDANYA HAS WORKED WITH LOCAL COMMUNITIES AND ORGANIZATIONS. IT IS INTERNATIONALLY RECOGNIZED FOR ITS EFFORTS TO PROTECT NATIVE SEEDS AND FIGHT AGAINST GM CROPS, LEADING THE VANGUARD IN DENOUNCING THE DAMAGE CAUSED BY THE GLOBALIZATION OF LARGE FOOD COMPANIES. NAVDANYA HAS MANAGED TO CONSERVE MORE THAN 3 THOUSAND VARIETIES OF RICE AND CREATED 60 SEED BANKS. AMONG OTHERS DR. VANDANA SHIVA HAS RECEIVED THE ALTERNATIVE NOBEL PRIZE IN 1993, THE SYDNEY PEACE PRIZE IN 2010 AND THE THOMAS MERTON IN 2011.

Declaración de la Libertad de las Semillas

La semilla es fuente de vida, es el anhelo de la vida por expresarse a sí misma, por renovarse, para multiplicarse, para evolucionar libremente en perpetuidad.

La semilla es la encarnación de la biodiversidad cultural. Contiene millones de años de evolución biológica y cultural del pasado, además de todo el potencial de milenios de futuros desarrollos.

Las semillas libres son el derecho de nacimiento de toda forma de vida y son la base para la protección de la biodiversidad.

Las semillas libres son derecho de nacimiento de todos los campesinos y productores de comida. El derecho de los agricultores a guardar, intercambiar, evolucionar, generar y vender semillas, es el corazón de las semillas libres; cuando se les quita esta libertad a los campesinos, quedan atrapados en la deuda y llegan al suicidio en los casos más extremos.

Las semillas libres son la base de la comida libre, ya que la semilla es el primer eslabón de la cadena alimentaria.

Las semillas libres están amenazadas por las patentes. Las patentes de semillas crean monopolios y convierten en ilegal para los agricultores guardar e intercambiar su propia semilla. Las patentes de semillas ética y económicamente están injustificadas, porque las patentes son derechos exclusivos otorgados a un invento. La semilla no es ningún invento. La vida no es ningún invento.

Las semillas libres de diversos cultivos están amenazadas por la biopiratería y las patentes con base en la sabiduría indígena y en la biodiversidad. La biopiratería no es innovación, es un robo.

Las semillas libres están amenazadas por las modificadas genéticamente, que están contaminando nuestros campos, de manera que nos impiden la opción de comida libre de transgénicos para todos. La libertad de las semillas está amenazada cuando después de contaminar nuestros cultivos, las corporaciones demandan al agricultor por “robar su propiedad.”

Las semillas libres –que son un recurso renovable que se autogenera- están amenazadas por su transformación deliberada en una mercancía no renovable, patentada. El caso más extremo es el de la tecnología Terminator desarrollada con el objetivo de crear semillas estériles.

Nos comprometemos a defender las semillas libres, la libertad de las diversas especies a evolucionar, la libertad de las comunidades humanas de reclamar las semillas libres como un bien comunitario.

Para este fin, salvaremos las semillas, no reconoceremos ninguna ley que de forma ilegítima convierta las semillas en propiedad privada de corporaciones: detendremos las patentes de semillas.

VANDANA SHIVA ES DOCTORA EN FÍSICA Y FUNDADORA DE NAVDANYA EN INDIA, UNA ASOCIACIÓN DEDICADA A PROTEGER LA DIVERSIDAD DE LOS BIENES COMUNES, A PROMOVER LA AGRICULTURA ORGÁNICA Y EL COMERCIO JUSTO; DURANTE VEINTE AÑOS HA TRABAJADO CON COMUNIDADES Y ORGANIZACIONES LOCALES. ES RECONOCIDA INTERNACIONALMENTE POR SU LUCHA PARA PROTEGER LAS SEMILLAS NATIVAS Y CONTRA LOS CULTIVOS TRANSGÉNICOS, LLEVA LA VANGUARDIA EN DENUNCIAR LOS DAÑOS CAUSADOS POR LA GLOBALIZACIÓN DE LAS GRANDES COMPAÑÍAS DE ALIMENTOS. NAVDANYA HA LOGRADO CONSERVAR MÁS DE 3 MIL VARIEDA-DES DE ARROZ Y CREADO 60 BANCOS DE SEMILLAS. ENTRE OTROS LA DOCTORA VANDANA SHIVA HA RECIBIDO EL PREMIO NOBEL ALTERNATIVO EN 1993, EL PREMIO DE LA PAZ DE SYDNEY EN 2010 Y EL THOMAS MERTON EN 2011.

VANDANA SHIVA ES AUTORA DE LA DECLARACIÓN, PUEDES LEERLA Y FIRMARLA AQUÍ: ORIGINAL

TRANSLATION BY ANA RUIZ DÍAZ

SEED THE RESILIENCE:
AGRI-CULTURE AND CLIMATE CHANGE

A CREATIVE ARTS AND COMMUNITY ENGAGEMENT PROJECT.

SPRING

T'IITRA

Kudrushtiya they will say and that means happy
Be happy and have a good mind and a good heart when you are planting
The mood, whatever mood you have in your garden is how your crops will be
If you are good and you are happy, check on them, nurture them, feed them, talk to them, and even sing to them
You are going to make them happy
They tell us to sing our traditional songs
Those songs talk about rain coming and the people being happy and all of those good things coming
The land becoming beautiful

These prints are from a series that were created as part of SeedBroadcast's continued collaboration with the Ancestral Lands Program of the Southwest Conservation Corps and Aaron Lowden in Acoma, New Mexico.
They will be exhibited in Acoma in 2019.

FALL

HAYAATSI

I wonder if the corn has become intuitive
I feel like they knew what kind of season they were in for
It was cold right up to the edge of spring
Then when summer came it felt like someone had turned up the oven and it started roasting
Out here, no rain
Then the rains came, it came quick and it came cold.
I think the corn knew that too
I think it knew it was going to be a short growing season this year
I think it knew what it was in for

DOVE OF THE COMALITO

LILA DOWNS

The beautiful people of this land
Grind corn
A miracle of their hands
A yellow shine I saw
In a basket she carries gold
Soft corn gold
In a basket she carries gold
Soft corn gold

It's over… my suffering is over
There's no more evil… there's no evil that can last a hundred years*
Little dove fly and tell her
That I'm here to kiss her hands
Little dove fly and tell her
That I'm here to kiss her hands

Cu,curu,cu,cuu,curu,curu, cu,cu

Little dove sing about the miracle
About the dough, about the smoke of this comal**
You who drank my tears
Of crystal grains
You who drank my tears
Of crystal grains

And miracles of this land
And women whose hands give nourishment
She who invites even though she may have nothing
And fights for the things that are really worthy
She who invites even though she may have nothing
And fights for the things that are really worthy

Little dove sing about the miracle
About the dough, about the smoke of this comal
You who drank my tears
Of crystal grains
You who drank my tears
Of crystal grains

PALOMO DEL COMALITO

La chulada de esta tierra
Muele masa de maíz
Un milagro de sus manos
Amarillo brillo vi
En tenate lleva de oro
De oro tierno de maíz
En tenate lleva de oro
De oro tierno de maíz.

Ya acabó... Ya acabó mi sufrimiento
Ya no hay mal... No hay mal que dure cien años
Palomita vuela y dile
Que yo beso aquí sus manos
Palomita vuela y dile
Que yo beso aquí sus manos.

Cu,curu,cu,cuu,curu,curu, cu,cu

Palomita canta un milagro
De la masa del humo de este comal
Tu que bebiste mis lagrimas
De granitos de cristal
Palomita canta un milagro
De la masa del humo de este comal
Tu que bebiste mis lagrimas
De granitos de cristal.

Y milagros de esta tierra
Y mujeres que sus manos alimentan
La que invita aunque nada tenga
Y pelea por las cosas que si son buenas
La que invita aunque nada tenga
Y pelea por las cosas que si son buenas.

Palomita canta un milagro
De la masa del humo de este comal
Tu que bebiste mis lagrimas
De granitos de cristal
Palomita canta un milagro
De la masa del humo de este comal

ANA LILA DOWNS SÁNCHEZ, BEST KNOWN AS LILA DOWNS IS A MEXICAN-AMERICAN SINGER-SONGWRITER AND ACTRESS. SHE PERFORMS HER OWN COMPOSITIONS AND THE WORKS OF OTHERS IN MULTIPLE GENRES, AS WELL AS TAPPING INTO MEXICAN TRADITIONAL AND POPULAR MUSIC. SHE ALSO INCORPORATES INDIGENOUS MEXICAN INFLUENCES AND HAS RECORDED SONGS IN MANY INDIGENOUS LANGUAGES SUCH AS MIXTEC, ZAPOTEC, MAYAN, NAHUATL AND PURÉPECHA. BORN AND RAISED IN OAXACA, SHE PRIMARILY STUDIED AT THE INSTITUTE OF ARTS, OAXACA AND ATTENDED THE UNIVERSITY OF MINNESOTA, BEFORE WITHDRAWING TO FOCUS ON HER MUSICAL CAREER. HTTPS://WWW.YOUTUBE.COM/WATCH?V=8O6QUWSADP8

Photo Credit: SeedBroadcast

~~UPROOTING~~
RESEEDING CULTURE

Ethnobotany in the Context of the Isle de Jean Charles Biloxi-Chitimacha-Choctaw Tribe Resettlement.
MASS Design Group with Isle de Jean Charles.

