

# A Preliminary Report on Seeds & Seed Practices across the United States

For too many people and communities around the world, the dominant agricultural model is causing economic hardship, the destruction of biological diversity, and the exploitation of earth's ecological *commons*. It is a model based on the *commodification* of life. We can no longer continue the status quo that enables multi-national corporations to corner our food system and our seed commons. Every element that is foundational to life (food, water, land, air) is under threat of privatization and marketization by an economic order that seeks to profit and own our common wealth.

The growing global movement by peasants, growers, farm workers, fisherfolk, pastoralists, indigenous peoples, urban growers, food system policy advocates, and human rights activists has born witness to a growing trend of patenting seeds and the genetic manipulation of seeds for corporate profit. We must shed light on and uphold the rights of all of life to grow, evolve, and be present in ecology, even the whole of the Earth. Seeds are one of the foundational elements to our food system and must be defended because they affirm our lives, our very sustenance, and our relationship to place, culture, plants, and all of nature.

This report is written to examine current seed culture, saving, keeping and sharing, and seed advocacy across the United States and North America. This is an initial report of the seed survey sent out by the Rights of the Mother Earth/Defense of the Commons Workgroup of the U.S. Food Sovereignty Alliance in summer 2013, to deepen the discussion around seeds and the rights of nature.

## **U.S. Food Sovereignty Alliance**

Rights of Mother Earth/Defense of the Commons Workgroup

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This report is written by a team from the Rights of the Mother Earth /Defense of the Commons Workgroup of the U.S. Food Sovereignty Alliance — specifically, Devika Ghai, Pesticide Action Network North America; Lisa Griffith, National Family Farm Coalition; Charity Hicks, East Michigan Environmental Action Council; Andrew Kang-Bartlett, Presbyterian Hunger Program, PC (USA); and Sara Mersha, Grassroots International. We have presented the information, related data, and commentary in this report with fidelity for trueness and clarity. Any errors and confusion are our own, and we are humbly open to any corrections and comments from readers. Thanks to other members of the USFSA for your editing support, including Holly Baker of the Farmworkers Association of Florida and Saulo Araujo of WhyHunger.

We thank all those persons and groups who participated in this survey to help all of us understand seeds, and seed keeping/sharing in our communities. Everyone's work toward food sovereignty is courageous and exemplary. We hope we have given strength to your work, and encouragement to others who are uplifting our seed commons and defending nature from an onslaught of privatization and destruction.

#### Cover photo credits (clockwise):

Heirloom seeds in small bowls of local food crops and spices, India - courtesy of Grassroots International; Abundant food table set with fruits and vegetables from EAT4Health - digital commons; Ears of heirloom blue corn - courtesy of Blain Snipstal; Image from ritual to Bhoo Devi (Mother Earth) - Offering of Earth's bounty of grains, fruits, and vegetables, India - courtesy of Grassroots International; Traditional heirloom corn from Oaxaca, Mexico - courtesy of Grassroots International.

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## Introduction

Essential to life itself, seeds are complex, botanical gems providing a splendid array of food, fiber, and shelter. Through natural and human transport, seeds have migrated and adapted to rural and urban regions worldwide. Yet a handful of transnational corporations (TNCs) are intent on controlling the global seed supply, restricting producers to planting only the TNCs' patented and genetically-modified varieties, which require strict contracts and a bevy of chemical herbicides, pesticides and fertilizers.

Farmers worldwide are facing the loss of seeds that their families and communities have planted for hundreds or even thousands of years. As multinational agribusiness corporations—TNCs such as Monsanto—buy regional seed companies, they eliminate seed varieties or simply close the facilities, narrowing the farmers' options. Non-genetically modified varieties are replaced with genetically modified seeds sold in conjunction with contracts the farmers must sign to purchase them. Farmers become virtual sharecroppers since they are not allowed to save seeds from year to year. Furthermore, free trade agreements have forced many farmers to stop planting seeds for food crops that are not traded on the international market, and to focus more on commodity crops such as corn, soy, and wheat. This contributes further to food scarcity and takes communities further away from the goal of *food sovereignty*.

In response, the U.S. Food Sovereignty Alliance (USFSA or Alliance) is launching this report, complemented by a plan to support regional *agroecology* trainings. The goals are to:

- Document cultural traditions and practices related to seeds
- Educate others about keeping seeds and the politics of seeds related to food sovereignty
- Debunk the myth that genetically modified seeds will feed the world
- Explore interest in seed banks and a Seed Keepers Network
- Build towards a food sovereignty movement in the United States

The U.S. Food Sovereignty Alliance believes in honoring seeds and the people who plant, cultivate, and harvest them. We have learned a great deal about the importance of seed saving and seed sovereignty from international networks of small-scale farmers and indigenous peoples, such as La Vía Campesina, a movement of more than 250 million small-scale producers in over 70 countries around the world. We continue to learn from and take direction from these global movements, as well as from urban and rural communities on the frontlines of struggles for food sovereignty across the U.S.

In 2013, the Rights of Mother Earth work team of the USFSA developed a survey in English and Spanish to collect information on seed-related practices, which 70 growers from diverse backgrounds, interests, and geographical areas answered. The Alliance hopes this report will help farmers, gardeners, organizers, advocates, consumers, and eaters to revere the seeds that they, their neighbors and local farmers plant. Increased saving, swapping, and sharing of native and heirloom seeds, as well as traditional and cultural growing practices, will allow societies to sustain life for centuries to come. We also hope that this report inspires readers and policymakers to protect for the common good the wealth and wonder inside these precious, essential components and originators of life.

Please note that we use italics in the report to denote terms that are defined in the glossary.

The results and stories from the survey follow.

## Methodology

The methodology employed in the survey, which is the foundational element underpinning this report, was based upon an open source, focused dissemination, and self-selected participation. The survey is based on one developed by Biowatch South Africa. The survey was available in both written and electronic formats to provide for the diverse spaces in which respondents were asked to participate, as well as in English and Spanish. To increase the opportunity to engage growers who could respond to the survey, we directly and indirectly used diverse channels in our networks and food system connections, starting with member organizations of the U.S. Food Sovereignty Alliance and extending out from there. We sent out the electronic link to the on-line survey via email, social media and listservs to garner responses. We also printed the survey to take to several meetings, conferences, and other gatherings where food and agricultural growers would be present.

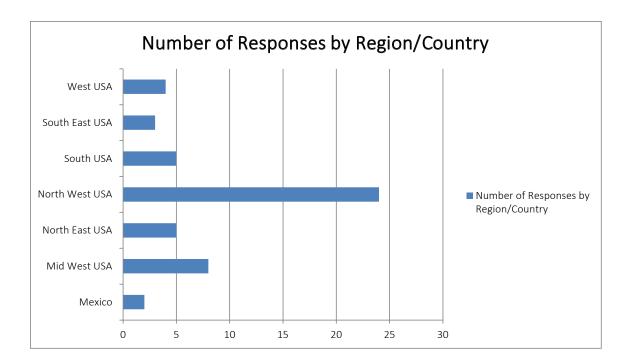
The data set includes elements that are both open and closed-ended, to provide for a richer contextual story, which informs this report. We simply wanted to know the "Who? What? Why? Where? and How?" about seeds, seed keeping/ sharing, and seed advocacy. The survey took approximately 15–30 minutes to complete.

