

Seedhead News

NATIVE SEEDS / S.E.A.R.C.H.



Fall 2019 nativeseeds.org No. 125



Raquel (lower left) and her family.

Dear Readers,

For this issue of the Seedhead News I am excited to introduce Raquel Aviles, the incoming chair of our Board of Directors. Raquel is Associate Director of Health at the Pascua Yaqui Tribal Health Department and has devoted most of her professional life to serving her tribe and community in various services of health and wellness. -Joy Hought

JH: Can you tell me how you came to be interested in indigenous seeds and working to conserve them?

RA: I was born and raised in Tucson, and I love our beautiful desert and sunsets. Throughout my childhood, my parents had small gardens in our backyard. My dad would carve old tires into containers to grow flowers for my mom and tomatoes, chiltepins, and cilantro for his salsa. Being a tribal member of the Pascua Yaqui Tribe, my parents would take us kids to the old Native Seeds store on 4th Ave so we could pick out a free packet of seed. I still remember the smell of sage and sweet grass in the air as calming flute music played in the background while we looked at all the beautiful American Indian crafts.

JH: And do you still have time to garden?

RA: I do try to. My husband and I have been fortunate to pass these traditions on to our three children including taking them to the Native Seeds store that is now located on Campbell Avenue. My younger son, Anthony, has been our grower of sunflowers, watermelons, tomatoes and whatever else he can get his hands on. It's a challenge growing in Tucson; however, it's been a family effort to keep the plants alive. It takes time and patience to grow something from a seed. Yet it's more satisfying to finally eat something you have grown yourself.

JH: What motivated you to take time out of your life to serve on our Board?

RA: To be a part of Native Seeds was an unspoken wish of mine since I was young. Sometimes, life has a way of bringing you back to your roots. This is why I support and believe in Native Search/SEARCH's mission and vision. It has been a pleasure to work with such a dynamic group of board members, staff, and volunteers. I am honored to have been elected as the next Native Seeds/SEARCH Chair and I know we have exciting and impactful years ahead of us. I enjoy connecting with some of our wonderful supporters to express our gratitude for their donations. Many have shared their stories of how they came to know Native Seeds and why they support our work. Some have even thanked Native Seeds for "doing all the hard work." However, this work and the impact it has made could not happen without you! ❖

The nonprofit mission of Native Seeds/SEARCH is to conserve and promote arid-adapted crop diversity to nourish a changing world. We work within the southwestern United States and northwestern Mexico to strengthen regional food security.

Founders

Barney Burns
Mahina Drees
Gary Nabhan
Karen Reichhardt

Executive Director

Joy Hought

Board of Directors

Chair, Raquel Aviles
Vice Chair, Chris Byrne
Secretary, Doug Smith
Treasurer, Linda Peck
Jacob Butler
Mahina Drees
Bill McGuire
John McLean
Tudor Montague
Cheryl Pailzote
Karen Reichhardt

front cover:

Yuma Red okra nearing harvest time at the Conservation Center.

seed stories

share your #seedstories with us!



Alana Yazzie



Arizona

“I’m in my second year of gardening and I look forward to planting new seeds each season. My favorite thing to plant in the fall is kale. This fall I am looking forward to growing Salt River Pima Peas!”

Normandie Wilson



California

“This is the Navajo Robin’s Egg corn I got from [Native Seeds/SEARCH], it has been so amazing for me to grow corn as it is very clear what a powerful plant it is. I am excited to save seed from this variety and share it with others.”

Haninah Levine



Mid-Atlantic

“... the genetic diversity that you and organizations like you strive to preserve will be essential to help ensure that humanity can continue to feed itself - and to enjoy the pleasures of home gardens. Thank you for doing what you do.”

Michael Sadatmousavi



Arizona

“I have to share this pic of my Mano de Obispo amaranth playing tricks with my head. Do you see the bunny too?”

wildflower planting tips

One thing you can do to help kickstart wildflower germination is to place the seeds in a jar with some rainwater and sharp sand/little rocks. Shake the jar with the seeds, rainwater and sand. This replicates the action of rain moving across the land, nicking the seed coat so the embryo inside gets a first drink of living water. You can spread that slurry out where you’d like them to grow. Maybe in a low spot in your yard, where they’ll get a bigger drink next time you are blessed with rain. Dust with a soil like that where they lay, cover them with a sheet of mesquite leaf fall and then a light blanket of gravel. Sprinkle a bit more rainwater over the top to hold down the goods. Now those seeds are tucked in and sheltered and will germinate when they’re good and ready. ❖LIZ FAIRCHILD

COLLECTION

MAYO GARBANZO BEAN

SPOTLIGHT

If you visited our Conservation Center garden this past spring you would've seen a crop of lovely blue-green plants inhabiting the waffle beds on the south edge of the garden. Their fern-like leaves with small serrated leaflets and their tiny purple or white flowers transformed our seed garden into an ornamental garden. And when they started producing puffy, pillowy pale green seed pods ... wow! Staff and volunteers alike found it hard to resist pinching them!



