



Seeds are a vibrant and vital foundation for food sovereignty,
and are the basis for a sustainable, healthy agriculture.

We understand that seeds are our precious collective
inheritance and it is our responsibility to care for the seeds
as part of our responsibility to feed and nourish ourselves
and future generations.

The Native American Food Sovereignty Alliance (NAFSA)

Indigenous culture Seeds as collective inheritance

The practice of saving and passing down seeds from hand to hand -- amongst families and neighbors, between tribes, and across regions -- has been maintained for countless generations amongst New Mexico's Indigenous Peoples, Acequia and land-based communities.

Over time, economic, social, political, and other changes at the national and global level have pressured and coerced farmers to stop saving their own seeds, and instead purchase commercial seeds and chemical inputs to grow food. In New Mexico, land-based Peoples have continued to protect and save their seeds despite these challenges -- but threats remain, and we need to continue to work together everyday to prevent dangerous losses of biodiversity, knowledge, stories, and skills.

Saving and sharing seeds gives us all the power to help ensure that this vital cultural heritage is protected and continues to be passed on to future generations. It affirms our cultural, spiritual and communal rights and relations with seeds -- and is an act of resistance against those

who would genetically modify, commodify, or claim ownership over seeds.

Seed saving promotes food access and food security, and also food and seed sovereignty, which is our ability to have self determination and make our own decisions about our communities health, food and farming. It strengthens our ability to provide for ourselves, and not be so dependent on outside sources for survival.

By saving seeds together, we help increase the availability of local seeds that are adapted to our unique place and people -- including resilience in the face of droughts and a changing climate. Seed saving helps us connect more deeply with Earth, our traditions, families and home-places, and helps nurture a culture of sharing, care and abundance in our region.

From the Espanola Healing Foods Seed Library
A project of the Española Public Library, the City of
Española and Tewa Women
United's Española Healing Foods Oasis

Tewa Women United: wi don gi mu

Purpose/Benefits



Cultural
Identity



Sovereignty



Resiliency



Reciprocity



Relationships



Biodiversity



Sacred Life
Cycle



Cultural
Memory

History of Seed Saving in Native Communities

Indigenous peoples have been cultivating plants as crops for tens of thousands of years, and have been saving, trading, planting, and passing on the seeds to and for future generations. Native culture is based in deeply important spiritual, practical and reciprocal relationships with seeds and seed saving, and Indigenous peoples have spent centuries ensuring food sovereignty, climate resilience, and preservation of bio and cultural diversity within these interconnected food systems by selecting the best seed, growing them as crops to feed their people, and saving them for future generations. Indigenous seed-saving practices form the basis of agricultural science as we know it today.

Seed-saving practices promote “food sovereignty” which emphasizes local food production and the preservation of both agricultural and culinary heritage. For Native Americans, it can be a way to repair damage inflicted when European settlers stole and attempted to destroy their traditional ways. Of the seeds and crops stolen from Indigenous communities, or left behind when Europeans forced them to relocate away from the land they knew, many were also saved, sewn into clothing or worn around their necks and carried along to new locations.

What truly sets Native American seed saving and agricultural practices apart from modern agriculture, however, is the innate belief in a holistic and symbiotic relationship in which the seeds, as “seed relatives”, take care of people by providing food, and, in return, the people protect the seeds for the future.

“For thousands of years, [Indigenous people] have worked with these seeds, making selection after selection,” Ballon says. “These include, among the many hundreds of varieties stored at the bank, Hopi corn and tobacco, Navajo watermelon, Kickapoo tepary beans, and herbs from Africa. All battle hardened, if you will, and containing the genetic material needed to germinate, grow, and sustain life regardless of soil and climate.”

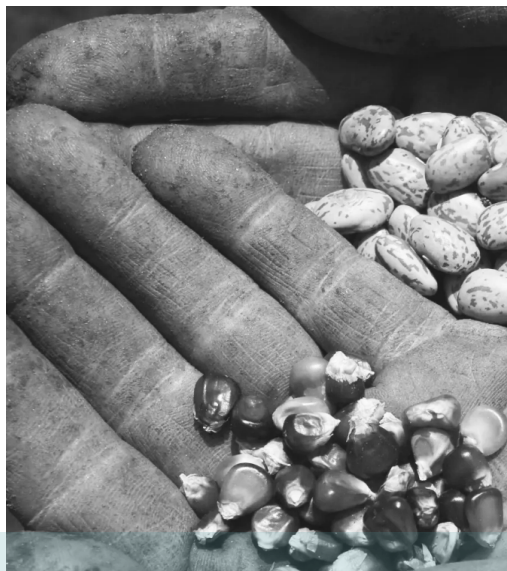
Ballon believes local agricultural independence is the best way to foster and ensure global food security. “We should have a small collection of seeds in every community,” he says, “because tomorrow might be a problem. We need to start asking, ‘How are people going to survive?’ ‘What is our food future?’ ‘What happens when we go to the grocery store and the shelves are empty?’”

