# Seedhead News



## Growing Farmers at Ndée Bikíyaa

Apache crops go home to The People's Farm

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Transforming School Gardens into a Network of Urban Farms 8



**SPRING 2019 ISSUE 124** 



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### meet karen reichhardt



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**

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Joy Hought

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front cover:

Top: Bringing in Apache Giant squash at Ndée Bikíyaa Bottom: Ochoa Community School Garden

Doug Smith



For this issue I spoke to Karen Reichhardt, one of our co-founders who recently returned to the board of Native Seeds SEARCH. She spent her career as a research assistant at Office of Arid Lands Studies at the University of Arizona, as a natural resources specialist with the US Army Corps of Engineers, and fifteen years at Bureau of Land Management. When she is not traveling, botanizing, or teaching about native plants, she is busy with three grandchildren and six stepgrandchildren along with her husband Jim Heard.

**\*JOY HOUGHT** 

JH: When you and your colleagues and friends were gathering seeds in the late 70's and early 80's, did you ever envision your work would become what Native Seeds is today?

KR: To be honest my vision at that time wasn't that grand, it was mostly that we would get around to labelling all those hundreds of baby food jars! And try and get them out of the sun room where they were and into some type of proper storage and curated. Then we hired Linda Parker and she knew how to handle the growing collection. Until then many of us, not just official founders but our many interested friends, we had the seeds in our homes – in the refrigerator, in baggies on shelves, even in pickle barrels.

We started increasing the seed on a small scale in our back yards, and at Tucson Botanical Gardens. We started the Seed Listing to offer seed if there was enough to distribute. We had seen the national seed storage laboratory in Fort Collins, and some of our earliest ideas included a large underground storage vault. Later after a few years of Native Seeds/SEARCH, we visited our friends Kent and Diane Whealy's new farm at Seed Savers Exchange in Iowa. Seeing their success made me realize that we had the potential too to grow on a larger scale.

My personal perspective as a plant ecologist was more in terms of the landscapes and people where the seeds came from - I envisioned that those landscapes would still be used for farming and that the seeds could help resurrect farming traditions. A few years ago, I drove through Moenkopi on the Hopi Indian Reservation. I stood on the hill overlooking the farming area and just looked out; I saw so many fields being cultivated that weren't in the late 1970s and early 1980s, which is encouraging.

JH: What surprises you most about NSS today?

KR: I think it would be how we've almost come full circle in our seed growout model. I'm amazed at how the staff has worked to find farmers and gardeners to grow and increase seed in the places and with the people where it was originally collected. And I'm encouraged that there are so many people from so many different communities who continue to grow these crops. We weren't sure that'd be the case.

JH: What would you like to see for the future?

KR: I already see a genuine interest by people to learn from each other that crosses cultural boundaries. And regardless of the pressures of industrial farming people are finding a way to learn about and revive the heritage foods. Old fashioned agronomy and farming and gardening is still a common language. Beyond that, it's critical that we sustain the financial future of our nonprofit. I'd like to see us develop an endowment in order to secure this important work for the future. ❖

### thank you, friends!

As you read through this issue, we hope you see firsthand what an essential role you play in protecting agricultural biodiversity.

Your support and passion are critical to the mission of Native Seeds/SEARCH. From all of us at NS/S - thank you for your ongoing support, and thank you for making a difference!



share your seed stories with us!









### **Neva Schuelke: Oro Valley, AZ**

"I've been a member of Native Seeds SEARCH since the late 80s or early 90s when I received a little trifold tan and brown flyer describing the organization and its mission. No one was talking about climate change back then, but some of us just knew human activity was changing the planet. When I heard that Native Seeds

was on a mission to conserve the agricultural heritage of the American Southwest, I saw immediately that this would be a part of the solution. I plan to continue to support Native Seeds SEARCH both financially and in my garden. This year I already have a great patch of I'itoi's onions and am planting Tarahumara squash for the first time. I'm reminded that it's our diversity that strengthens us. Thank you to the founders, staff, and volunteers for this great work."

What Neva's growing this year: l'itoi's Onions (one of our favorites!)



#### Paul Minnis & Patricia Gilman: Tucson, AZ

"We have been supporters of NS/S pretty much since the beginning. While its mission has always been important, Native Seeds/SEARCH's effects are even more critical now. Rapid climate change and the need to feed an expanding population sustainably requires maintaining as much genetic crop diversity and knowledge of all types of farming strategies as possible. Supporting Native Seeds/SEARCH helps provide a firmer foundation for our grandchildren and their children's future."