These “empty” airy pods eventually filled with Mayo Winter Beans. Now I know what you're thinking -- even in sunny, warm Tucson, growing beans in winter is a stretch. But not if they are garbanzo beans! Garbanzos (or chickpeas) like arid weather, cool temperatures and don't mind a light freeze at all. The snowy day we had last February didn't cause a hiccup. We planted at the end of December and were harvesting dried pods from late May through mid to late June.

The original seed for this accession was grown near Huatabampo, west of Navajoa, Sonora, and collected in 1992 at a market in Alamos, by NS/S co-founders Barney Burns and Mahina Drees. But garbanzo, *Cicer arietinum*, had already traveled a long way to reach Alamos. This ancient crop was likely domesticated from related wild species in what is now Turkey or Syria something like 12,000 years ago. From there, seed was traded to India, Africa, and Europe and beyond. Garbanzos came to the Americas with the Spaniards after 1500. Over time this delicious and nutritious crop became an important part of the diet of many cultural groups in the region, including the Yoeme/Yaqui and the Mayo people, who contributed this accession. One of the favored ways of using garbanzos among the Yaqui and the Mayo is in Wakabaki, a soup made with beef, squash, garbanzos, chiles, corn and other veggies. Sounds delicious!

Culinarily, garbanzos are incredibly versatile and cultures around the world have developed hundreds of ways to use them. If you grow them in your garden, you can even harvest them

green and eat them fresh like edamame. The folks at Tucson Village Farm grew a different NS/S accession of garbanzos last winter and said the fresh-picked green ones were “So so yummy!”. Of course they are more often used as dried and cooked beans for hummus, dahl, curries, stews, falafel, salads, and the yummy snack in the recipe here.

It does take some care to get a good crop of chickpeas. Our Winter 2017-18 crop was “harvested” by ground squirrels. Apparently they like the plants just as much as humans like the beans, so no beans were ever produced. Excluding rodents from the growing area is important. We've also learned that the plants require soil with a good phosphorus content in order to be productive. Fertilizing with aged bat guano as, or before, the plants start flowering is a good idea. You'll also want to be sure the plants get plenty of water during their seed production period. Plan on growing at least four plants per household member to get a nice yield.

None of the five accessions of garbanzos in the NS/S collection have been available for distribution since 2014, so we are thrilled to be able to offer Mayo Winter Bean to the public now! Now is the perfect time to add these beautiful plants to your winter garden! ❖**SHERYL JOY**

Chile-Lime Garbanzo Snack

30 oz cooked garbanzos	1 T chile powder
2 t ground cumin	3/4 t sea salt
2 T olive oil	1 t lime zest
1 T lime juice	

Rinse and drain garbanzos. Pat dry and remove any loose skins. Roast in a 400° oven for 40-45 minutes or until crunchy. Check early to be sure they aren't turning dark brown. Let cool 5 minutes. Meanwhile, whisk together remaining seasoning ingredients. Pour over beans and stir well. Store in airtight container to maintain freshness.

Best of Monsoon

Top 3 most successful growouts:

Peyote Ceremonial Gourds, Yuma Red Okra, Hopi Short Staple Cotton

Most voracious insect:

Squash Vine Borer (runner up: False Chinch Bug)

Hottest day endured by garden volunteers:

107 ° F

Most difficult seed to harvest:

Mano de Gato (see our YouTube channel!)

Tallest Crop:

Gila River Caña Sorghum (over 9'!)

Most rain at one time:

1/2 inch



Adopt-A-Crop 2019

Every spring Native Seeds/SEARCH launches an Adopt-A-Crop (AAC) campaign to help fund conservation efforts. Anyone can adopt one or more of several select crops and follow their growth throughout the summer season. This season, most of the AACs are being grown right here at the Conservation Center!