It is our intent to protect the identities and operations of the respondents, so we have left some identifying information out of this report and aggregated all the responses to provide a quantitative framing on seeds practices, and personal narratives of seed keeping which provide a more qualitative framing. Some responses are personally identified while others are not. This does not affect the credibility nor the worth of the responses, as these differences flow from the diversity of respondents' lived experiences in and around food and agricultural systems in our communities. All respondents are equally important, valuable, and significant to the process and to this report.

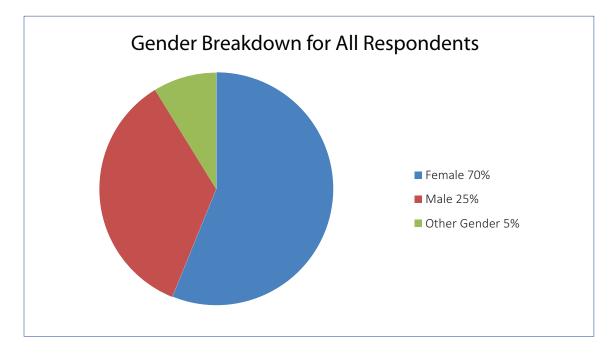
The first section sets the demographic profile of the surveylocations, gender, and years of farming experience-which help us envision the geographical diversity and experience level of respondents. The next section goes into the notion of approach and identity surrounding individuals and organizations. There is a wide diversity of work and practice surrounding seeds—some respondents are deeply engaged in farming, others are new to seeds and find it affirming to plant, save and share them in their neighborhoods, while some are deeply rooted in cultural experiences which are dynamically attached to seeds and heritage within ecological relationships. These approaches help us to see the multi-faceted ways in which we interact with seeds. The third section tells the story of seeds in the lived experiences of the participants. This section brings forward the context of importance, history, place, and seed selection practices. Lastly, we look at the practices of seed advocacy including seed sharing, seed keeping, and promotion of seed sovereignty. Overall, we are painting a diverse picture of evolving seed-consciousness and intentional practices related to seeds.

## **Demographics**

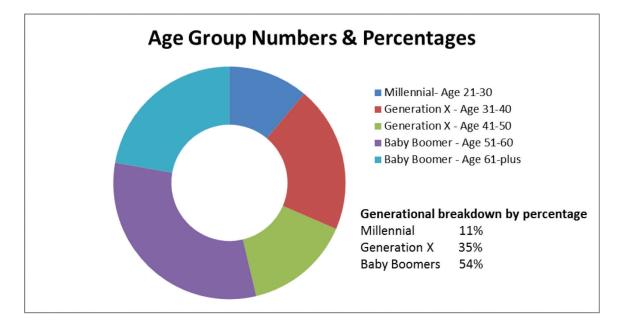
People and organizations representing rural, urban and suburban communities in several states participated in the survey. The majority of responses were from inside the United States, which was the focus of our survey outreach.



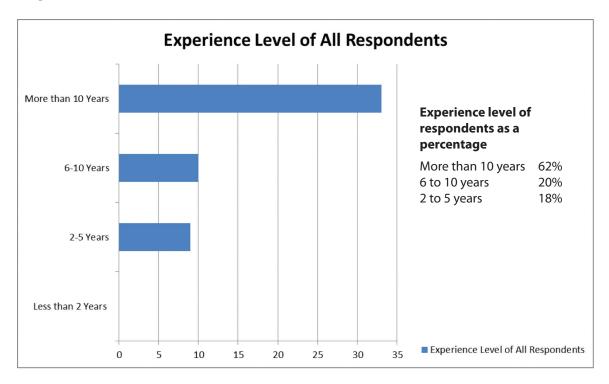
The majority of survey participants were female.



Age demographics displayed a multi-generational spread. The bulk of responses came from the Baby Boomers (50s–60s) and the next largest response was from Generation X (30s–40s). This demographic falls in line with the full statistics of farmers in the United States which show the bulk of farmers being Baby Boomers.



The experience of respondents reflects new farmers/gardeners/seed-savers and those who have been in the practice for decades.



## **Our Identity, Our Approach**

We, asked respondents to identify themselves and/or their organization across a grouping of food system categories.

The response group consisted of 13 identity and work categories:

- Food Justice
- Biodynamic Farming
- Food Security
- Anti-Hunger
- Organic Agriculture
- Permaculture
- Climate Change
- Climate Justice
- Agroecology
- Nutrition
- Food Policy
- Health

We also added an option to allow for respondents who wanted to add to or self-identify their category. All categories are relevant and important for food sovereignty and agroecology.

We know that there is multi-faceted work in the U.S. that reflects a growing trend toward a local, sustainable, and culturally relevant food system. This word cloud below is a way for us to visualize the fullness of our work. We know and understand that it will take all of us to restore our seed and agricultural commons.

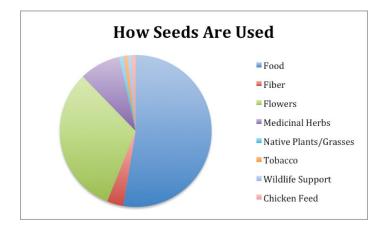


## Seeds As Lived Experience! Seed Practices and Seed Stories

We asked for eight separate crops/plants that people grew each year. The responses reflected the range and diversity of crops that are grown for food, fiber, flowers/ornamentals, transplants, cultural heritage, and for the market. Here is what we are growing.



## What kind of seeds: food, fiber, blooms, other?



# <complex-block>

#### What three seeds are the most important to you?

## Respondents shared a variety of responses to the following questions:

- Why are they the most important?
- What is the seed culture that comes with these seeds
- Seed Culture: What is the story behind these seeds?
- How long have they been in your family and/or community?
- Is there a ritual for planting this seed?
- What does it symbolize?

Some people shared **practical reasons** why their identified and prioritized seeds are the most important to them. For example:

• Geographical considerations—Which seeds grow best locally, based on resistance to diseases, weather extremes, growing seasons, and

other local conditions? One respondent wrote, "The Hickory King White Corn survived the drought and record heat of 2012 and produced 250 pounds that year without irrigation, and

"We save the seeds because it saves money, and we don't trust many of the seeds that are sold commercially."

has a strong stem perfect for pole beans to climb and to avoid raccoons pulling them down."

- Financial considerations—such as which crops sell the most, and which seeds, if saved, provide the "biggest cost saving over buying organic in [the] market." One respondent shared that "collard greens, okra, and southern peas are traditional southern crops, and they make up 50% of my farm's income."
- Concerns about seeds that are commercially available for purchase—particularly since GMO seeds tend to be "unmarked," and it can be difficult or expensive to purchase heirloom and organic seeds.

"The seed you buy is oftentimes not as good quality as [what] you can save and select for yourself."

- Access and availability one respondent reported,
  "There are varieties that I can't find in catalogs but have gotten from another farmer who has been saving her own seed for 20+ years."
- Ease in saving and storage

Others focused on health concerns:

- Interest in crops that have medicinal and healing properties, such as Tulsi basil and garlic.
- Nutritional value and quality—specifically, respondents described an interest in growing beans and other pulses (like peas and lentils) for protein, corn and sweet potatoes as carbohydrates, and kale and beets for high vitamin content.

Some respondents shared reasons based on **personal pref**erence and/or a connection to family members. Among these testimonials are:

- "Tomatoes are the heart and soul of southern gardens/ urban farms. All summer conversation is around how the tomatoes are doing... My great grandmother used to grow in a permaculture manner before it was even permaculture and her tomatoes were the best. On some white bread with mayo, salt and pepper."
- "My kids love the brassicas [a family of vegetables including cabbage and some greens], particularly broccoli and kale, and have 'their own' garden for them."
- "Zinnias are important to me because they add the wow element to the farm. They burst with color and give you that little smile when you see them. They make great cut flowers for CSA shareholders."