The Isle de Jean Charles Band of Biloxi-Chitimacha-Choctaw has — for nearly 200 years — cultivated a distinct set of ethnobotanical traditions. These 'lifeways' have been shaped both by the unique environmental conditions of Isle de Jean Charles, as well as by the sociopolitical forces that the community has been forced to reckon with. Today, the IdJC community is leading a culturally resilient relocation in the midst of receding coastal lands and rising sea level. The island that was once a haven for Biloxi-Chitimacha-Choctaw members escaping the Trail of Tears and that provided a biodiverse ecosystem within which tribal lifeways flourished, is now a sliver of land sinking into the Gulf of Mexico.

Since initiating resettlement in 2001, the tribe has engaged numerous mission-aligned partners in conversations around culturally appropriate development. Through a generous grant from the National Academy of the Sciences, the tribe is currently engaging the Lowlander Center, Evans and Lighter Landscape Architects, the Tulane ByWater Institute, Sustainable Native Communities Collaborative, and MASS Design Group to design a museum and living resource center within an improved naturalized zone on their new resettlement site. From this, they will also develop a toolkit that can be used as a future resource for communities facing resettlement challenges.

This reseeding process has the potential to facilitate peer-to peer learning, elevate indigenous ecological knowledge in mainstream culture, and improve community access to key environmental resources. It also brings up important questions around how design can support the transplanting of native identity onto a new site. Plants are only a piece of this story; fully reterritorializing their resettlement site will involve creating spaces where the Isle de Jean Charles Tribe can remember and continue to reinvigorate all of their lifeways.

WITH THANKS TO THE LOWLANDER CENTER, THE BYWATER INSTITUTE AT TULANE UNIVERSITY, SNCC, EVANS + LIGHTER, AND MAYRAH UDVARDI FOR THEIR RESEARCH AND WORK ON THIS PIECE.

MASS DESIGN GROUP: A NON-PROFIT DESIGN PRACTICE GROUNDED IN THE BELIEF THAT ARCHITECTURE HAS THE POWER TO HEAL AND IS BOTH A RIGHT AND A PUBLIC GOOD. OUR COLLABORATIVE AND PROXIMATE PROCESS IS OPTIMIZED TO DELIVER MAXIMUM IMPACT TO OUR PARTNERS AND THE COMMUNITIES THEY SERVE.

ISLE DE JEAN CHARLES: BAND OF BILOXI-CHITIMACHA-CHOCTAW INDIANS WHO SETTLED THE SOUTHERN LOUISIANA ISLAND IN THE EARLY 1800S AND HAVE PERSISTED AS A SELF-DETERMINED ENTITY IN THE FACE OF CULTURAL AND ENVIRONMENTAL DISRUPTION.

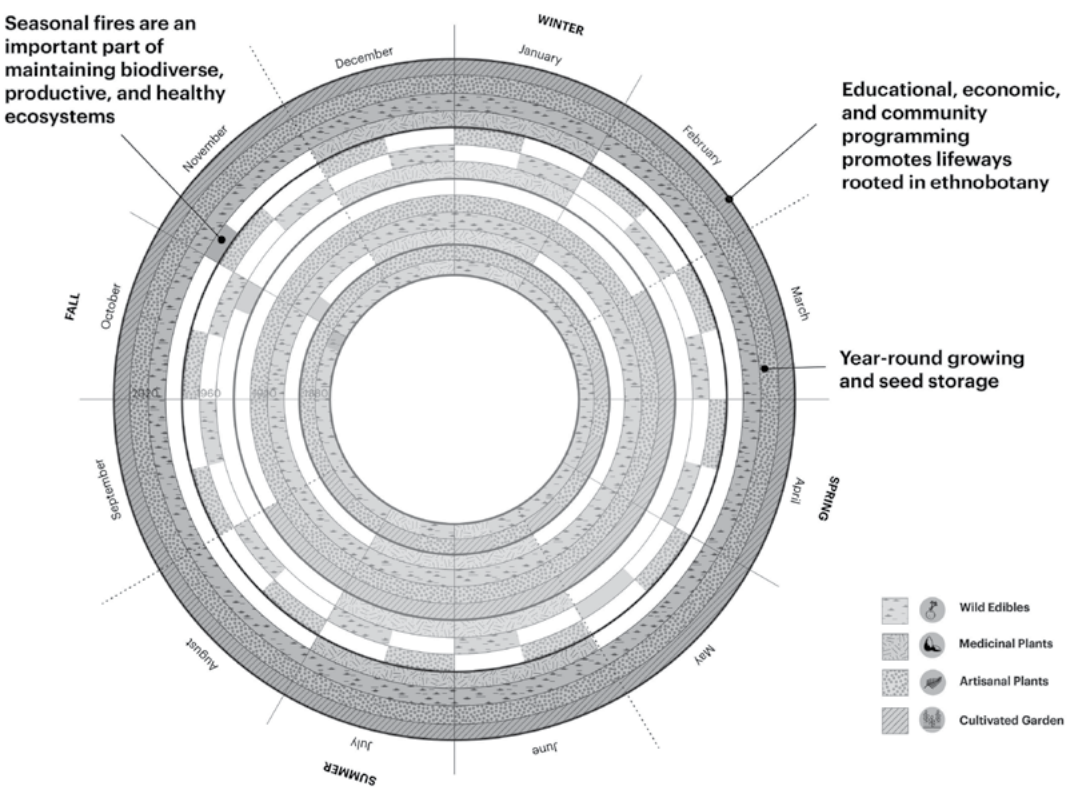
LOWLANDER CENTER

THE BYWATER INSTITUTE

SUSTAINABLE NATIVE COMMUNITIES COLLABORATIVE

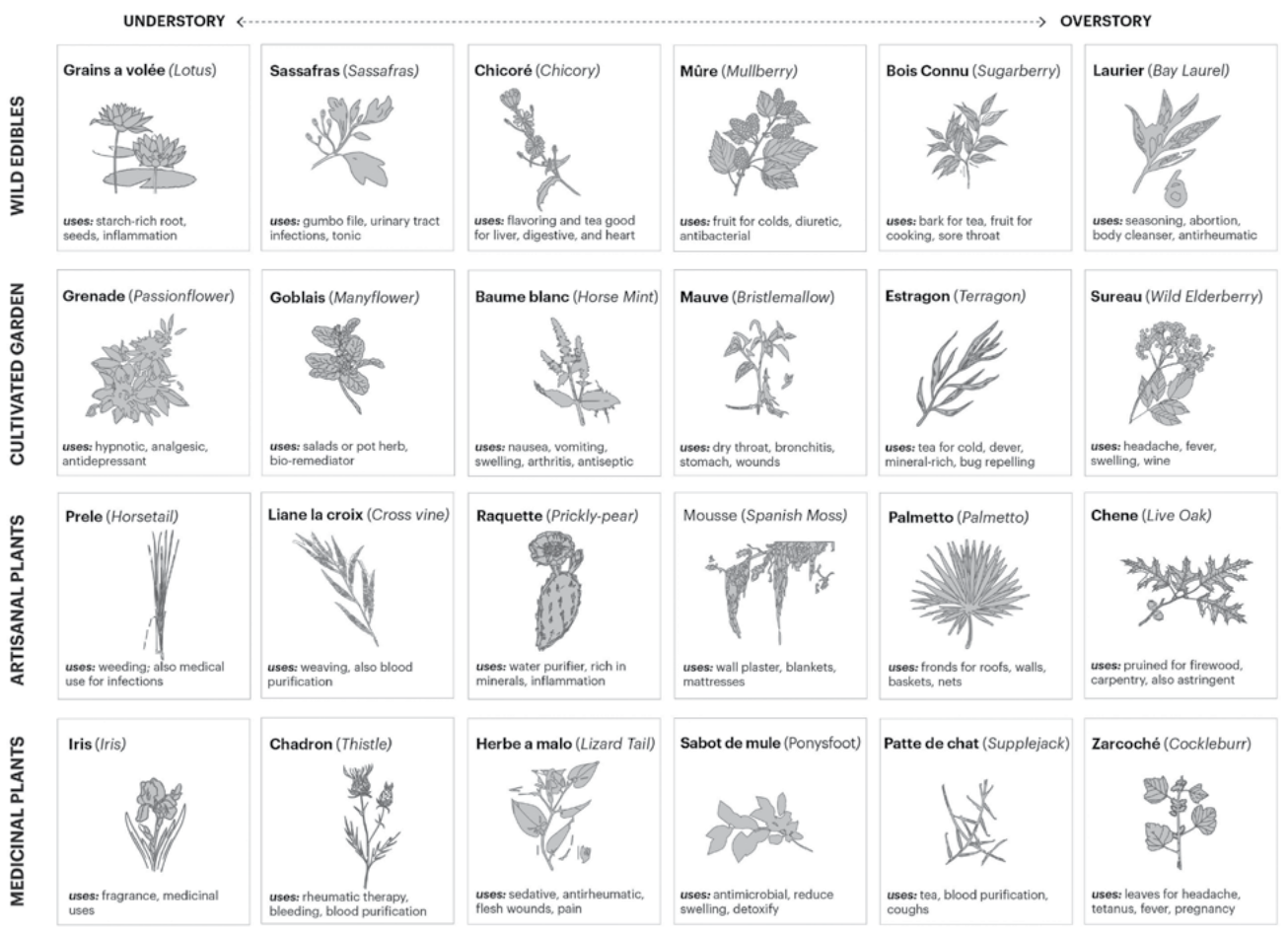
EVANS + LIGHTER LANDSCAPE ARCHITECTS

MAYRAH UDVARDI



This diagram shows the seasonal performance of these four ethnobotany lifeways through time. Many of these lifeways have been difficult to maintain over the past few decades, as the tribe has become increasingly separated from their customary lands. The continuity of these lifeways becomes particularly important in this new resettlement process.