Paul putting up a brand new greenhouse (found in a dumpster!) at the Conservation Center. We love it.

# Harry Howard & Barbara Batey: Whitewater Draw, AZ

"The work of all involved with Native Seeds/SEARCH is a deep blessing, to ancient history and our present and future life on earth. Planting seeds, caring for them, harvesting, eating, sharing and saving these gifts, keeps our family connected. Not to mention each seed makes us smile."

Harry's bean harvest!



### collection spotlight

guatemalan

A few months ago, out of the blue, I received the sort of email I love to get. Its author, Alan Praskin, wanted to know the source of our Guatemalan Amaranth seed. NS/S had very little information about this particular seed, but as we corresponded we discovered that Alan was the one who originally brought it to the US from Guatemala in 1979. We began to piece the story together!

When a seed is added to the NS/S collection, we do our best to bring with it its complete story – the farmers who grew it and shared it, the location of their farm or garden, anything known about its flavor or growing characteristics, and permission to share the seed with others. Unfortunately in this case the notes were bare. The page wasn't even dated; it said only that it came from San Martin Jilotepeque in Guatemala and that the collector was "Plenty Agricultural Project in Summertown Tennessee".

In the 1970's, Alan explained to me, The Farm in Summertown was one of the most famous back-to-the-land spiritual hippie communes of its day. They were an early promoter of both midwifery and vegetarianism, and provided public services like food and nutrition through a program called PLENTY. Alan was a community member and director of PLENTY's agricultural project in Guatemala. He knew from his contacts in the USDA germplasm department and at CATIE, the seed bank of Costa Rica, that they no longer had viable seed for domesticated Guatemalan *Amaranthus cruentus*, and feared its extinction.

While visiting farmers and market days in different towns, Alan looked for *niguas*, a traditional candy made with amaranth (much like Mexican alegría). He finally found a native farmer named Claro in the market place of San Martín selling the candy. Alan says: "A week later I went to his home outside of San Martín in the hills and documented him harvesting his Amaranth plants. I purchased seed from him and sent it to the USDA, CATIE, and to Rodale press who was doing Amaranth research at the time. My plan was to re-introduce it to more farmers to conserve it, but the political climate became

dangerous and I had to leave Guatemala before we

amaranth

It's not clear how the seed came to Native Seeds/SEARCH, but it was likely through contacts with the USDA or Rodale, who sometimes shared seed with us. But Alan was happy to find it here and promptly ordered some to grow. "I'm so glad to see that it is being grown and propagated since it was and still is on the edge of extinction."

We can be thankful that Claro had the wisdom to keep growing this amazing plant despite the influx of other commodity foods into his village—this seed that his distant grandparents may have themselves once received from a stranger. And we can thank Alan for trekking through the jungle to meet him. Neither NS/S nor PLENTY currently has contacts in Guatemala, but hopefully there will be a way to make this seed available to more farmers there in the future. SHEBYL JOY

#### Dulce de Alegría Yields: 16 x 8 oz bars Submitted by: Melissa Kruse Peeples

- 2 c. amaranth
- 6 T. honey
- 6 T. agave nectar
- 6 T. salted butter
- 6 T. unsalted sunflower seeds
- 6 T. pumpkin seeds
- ½ c. dried apricots, diced
- 1/4 c. dried figs, diced
- Nonstick spray, as needed

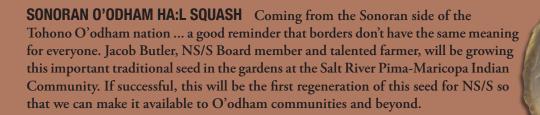
1.Pop amaranth (place in a very hot skillet, 1 T. at a time, stirring constantly for about 15-18 seconds until seeds pop. Watch carefully as they burn quickly when popping is finished). Transfer to a bowl & add the next tablespoon of amaranth to the pan. (You should end up with  $4\frac{1}{2}$  c. of popped grain total).

could do it."

- 2. Generously coat a 8x8 inch pan with nonstick spray.
- 3. Combine honey, nectar & butter in a large saucepan. Cook over medium heat for 7 minutes (no more, no less!), stirring constantly, until the syrup bubbles & starts to compelize
- 4. When the mixture turns golden brown & becomes thick & sticky, add the popped amaranth, sunflower seeds, pumpkin seeds, apricots & figs; stir with a wooden spoon until all ingredients are coated with the syrup.
- 5. Transfer the mixture to a coated half hotel pan. Push the mixture into the corners of the pan by hand. Let cool and harden. Cut into bars & enjoy!