The answer, he says, is in the seeds we save.

Excerpt from: “Flash: A Safe Spot for Rare Seeds” Trend Magazine Global, September 16, 2020

“My principle focus is preserving the traditional seeds because for thousands of years indigenous people have been selecting the best crops, growing them out and saving the seed. The work and knowledge of Indigenous farmers are the basis of agricultural science.”

—Emigdio Ballon
Agricultural Director, Tesuque Pueblo Farm



Dry Land Farming

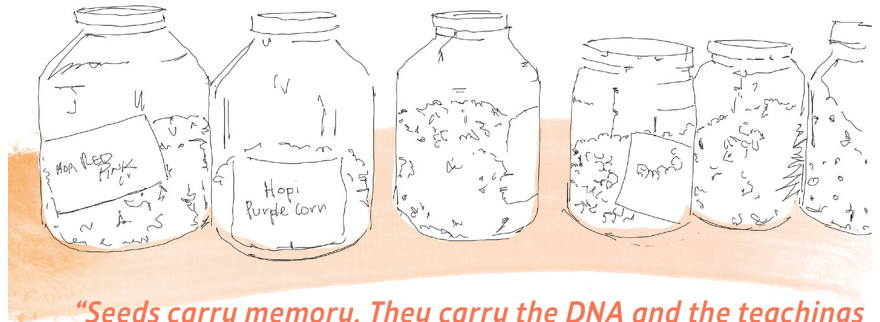
“When you see the Hopi people, they’re planting not only one color of corn. They’re planting so many different colors of corn. And they practice dry land farming. They put one seed or five seeds or 10 seeds or 20 seeds in one hole. They are practicing what we call natural selection because some survive certain insects, some survive the dry conditions.”

Biodiversity and the Future

According to the U.N., more than 6,000 plant species have been cultivated for food worldwide, but only nine account for the majority of total crop production, with crop diversity continuing to decline across the globe due to unsustainable agricultural practices, industrialization, and increased urbanization.

Comprising less than 5 percent of the world's population, Indigenous people protect 80 percent of global biodiversity*, growing more diverse crops than almost anywhere else in the world. With inevitable climate changes and extreme weather, Native seeds may be the answer to the earth's survival. Many of these seeds/plants have been adapted to very dry climates and short life cycles.