Several respondents described the importance of preserving different types of seeds that are rare and difficult to find, in order to **preserve biodiversity**.

- "These are seeds that we should save but don't. Our wheats haven't been raised in Missouri since World War I. Wheats are heritage seeds that are no longer grown. We acquired [seeds] via USDA and are trying to repopulate them in Missouri to find a good non-hybrid grain."
- "There is a huge diversity within the heirloom varieties, especially for tomatoes. We work to explore, share, and preserve unusual varieties. We grow 40–50 heirloom tomato varieties, working to explore the more unusual varieties that are lesser known."
- Some respondents reported certain crops being important to them for their ability to attract pollinators such as bees, which are important for food production as a whole, and whose populations have been on a sharp decline in recent years with direct correlation to agricultural chemical use (like pesticides).

Still more respondents shared reasons and stories that reflect a connection around deep histories of **resistance and cultural traditions**, and a desire to promote and educate their communities around these histories and traditions. In particular, several respondents elaborated on the importance of okra, corn, beans, and squash.

Ben Burkett, a long-time farmer, director of the Mississippi Association of Cooperatives and board president of the National Family Farm Coalition, shared why it is so important to him to save his okra seeds. He shared:

"There's an important story about the okra seeds. An African captured as a slave held okra seed pods in her hand, all the way across the Atlantic. She was sold to a plantation in Louisiana, and those seeds have been handed down till now. That's one of the few seeds that I save." —Ben Burkett, Mississippi Association of Cooperatives and National Family Farm Coalition

Both the seeds and the story of her courage and determination to survive and to pass along this important element of her culture have been shared through African American oral traditions for over a hundred years.

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Our survey showed that the cultural importance of okra reached another community far away from Mississippi. In San Antonio, Texas, the Southwest Workers Union (SWU) organized a community farm, where members of the organization work together to grow a variety of crops. SWU leaders described okra as a particularly important crop, both because of its productivity in the Southwestern heat, and because it helps facilitate a process of education and building connections between Black and Brown (African American and Latino) communities. He explained,

"Okra is one of those crops that people only know as the final product such as fried okra from Church's Chicken or gumbo. In our farm okra grows like a mini tree, really thick stem, long roots and around 6 feet high...The variety is Star of David, it loves the heat and will grow in any area in the farm. A regular 2x8 garden bed turns into an okra forest during our summer planting season. The kids love it. Our members have traditionally always been Mexican-American but now that we grow a variety of crops we begin to build bridges among the black and brown communities. People are just amazed at seeing [how] okra grows from the seeds to a large plant to a variety of uses in the kitchen. It starts to expand people's knowledge about how veggies can be used as opposed to what fast food tells you it can be."- Southwest Workers Union

SWU leaders also described the importance of corn for the local community in San Antonio, as a staple for people's diet, as a structure that supports other crops grown together agroecologically, and as part of a living cultural tradition. They explained,

"About three years ago a community elder shared it with us. We have been growing and saving the seeds since then. We usually plant corn in large groups because it [is]such a big task that involves many hands. Last year we created a large round bed for May 1st, International Workers Day. Each person found different symbolism in circles such as the sun, the circle of life, the four directions and many more natural round four-sectioned items in our lives. Each of the sections had either corn, tomato, chili and squash. Beans were mixed throughout the corn and squash and basil within the chili and tomato to promote companion planting and natural pest control." — Southwest Workers Union

"Corn pollen is one of the most sacred sacraments we have in ceremonies...The pollen symbolizes the non-material world, the spiritual aspects of our lives...sometimes we get too caught up in the material world...Life itself comes from something deeper, more sacred...Pollen means we have to try to stay connected to the universe, to all of creation... by doing that we can try to maintain balance." — Roberto Nutlouis, Black Mesa Water Coalition

Several other respondents also shared stories of the importance of corn as part of their heritage. Roberto Nutlouis coordinates work on food sovereignty and traditional lifeways, with the Black Mesa Water Coalition, based in Navajo (Diné) communities in northeastern Arizona. Roberto shared a story that describes the deep connection between corn, beans, squash, tobacco, and Diné culture:

"Within our creation story, how we evolved into an agricultural society, we are told that we were given four seeds by the holy people: corn, beans, squash, and tobacco. Each of these represents the four cardinal directions and there's an awesome story:

"Corn represents the east—for us everything begins from there, our philosophy and thinking—corn pollen and positive thinking. The south represents the planning process, and that's the beans. The west represents how you act, and live out what you plan in life. That's represented by the squash. Tobacco is the north, the time you allow yourself to reflect on the journey and make changes needed to enhance areas of your life. And your reflection goes back into your thinking, planning, and life. So the plants give us that energy. "For the corn, we use the corn in various ceremonies, but in everyday application we use the white corn to offer at dawn, and the corn pollen is one of the most sacred sacraments we have in ceremonies to bring ourselves back into balance. One of the things we're always told is that as human beings we have to strive to stay in balance—part of how we do that is to walk on the corn pollen road. The medicine man explains that the corn stalk roots into mother earth, and expresses itself from the energy it gets from the earth—that symbolizes our lives in the material world. When you get to the top, the pollen is there, and it symbolizes the non-material world, the spiritual aspects of our lives. The pollen travels, regenerates life and creates balance. So they tell us to try to stay on the corn pollen road—and my own understanding is that sometimes we get too caught up in the material world, the mind gets stuck and brings negative energy. [We] don't deny that but realize that life itself comes from something deeper, more sacred, not just the material world. Pollen means we have to try to stay connected to the universe, to all of creation...by doing that we can try to maintain balance. It's similar to Buddhist philosophy, 'connect to the source.'

"This is just the corn—and there are stories for every one of them. That's how significant and sacred these varieties of seeds are."—Roberto Nutlouis, Black Mesa Water Coalition

Simone Senogles of the Indigenous Environmental Network, in Bemidji, Minnesota, shared another story on the importance of a particular variety of corn that is important to the communities in which she works—Bear Island Flint Corn. She explained,

"It's part of reclaiming our agricultural heritage. In our disconnect with our food came a disconnect with identifying ourselves as agricultural peoples. A lot of people think we were only hunters and gatherers, but as a matter of fact we have this important kind of corn, as Anishinaabe people—to claim fully who we are."

"It's part of reclaiming our agricultural heritage. In our disconnect with our food came a disconnect with identifying ourselves as agricultural peoples....Everything we do is a reclamation of that part of our heritage....Also reclaiming the right to be a dynamic and changing, living culture." — Simone Senogles, Indigenous Environmental Network

Simone went on to describe the connection to a wide variety of other crops grown both as part of tradition and as part of a culture that continues to change:

"We also use heirloom seeds that came from settler descendants—it's important to keep the seeds that grow here. It's not just the three sisters or four sisters—you talk to the old folks and they talk about watermelon, musk melon, popcorn, beets, carrots. Everything we do is a reclamation of that part of our heritage. Even if it's not native to this area, it's something people have grown for generations, so it counts. Also [we are] reclaiming the right to be a dynamic and changing, living culture. There's so much emphasis on preserving that sometimes people get static, but we're dealing with where we are now. It's unjust that we have the legacy of terrible pain, but people have the right to do whatever we want, if we like it and it grows well here. That's part of culture." — Simone Senogles, Indigenous Environmental Network

Similarly, Yolanda Gomez of the Farmworkers Association of Florida (FWAF) described the importance of squash, chile, and corn to the farmworker communities that are growing their own food through FWAF's community gardens.