# Adopt-A-Crop 2019

Thank you to everyone who participated in last year's AAC campaign! Several tepary bean varieties were successfully regenerated and we learned more of their growth habits. Here's a sneak peek of five super-special varieties that need your help this warm season! Your donation will help support the growout and preservation of these rare seeds. Keep an eye out for our Adopt-a-Crop mailer and choose your seed to adopt.



RED STRING BEANS OF HOPI 16 precious beans remained in the seed bank of this dry-farmed accession from Hotevilla, which has never been regenerated by NS/S. We planted all 16 carefully at the Conservation Center amidst a small plot of White Sonoran wheat, which is sheltering them from the extremes of our unusual spring weather.

**MELÓN MEXICANO** This lovely little cantaloupe comes from Redmond, Texas and has been very popular with low desert gardeners. We are thrilled to be working with Ochoa Community School to grow this melon in their school garden in South Tucson. The kids will learn gardening and seed saving in the tastiest way possible, by eating sweet melons and saving seed for the NS/S community.

YUMA RED OKRA This variety is new to NS/S and we're excited to be able to preserve it and grow seed to share! A generous NS/S member and volunteer received these seeds in 1980 from a family who had grown them in Yuma, AZ for many years. They've since thrived every year when grown in varied southwestern locales. A beautiful plant with deep red stalks, spectacular flowers, and tasty pods. We're preparing the soil at the Conservation Center to plant these seeds soon.

**TEOSINTE** In our workshops we often talk about teosinte, the wild progenitor of modern corn. However, we have not yet produced seed successfully from this accession, which comes from Nabogame, Chihuahua. Hopefully our longer season here at the Conservation Center in Tucson will be more to this plant's liking than were conditions in Patagonia, and we will be able to produce seed for regeneration.



Shy is honing her skills at Ndée Bikíyaa; here she presents an Apache Brown Striped sunflower at harvest time.

### Growing Farmers at Ndée Bikíyaa

Located just west of Whiteriver, AZ on the White Mountain Apache reservation, Ndée Bikíyaa ("The People's Farm") wakes up early to produce food, raise farmers, and nourish the community.

Farm, farming, and farmer denote such positive things for me – a place to grow food, cultivating plants, one who feeds her community; but I was surprised to learn these definitions only developed in English over the past 200 years. I accidentally Googled "farm" recently and the first

result was the word's original, and disheartening, definition and etymology. A farm, defined in its original context, is simply a lease. It's a payment made to a landowner for the permission to grow crops on a desirable piece of land. To learn that farming in Western culture is an idea and practice based on social inequality and monetizing natural resources, helped me connect Western agricultural history to what modern conventional farming has become: an industry that stratifies our health by our income, poisons the air, water, and soil, and threatens its workers with the 8th most physically dangerous profession in the country.

The Tribal Farm at the White Mountain Apache Community was started in the 1980's to produce animal feed, but mismanagement ended the enterprise, leaving more damage done to a community that already had high unemployment, domestic violence, and dietary disease. In 2009 however, The White Mountain Apache Tribe's Hydrology and Water Resources department won water

This farm is the heart of a concerned community tackling health and social issues with a return to more traditional ways...

rights and invested in infrastructure on the and embarked site. on a new mission to restore personal and cultural health among the White Mountain Apache through reconnecting with their own agriculture. It was renamed Ndée Bikíyaa which is commonly translated "The

People's Farm." Ndée is the Athabaskan word Apaches use to refer to themselves in their own language, but bikíyaa more accurately means 'land,' rather than farm. This distinction is important because land is a shared resource that can be stewarded to restore a community's health.

Ndée Bikíyaa is staffed by young people learning to farm traditional crops, but it does much more than produce food. This farm is: the heart of a concerned community tackling health and social issues with a return to more traditional ways; it is a training center for agribusiness professionals and new farmers; it is a demonstration site and school for sustainable farming practices; and now it's the site of their own permanent farm stand! They are also supplying produce to the new Café Gozhóó, a restaurant specializing in traditional and healthy offerings.

This past season, Shy, Leander, Grant, Onah, Emily and Clayton helped us bring the Apache Brown Striped sunflower and Apache Giant squash back to their homes. We also provided White Mountain Apache Sugarcane to the growers, but instead of returning that to the seed bank, Clayton offered a red sorghum variety from his grandparents in exchange (after seeing how much better his seeds performed than ours this past summer)! It has been such a pleasure to see the incredible successes that these young growers keep accomplishing, and we are looking forward to the reintroduction of even more Apache crops working with Ndée Bikíyaa.

