



Seedhead News

The mission of Native Seeds/SEARCH (Southwestern Endangered Aridland Resources Clearing House) is to conserve, distribute, and document the adapted and diverse varieties of agricultural seeds, their wild relatives, and the roles these seeds play in the cultures of the American Southwest and northwest Mexico.

FALL 2013 NUMBER 115

2

From Our Collections Manager

3

Calendar of Events

October's Chaco Canyon Tour

Upcoming NS/S Salons

5

Volunteer Salute: Will Larrimore

Volunteer Brunch

News from the Trading Post

6

Seed School is on the Move

A Cornucopia of Events

7

News and Notes

Conoce tus Semillas

8

NS/S Staff Contacts



A small farming community at Begnas Tal, a lake near Pokhara, Nepal. Centuries-old terraces support rice paddies interspersed with plots of maize, bananas, and taro, while fish pens hug the shore.

Trek to Nepal Yields Cross-Regional Exchange of Ideas

by Chris Schmidt, NS/S Director of Conservation

Every region of the world requires unique solutions to building and sustaining its own system for seed security, but practices that work well in one context can often be informative in others. With such cross-pollination of ideas in mind, I recently had the great fortune to visit the stunning nation of Nepal to exchange experiences with farmers, community seed bank members, and staff of local and international NGOs. Thanks to connections made in Rome by NS/S directors Bill McDorman and Belle Starr, and at the invitation of Bioversity International and Local Initiatives for Biodiversity, Research and Development (LI-BIRD, a local NGO doing ground-breaking work), I travelled to Nepal in late July and early August to participate in a pair of workshops aimed at strengthening capacity within Nepal for on-farm conservation.

The workshops were set in the beautiful city of Pokhara, where water buffaloes freely roam the streets, verdant sponge gourd vines drape over buildings, and small rice paddies compete for space with germinating apartment buildings. The peaks of the incredible Annapurna Range of the Himalayas rise in the distance, and colorful boats grace the majestic lake Phewa Tal, in sight of the serene World Peace Pagoda. Through these workshops I not only learned about several novel approaches to on-farm conservation and was inspired to consider their potential in the Southwest, but also provided insights from the experience of NS/S and training to Nepali NGO and community seed bank staff.

Agrobiodiversity is fundamental to food security. The conservation and use of that diversity has revolved around two complementary approaches: *ex situ*, in which diversity is maintained in genebanks as an insurance against genetic erosion; and *in situ*, in which the dynamic process of continuous adaptation and experimentation is maintained on farms to generate new diversity and encourage the preservation and use of traditional knowledge.

The role of genebanks in supporting agrobiodiversity has received a great deal of focus from the global community, but *in situ* strategies are generally more poorly developed despite their critical importance. The

continued page 4



From Our Collections Manager

Fall is an exciting time at Native Seeds/SEARCH. The season's activities are centered on harvesting seeds from the summer's crops at the Conservation Farm in Patagonia, Arizona. Racks in the barn are full of piles of drying corn, gourds, sunflower heads, and colorful beans. Mason jars with fermenting tomato and tomatillo seeds line the counter making the barn look like an abandoned science lab. This is the season seed savers live for. And it's a season for foodies too. Watermelon seed processing days are a feast for all involved. Dried chilies, lemon basil leaves, and pumpkin flesh are all destined for the dinner plate after the seeds are collected.

Reflecting on the seed harvest makes me contemplate this special season as a whole. Where are the monsoon rains? As a recent transplant from Phoenix, where it rarely rains, I relished the opportunity to experience the daily darkening of the skies more common in Southern Arizona. But while some portions of the Southwest have undergone flooding, our Conservation Center and farm have both experienced lackluster precipitation and infrequent storms this year, serving as a reminder of the fragility of our current agricultural system that depends upon high inputs of water. This is particularly troubling because climate change models suggest monsoon rainfall will become increasingly unpredictable.