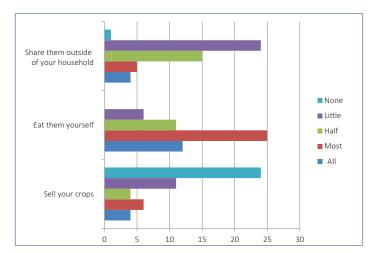
"The seeds were brought from our country of origin (Mexico) where they were passed down from generation to generation. They must be planted when the moon is waning. The squash seeds symbolize life and prosperity. If we don't have chili, there is no flavor on our plates. The corn seeds brought from Mexico are some of the most important to us because we eat [corn] in tortillas, tostadas, guisados, etc." — Yolanda Gomez, Farmworkers Association of Florida

Another respondent described the importance of squash both because of current food preferences in the local community, as well as bringing back a variety from nearly a millennium ago!

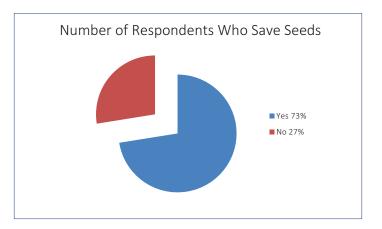
"Squash is one of our favorite foods—we eat a lot of squash as well as pumpkins. This is also a big part of the Native Community and is grown in the Three Sisters gardens. We actually were given seeds that had been found in a clay vessel, they were carbon tested to be over 800 years old. We actually grew these for the first time here on Lac Courte Oreilles reservation this year!"

The wide variety of responses we received through this relatively limited survey is an indication of the critical importance seed saving holds for communities across the country—whether for reasons of accessibility, health, biodiversity, personal preference, productivity, adaptation to local climate, or as a form of cultural heritage and resistance. The questions in the rest of the survey get into more details about how and why people engage in seed saving, as well as how they are engaged in promoting the practice of seed saving through broader advocacy and organizing.

## Do you share, eat and/or sell your crops? If yes, how much?



#### Do you save seed?



## What determines which seeds you save: crop success, origin, rarity, other reason?

Respondents reported a number of different criteria that they use for determining which seeds to save, including:

- Crop health & success/productivity
- High quality seeds within a crop—can tell by shape, size, color, weight. With some crops (like okra), "...if you put the seeds in a bucket of water and they come to the top, they're no good."
- Heirloom origin
- Hardiness of the plant, including adaptation to climate change/resistance to weather extremes and disease-resistance
- Adaptation to the local area
- Taste
- Rarity/biodiversity/unique varieties re-establishing endangered native species

- Ease of saving the seed
- Financial considerations—how expensive the seed would be to purchase compared to other crops' seeds
- Nutrition
- Teaching/education
- Culture/origin/story of the seeds
- Ability for the plant to provide habitat for wildlife
- Ability to for the plant to attract pollinators
- Accessibility—saving seeds that are hard to find in a store
- Sustaining the gardens and farms for the future—"We save what we need to plant for the season to come."

Several respondents shared more detailed explanations of determining which seeds to save. Several pointed to a desire to save rare seeds that are in danger of being lost, or to reclaim varieties that had previously been lost (i.e. has not been grown or widely available for a long time). One respondent shared: "We want to bring back old-time varieties." Others explained:

"We are committed to saving and selecting into the future the Hickory King white dent corn and Bloody Butcher red dent corn, as a means of guaranteeing the survival and improvement of these native varieties. As native cultivars not available any longer in local seed stores, we consider ourselves the guardians of these important varieties that also provide us with food security of an important staple that can be ground into meal or made into masa for tortillas/tamales/atoll."

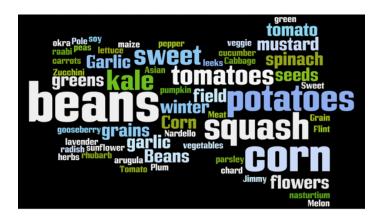
"I grow out some local heirlooms (sweet corn, winter squash), mostly as a public service. I grow things that I want to eat that are unavailable for purchase or for a price that I am willing to pay (red heirloom flint corn vs. \$12/lb for trendy red polenta.) This is a tricky biozone. I grow some things because they are marginal producers varound here and I want to adapt to our bioregion. Cabbage produces splendidly around here. Half the world's cabbage seed is grown here. I bred my own stabilized cabbage cross because I got a kick out of it, and mine tastes better than anything that I can buy."

A few more respondents elaborated on cultural teachings and practices around determining which seeds to save.

"When we are bringing in all the corn from the field, some of it had been heavily eaten by insects or birds —those we'll save for the animals. Then the mediumsized corn we'll save for personal consumption. Then the bigger varieties, those we'll save for planting for next year. And then there are unique ones—a perfect ear where kernels go all the way to the top—those are really special corn and we save those for ceremonial purposes. Also if there is a corn with a big gap in the kernels all the way to the top, they say if a child is having a hard time learning to speak clearly or if you're going to speak with public officials or leaders, that corn is used in ceremonies to help you speak more clearly, using words of positive compassion and love, because white corn in its essence and energy is a very compassionate being."

#### If you save seed, which seeds do you save and how do you save seed? Jars/bags at home, at a local seed bank, other place?

The image below gives a visual representation of the seeds that respondents reported saving (with those that had a



higher number of responses appearing larger):

Respondents shared a number of different kinds of seeds that they save in different ways: "I wait for coods to get dry

- Corn in sacks in the basement or in the car
- Beans saved in jars or bags in their pods

"I wait for seeds to get dry, then store them in large paper bags, then invite friends over to 'stomp' and process them."

- Garlic cured and saved in a cool dry place, or hung in the attic
- Melon and vegetable seeds in small paper envelopes, brown bags, glass jars, sealed plastic bags, bins, or burlap sacks; or in envelopes that are then placed in glass jars.
- Often placed in the basement.
- In the fridge over the winter (in jars)
- In jars or plastic bags in the freezer

"With Monsanto and terminator genes, control of local food is a major issue. I focus on nutrient dense vegetables, beans, and grains. I save them in coin envelopes in a climate controlled basement. Also, we have a local seed exchange."

- First in jars, then in a 55-gallon metal drum in a cool place (to prevent animals and insects from getting to them)
- Dry seeds in greenhouses
- Store seed potatoes in boxes

"The old-school people won't shell the corn until it will be used or planted. Every family has their own method of how they save their seeds. In general, you dry them out, husk them, put them into sacks. Most families have traditional cellars in the ground and store the seeds there because it will stay cool year-round."

• Neighborhood seed bank, community seed banks at local public libraries

## What is the regional and climatic adaptability of the seeds you save?

Respondents gave a number of different responses that reflect the different areas where they are growing food:

• South: hot and humid in some areas, hot and dry in others. One respondent noted that the seeds are adapted

to dry weather except some rain late in the evenings from July 15–August 23.

- Southwest: "dryland seeds," plants that thrive in the heat and full sun, drought, solar desiccation (high altitude UV rays). Some plants that need little to no watering do very well, but those are only a small percentage of the seeds.
- Mountain: moderately high-altitude, dry summers and cool nights, winters are cool to cold and wet.
- Northwest: "maritime" climate, short amounts of sunlight each day, moderate temperatures.
- Midwest and Northeast: cold winters, short growing seasons, as short as 33–90 days between frost in some areas.

Several respondents discussed the impacts of climate change on their crops, and expressed uncertainty about adapting what they grow within a changing climate. Some discussed the importance of saving and exchanging a wide variety of seeds as one of the most important ways to create resilience to climate impacts, as a high level of biodiversity provides real protection in the face of climate disruption.