Ethnobotanical lifeways, including gathering wild edibles, processing medicinal plants, utilizing plants for artisanal traditions like weaving and net-making, and subsistence-based agriculture become integrated on the resettlement site. A network of trails links these lifeways zones to the living resource center, where learning and connection take place.



A list of commonly used wild edibles, medicinal, artisanal, and cultivated plants. The IdJC Tribe has a long tradition of growing and protecting these valuable species.

FROM ANCIENT TO HEIRLOOM: THE HISTORY OF THE HUMBLE BEAN.

NAN FISCHER

Similarly pleasing to see and to taste,
heirloom beans have a long and colorful past.

Above: Cat and dry beans

Below: Renee's Garden French Rolande Green Beans in the garden

Living in the Desert Southwest, I'm pleased to grow and eat bean cultivars that the local indigenous people have consumed for thousands of years—much longer than most heirlooms. 'Anasazi,' 'Four Corners Gold,' and 'Taos Red' are a few of the beans with venerable roots that grace my plate.

Humans have domesticated beans at various times in various regions. Over millennia, growers have selected for large seeds, bushy growth habit, color (beans are very colorful!), hardiness to local growing conditions, disease resistance, ease of cooking, and good flavor. Let's take a trip back in time to learn more about the colorful history of beans.

EARLY HISTORY

Cultivated beans have been found in the tombs of ancient Greeks and Egyptians. Domesticated fava beans (Vicia faba) were found in what is now northern Israel and were carbon-dated to about 10,000 years ago. Favas (not a true bean, but a legume) were a major staple of the Mediterranean diet and widely grown, even before grains. Chickpeas (Cicer arietinum) and lentils (Lens culinaris) were also common crops in the ancient world. Through travel and trade, these beans gradually spread into India, northern Africa, Spain, and the rest of Europe.

The common bean (Phaseolus vulgaris) is native to the Americas, where it was a staple of the indigenous people of Mesoamerica and the Andes. This vining plant with twisted pods and small seeds is the mother of almost all modern beans—snap beans, soup beans, dry beans, and shell beans—and can still be found growing wild in parts of Mexico.

The oldest cultivar of the common bean was found in Peru and dated to about 8,000 years ago. Three other types of beans in the Phaseolus genus have also been domesticated: Lima beans (P. lunatus) probably domesticated near Lima, Peru about 5,300 years ago; runner beans (P. coccineus) in Mexico 2,200 years ago; and tepary beans (P. acutifolius). According to Native Seeds/SEARCH, the tepary bean has been cultivated for about 5,000 years in the Sonoran Desert of northwestern Mexico and the southwestern United States, where it's still a dietary staple.

Until the late 1200s, the Anasazi people inhabited the southwestern U.S., where they cultivated a white-and-maroon-patterned bean. Wild bean plants were found growing around the civilization's ruins in the early 1900s. Since then, the beans have been grown out and saved and are now available commercially as 'Anasazi' beans.

LEGUMES ON THE MOVE

Through a complex system of trade routes and trading centers, beans migrated to the rest of North America along with other supplies, including shells, animal hides, and stone for tool making. After generations of selection and cultivation, each tribe had its own locally adapted bean for food, seed, gifts, and trade.

The common bean has migrated around the world for thousands of years—from the Americas to Europe and back again with European explorers and immigrants. When European explorers arrived in the Americas, tribes introduced them to the companion planting technique known as the Three Sisters. Corn, beans, and squash were grown together because, after hundreds of years of experimentation, the indigenous people found them to be more productive when planted together than when planted separately. When the explorers headed back to Europe, they took along seeds of the crops they had encountered. Up to this point, Europeans had known only the fava bean. Over the next couple of centuries, beans spread across Europe through trade and migration.

European settlers renamed bean cultivars and returned them to North America. For instance, today's 'Mayflower' bean may have come over on the Mayflower in 1620 to become a staple in North and South Carolina, but it most likely originated in its "new" location to begin with.

'Hutterite Soup' beans came to the U.S. from Russia via Austria in the 1870s with the Hutterites, a pacifist and communal Christian group who migrated to escape religious persecution. They settled in the upper Midwest and Canada.

Immigrants who carried seeds from Europe grew them out, making selections adapted to the local climate, and passed down the seeds as family heirlooms. Some cultivars were picked

The five jars of dry beans are Pinto, Great Northern, Anasazi, top row. Bolita, Four Corners Gold, bottom row.

Photo Credit: Nan Fischer

up by seed companies for development and sale. 'Kentucky Wonder' pole bean, for instance, is one of the most popular heirloom beans grown today. It originally had the name 'Texas Pole,' which was changed to 'Old Homestead' around 1864. Seed catalogs introduced it as 'Kentucky Wonder' in 1877.

'Bolita' beans have been part of the northern New Mexican diet for centuries. It's unclear whether these beans were brought from Spain, or if the Spaniards picked them up as they made their way north through Mexico. Navy beans came from Italy, flageolet beans from France, and the list goes on. All of these heirloom beans' ancestors originated in the Americas.

GIFTS OF BEANS

White settlers sometimes received beans from native peoples, and some of the stories that have been passed down with these heirlooms are as colorful as the beans themselves.

My friend, Lee Bentley, gave me some dry beans he calls "Kickapoo beans." According to the family story, Lee's ancestors purchased a tract of land in Illinois in 1830. It was too late in the year to build a house, so they erected a large tent for shelter. What followed was one of the worst winters the Midwest had seen in years. The livestock died, and the family was running out of food. They were sure they would die, until Kickapoo hunters discovered them. The hunters went back to their village and returned with enough brown speckled beans for Lee's family to eat for the remainder of the winter and to plant the following spring. Lee's family has grown out what they call Kickapoo beans for nearly 200 years.

'Great Northern' is another bean that may have been transferred directly from indigenous people to new settlers. The story goes that Oscar H. Will, a North Dakota seedsman (and great-grandfather of Heirloom Gardener's Editor-in-Chief) received a bag of mixed beans from Son of Star, a Hidatsa friend. Will picked out the small white ones and developed them for a dozen years before introducing them in his catalog with the name 'Great Northern.'

When I lived in New Hampshire, 'Jacob's Cattle' was a popular cultivar associated with New England, but it's actually an heirloom from Prince Edward Island, Canada. According to Slow Food USA, the beans were a gift from the Passamaquoddy tribe to celebrate the birth of a settler's child in Lubec, Maine.

Ancient strains are frequently renamed as they change hands. A friend of mine, a sales representative for Adobe Milling, gave me some beautiful, large white beans to grow out. He called them 'Mortgage Lifter,' which is a familiar name for an heirloom tomato. I searched online and discovered that 'Mortgage Lifter' is also known as 'Aztec Runner' and 'Bordal.'

Although we don't always know the exact origins of the beans we grow and eat today, we can still honor the bean's journey from a wild plant to the popular, healthy foodstuff it is. Let's preserve culture and biodiversity by continuing to share seeds and their stories.

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WWW.SWEETLYSEEDS.COM

PAYING ATTENTION

ROSIE GIBSON

I'm now the same age my grandad was when I was born. Sixty-five.

So, it's maybe no surprise that I have rekindled my love of gardening and growing, often from seed, which I absorbed like a sponge from him in my early years.

Apparently the first words I spoke were "Ocht grandad!"

Delivered at volume with crystal clear exasperation when he had the temerity to leave the house without me.

He might have been going out to feed the hens, clean out the pigs, check the young heifers, weed the cabbages or tend the roses.

And my rightful place was by his side.

I am channeling grandad when I sink a spade into a potato plot or lever a forkful of soil up from the earth and crumble it by gentle tapping with the back of the prongs.

I walked beside him as he broadcast seed. I remember the movement, the rhythm, the ritual dispersal of seed from concentration to expansion.

I don't have a photo of him broadcasting, but I do have a photo of him scything, taken by my dad I'm sure. He once said "Watch your grandad scything - no wasted energy. He's got it down to a fine art of minimum effort for maximum effect."

Broadcasting and scything are at different points of the growing, harvesting and seed gathering cycle, but they share the actions of movement, rhythm, manual effort, and the element of soft sound near silence.

My grandad also embraced the modern. He had a television sitting in the living room, waiting for the electricity to be connected in 1953, the year I was born. (I've also inherited his love of television hospital dramas.)

I often wonder what he would make of the way the world has gone in the last 65 years. What would he have to say about progress and evolution? Can I channel him?