Yuma Red Okra is a new accession to the seedbank, and has been the most prolific producer of the five so far. The woody pods are harvested twice per week, and the plants are still flowering! **Yoeme Blue Corn** is drying down and should be ready for harvest in the coming days, though we know it's been under seige by corn earworm and others. **Melón Mexicano** was the greatest diva of the season, being grown out in three different locations with varying success. The melons, and therefore the seeds, are not quite mature yet. Stay tuned! **Teosinte** is the fourth crop, and has just begun to show its silks. We knew the season would be a long one for teosinte, so it comes as no surprise that some patience is required. It looks like a weed out there in the garden, surviving despite heavy winds that have caused it to blow down from time to time. Finally, the **Yerba Anís** put out one beautiful yellow flower at the beginning of the monsoon season and no more since then! The plants are alive, but it may be that they don't produce seed until next season.

Thank you to all who generously gave to the 2019 Adopt-A-Crop campaign. Your support is critical to making sure these varieties survive for generations to come.

Yoeme Blue Corn



The Ways of Weaving

It's a peaceful August morning in Tucson and the thunderheads are already building. The monsoon rains arrived late this season and any hint of moisture in the forecast is encouraging. As the rain clouds roll in, a pickup truck pulls into our storefront parking. We have the pleasure of a visit from Della and Fred Cruz, Tohono O'odham weavers and longtime partners, who have brought us a selection of their handwoven baskets. There are several to choose from, including some in the shape of a desert tortoise and an owl, along with their signature "basket necklaces".



Della and Fred stay and chat for a bit to discuss how they first learned to weave. Della learned at age 5, while growing up in a small rural village near Sells, on the Tohono O'odham Nation in Arizona. Her mother taught her the intricate details of this lengthy process and as Della explored the "ways of weaving" over the years, it became an artistic calling for her. Later, she developed an idea for the three dimensional, figurative basket designs that she and Fred have become known for. Della particularly enjoys creating desert animal figures. She also likes to incorporate designs

reflecting the seasons, such as the Saguaro Fruit Harvest, or other significant natural events such as a basket she once wove depicting Halley's comet.

Fred was born in Sells, Arizona and lived in Dirt Burn Village when he was a boy. As a child, Fred helped his family gather, clean and prepare Sonoran Desert plant materials such as yucca, beargrass, and devil's claw to weave into traditional baskets. When weaving, Fred repeats a pattern until he knows when he's ready to move on to another design. He said: "as an artist, you just know when you are ready to develop your own new technique."

Della and Fred also specialize in what they call "basket necklaces" which are small, lidded baskets with dangling shell ornamentation, strung on leather to be worn around the neck. These necklaces are meant to hold something of special personal meaning to the wearer, such as a rosary, a bit of sage, or creosote. These necklaces are often worn for

strength during the long walk on 5-day pilgrimages to Magdalena, in Sonora, Mexico. Other times, salt is placed inside a basket necklace for pilgrimages to the Gulf of California in Puerto Peñasco, Mexico.

Over the 25 years they have known each other, Della and Fred have created original works of art, shared their heritage and provided demonstrations to educate the public regarding all aspects of this Tohono O'odham tradition. They present the specific plant materials used, discuss the seasons in which materials are gathered, explain how to prepare them, and show how to use the tools needed to weave.

Before leaving us to continue on with their day, Fred harvests a bundle of beargrass from the overgrown specimen we have in front of the store. It will go to good use. We look forward to seeing Della and Fred soon for two upcoming shows scheduled at the NS/S Store in October and November. ❖ **SUSAN PHILLIPS**



Local restaurateurs and chefs came together to support Native Seeds/SEARCH and SAACA at the Three Sisters Brunch hosted by The Lodge at Ventana Canyon. The chefs used foods traditionally part of the Three Sisters farming method.



FALL EVENTS

10/12 & 10/13

**Tohono O'odham
Basket Weaving Demo & Show**

11/23-11/27

Indigenous Arts Show

12/7

Holiday Open House

12/14

Mata Ortiz Pottery Show

*All events listed at:
3061 N Campbell Ave Tucson, AZ
85719*

**Visit nativeseeds.org for
detailed event information!**



Volunteer Jude Bumgardner prepping beds for cool season plantings at the Conservation Center.

Volunteer Jack Petersen plants tepary beans with his daughter at the annual San Juan's Day planting party.



Former NS/S Event Queen and Administrative Assistant, Linda Stewart, organizing proceedings at the Agave Dinner hosted by Hotel Congress.