## Seed Advocacy

Whether you grow seeds for food, flowers, fiber, cultural heritage, or political stance on seeds as part of our ecological commons, any and all work with seeds touches our political and social consciousness. We asked respondents about seed advocacy because more and more farmers, urban growers, and gardeners are confronted with seed quality and seed integrity. Seed advocacy allows for us to develop a position and frame around seed saving/keeping which support agroecology and food sovereignty. This is the heart of the restoration and affirmation of the health and sustainability of our food system.

#### What is your main reason for saving seeds?

Respondents gave a number of reasons for saving seeds. We have grouped them into five main categories for this report, but recognize that the categories are inter-related.

#### Biodiversity/Preserve or rescue rare varieties

- "Save heirloom varieties"
- "Make sure we have a supply of the seeds we like from year to year"
- "To keep the old-time variety going. Some in our co-op keep the old-time watermelon—on the rind, there's stars and moon watermelon! We try to keep different kinds yellow flesh, orange, green flesh. I want young people to know there's more than one kind. The Charleston Gray is probably the best eating watermelon but you can't sell it because of how it looks."
- "To rescue old wheat varieties"
- "Concerns about loss/inaccessibility"

#### To ensure high quality crops

- "To improve the harvests"
- "Disease control"
- "Select for cold and short season varieties. Regionalism!"

my garden is better than anything that I can buy or am willing to pay for. The local heirlooms have stories as well as taste."

"The food I grow in

"Adaptability to local climate" "Developing locally suc-

cessful varieties with exceptional taste and beauty."

• "The food I grow in my garden is better than anything that I can buy or am willing to pay for. The local heirlooms have stories as well as taste."

#### **Economic reasons**

- Save money
- Sell the seeds

#### Survival of people and culture

- Future food security—"I save seeds for future food. The skill of saving seeds is important to share with others for our future survival. I save seed to give away so others have a reliable food source."
- "I save seed to develop the skills of seed saving in case I become no longer able to purchase safe seed to grow food"
- "It teaches students about the circle of life"

#### "We can take things that have worked for our people for thousands of years — seeds, and resources — so that we can keep living here for thousands more years. Monsanto will be bankrupt by then. We can't trust their system, but we can trust our ancestors' systems."

• "Survival. Really, to survive and to live. It's so engrained in our culture-we can't just let it go. Our ceremonies and our identity—they say that we come from corn. There's a strong spiritual connection to it. Living out here, you know where your family's corn fields are. Unfortunately we've been forced to acculturate to another form of life that we're finding to be very destructive, and we're trying to go to our traditional ways, and innovate. We can take things that have worked for our people for thousands of years-seeds, and resources-so that we can keep living here for thousands more years. Monsanto will be bankrupt by then. We can't trust their system, but we can trust our ancestors' systems. Some say it was a gift given to us by the holy beings that gave us permission to live here—it came with the land, we chose to live on the land, be part of the land, and be caretakers of the land, and that responsibility flows naturally with continuing these seeds. A lot of it is cultural survival."

#### Seed sovereignty

- "To keep seeds in the hands of the people and out of large corporations. These seeds are our story, our heritage, our food and our medicine."
- "The desire to reclaim seed as a gift as opposed to a commodity"
- "Creating a stronger local food system"

- "Anti-corporate symbolism"
- "No GMOs"
- "Know where my plants come from"
- "We don't trust many of the seeds that are sold commercially"
- "Autonomy"
- "Independence and self-sufficiency"
- "Self-reliance"
- "Passion, politics, resilience, ethics, and we cannot trust chemical agribusiness with the local, regional, or global seed supply."

"Seeds are a public

property, so my saving, planting, and

good and common

sharing of my own

seeds is a practical

assertion of food

sovereignty."

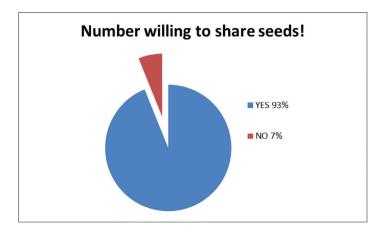
- "Getting community buy-in."
- "Taking the power back from the multinationals and trying to keep this vital genetic material in the hands of the people."
- "Seeds are a public good and common property, so my saving, planting, and sharing of my own seeds is a practical assertion of food sovereignty."
- "Seeds are life and part of the patrimony of humankind. As someone who likes agriculture and advocate[s] for food sovereignty, seed saving is a critical step."
- "The main reason I want to save seeds is to have food sovereignty - to have control over seeds, to have respect for the seeds, to have them be where they need to be. To respect them and plant them where they are meant to thrive. And also for people to have control over the food that they grow as much as possible."

And last but not least, several respondents reported that they enjoy saving seeds, and do it because it is "fun." As one respondent wrote, "They're irresistible. Why not save money, improve my crops through hardiness, and help others start gardens of their own?"

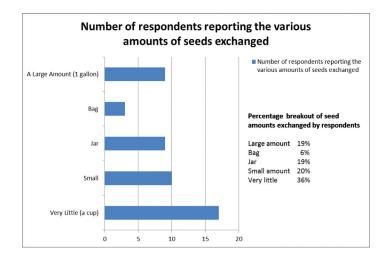
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## Would you be willing to share some of your seeds with a local collective?

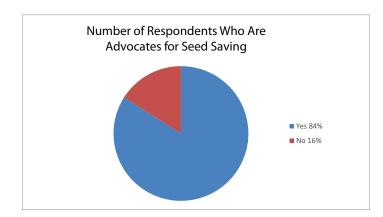
While the loss of common practice or lack of seed-sharing spaces may be factors that limit respondents' ability to share seeds, their answers to this question sends an encouraging message of the potential to expand seed saving practices, and use seeds to build community.



## How much seed do you exchange per season?



## Do you advocate for seed saving, seed banks, nursery stocks, etc?



## How do you that? What do your advocacy efforts focus on?

Respondents shared a variety of different ways that they promote and advocate for seed saving/keeping and seed banks. For the purposes of this report, we grouped responses into five main categories: education, collective seed exchange, establishing seed libraries/seed banks, community organizing and policy work, and solidarity.

#### **Education/Communication**

The largest number of responses included engagement in efforts to educate their community or broader society. Strategies included:

- Workshops, classes, and other educational programs on the farm and in community groups
- Written articles and publications (such as those by Food First)
- Public speaking
- · Concerted campaigns to promote seed saving/keeping
- Online information sharing (email, Facebook, etc.)
- Biodynamic educational programs
- Using arts and theater to raise awareness
- Grassroots popular education with local families to reconnect to traditional indigenous food systems and "why it's important for physical nourishment, cultural survival, [and] climate change."

#### **Collective seed exchange**

The second largest number of responses included efforts to participate in and promote some form of group or collective seed exchanges. Examples included:

- Creating local seed sharing networks
- Organizing seed swaps
- "Defying restrictions about carrying seeds across borders"
- Bringing seeds to community events to share
- Participating in seed saving projects with organizations such as NOFA-NY, which has organized conferences and also has provided funding for farmers to have access to seed cleaning equipment
- "Trying to set up a farmers-owned seed co-op in our region"
- Participating in seed swaps at larger conferences, such as the Midwest Organic & Sustainable Education Service conference (MOSES).
- Saving seeds with a youth cooperative garden

#### Seed libraries/seed banks

A smaller but still sizeable number of respondents discussed their advocacy efforts through seed libraries and community seed banks:

- "We operate a seed library as part of our nonprofit. We also have a small seed cleaner, a seed librarian, and two small mills for grinding grain."
- "We also have formed a living seed bank project. So far we only have six people participating, but we have each committed to saving a different kind of seed from year to year."
- "We are planning on starting a seed bank for here on the reservation. I plan to do the same thing at home. We share seeds and ask people to save seeds and pass them on when they have extra."
- "Yes, we do advocate, and the way we do it is community forums on seed banks and seed libraries."
- "We currently have a public seed library where we distribute and exchange seeds. We also have our own seed bank where we store and process seeds."