"Pay attention", is the phrase that comes to mind:

attend (v.)

c. 1300, "be subject to" (obsolete); early 14c., "direct one's mind or energies" (archaic), from Old French atendre "to expect, wait for, pay attention" (12c., Modern French attendre) and directly from Latin attendere "give heed to," literally "to stretch toward," from ad "to, toward" (see ad-) + tendere "stretch," from PIE root *ten- "to stretch." The notion is of "stretching" one's mind toward something. Etymonline.com

He might advise stretching our minds towards the bigger picture of progress and evolution. To pay attention when we find ourselves thinking, "It was better before - on this occasion (as is the nature of evolution) we have gone too far. Time to pool our skills, experience and wisdom and take stock. Stretch our minds as we stretch our arms when broadcasting and our waists when scything."

I think he would say something like that.

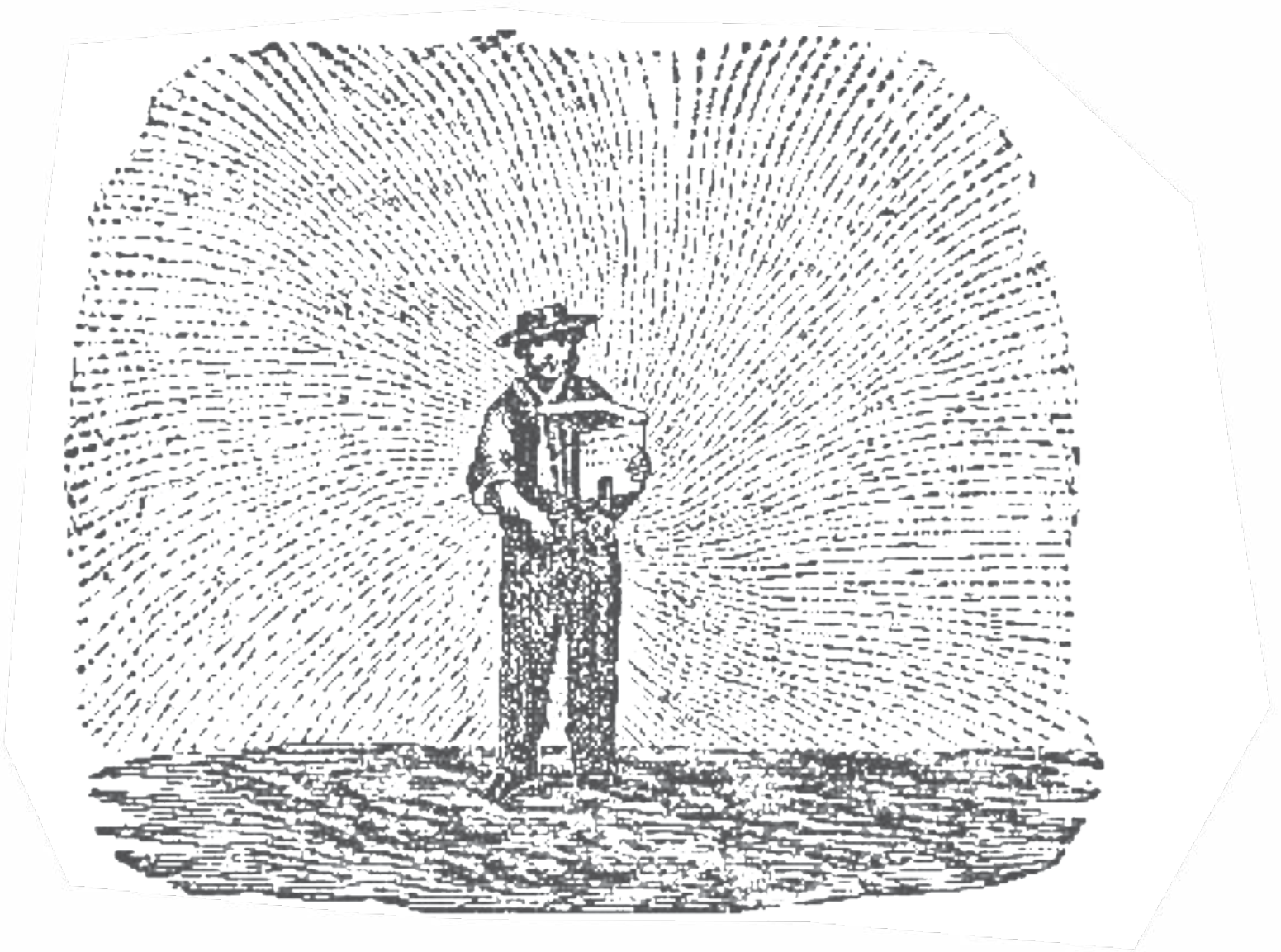
ROSIE GIBSON LIVES IN INVERKEITHING, SCOTLAND. SHE HAS BEEN A COMMUNITY ARTIST FOR " AT LEAST 100 YEARS", IS A FILM-MAKER AND SCULPTOR WHO LOVES TO GARDEN AND FOLLOW IN HER GRANDFATHER'S FOOT STEPS. HER AWARD WINNING FILM "THE WORK THEY SAY IS MINE" IS A DOCUMENTARY ABOUT WOMEN'S HISTORY AND PRESENT LIVES IN SHETLAND,. SHE IS CURRENTLY TEACHING DRAWING CLASSES AND HELPING TO DEVELOP AN ARTIST RESIDENCY PROGRAME WITH INVERKEITHING ARTS INITIATIVE.

THE HAND POWERED BROADCAST SEEDER

Wheat was the most important small grain crop planted by Iowa farmers. It was not only useful for food but also was easily stored and in great demand as an export product.

Other small grain crops raised included barley, oats, and rye. Barley was useful as livestock, feed, in the preparation of beer and in making bread. Oats supplied the main dish for millions of hardworking horses and supplied oatmeal for hardworking farmers. Rye did well in poor soils and harsh climates.

The earliest farmers planted these crops by hand. They broadcast their seed, that is, they scattered it in the air as they walked across the field. An alternative to broadcast planting was the use of the broadcast seeder. This equiptment consisted of a bag with a star-shaped disk at the bottom. As the crank was turned, seed fell onto the rotating disk and scattered across the field.



The Iowa Agriculturalist

CICADA SYMPHONY

SARA WRIGHT

Each evening
I sit in gathering shadows
listening for the nighthawk's peet,
the owl softly hooting.
Peering into the dense cottonwood canopy
I await the symphony…

How do they know
just when to begin
in perfect synchrony?
Punctual to the minute,
the swell is deafening
This music of the spheres
saturates my body
with song as I breathe
into the wonder of
Nature on the wing.

POSTSCRIPT AND NATURAL HISTORY

Every night I sit on the porch at dusk listening to night sounds. At precisely 8:30PM the symphony begins as the arching boughs of the cottonwoods come alive with song. When it's really hot the cicadas are so loud that when I stand underneath the cottonwoods I am transported to another realm.

One night they surprised me. A few drops of rain fell and instantly the choral overture began. It was 8:15 PM and this uncharacteristic early beginning seemed to have everything to do with the rain which only fell for a few minutes although the insects sang on… perhaps the cicadas too are singing to the Cloud People, praying for rain.

I listened to many recordings before identifying the cicadas that are singing from these cottonwoods! Mine are "cactus dodgers" that are known for their affinity for cacti during courtship because they can dodge deadly spines during frenzied mating! They are primarily black, gray, white, and beige colored; well camouflaged for the desert.

Cicadas in general are an order of insects distinguished by piercing and straw-like sucking mouthparts. Worldwide, cicadas comprise about 2000 species, which occur primarily in temperate and warmer regions.

Like all insects, the usually dark to brownish to greenish cicada has three body parts—the head, the thorax and an abdomen. It has six jointed legs, with the front pair adapted for digging—a reflection of its underground burrowing life when a nymph. A strong flyer, it has two sets of transparent and clearly veined wings, perhaps its most distinctive feature. At rest, it holds its wings like a peaked roof over its abdomen. It has bulging compound eyes, three glistening simple eyes and short bristly antenna.

The male cicada has on its abdomen two chambers covered with membranes – "tymbals" – that it vibrates, when at rest, to produce its "song." It can make various sounds, including, for instance, an insistent call for a mate, an excited call to flight, or a hoped-for bluff of predators. Both the male and female cicadas have auditory organs, which connect through a short tendon to membranes that receive sound. The male produces a call distinctive to his species. Ever faithful, the female responds only to the call of a male of her species.

The cicada often makes its home in the plant communities along river bottoms and drainages.

The cicada falls into one of two major groups, one called "dog day," the other called "periodical." The dog-day cicadas, which usually appear during the hottest days of summer, hence the name, include all of the several dozen species of the Southwest. They have a life cycle of two to five years. The periodical cicadas, which include several species, all east of the Great Plains, have a life cycle of 13 or 17 years.

Once one of our Southwestern female dog-day cicadas answers the call of one of our male cicadas and the two mate, she seeks out an inviting, tender twig or stem on a tree or a bush. She uses the jagged tip at the end of her abdomen to gouge into a twig. She lays eggs, each shaped like a grain of rice, into the wound. She seeks out another twig and repeats the performance, eventually laying several hundred eggs.