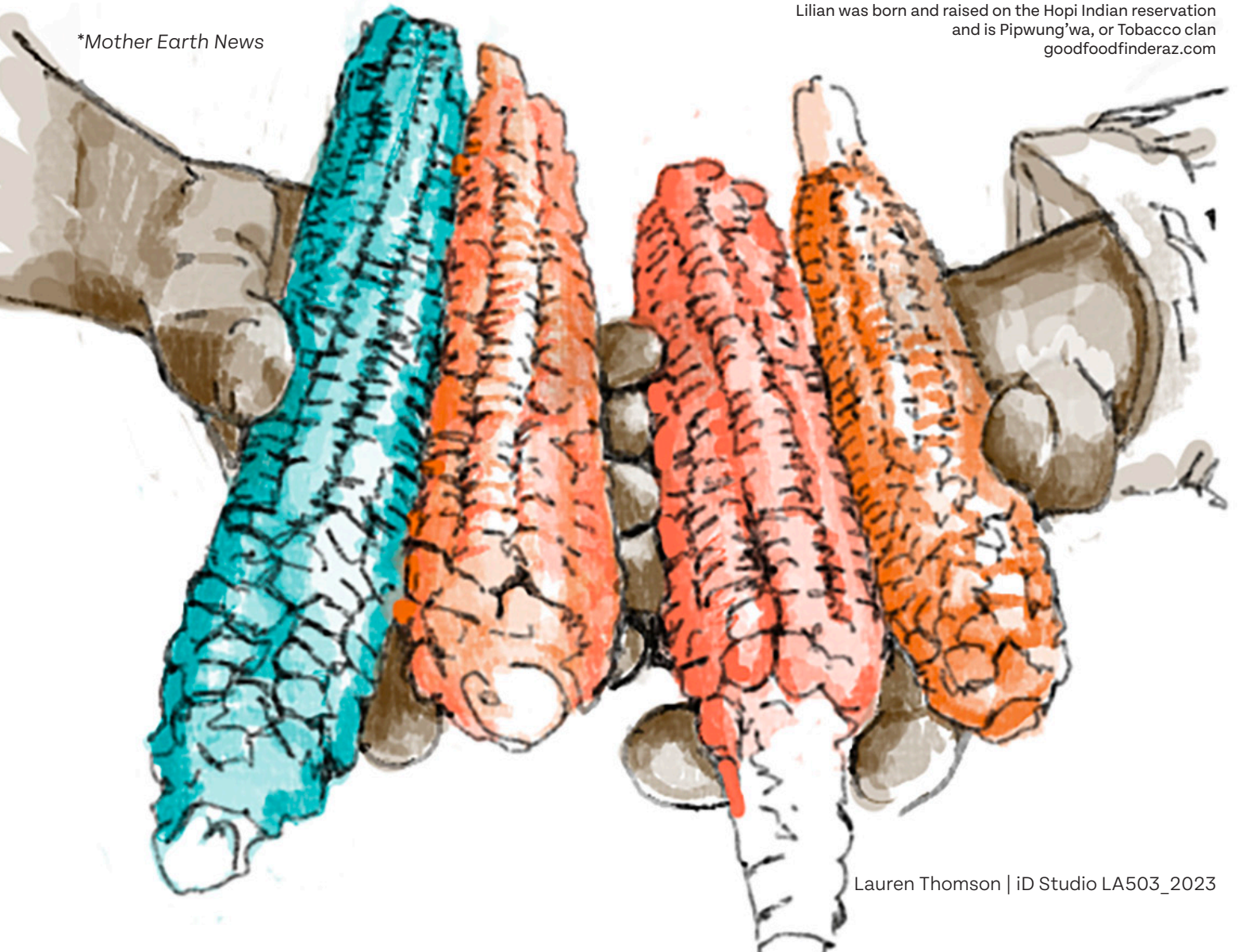
*Mother Earth News



"Seeds carry memory. They carry the DNA and the teachings of our ancestors and all of the experiences that the seeds went through during their lives. As seeds begin to grow in the world within soil and minerals and absorb the atmospheric nitrogen, the plant then needs humans to nurture them and help them thrive. The care that is given to them during this process transfers to the seeds and those who consume them also become part of that experience."

"Seeds are recordkeepers of a plant-human relationship, according to Hopi tradition. We have the ability to be influenced and inspired by what is carried in seeds."

Lilian was born and raised on the Hopi Indian reservation and is Pipwung'wa, or Tobacco clan
goodfoodfinderaz.com



Rematriation

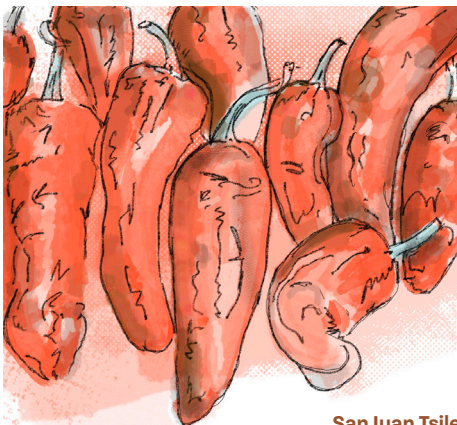
According to the [Native American Food Sovereignty Alliance](#), there is a “growing inter-generational movement of Indigenous people across Turtle Island (N. America) carrying the process of the rematriation of seeds (and foods) back into Indigenous communities”. Seed rematriation is a process, simply put, through which seeds are returned to their place of origin. Many of these seeds have been stolen, ignored, missing from their Indigenous communities for centuries, put in seed banks and public institutions and universities. The rematriation and seedkeepers’ efforts are reuniting many of these seeds back to their communities of origin. Rematriation, decolonization, cultural restoration, and re-indiginising make up the foundation of the seed sovereignty movement.