#### **Community organizing & policy work**

Several respondents reported on engaging in broader community organizing and policy work:

- Organizing for passage of local resolutions in support of seed sovereignty. For example, the Black Mesa Water Coalition has been successful in organizing for passage of local declarations, "Declaring Black Mesa and All Our Traditional Homeland Food/Seed Sovereignty and GMO/Pesticide-free zones, over all of Black Mesa and all of our traditional homelands."
- Being part of a local "Transition Group"
- "Lobbying for more seed banks in local libraries"
- "Our work has always been towards collective action. This year we helped start a permaculture group with the hopes of having a wider city wide project that will support seed saving and banks and community nurseries."
- "Challenging the privatization of seeds by agribusiness"

#### Solidarity

Finally, one respondent described their efforts "supporting the work of peasants' organizations in Global South" as an important part of their seed advocacy work.

## Conclusions

The Rights of Mother Earth/Defense of the Commons working group of the U.S. Food Sovereignty Alliance seeks to promote agroecology and food sovereignty through deepened understanding of the relationships with our heritage, seeds, and ecological systems. This report provides the USFSA and its partners with an overview of some current activities for building food and seed sovereignty. We understand that information is powerful and helps us to plan and engage in real and meaningful systemic change. We hope this report will stimulate conversations, provide helpful information, raise consciousness, and inspire many to deepen their respect for the power of seeds and to commit to the advancement of food sovereignty.

Again, we thank all the respondents who gave of their time, energy, and their experiences to inform this report. It is

because of you that we know there is a great deal of commitment, concern, and transformative work centered on life-giving seeds. We are open to any and all suggestions for future surveys, reports, gatherings, and engagement around seeds. Please be engaged and support seed saving and seed keeping efforts which are important to plant diversity, food system health, and the very continuation of our essential nourishment.

We invite your review and action on the recommendations below. If hunger, famine, climate disruption, commodification of seeds, land grabs, and every other threat to our food system is to be confronted and transformed, it will be because so many individuals, organizations and communities have done the work. Thank you!

## Recommendations

### **Actions to Take for Seed Freedom**

#### Individual actions:

- Share this report with others in your local community and online through social media and website posts. You may even want to think about sharing it with your representatives in the House and Senate.
- If you have access to space, **grow your own plants and harvest seeds to share and exchange with others**. See Organic Seed Alliance's "<u>Seed Saving Guide</u>" for more.
- Join a seed library, seed bank, or seed exchange. See "Resources" section for information about some of these existing groups.
- Learn more about seeds and the food system. Check out the "Resources" section of this report for some ideas of where to start.
- Eat good, slow food: Prepare a meal for your family using heirloom varieties and <u>discuss the nutrient value</u> of wilder species versus their domesticated varieties. For example, Peruvian Purple potatoes have 171 milligrams of phytonutrients compared to the Yukon Gold variety (5.45 mg) or the standard white potato (1.03 mg)!
- Explore and support the Open Source Seed Initiative (OSSI), which on April 17, 2014, release over 25 varieties of "open source" seeds. These first varieties have been produced by professional plant breeders from independent businesses and university extension, with the intent of releasing and keeping these varieties into the commons for all people to use in perpetuity. Current legal protections (e.g. Patent law) is targeted at protecting only private rights to exclude people from using certain things; there are no legal provisions for protecting the inclusion of all people all potential users of our common heritage of seed varieties and knowledge. Despite this lacking legal structure, OSSI seeks to promote a moral economy in solidarity with peasants, farmers, gardeners and eaters all over the world, where farmers and breeders may share or sell seeds they have developed, but the biological essence (the underlying genetic material and potential, and seeds reproduced from the original seeds) may be used in perpetuity by all, for their own planting or for further breeding, refinement, or alteration as serves the needs of any given individual, community, or peoples. See more at www.facebook.com/opensourceseedinitiative.

- **Convene** a community and/or faith group to study local plants, native/indigenous seeds, and issues around seed patenting. Write letters to the editor of your local newspaper about the need to protect seed varieties from privatization.
- Organize to defend native seeds and oppose GMOs: If you can't find a seed library or community seed bank in your neighborhood, create one! Gather your local farmers and gardeners to build a seed bank in your local library by 'checking-in' your most successful breeds and 'checking-out' the champions among fellow breeders. For inspiration, read about the partnership between <u>Basalt</u> <u>Public Library and the Central Rocky Mountain Permaculture Institute</u> to find out how it can be done, and watch <u>this webinar</u> from the Center for a New American Dream to learn more.
- **View**: Host a screening and conversation about the film <u>Seeds of Freedom</u>.
- **Study**: Start a short-term reading group to study <u>La Vía</u> <u>Campesina's publication</u>: <u>Our Seeds</u>, <u>Our Future</u> (PDF), or to study the articles on Seeds and Peasant Sovereignty in the 2013 <u>Right to Food and Nutrition Watch</u>, which was released on the 2013 World Food Day.
- **Coordinate learning exchanges**: Come together with other people in your community, or with other communities around the region, nation, or around the world, to share practical lessons on how to do seed saving, how to organize seed libraries, and what strategies to use to fight for seed sovereignty.
- Declare your community a Seed Sovereignty Zone: Building on models of local declarations passed in Navajo communities, as a result of the efforts of the Black Mesa Water Coalition, bring people together in your community to define what seed sovereignty would look like where you live, and then get your local government to pass a resolution recognizing your local rights.
- Fight for seed freedom: Join a 'Seed Keepers' group. Contact the U.S. Food Sovereignty Alliance's Rights of Mother Earth/Defense of the Commons workgroup at <u>smersha@grassrootsonline.org</u> or call Sara at 617.524.1400.

## Domestic/national policy recommendations: (See glossary for more information on some of these terms)

• Enforce anti-trust laws such as the Sherman Act, and use these in combination with the authority of the

#### **Community actions:**

USDA (which extends beyond concentration to include unfair and deceptive practices) to ensure open and competitive seed markets.

- Hold biotech companies and transnational corporations responsible for drift of transgenic material and GMO contamination of native crops. Protect farmers' rights to plant and exchange seeds.
- Return to the **Plant Variety Protection Act**, rather than patent law, as the main legal framework to regulate seed ownership.
- Put a moratorium on deregulation of all additional genetically engineered seeds (including those currently in the pipeline) until a more effective regulatory framework is in place.
- Instead of investing millions in so-called "climate-smart" biotech seeds, address the root causes of climate change, and **promote climate-resilient agroecology**.
- Invest in more public-sector, non-patented, conventional seed research based on existing knowledge, such as that held by Indigenous Peoples, family farmers, and urban gardeners. Ensure that all researchers and practitioners have equal and unrestricted access to genetic material for the purpose of research and development.
- **Provide public support** for the startup of seed collectives, seed banks, small seed companies, and other ways of disseminating and sharing seed in both rural and urban areas.
- Incentivize quality over quantity: Instead of subsidizing mass production of just a few commodity crops, support farmers attempting to transition to organic and/ or more sustainable practices. Consider (and incentivize) diversified farming operations as a form of in-situ conservation.
- Learn from social movements in the Global South: Consider the Organization of African Unity's <u>African</u> <u>Model Legislation for the Protection of the Rights of</u> <u>Local Communities, Farmers, and Breeders, and for the</u> <u>Regulation of Access to Biological Resources</u> (PDF), Bhutan's National Organic Policy, El Salvador's nationwide ban of 53 agrochemicals in Septemer 2013, and El Salvador's 2008 Constitutional Amendment to add food sovereignty and a commitment to preserve biodiversity, as starting points for the United States to reform our legislative framework around seeds and farming.
- **Remove patents on life**: Incentivize, don't criminalize, seed-saving and sharing.