Once a cicada nymph hatches, it drops to the ground, immediately burrowing into the soil, using its specially adapted front legs for the excavation. It seeks out a root and uses its specially adapted mouthparts to penetrate through the epidermis and suck out the sap. The cicada spends much of its time in its underground chambers. Once grown, it tunnels upward, to near the surface, where it constructs a "waiting chamber." Upon receiving some mysterious signal, perhaps a temperature threshold, our nymph, along with its multiple kindred nymphs, emerges in a synchronized debut, one of the great pageants of the insect world. It climbs up nearby vegetation, molts for the final time, emerging from its old nymphal skin as a fully winged adult, beginning the final celebration of its life.

The cicadas struggle for survival through its final days because it is nontoxic and relatively easily caught, especially during the final molt, must deal with a crowd of potential predators, including birds such as boat-tail grackles, various woodpeckers, robins, red-winged blackbirds and even ducks; mammals such as squirrels and smaller animals; reptiles such as snakes and turtles; spiders such as the golden silk spider; and other insects such as its especially fearsome arch enemy, the cicada killer wasp.

Of course, the cicada does have certain defenses. Once it has molted, it can fly swiftly to escape some potential predators. The raucous male alarm call may startle some predators, especially birds. It may occur in such numbers that it overwhelms the collective appetite of predators.

In perhaps its most novel defense, the desert cicada has developed an extraordinary ability to remain active throughout mid-day, when most would-be predators have to seek shelter from the desert heat. Notably, the cicada, unlike any other known insect, can sweat, which helps it dissipate heat. When threatened with overheating, desert cicadas extract water from their blood and transport it through large ducts to the surface of the thorax, where it evaporates. The cooling that results permits a few desert cicada species to be active when temperatures are so high that their enemies are incapacitated by the heat. No other insects have been shown to have the ducts required for sweating."

While the cicada may cause minor damage to the plants on which it feeds during its life cycle, it contributes in important ways to the environment. Studies of the cicada in Colorado River riparian communities revealed the ecological importance of this species. Feeding by the nymphs influences the vegetative structure of mixed stands of cottonwood and willow that occur in certain habitats. Excess water removed from the host's water conducting tissues (the xylem) during feeding is eliminated as waste and improves moisture conditions in the upper layer of the soil. Xylem fluids are low in nutrients and the nymphs must consume large amounts of it to accommodate their energy needs. Most of the water is quickly excreted and becomes available to shallow rooted plants. Additionally, cicadas comprise an important prey species for birds and mammals, and the burrowing activity of nymphs facilitates water movement within the soil."

The cicada has entered the realm of folklore across much of the world, possibly because its periodic emergence from darkness into light and song has been equated with rebirth and good fortune.

In one myth Cacama was the lord of the Aztec kingdom of Tezcuco who met his end at the hands of Spanish conquistadors. Cacama lives on in these winged desert treasures.

A Greek poet once wrote, "We call you happy, O Cicada, because after you have drunk a little dew in the treetops you sing like a queen."

An Italian myth held that "one day there was born on the earth a beautiful, good and very talented woman whose singing was so wonderful it even enchanted the gods. When she died the world seemed so forlorn without the sweet sound of her singing that the gods allowed her to return to life every summer as the cicadas so that her singing could lift up the hearts of man and beast once again."

In our desert Southwest, the cicada outwitted the traditional trickster, the coyote, in Zuni mythology. It produced heat in Hopi mythology, heralding the arrival of summer, and it is "the patron of Hopi Flute societies in charge of both music and healing," according to Stephen W. Hill, *Kokopelli Ceremonies*. The cicada played a key role as a scout and a conqueror in Navajo creation myths. It brought renewal and healing to other tribes.

Across the Southwest, from prehistory into historic times, the cicada became identified with the hump-backed flute player, or Kokopelli, a charismatic and iconic figure portrayed in rock art and ceramic imagery.

Kokopelli risked his life to lead the Ant People from mythological inner worlds to the present world, where they became The First People, after agreeing to follow the teaching of the Great Spirit.

"Kokopelli's transparent wings have now unfolded and dried, and he is able to take to the sky. Kokopelli's reward is flight. His continued gift to us is his reminder to be grateful that we no longer live in darkness."

NEXT EPOCH SEED LIBRARY

SIMONE JOHNSON

My name is Simone and I am excited to share an interview with Ellie Irons and Anne Percoco of the Next Epoch Seed Library based in North Troy, New York. Their work has sparked my curiosity about seeds, soil, weedy plants and climate change even more than before.

"Stocked with seeds gathered from the vacant lots, street verges, superfund sites and abandoned infrastructure, the seed library provides a gene pool of tough, highly adaptable plants well-suited to live in close quarters with humans and their attendant landscape transformations".

As someone deeply interested in farming and seedkeeping, and having grown up in Staten Island, New York City since the age of 14, I appreciate learning about various approaches and perspectives to seed saving and engaging with plants and urban ecology.

WHY DID YOU START THE NEXT EPOCH SEED LIBRARY?

In 2015 when we met, we were both working with weeds and seeds in different ways and for different reasons. Ellie, missing the expansive nature of her home in California, was interacting with the urban ecology in her new home, NYC. She was collecting plant specimens, including seeds and berries, and making them into pigments for painting. Anne is a sculptor interested in finding value in overlooked places and materials. In her walks through junkspaces, such as vacant lots, she became interested in the plants growing there. She did some weaving projects with phragmites and created a terrarium for transplanted weeds inside a shipping container, with mixed seed packets from those plants as an artifact of that project.

During a studio visit in January of that year, the idea for a seed library for weedy species was born. We began working on it in the following months and had our first exhibition, through No Longer Empty, that fall. Since then, we've been expanding our scope beyond the physical seed collection to include interactive components: participatory walks and workshops, an open access curriculum, long term seed storage experiments, indoor and outdoor installations, printed materials, videos, and more.

When we started the project in 2015, we were aware of big so-called "doomsday" seed vaults like the one in Svaalbard, Norway, designed to store and preserve seeds long term. And we'd also encountered small-scale, community run seed swaps of ornamental and agricultural seeds that take place seasonally. We were interested in the gap between these models, and in species of plants that aren't being stored and saved by such efforts. As artists, gaps and omissions jump out at us as opportunities to experiment. So we created a small, nimble seed library that does deep time storage and season-by-season sharing and swapping. We decided to dedicate it to the overlooked spontaneous, wild and weedy plants that live alongside us in cities, and that are rapidly adapting to our changing epoch.

NESL re-imagines the conventional seed bank for a new epoch defined by massive human impact on the global environment. Rather than focusing exclusively on human utility or agricultural heritage, we champion the contributions of weedy plant species most likely to survive and thrive alongside humans as our cities move into an unpredictable future. Stocked with seeds gathered from the vacant lots, street verges, superfund sites and abandoned infrastructure, the seed library provides a gene pool of tough, highly adaptable plants well-suited to live in close quarters with humans and their attendant landscape transformations.

Offering services like soil stabilization, moisture retention, heat island reversal, toxic bioaccumulation and medicinal and nutritional attributes, these plants are the ideal urban pioneer species, prepared to heal the wounds inflicted by a changing climate and unsustainable resource extraction. We expect that spontaneous urban plant communities will form the base of new, novel ecosystems in our growing cities as we move through the bottleneck of the sixth mass extinction. Dedicated to overcoming plant-blindness in contemporary urban life, NESL believes that reciprocal networks of plants and people can provide a solid foundation for building ecologically just communities.

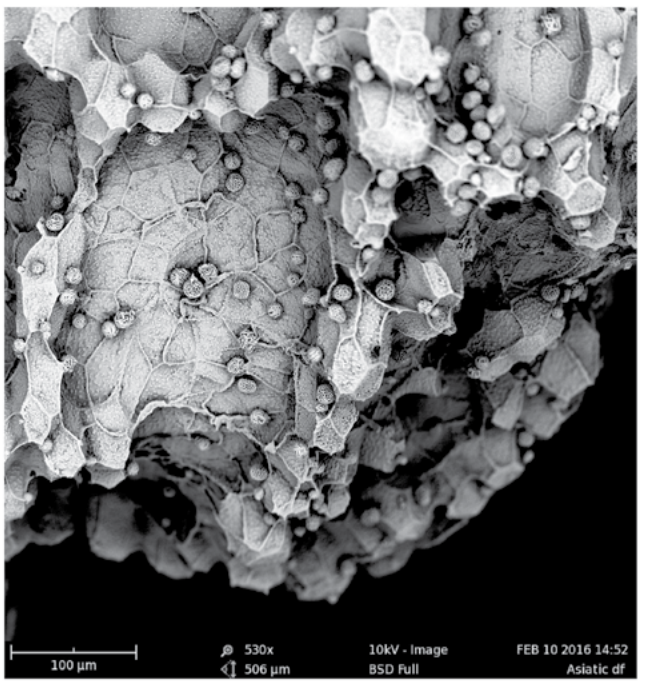
SINCE STARTING THE LIBRARY, WHAT HAVE YOU LEARNED SO FAR ABOUT THE WORK YOU ARE DOING?