♦ NICK GARBER









Ochoa Community School students planting Melón Mexicano for Adopt-A-Crop 2019

## Our Young(est) Stakeholders

Ultimately, we

hope this project

will transform

the participating

school gardens into

a network of urban

farms...

This year Native Seeds/SEARCH was awarded meaningful life after graduation - to propagate 13,500 the Punch Woods Endowment Grant from the Community Food Bank of Southern Arizona, along

with our partners at The University of Arizona School and Community Gardens Program. With these funds, our goal is to transform 25 Tucson-area school gardens into a network of urban farms, and build community capacity to grow local food and save seed.

Native Seeds/SEARCH will be training teachers and University of Arizona interns to grow seed-saving gardens, develop greenhouse job skills, and learn how best to grow these crops within the seasonal time constraints of the school year. Specifically we will be working

Program at Tucson High Magnet School – a resource for high schoolers with disabilities to transition to a

heirloom plants (Punta Banda tomatoes, Yoeme Purple string beans, and Jemez chiles). These plants will be

> distributed to the 25 school gardens in the Tucson Unified School District (TUSD) as a foundation for training students, 75 teachers, and 80 school garden interns in plant propagation, garden maintenance, and seed saving.

> The nutritional, educational, and overall health benefits of school gardens for students are welldocumented. This project adds learning job skills to that list and has the potential to increase food access in 25 of the most food-insecure communities in Tucson, by moving

with young adults in the Community Transitions food production and the skills to raise crops from seed-to-seed into those communities. Stay tuned for updates on our progress! \*NICK GARBER









## shop talk

At the Native Seeds/SEARCH Retail Store we offer over 3,000 different products for sale - from individual seed packets to larger seed collections, soaps and salves, compost cranks and potting soil, handmade arts and crafts, and lots of local foods - chiles, salsas, tepary beans, and cholla buds to name a few! These goods come from a diverse and amazing array of local and regional vendors - our list includes more than 300! Thank YOU vendors, one and all, for supplying our shop with the very best!

#### Carolyn Camp - Silver Lining Goods

We've offered Carolyn's creosote and juniper soaps, chaparral healing salve, and lip balms for sale since 2011. Her products are made in small batches and are 90% organic. The smell of the desert during a rainstorm is what inspired her to find a way to process the creosote bush to make her beloved and very popular Creosote Soap.

#### Bernadette Jilka - Nighthawk Natives Nursery

In business since 1993, Berni began selling plants to NS/S in 2013 and has been a consistent supplier at our plant sales ever since. She provides NS/S and other retail outlets an assortment of native wildflowers, shrubs, and grasses. Berni encourages creating a healthy environment by growing and providing native plants of the Sonoran Desert, emphasizing pollinator plants that will increase food supply of our native bats, bees, butterflies, and birds. You can find Berni's plants at NS/S during each of our 5-yearly plant sales: Valentine's Sale (February), Spring Sale (March), Mother's Day Sale (May), Monsoon Sale (July) and Fall Sale (October).

#### Amy Valdés-Schwemm - Mano Y Metate

Amy sold her first batch of moles [MÓ-less] in 2007 and it all started with NS/S! The first recipe she came up with was her Mole Dulce, which is what her family thought of as traditional mole. Her first creation is now world-famous, and it flies off the shelves at the NS/S shop. What Amy finds beautiful and continually exciting about this work is the same thing that keeps her a part of the NS/S family: "It's about finding the cultural connections to these seeds and foods that we all still have!" NS/S is proud to offer Amy's full line of moles both online and in-store: mole dulce, pipián rojo, adobo, mole verde, pipián picante and mole negro.

#### Mike Mayer - La Madera Mesquite

"I must admit that if it wasn't for NS/S I would have never started the mesquite flour business." Mike was shopping in the NS/S retail store in 2013 looking for seeds and other gifts when he noticed there was mesquite flour for sale - and at the time - it was all from either from Argentina or outside the Tucson area. "How could that be, I thought, when we have an abundance of mesquite trees and tons of pods that end up in the trash every season?" Mike collected his first batch of mesquite in the summer of 2013 and by the end of 2014 had this first batch of flour for sale in the NS/S shop. Mike hopes to some day move on to other ventures and would love to either sell or turn his business over to others. In the meantime you can find his mesquite flour and bonus recipe book for sale at the NS/S store.