• Support sovereignty-oriented initiatives like the Open Source Seed Initiative (OSSI), and act by and demand that the government recognize it:

"This Open Source Seed Pledge is intended to ensure your freedom to use the seed contained herein in any way you choose, and to make sure those freedoms are enjoyed by all subsequent users. By opening this packet, you pledge that you will not restrict others' use of these seeds and their derivatives by patents, licenses, or any other means. You pledge that if you transfer these seeds or their derivatives YOU WILL ACKNOWLEDGE THE SOURCE OF THESE SEEDS AND ACCOM-PANY YOUR TRANSFER WITH THIS PLEDGE."

#### International policy recommendations:

- Keep seed, agriculture, and food out of the World Trade Organization and trade agreements: Food and seeds are the foundation for community and state sovereignty. Trade agreements should not include any provisions related to food or agriculture, including policies related to agricultural subsidies or regulation of genetically engineered crops. Each country's food needs and systems are unique, therefore "policy harmonization" of food or agricultural policies must not be sought or incentivized.
- Oppose GMOs and Monsanto laws.
- As an extension of removing patents on life, **dismantle the UPOV structure** and roll back UPOV provisions in countries that have already implemented them.
- Instead, **implement the International Treaty on Plant Genetic Resources for Food and Agriculture** (The International Seed Treaty), which says that "International cooperation and open exchange of genetic resources are essential for food security".
- Implement the **recommendations of the International** <u>Assessment of Agricultural Knowledge, Science, &</u> <u>Technology for Development</u> (IAASTD), as well as those made by former UN Special Rapporteur on the Right to Food, Olivier DeSchutter, in his <u>final report</u> (PDF).

## Resources

## **Background & current situation**

Our Seeds, Our Future - La Via Campesina publication <u>bit.</u> <u>ly/1j9W35J</u>

Promoting Seed Sovereignty bit.ly/1h0BKTe

Seed Freedom Video <u>bit.ly/1fofuTv</u>, Declaration <u>bit.ly/1dyj-sOG</u> & Facebook page <u>on.fb.me/1pAcOap</u>

Seed Industry Structure Info-Graphic bit.ly/1dyjHcy

Organic Food and Industry Infographic bit.ly/1heIAsI

Overlap of USDA and Monsanto bit.ly/1mwV6Y8

International Assessment of Agricultural Knowledge, Science, & Technology for Development <u>bit.ly/OYrd59</u>

International Treaty on Plant Genetic Resources for Food and Agriculture <u>bit.ly/O085SZ</u>

Seeds for Life: Scaling up Agro-Biodiversity bit.ly/1pcTPEi

Putting the Cartel Before the Horse <u>bit.ly/104MrOp</u>

Transcripts from joint USDA/DOJ hearing on concentration in food and agriculture, Ankeny, IA <u>1.usa.gov/1pAcXuo</u>

## Seed finding

Seed Finder: Online guide for finding non-patented and organic seeds: <u>www.organicseedfinder.org</u>

Some seed companies that focus on organic, open-pollinated, heirloom and traditional varieties:

- Fedco <u>www.fedcoseeds.com</u>
- Adaptive Seeds <u>www.adaptiveseeds.com</u>
- Native Seed Search www.nativeseeds.org
- Sierra Seeds Cooperative <u>www.sierraseeds.org</u>
- Baker Creek Heirloom Seeds <u>www.rareseeds.com</u>
- Kitazawa Seeds esp. Asian heirloom varieties <u>www.</u> <u>kitazawaseed.com</u>
- High Mowing Organic Seeds
- Albert Lea Seed Company
- Wild Garden Seed

#### Seed saving/keeping & seed libraries

Organic Seed Alliance www.seedalliance.org

Participatory Plant Breeding Toolkit <u>bit.ly/1rGep2f</u>

- A Seed Saving Guide for Gardeners and Farmers <u>bit.</u> <u>ly/1rGep2f</u>
- Organic Seed Resource Guide <u>bit.ly/QkfQFt</u>
- Organic Seed Production Tutorials <u>bit.ly/1mwVUfz</u>

Seed Saving Resources from Seed Savers Exchange <u>bit.</u> <u>ly/1gGnBQF</u>

How To Save A Public Library: Make It A Seed Bank <u>n.pr/1dwn7fo</u>

Seed Saving Powerpoint Presentations and PDFs: <u>www.</u> <u>slideshare.net/PX8</u>

International Seed Saving Institute: <u>www.seedsave.org/issi/</u> <u>issi.html</u>

Dropbox to a Seed Library School Organizing Kit (a veritable treasure trove!) <u>bit.ly/1l7PXTw</u>

The Seed Library Social Network (the links page on this site is amazing) <u>seedlibraries.org</u>

#### Seed groups & resources

#### Native Food Resources

Occidental Arts and Ecology Center www.oaec.org

Native Harvest/White Earth Land Recovery Project <u>www.</u> <u>nativeharvest.com</u>

Native Seeds/SEARCH www.nativeseeds.org

TCEDC Taos Food Center <a href="http://www.tcedc.org/TFC.html">www.tcedc.org/TFC.html</a>

Tohono O'odham Community Action www.tocaonline.org

New Mexico Acequias Association www.lasacequias.org

Seed Sovereignty Alliance <u>www.lasacequias.org/programs/</u> seed-alliance

Food and Seed Sovereignty Conferences <u>www.foodandseed-</u> <u>conference.info</u>

Traditional Native American Farmers Association <u>www.tnafa.</u> <u>org/TNAFA.html</u>

Grassroots Group out of the Northwest seedambassadors.org

Organic Seed Alliance – Regions:

- <u>seedalliance.org/southeast</u>
- seedalliance.org/california
- seedalliance.org/pacific\_northwest

## **Seedy Quotes**

"The creation of a thousand forests is in one acorn." — Ralph Waldo Emerson

Then God said, "Let the land produce vegetation: seed-bearing plants and trees on the land that bear fruit with seed in it, according to their various kinds." And it was so. — Genesis 1:10-12

"Even if I knew that tomorrow the world would go to pieces, I would still plant my apple tree." — Martin Luther

"Every problem has in it the seeds of its own solution. If you don't have any problems, you don't get any seeds." — Norman Vincent Peale

> "Seeds have the power to preserve species, to enhance cultural as well as genetic diversity, to counter economic monopoly and to check the advance of conformity on all its many fronts." — Michael Pollan

"We need to decentralise our food system, and if we need to decentralise our food system, decentralise seed provisioning. Seed sovereignty must become very central to food sovereignty." — Vandana Shiva

> "Don't judge each day by the harvest you reap but by the seeds that you plant."— Robert Louis Stevenson

"All the magic of creation exists within a single tiny seed." — The Wise Old Sprite of the Forest, from the animated film *Fern Gully: The Last Rainforest.* 

## Glossary

**Agroecology**: Agroecology is a set of practices that are socially just because they are based on local knowledge of those who work the land and the leadership of women and young people; environmentally friendly because they are based on local materials, protection of biodiversity and the rights of Mother Earth; and economically sustainable because they are based on local communities' basic needs for healthy food, support to local economies, and democratic distribution of resources.