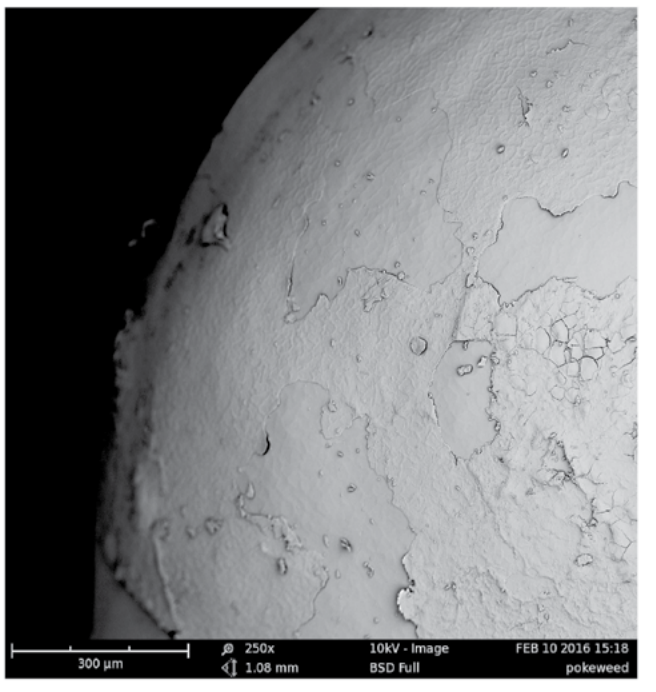
Anne: I have learned a ton from Ellie and from others we've worked with about these plants, the urban ecosystems they inhabit, and existing models for seed saving. Together we've learned more about the ability of a seed to lie dormant for potentially thousands of years and the conditions most favorable to long term storage. Additionally, we've learned that there is a benefit to saving the seeds of the wild cousins of agricultural crops, for potential cross breeding to meet future challenges.

Ellie: Yeah, that bit about wild crop cousins has been really exciting to discover! When we started out in 2015, I'd never heard of a wild crop cousin, and now we're learning that there are new organizations dedicated to preserving the genetic diversity of the species that are related to important food crops. The organisation "Crop Wild Relatives", run by the the Global Crop Diversity Trust, is a good example. We've also seen more and more examples of how plants living in urban places are adapting rapidly to the changing climate, and are, in a sense, living in the future. Cities tend to be hotter and more extreme in terms of other weather factors, patchy habitat-wise, and often have more sources of intense pollution, like heavy metals, particulate matter in the air, etc. These challenges mean that plants living in cities are already experiencing more extreme climates. There was an article in the New York Times recently about the common lawn enlivener, white clover, and how quickly it's adapting! This stuff is really exciting to us.

It's also been neat just to see folks discover something new in their own backyard, or alley, or sidewalk street tree pit. Seeds are really easy to miss, but once you start looking (and touching, smelling, sensing, gathering) they are so amazing to interact with! Seed gathering in the city really opens up a new dimension of urban life, that both Anne and I have loved getting into, and found that others benefit from it too!

Scanning electron microscopy on NESL seeds, in collaboration with the Nature Lab at the Rhode Island School of Design, 2016





Lawn (Re)Disturbance Laboratory plot establishment workshop with Community Miracles in Action, Cohoes, NY, 2018

HOW DO YOU THINK APPROACHING THE NEXT EPOCH SEED LIBRARY FROM AN ARTIST PERSPECTIVE IMPACTS YOUR WORK WITH SEEDS?

Anne: I think being artists impacts the project in a number of ways. It definitely allows for more flexibility and playfulness in the different ways we engage our audience. We are more attuned to the visual impact of our materials and displays, and we are interested in the conceptual parallels between a seed and different artistic forms. For example, we consider our seed packets to be part of the book art tradition. We might even consider a seed to be a kind of book, as a carrier and container of genetic text. We are also connecting to land and environmental art traditions, and are inspired by artists such as Agnes Denes, Robert Smithson, Mel Chin, Mary Mattingly, Katie Holten, Mark Dion, Future Farmers, and more.

Ellie: I think being artists gives us some interesting conceptual space and flexibility, too. As mentioned earlier, approaching seed collecting as an art project gives us the chance to look for gaps and frictions in more conventional methods and models, and try to meet and bridge them. Our work with this seed library can be a little confusing to people sometimes, and we think that's a good thing!

Seed collecting walk at Newtown Creek, in partnership with Chance Ecologies/Queens Museum, Brooklyn, 2016

Above: Next Epoch Seed Library at William Patterson University, 2016

Below: Plant identification and seed sorting for "Time Capsule for Pacific Street Futures", in partnership with the Environmental Performance Agency, 1067 Pacific People, Crown Heights, Brooklyn, 2017

Photo Credit: Next Epoch Seed Library

We're interested in the questions and conversations generated by working with overlooked (and even disdained) urban greenery. Sometimes people are concerned about the fact that we work with plants they might consider "invasive" or otherwise deleterious to the environment. We're committed to thinking through (and attempting to dismantle) stiff binaries like native/introduced, beneficial/invasive, wild/domesticated. For us, a whole species of plant is never invasive. Every plant evolved somewhere, but habitats are changing fast. Individual plants in certain situations may act invasively, whether they evolved in that place or not. Sometimes the way an introduced species thrives has more to do with previous wounds to the landscape - as recent studies have pointed out, introduced species can be the passengers, not the drivers, of environmental change. They respond to previous damage, rather than causing it. And sometimes they are the only plants that can survive in bare, compacted and/or polluted soil. They jumpstart the process of recovery in situations where beloved native plants can no longer survive. And in the process they help hold the soil in place and make oxygen! And of course, cities are sooo different from any habitat these plants evolved to live in. Between the rapidly changing climate and the novelty of urban environments, at some point we may need to reconsider what native means.

WHAT ARE SOME QUESTIONS OR CURIOSITIES COMING UP FOR YOU ABOUT YOUR CURRENT WORK WITH THE LIBRARY?

We're very interested in getting some more visible public seed vaults out into the world, and in investigating how superfund sites are rewilding, in 3D scanning some seeds as their shapes can be incredibly intricate and beautiful, and in studying the species Asiatic Dayflower in more depth. And we continue to wrestle with the questions broached earlier, with regard place and nativeness and habitat health. We're very curious about how dialogues will shift as approaches to restoration and adaptation shift. As the world continues to grow more urbanized and the pressures of climate change mount, what will it look like to live in a city in twenty or forty years? What kind of plant life will we live alongside?

WHAT WAS ONE OF THE MOST MEMORABLE PROJECTS AND WHY?

Continuing with the deep time theme, we recently recreated a 120 year old experiment by botanist Dr. James Beal. He buried some weedy seeds and retrieved them every 20 years, to test their ability to germinate. Some seeds were still viable for the entire timespan! We recently recreated this experiment for the show Wilder City in Queens, curated by Lorissa Rinehart and Nat Roe, in Windmill Community Garden. We also did this with a group of youth at Uptown Summer a program for high schoolers at the Sanctuary for Independent Media in Troy, NY. We intend to unearth both every 20 years!

CAN YOU TALK ABOUT YOUR OPEN ACCESS CURRICULUM AND WHY YOU INCLUDED THIS EXPERIENTIAL COMPONENT? ARE YOU WORKING ON ANY NEW EXERCISES FOR THE CURRICULUM?

We came up with the idea for the curriculum because our installations and exhibitions are so often accompanied by workshops or other participatory aspects that feel really integral to the work. We wanted to be able to spread this participatory piece around, so that even if folks couldn't make it to one of our workshops, they could potentially recreate some of the activities on their own. Working with wild urban plants is an accessible way to bring youth living in urban environments in touch with the multispecies reality of our lives as humans! It's so easy to feel isolated in a world of screens and concrete and buildings- but reaching out to touch and interact with an urban plant can change that in an instant! So we intended the curriculum to be a flexible invitation for others to try what we've been up to. So far we have a few games, a group meditation/visualization, and a guide for doing a seed time capsule. There is more to come!

I'M REALLY CURIOUS TO LEARN MORE ABOUT YOUR "LAWN (RE)DISTURBANCE = SOIL SEED BANK AWAKENING PROJECT. WHERE DID THIS IDEA COME FROM AND WHAT HAVE YOU BEEN OBSERVING SO FAR?

Ellie: I love how you called it a soil seed bank reawakening project! That is so accurate, and lovely! This project arose in the last year because I started living part time in Troy, NY, after many years in Brooklyn, and found myself surrounded by lawns. Troy is still very much an urban environment, with a long industrial legacy, but it's a shrinking city, and there is more open land around that's not covered by concrete or buildings. In many of the gaps between buildings, there is land that is covered in grass and regularly mowed. The projects NESL had been doing about deep time seed burial and the longevity of hibernating seeds led us to wonder what kind of seeds might be hiding in the soil under Troy's many lawns, waiting to sprout should the right conditions arise. I was also struck by how ecologically depauperate the lawns are as ecosystems. A recent study showed that highly maintained lawns might even be worse for the climate than an asphalt parking lot, due to chemical inputs and energy used in maintenance. So NESL was interested in doing something to disrupt this monoculture.

I decided to carry out a public experiment of sorts! I recruited local residents and institutions with lawns, (including the groundskeeping team at Rensselaer Polytechnic Institute, where I am currently a PhD student), to donate 1 x 1 meter test plots where the grass could be "re-disturbed" to see what seeds might awaken when exposed to light, air and moisture. (Re-disturbed because as a heavily maintained monoculture, NESL sees lawns as already a disturbance in and of themselves).