Native Health



Midtown Phoenix seems an unlikely place for a field of traditional Diné blue corn, O’odham watermelons, and Hopi beans. But a group of gardeners are working together to turn a small plot of land in the heart of the urban metro into an urban oasis to reconnect with indigenous foods, farming, and community as part of the **NATIVE HEALTH** Garden program. The program provides space for community members to grow their own food, flowers, and herbs as well as space to come together for workshops about gardening, cooking, and traditional foods.

Access to traditional varieties allows gardeners to connect with crop diversity that is not often available to our families living outside the reservation.

NATIVE HEALTH provides primary, pediatric, and dental care as well as other wellness services at four community health centers across the Phoenix metro area. **NATIVE HEALTH** has a foundation in serving

Native American people in urban Phoenix and those who lack health care. **NATIVE HEALTH**’s approach to holistic health care addresses the social determinates of health as well as treatment of ailments. This approach includes addressing food security, as well as education about healthy eating for youth through adulthood. This garden is central to this approach and provides food for cooking classes, indigenous food boxes for diabetes education cohorts, and supplemental produce for food bank distribution.

The garden does much more than produce food. The garden is also a place for physical activity, community connection, and learning. One gardener has found that after a year of working in her plot she has lost 40 pounds and is more flexible than ever. Several families have used the monthly workshops to introduce their kids to other indigenous traditions. Many participants are learning about and tasting wild foraged desert foods for the first time and are able to share their personal traditions with others. These benefits and more go beyond the fresh, healthy produce.

The **NATIVE HEALTH** garden program is only possible with the support of partnerships. Land for growing is provided by Agave Farms, a local plant nursery, and Keep Phoenix Beautiful, a local conservation

project that promotes volunteerism and neighborhood beautification. Compost, tools, and other supplies have been donated by numerous area businesses. And hundreds of volunteer hours from our community have been spent digging, weeding, planting, and harvesting.

And of course, growing begins with seeds. Native Seeds/SEARCH has generously provided us with varieties from the seed bank. Access to traditional varieties allows gardeners to connect with crop diversity that is not often available to our families living outside the reservation. Favorites have included Tohono O’odham Yellow watermelons, Diné melons, Yoeme Purple beans, Hopi Red Dye amaranth, and of course corn. With the long season in Phoenix we have been able to grow several varieties of corn with Diné Blue flour being the most popular. In return we are helping grow and multiply some varieties to provide our project with future supplies as well as give back to NS/S to share with others via the NS/S Bulk Seed Exchange Program (see below for details).

❖**MELISSA KRUSE-PEEPLES**

Visit nativehealthphoenix.org to learn more!

Photos courtesy of NATIVE HEALTH, printed with permission.

Seeds in a vault? How about a field!

There are benefits to storing seeds in cold storage, like an insurance policy for a rainy day. But why go through the effort if no one is growing and eating them? NS/S’ **Bulk Seed Exchange** is intended to get larger quantities of seed into the hands of small and mid-sized growers so they can plant in greater quantity than a hobby gardener. With a successful harvest, a grower returns a portion of the seed to NS/S and keeps the rest either for re-planting or to share with the community. Of course, the crop doesn’t all need to go to seed. The grower decides what will become of the produce, whether it’s distributed through a CSA, sold wholesale, brought to a farmer’s market, donated to the food bank, or any number of routes to get these crops on to a dinner table.

Membership

Beginning Oct. 1, Native Seeds/SEARCH will be raising the rate for some of our memberships in order to keep pace with the costs of operating our seed bank and programs. The Squash-level membership will increase to \$45 annually, and the Gourd-level membership will increase to \$60. Other levels will remain the same.

Members at all levels will continue to enjoy traditional basic benefits, such as a 10% product discount, early access to plant sales, discounted tuition to workshops, and Members-only seeds access. If you are a member at the Bean level or higher, you will also receive additional benefits including special publications, and invitations to connect with Native Seeds leadership. Please see the box below for more information. We are extremely privileged to have the ongoing support of our members. Thank you for being a critical part of our work!

Native American	no cost	Basic Benefits (see above)
Squash	45	Basic Benefits
Gourd	60	Basic Benefits
Bean	100	Basic benefits + one complementary annual publication
Chile	250	Bean Benefits + Bi-Annual report from Executive Director
Corn	500	Chile Benefits + one seat at the annual Insider's Lunch
Sunflower	1000	Corn benefits + two seats at the annual Board Dinner

Planned Giving

The other day I stumbled on one of the most popular quotes from the musical Hamilton. "Legacy. What is a legacy? It's planting seeds in a garden you never get to see."