**Biotechnology**: In agriculture, the manipulation of plant genes through techniques of modern molecular biology, i.e., genetic engineering, to develop other technologies and products.

**Commodification**: The process of treating something that cannot be owned or that everyone has a right to like a product that can be bought and sold.

**Commodity Crops**: Crops that are regulated by federal programs under the commodity title of the U.S. Farm Bill, and are usually relatively nonperishable, transportable, and storable. In the U.S., the top five commodity crops are corn, soy, rice, wheat, and cotton.

**Commons:** Commons refer to all natural resources, information, and any product derived from collective wisdom, work, and traditional knowledge. Commons are held as a collective wealth to be shared and maintained.

**Cultural Heritage**: Cultural heritage refers to artifacts, seeds, traditions and ways of living that are passed from generation to generation. In the text, we also use "agricultural heritage" which is a similar tern, but is directed to the act of agriculture, the production of food for sustenance.

**Deregulation**: In this context, deregulation is the process whereby the government enables a new genetically modified product to enter the market for sale and use. Also called "approval".

**Food Sovereignty** (From the <u>Declaration of the International</u> Forum on Food Sovereignty, held in Mali in 2007 – also known as the Nyéléni Declaration): "Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts the aspirations and needs of those who produce, distribute, and consume food at the heart of food systems and policies rather than the demands of markets and corporations. It defends the interests and inclusion of the next generation."

**Free Trade Agreements**: Agreements between countries that regulate tariffs, import quotas, and preferences on certain goods and services traded between them, benefitting corporations over individuals, communities, and the environment.

**GMOs**: GMOs (or "genetically modified organisms") are organisms that have been created through the gene-splicing techniques of biotechnology (also called genetic engineering, or GE). This relatively new science allows DNA from one species to be injected into another species in a laboratory, creating combinations of plant, animal, bacteria, and viral genes that do not occur in nature or through traditional crossbreeding methods.

**Heirloom Varieties**: Crop seeds that are preserved and passed down by different generations of a family or community to succeeding generations.

**IAASTD**: Sponsored by the World Bank and the United Nations, the International Assessment of Agricultural Knowledge, Science, and Technology for Development (IAASTD) is the most comprehensive global assessment of agriculture to date. Authored by 400 scientists and development experts from over 80 countries, it highlights the urgent need to undertake major shifts in governance, trade, finance and development policies in order to "feed the world."

International Treaty on Plant Genetic Resources for Food and Agriculture: Commonly referred to as 'The International Seed Treaty', the International Treaty on Plant Genetic Resources for Food and Agriculture calls for farmers, plant breeders and scientists to have universal access to plant genetic materials, thus challenging monopolistic control of global seed systems.

**Rights of Mother Earth**: A recognition that all beings, forests, water, and the earth itself has rights. The concept was elaborated into the <u>Declaration on the Rights of Mother Earth</u> at an international gathering in Cochabamba, Bolivia, in 2010. The term Rights of Nature is also used to describe this concept.

**Seed Keeping**: Seed Keeping is seed saving which emphasizes the cultural traditions associated with the seed and plant, which may include agronomic as well as social practices (i.e. familial, ritual, communal and identity).

**Seed Saving**: Seed Saving is the practice of saving seeds or other reproductive material (e.g. tubers) from vegetables, grain, herbs, and flowers for use from year to year for annuals and nuts, tree fruits, and berries for perennials and trees. This is the traditional way farms and gardens were maintained.

**Sherman Act**: The Sherman Act of 1890 is a federal statute that prohibits anticompetitive business practices and requires the government to investigate and pursue trusts.

**Terminator Seeds**: Terminator seeds are seeds that produces sterile plants, used in some genetically modified crops so that a new supply of seeds has to be bought every year.

**UPOV** [**Convention**]: The International Convention on the Protection of New Varieties of Plants codifies, institutionalizes, and internationalizes the privatization of seed systems by establishing patent rights over seed genetic material. First adopted in 1961 (latest revision in 1991, hence also often referred to as UPOV '91), it also established an organizational known as the International Union for the Protection of New Varieties of Plants, with headquarters in Geneva, Switzerland.

## The Rights of Mother Earth and Defense of the Commons

With each passing year, it is becoming more and more clear how the struggle for food sovereignty is interrelated with the struggle for the future of the planet. We now know that the industrial agriculture system is one of the main contributors to climate change. We also know that the people who are on the frontlines of the struggle for a just food system (i.e. family farmers, farmworkers, indigenous communities, and low-income urban communities of color) are the ones who experience some of the first and worst impacts of climate disruption—from droughts and floods, to soaring food prices, to contamination of precious land and water from the extraction of oil, gas, and coal.

At the same time that our communities experience some of the worst impacts, we are also the source of the best solutions to heal and protect our land, water, seeds, and food systems, as part of Mother Earth. We draw inspiration from and commit ourselves to fight for the Rights of Mother Earth, a concept that has existed for thousands of years in indigenous communities around the world, and which has recently been described in depth through the <u>Declaration</u> <u>of the Rights of Mother Earth</u>, developed in Cochabamba, Bolivia.

Across the country, our communities are developing creative and resilient ways to defend the planet and prevent harmful exploitation by unaccountable governments and corporations. Examples include the cross-border struggle against the Keystone XL tar sands pipeline; city, town, and tribal ordinances and resolutions for Mother Earth Rights, which can support other campaigns such as those to stop fracking; local fights for public dollars to enable communities to harvest rainwater for food production; marine stewardship; policy change work to protect environmental and human health from exposure to toxic chemicals used in conventional agriculture; efforts to preserve the centuries-old and ever-evolving ecological relationship between peasant/ family farmers and local seeds, free from corporate control; and the global struggle for climate justice. We look forward to finding ways to lift up these struggles from a local to national and international levels.



## **U.S. Food Sovereignty Alliance**

The **U.S. Food Sovereignty Alliance (USFSA)** works to end poverty, rebuild local food economies, and assert democratic control over the food system. We believe all people have the right to healthy, culturally appropriate food, produced in an ecologically sound manner, and the right to define their own food and agriculture systems. As a U.S.-based alliance of food justice, anti-hunger, labor, environmental, faith-based, and food producer groups (including farmers, farmworkers, and fisherfolk), we uphold the right to food as a basic human right, and work to connect our local and national struggles to the international movement for food sovereignty.

## At our first Membership Assembly in November 2011, we decided on five main priorities for the alliance's work over the coming period:

- 1. Stopping land grabs and fighting for land reform
- 2. Immigrant rights and trade
- 3. Mother Earth rights and defense of the commons
- 4. Working on the structure & leadership of the alliance, and combatting racism
- 5. Popular education toward all of our goals

#### We call on people across the United States to use our political power and actions to fight poverty by rebuilding local food economies, and specifically for food system changes that:

- 1 Stabilize prices for farmers and consumers locally, nationally and globally
- 2 Balance power in the food system
- 3 Make agriculture environmentally sustainable
- 4 Guarantee the right to healthy food by building local and regional food systems and fostering social, ecological and economic justice

Through food sovereignty, the Earth can feed all living things.



Website: www.usfoodsovereigntyalliance.org