Throughout spring I held lawn re-disturbance workshops in Troy, where participants were invited to de-lawn the test plots. After observing each square of lawn as a little habitat in its own right, and reading a re-disturbance acknowledgement together, we pulled and tugged and tore the grass away, revealing the soil beneath, and creating a bare brown square in the middle of a green lawn. At each site, we took a soil sample to grow indoors under controlled conditions, then added a little nutrient mix to the bare soil, staked the plot off with yellow flagging, left a sign explaining the project, and then we waited! Of course, within just a few days, sleeping seeds in the soil started to come to life, rewilding what had been lawn.

Now, in late summer, there are test patches where the surrounding lawn has turned brown in the August heat, but the weedy plants that emerged are thriving. We've gotten a huge range of results. There is one patch that has 15 different species in it, from broadleaf plantain to yellow sweet clover to sumac seedlings. And another plot that has nothing but crabgrass, so far! One thing that has been really noticeable is that insects like the test plots. Even though they are only 1 x 1 meter, they always have a few butterflies, or bees, or little flies or ants, hanging out in what they must find to be an inviting microclimate. We're hoping to do some temperature and moisture tests soon to see if they are climatically different than the surrounding lawns.

LEARN MORE ABOUT THE NEXT EPOCH SEED LIBRARY AT NEXTEPOCHSEEDLIBRARY.COM.

IF YOU WOULD LIKE TO GET IN TOUCH WITH ELLIE AND ANNE, YOU CAN EMAIL NEXTEPOCHSEEDLIBRARY@GMAIL.COM.

SIMONE LIKES DOING MANY THINGS IN LIFE. LATELY IT'S BEEN USING HER HANDS TO MAKE POTTERY.

CHECK OUT HER MOVEMENT ART AT WWW.DANCINGNOMADVA.COM.

GENTLY RADICAL CHANGING

KAITLIN BRYSON

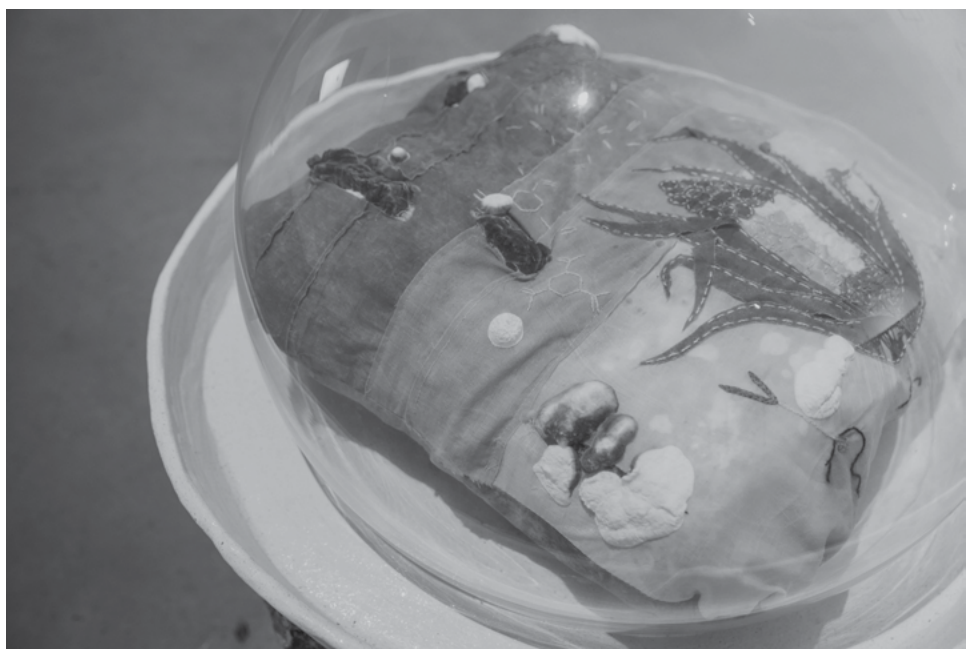
Gently Radical Changing was a project and exhibition that explored the potentials of environmental and social justice through collaborations between humans and the more-than-human world. This project sporulated from the physical capabilities and emergent metaphors of fungi, by highlighting the potentials of mycoremediation which is the use of fungi to clean harmful toxins from the environment. Through engaging with mycelial ways of fairing through damaged ecosystems, the work followed hyphal lines through places with histories of grave environmental injustices and subsequent trauma, specifically in the Tewa ancestral homelands in the area of Española, New Mexico. The foundation of this project lies first in acknowledgement of these injustices, and secondly, in honor and dedication to those who have worked to remediate these lands.

Española, New Mexico is a place of complex and contentious history. It is a marginalized community in New Mexico, seated in Rio Arriba County which is one of the poorest counties in the United States. It was the first Spanish settlement in New Mexico, taking place in the sixteenth century, which fractured the already-established pueblo communities and ways of life of the indigenous inhabitants. The imposition of this foreign power structure resulted in seismic fissions that continue to ripple out today. Española has further been affected by the industrial war complex and nuclear weapon development in Los Alamos County – home of the Manhattan Project and the "birthplace of the atom bomb."

In the early 1940s, The Manhattan Project acquired Los Alamos through eminent domain, and called the appropriated territories, "generally nonpopulated." This location was a designated sacrifice zone by the US government and was chosen because it was determined to have lesser collateral damage if something were to go wrong. Today, the contamination caused by nuclear fallout has left these so called non-populated communities with cancer rates seven times higher than the national average. To this day there are over 2,000 contaminated sites in the Los Alamos and Española region. Furthermore, many of the still unremediated waste sites are on sacred sites, making it illegal and incredibly dangerous for the Tewa people to practice traditional sacred rituals. Land, water, plants, animals, bodies, minds, and spirits have been polluted and destroyed.

This is a slow-type of violence that Robert Nixon describes as, "…[A] violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all… Chemical and radiological violence, for example, is driven inward, stomatized into cellular dramas of mutation that – particularly in the bodies of the poor – remain largely unobserved, undiagnosed, and untreated." (1)

The artwork presented in the exhibition, Gently Radical Changing, was a collaborative call to action. A form of expression seeking to illuminate these truths while fostering potentials of remediation. The artwork was made in collaboration and partnership with the Environmental Justice Department of the Tewa Women's United (TWU), an indigenous non-profit organization based out of Española, NM. In compassionate collaboration with TWU and with fungi, the artwork was fabricated with the intention of replenishment of three toxic and contaminated sites that have been selected for remediation study with TWU.



Images: A Habitat for Potential (for the Rio Grande), 2018

Collaboration with: Hericium erinaceus, Beata Tsosie-Peña & Tewa Women's United; Linen, raw silk, and wool dyed with: Cutch, indigo, madder root, rabbit brush, micaceous clay, glass, elm

KAITLIN BRYSON MODELS HER INTERDISCIPLINARY ART PRACTICE AFTER FUNGI, WHO INHABIT THIS WORLD AS BOTH MAKERS AND CARE-TAKERS. MERGING BIOREMEDIATION – THE USE OF BIOLOGICAL MATERIALS TO CLEAN HARMFUL TOXINS FROM THE ENVIRONMENT – WITH SCULPTURE, PERFORMANCE, FIBER ARTS, VIDEO AND INSTALLATION, SHE MAKES POETIC GESTURES TOWARDS ECOLOGICAL RENEWAL. BRYSON RECEIVED AN MFA IN ART AND ECOLOGY FROM THE UNIVERSITY OF NEW MEXICO, AND A BFA FROM THE UNIVERSITY OF NEVADA, RENO. HER WORK HAS BEEN SHOWN INTERNATIONALLY AND SHE IS CURRENTLY WORKING ON SCULPTURAL REMEDIATION PROJECTS IN NEW MEXICO AND MEXICO.

Below our feet, above our heads, and even in our bellies lives an extraordinary world of entanglement called, mycelium. Mycelium is the (most often) white feathery substance that we might see on the forest floor, or in leaf litter. As it turns out, this substance is connected to a vast rhizomatic-like network and is the vegetative body of a fungus. Nearly all fungi grow as this three-dimensional network of microscopic, one-cell-thick threads. Each thread is known as a hypha and multiple threads are known as hyphae. This network grows at its leading edge, where individual hyphae assess their environment at their tip. As environmental signals come in, each hypha responds by releasing a suite of metabolites to defend against antagonistic microbes and/or to digest its food. This network is intelligent, expansive, and decentralized but is intricately connected through the woven matrix it creates and the nutrients that it shares throughout the system.

Only a small percentage of fungi – the Homobasidiomycetidae – are able to condense their mycelium into the larger, complex forms that we call mushrooms. Remarkably, all mushrooms are made of nothing more than one type of tissue: mycelium. The mushroom is the fruit body of the mycelium and as such contains billions of microscopic spores bearing genetic information.

Saprophytic – decomposer – fungi, as part of the homobasidiomycetidae, are some of the world's oldest organisms, and as such these decomposers are among the most evolved creatures on our planet. Saprotrophic fungi consume dead and decaying material, and, in this process, they return base nutrients to the ground. Saprotrophic fungi have actually eaten and recreated the Earth's ground many times over and if we adhere to the old adage: you are what you eat, these decomposers are the world themselves. Furthermore, saprotrophic fungi have learned, over eons, how to digest lignin – the invariably complex chemical compound that constitutes wood. Decomposing fungi enter into the biochemical world of wood in search for sugar-rich cellulose and hemicelluloses. In this process, however, they disassemble these large, and strong bonds by creating small ions that enter the compounds causing an oxidative chain reaction which cracks open the molecule. Once this molecule has been opened by the fungi, a host of other microbes move in, further deconstructing the material.