**&LAURA JONES** 

### volunteers keep us running!

There are about four times as many volunteers at Native Seeds/SEARCH as there are staff- which is good news because there are upwards of 60,000 packets of seed needing to be filled every year, hand-packed exclusively by volunteers! If you were to walk into the seed lab around 11 AM mid-week, you might hear some classical music playing in the background, see concentrated faces sorting through bean seeds, or maybe smell the aroma of dried epazote being processed (only some people like this smell, others can't stand it). On other days, there could be lively discussion about one thing or another, or even a dismissal of work in favor of chatting up an old friend. Volunteers in the seed lab slowly become seed processing experts just by being here all the time. They find their own (sometimes more efficient) ways of getting seeds out of devils claw, dealing with very tiny seeds, or winnowing finicky crops.

Not everyone prefers seed processing. While many desert dwellers move between airconditioned rooms all day, some enjoy the pleasure (pain?) that comes with working in the garden in the middle of the summer. Volunteers of all ages and professions are master hole diggers, relentless weeders, irrigation repair people, and compost turners. Grandpas, night-shift nurses, students and the temporarily unemployed gather weekly to keep the garden growing, and we couldn't get it done without them. Still others brave the mid-40's temperatures of the seed vault-pulling, packing, and shipping orders for customers across the US and Canada. Thank you, volunteers, for all that you do!

### -----garden update

We are prioritizing the reunion of plants, people, and place, growing parts of our low desert collection in the gardens around the seed bank. Come see what we have growing as we explore our collection to identify the best low-input and traditional farming methods for these arid-adapted plants. As we transition the desert surrounding our headquarters into no-till agriculture, we hope our supporters will join and learn with us how to get the best harvests in the desert. We have already learned that ground squirrels do not eat sorghum, and White Sonora wheat makes a great winter cover crop. The 0.1-acre we are farming now is part of an ambitious 5-year plan to expand the cultivated area around the Conservation Center to cover almost the entire 6 acre lot and contribute produce from the collection to our community.











### plant hacks

Cover cropping - growing a plant to benefit the soil, is big news in sustainable farming around the world. Arid land farmers are missing this revolution because of water concerns and that's where the remarkable plants at Native Seeds/SEARCH come in. This year we are offering larger quantities of the sorghum, wheat, cowpeas and tepary beans that are helping us increase farmable land at the Conservation Center for home gardeners and small farms. Let these plants do the hard work of soil improvement for you! Contact NS/S for more information.











### welcome aboard





Please join us in welcoming two new talented staff members. If you're in Tucson, you can stop by and say hello to our new Retail Store Manager, **Susan Phillips**. Susan brings a wealth of experience from both Retail and the Health & Wellness industry, most recently with Sundance at La Encantada and Westward Look Resort. As a long term resident and lover of all things Tucson, Susan's interests include southwestern Native American art and culture, gemology and the culinary arts.

And if you've heard our new drive-time spots on AZPM radio, you have our new Marketing Coordinator **Lissa Marinaro** to thank. Lissa recently retired from her popular Tucson clothing shop Zoë Boutique and is excited to dedicate her considerable talents to growing the Native Seeds community.

### In Memoriam: Kit Schweitzer



We are sad to share the passing of long time supporter **Kit Schweitzer**, who died on March 9 at the age of 74. A resident of Tucson since early childhood, Kit and his mother spent summers camping and visiting with Hopi and Navajo friends in northern Arizona. After serving as a park ranger at Navajo National Monument for several seasons, Kit became a full-

time professional sculptor and second-generation Arizona artist, working in an impressive range of media from ceramics to musical instruments to boats to straw bale homes.

Many "old school" Native Seeds friends remember Kit's passion for sharing desert foods. He was one of the crew that formed the Tepary Burrito Society in the mid-70's; teparies had been newly "discovered," and this was a group of UA graduate students who got together to share their research and potluck meals.

#### Staff Directory

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Become a Member

Join NS/S as a member & receive special event invitations, regular updates, & discounts on purchases.

Legacy Giving Bequests & life income gifts help ensure food security for future generations. Legal counsel should be consulted prior to action.

Memorial Giving

Celebrate the lives & achievements of special individuals by making gifts in their honor.

Workplace Giving Help sustain NS/S through the Combined Federal Campaign, your local United Way, or other workplace campaigns.

**Direct Donation** 

Gifts can be made for unrestricted support or a specific purpose.



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www.nativeseeds.org 520-622-0830

Native Seeds/SEARCH is a 501(c)3 nonprofit whose mission is to conserve and promote aridadapted crop diversity to nourish a changing world. We work within the southwestern United States and northwestern Mexico to strengthen regional food security.