In this sense the seedbank at Native Seeds/SEARCH is a literal legacy – a seed collection carefully curated by farmers, staff and volunteers for preservation and use by future generations of gardeners and farmers in the Greater Southwest and beyond. The seedbank provides an assurance the plants that were grown here, some for thousands of years, will continue to be viable for future use. This helps guarantee our capacity to educate, sustain and enrich the lives of people from all walks of life, in particular indigenous farmers and those who need help accessing nutritious local food. It is a powerful legacy.

We rely on a diverse array of funding sources to sustain this legacy. Memberships and donations from our devoted and loyal supporters remain critical to our success. Many of our donors have faithfully contributed for years, even if they no longer garden or farm. The mission is well understood by our members, who are proud of the contributions they make

each year. Realizing this important funding source, the NS/S Board of Directors and leadership have decided to formalize recognition of future gifts by forming the Seed Legacy Society.

The Seed Legacy Society is a recognition program for planned giving of future gifts and bequests. There are several ways to make a bequest or special designation to Native Seeds SEARCH. Individuals over 70 ½ may choose to alleviate a tax burden by making a special designation to NS/S through qualified charitable distributions of retirement plans and IRAs. You can also designate NS/S as a beneficiary for all or a portion of life insurance or insurance annuities. You can visit www.nativeseeds.org under "Ways to Support - Legacy Giving" which specifies language to be used for wills with specific or residuary bequests, or contact Executive Director Joy Hought at (520) 622-0830 x105 for more information. I have personally designated NS/S as a beneficiary in my estate as an important part of my own legacy on this earth. Will you join me in the Seed Legacy Society by assuring we can sustain our organization? ♦**KAREN REICHHARDT**

Meet the Staff!



Native Seeds welcomes three new staff this Fall!

Brian Smith is our new Development Associate, coming to Tucson from Colorado where he worked in non-profit marketing. Brian's focus at NS/S will be developing our membership program, creating relationships with our donors, fundraising and grant writing. Brian earned his degree in Mass Communications from Colorado Mesa University and has also worked in journalism, focused on environmental issues such as land use and natural resource development. He is deeply passionate about the Southwest's landscapes and people.



If you're calling the main line at the Conservation Center, **Heidi DeDanaan** is the first person you'll speak to - a lifelong learner in everything she does, her hobbies include late-night Googling, extreme book-jenga, and making a spreadsheet for everything. Her goals include staying in school forever, adopting all of the animals no one else will, and getting a hobby that is not on a computer. The most important thing to her is ceaseless improvement - of self, community, and the world.



Finally, we welcome **Noah Schlager** as our new Conservation Program Manager. Noah works to correct the historic exclusion of Indigenous people from conservation, and to see spaces opened up for Indigenous people to lead in caring for our plants and the land. In his capacity at NS/S, Noah brings together the conservation of the collection's seeds with efforts to support and revitalize Indigenous farmers and communities. Through his mother, Donna Wiggins, he is Mvskoke-Creek and Florida Catawba/Cheraw— mixed with Carolina Indian, West African, and European Settler heritage. Through his father, Dan Schlager, he is Jewish, his family settling in Colorado as refugees of the Eastern European pogroms. Noah's maternal grandmother, Mama Nell Wiggins, was the one who first taught him to garden, forage, and cook foods that have been in his family since time immemorial. Noah received his Masters of Environmental Science from the Yale School of Forestry and Environmental Studies. He is grateful to be working on the lands of the Tohono O'odham and Yaqui, and takes seriously the responsibility to care for the plant relatives of Indigenous nations and communities across the greater Southwest.

Staff Directory

Joy Hought, Executive Director
Laura Jones, Distribution Manager
Susan Phillips, Retail Manager
Noah Schlager, Conservation Program Manager
Glenn Wagner, Finance & Operations Manager
Betsy Armstrong, Fulfillment Coordinator
Melissa Barrow, Retail Associate

Heidi DeDanaan, Admin. Assistant
Liz Fairchild, Seed Distribution Coordinator
Sheryl Joy, Collections Curator
Michelle Langmaid, Production Coordinator
Lissa Marinaro, Marketing Coordinator
Laura Neff, Education & Retail Associate
Nancy Reid, Retail Associate
Brian Smith, Development Associate



Native Seeds/SEARCH
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520-622-0830

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Fall Plant Sale

October 25th - 27th

**Friday, Saturday, Sunday
10am - 4pm**

- ◆ **veggie & herb starts**
- ◆ **landscape plants & wildflowers**