“In many communities, including my own Mohawk tradition, the responsibility of caring for the seeds over the generations is ultimately within the women’s realm. Rematriation simply means back to Mother Earth, a return to our origins, to life and co-creation, rather than Patriarchal destruction and colonization, a reclamation of germination, of the life-giving force of the Divine Female.”

Rowen White, Mohawk community of Akwesasne, Founder and Creative Director of Sierra Seeds



Henrietta Gomez and Gilbert Suazo, Sr., receive a Taos Pueblo squash in 2018 | Photo by Andi Murphy



San Juan Tsile

Capsicum annuum. A native New Mexico type chile still grown by elder farmers in San Juan Pueblo north of Espanola, NM. Origin: high desert, 5499' elevation



Hopi Sunflower (Tceqa' Qu' Si or A:Qaw'u)

Helianthus annuus. the blue/black hull is used traditionally for wool and basket dye, and as eye medicine, but the seed is also edible. Origin: High desert, 4902' elevation.



New Mexico Bolita Bean

Phaseolus vulgaris. Pinkish-beige rounded beans grown for centuries by traditional Hispanics of n. New Mexico in irrigated plots. Origin: High desert, about 5450' elevation

Strategies and Exigencies

- Building mentorship networks
- Supporting food sovereignty as a means to reclaim Native health
- Coordinating collaborative efforts to care and protect seeds
- Embracing a diverse understanding of Indigenous cultural values
- Maintaining and protecting open-pollinated seeds
- Combating the health-related pitfalls of the modern diet
- Promoting outreach and advocacy support on seed policy issues
- Rebuilding Indigenous food and seed trade routes
- Avoiding the transmission of genes through cross-pollination from GMOs to non-GMOs, including organic crops, weeds, and native plants
- Promoting and planting for biodiversity (75% of crop diversity has been lost over the past century, the impacts include reduced soil health and fertility, nutrient depletion, homogenization of food, and poor adaptation to climate change. *Source: United Nations*)
- Empowering and equipping indigenous leaders with the tools and knowledge on how to re-integrate seed stewardship (Indigenous Seed Keepers Network)

Huatli

Amaranthus cruentus. Originally from a Nahuatl market in Tulyehualco outside Mexico City. Seed typically used for the traditional central Mexican confection, *alegría*, which is made with popped seeds and honey. The edible greens taste best before flowering. Green flowers, some with red tinge.

Origin: High Desert
7546' elevation
Also performs well
in low desert



Amaranth greens can be cooked like spinach. Its seeds can be ground into flour and used in atole and other Native recipes. The grain from mature plants is a so-called superfood because it is a complete protein and contains B-complex vitamins. And, like other indigenous crops, amaranth's resilience makes it much better suited to withstanding the erratic weather conditions that climate change has provoked.

"Amaranth could replace all these GMO cornfields and feed the world," says Beata Tsosie Peña. "If we just listened and paid attention to what the plants are telling us, we would have our solutions."

Excerpt from *Turning Toward the Taproot* EL Palacio, Spring 2018
Beata Tsosie Peña is from Santa Clara Pueblo, Tewa Women United

Selected References and Resources

The Native American Food Sovereignty Alliance (NAFSA)

Dedicated to restoring the Indigenous food systems that support Indigenous self-determination, wellness, cultures, values, communities, economies, languages, families, and rebuild relationships with the land, water, plants and animals that sustain us.

Indigenous Seed Keepers Networks (ISKN)

Promoting Indigenous culturally diversity for future generations by collecting, growing, and sharing heirloom seeds and plants

Tewa Woman United

<https://tewawomenunited.org/espanola-healing-foods-seed-library>

Tesuque Pueblo Farm

<https://tesuquepueblofarm.weebly.com/>

Native Seeds/SEARCH (NS/S)

is a nonprofit seed conservation organization dedicated to conserve and promote the arid-adapted crop diversity of the SW US in support of sustainable farming and food security.

Sierra Seeds

Sierraseeds.org/seed-seva/

The Unlikely Peace of

Cuchamaquic by Martin Prechtel

Podcast

<https://soundcloud.com/wort-fm/indigenous-seeds-and-food-sovereignty>

Seeds, Soil & Culture

<https://seedssoilculture.org/>

Bioneers

A nonprofit organization highlighting breakthrough solutions for restoring people and planet

Seeds Are Alive: An Interview with Emigdio Ballon