Due to their biochemically radical dinning capacity, many of the decomposer fungi are capable of remediating, immobilizing, or digesting some of the world's most troubling pollutants, namely heavy metals and toxic chemicals. This process is called mycoremediation and has been the main source of inspiration and material for the project, *Gently Radical Changing.*

The mycoremediative pieces in the exhibition were soft sculptures called: mycoremediation pillows. Each mycoremediation pillow began with formal research of the particular site and toxin. Once this information was determined, a specific species of mycelium was chosen to target the contaminant.

Through conversations with the inhabitants of the sites, imagery was chosen for the quilted coverings of the pieces that embellishes a positive future of restoration as well as pays honor to the spirits, plants, peoples, and animals of those places. The remediation pillows are completely crafted out of natural materials. The silk and muslin fibers that make up the quilts have been dyed with plants and insects, fabricated into pillow forms, and then are stuffed with remediative mycelium and substrate. After a period of incubation, the pillows were buried or installed at the chosen site in a collaborative performance or ceremony. These pillows are meant to represent a gentile resting place for the contamination to meet its end, while also illuminating the potentials that can grow from this restoration.

The hazards and environmental injustices faced by the Española community and many marginalized communities throughout the United States, point to environmental racism, unveiling deeper truths about the injustices and instability of our country and contemporary times. However, like the decomposer fungi, I think we can find hope in this destruction – the decay of these systems only means that there are nutrients available for the next. At this time, it is vital to fiercely compost these spent pasts. We must throw them into the chaos of the compost – a precarious, deconstructive, and fertile place.

The dissolution of the old world will take us to a new edge. Like the mycelium coming in contact with a new material or antagonist in the soil, we must pause – feel into it, learn about it, so we can digest it. This *feeling into* is at odds with our animal instinct to run away, to be afraid of. We must demonstrate our capacities to be brave and face these realities head on. In this regard we must hope, and this hope has to be radical. Two scholars speaking to radical hope, Junot Diaz and Rebecca Solnit, have greatly influenced this work. Diaz describes, "Radical hope is not so much something you have but something you practice; it demands flexibility, openness… and imaginative excellence… We need to bear witness to what we have lost: our safety, our sense of belonging, our vision of our country. We need to mourn all these injuries fully, so that they do not drag us into despair, so repair will be possible." (2) And Solnit proclaims, "…hope is an ax you break down doors with in an emergency; because hope should shove you out the door, because it will take everything you have to steer the future away from endless war, from annihilation of the earth's treasures and the grinding down of the poor and marginal…Hope calls for action; action is impossible without hope." (3)

As an artist, I take hopeful action and choose to engage with these emergent emergencies through the creation of remediative artwork with fungi. Fungi silently and ordinarily inhabit this world as both makers and caretakers. Their biochemical processes and lifestyles are fundamental, terrestrial miracles which unfold as interconnected performances that nourish land, remediate toxins, and terraform the unformable. In working with fungi and illuminating these potentials, I am interested in terraforming new types of stores myself. Stories that dismiss common narratives about destruction and disaster as catastrophic ends turning humans against one another and the environment, and instead look to these places of precarity and entropy as fertile grounds for collectively inspired adaptations.

Below: A Habitat for Potential (for the Rio Grande), 2018
Collaboration with: Hericium erinaceus, Beata Tsosie-Peña & Tewa Women's United; Linen, raw silk, and wool dyed with: Cutch, indigo, madder root, rabbit brush, micaceous clay, glass, elm

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Above: Mycoremediation burial performance and workshop, 2018
Collaboration with Tewa Women's United and Española community

SARA IS A WRITER, ETHOLOGIST AND NATURALIST WHO IS MAKING HER HOME IN ABIQUIU, NEW MEXICO AFTER LIVING IN MAINE FOR MOST OF HER LIFE. SHE HAS INDIGENOUS ROOTS. NATURE IS HER MUSE AND INSPIRATION. SHE WRITES FOR MANY PUBLICATIONS MOST OF WHICH FOCUS ON NATURE, AND ECO-FEMINISM - THE BELIEF THAT WHAT IS HAPPENING TO THE EARTH IS ALSO HAPPENING TO WOMEN.

SINGING UP THE DAWN

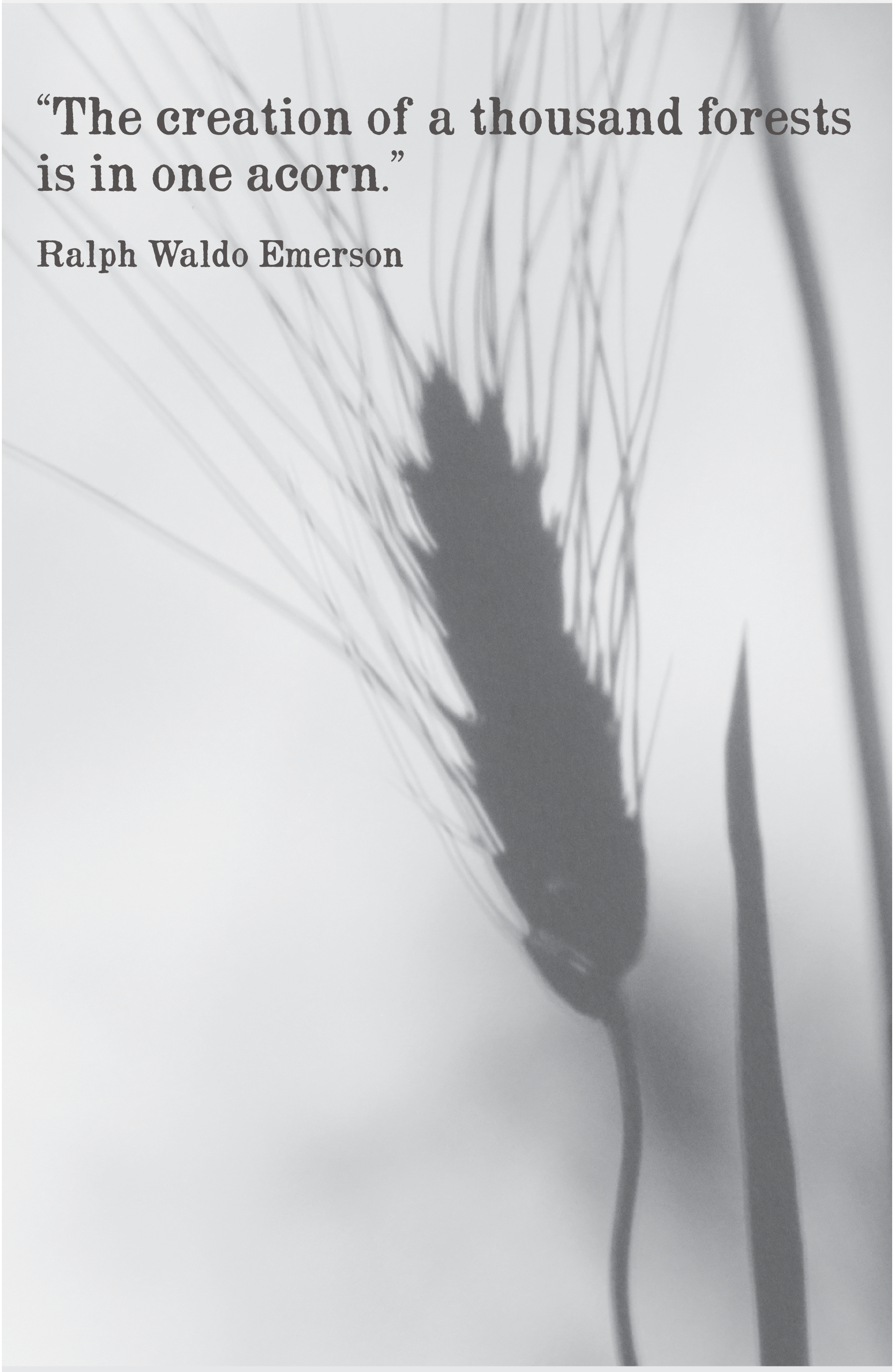
SARA WRIGHT

My walk to the river
is a joyful entrance
into the eternal Now.
The water flowing,
crushed fresh mint,
trilling bird song
desert air so sweet
my body vibrates
humming with all that is…

Returning under
bowing cottonwoods
I touch a heart shaped leaf
in reverence…
For Life.

Datura trumpets
are sirens singing…
And I bend down
to pull intoxicating scent
into my lungs
remembering a seed
that became a Goddess
white roots tangled
in wet cloth
before spring planting.
This holy one of the Wild Places,
Waste Places,
also speaks to death
for the unwary -
fans Wildfire.

Luminous white moon faces
celebrate the dawn
perfume dissipating…
When a piercing eye rises
pearl blossoms fade
like I do under
the fierce heat of
a bittersweet orange
star.


“The creation of a thousand forests is in one acorn.”
Ralph Waldo Emerson