Interestingly, the rather dry monsoon has also demonstrated the adaptability of the varieties in the NS/S collection to arid conditions. An example of this arose from a happy accident this summer. Several "volunteer" seeds of Hopi Blue corn sprang up in late April on a section of the farm where they were planted last year. The field, left fallow, did not receive any irrigation and no rainfall occurred from March until July. Relying only on remnant soil moisture, the corn stalks grew to a modest three-foot height but still produced an abundance of majestic 10-15 inch ears. Plant for plant, the dryland corn from this summer produced equally well, or better, than last year's six-foot tall corn of the same variety grown with irrigation during an abundant monsoon. Those seeds, and the hundreds of other varieties in the NS/S collection, hold the key to growing food in a hotter and drier world.

Aided by recent grants from the Gila River Indian Community and Christensen Fund, and through support from you, our members, NS/S is embarking on a research program to use the collection to develop a regional "climate-smart" agricultural system—a food system that emphasizes resiliency, sustainability, and adaptability to climate change. Through this program we will work to increase access to seed and information on varieties in our collection to regional farmers at the front lines of climate change. Conservation of the arid-adapted seeds we steward represents the foundation of a climate-smart agricultural future. We are doing everything we can to create a sustainable and resilient food system for today and tomorrow. Thank you for your continuing support of this important work.

Melissa Kruse-Peebles, PhD, Collections Manager



Founders

Barney Burns
Mahina Drees
Gary Nabhan
Karen Reichhardt

Board of Directors

Chair David Tiers
Vice-Chair Cynthia Anson
Secretary Kim Fernandez
Treasurer Jim Cook

Martha Burgess
Barney T. Burns
Kevin Dahl
Mahina Drees
Christopher Fullerton
Sally Harris
Justine Hernandez
Donna House
Karen Jambeck
Greg Peterson
Marie Swanson
Ronald Austin Wells
Janos Wilder

Seedhead News (ISSN 1083 -8074) is published by Native Seeds/SEARCH as a benefit to members. All photos by NS/S staff and volunteers, unless otherwise noted. Contents © 2013. Design: Julie St. John.

Calendar of Events

September

- 18** The Mystery of Chaco Canyon with archaeologist Gwinn Vivian — NS/S Conservation Center, 6pm. Free!
- 20–21** Ready or Hot? Climate Smart Southwest conference — Tucson. psr.org/chapters/arizona/climate-smart-southwest
- 20–22** Aquaponics Association conference (NS/S E.D. Bill McDorman speaks) — Loews Ventana Canyon Resort (Tucson). aquaponicsassociation.org

October

- 10–15** Chaco Canyon Tour (*see below*)
- 16** Water Smart Talk with NS/S E.D. Bill McDorman — Pima County Cooperative Extension
- 19–21** Straw Bale Workshop at NS/S Conservation Farm (Patagonia)
- 23** Food Day — University of Arizona Mall, 10am–2pm
- 24** Volunteer Brunch at NS/S Conservation Center, 10am
- 26** Harvest Festival at NS/S Conservation Farm (Patagonia). Activities and local food feast. Free! RSVP: info@native-seeds.org

November

- 3–8** National Seed School — Buhl, Idaho. Register: native-seeds.org
- 9** Harvest Festival at Tucson Audubon Society. www.tucsonaudubon.org
- 10** Easy Organic Gardener Radio Show (featuring NS/S E.D. Bill McDorman). Listen online: arbitco-organics.com, 11am–noon
- 10** An Amazing Sense of Place (Tucson). NS/S fundraiser dinner — Janos Downtown Kitchen, 6pm. Register: native-seeds.org
- 16** Máiz Mágico: A Celebration of Corn — NS/S Conservation Center, 10am–2pm. Fun, food and activities for the whole family.
- 17** An Amazing Sense of Place (Phoenix) – NS/S fundraiser dinner — Phoenix Public Market Cafe, 6pm. Register: native-seeds.org



NS/S Conservation Center is located at 3584 E. River Road, Tucson, AZ 85718

Our popular monthly Salon series continues to bring together the vibrant community of Tucsonans interested in local food, gardening and sustainability. If you have yet to make it to one of these FREE and fascinating gatherings, what's stopping you? Mark your calendar and join in the mind-watering conversations!

Salons are held every third Monday of the month from 6-8 pm at the NS/S Conservation Center. If the Salon falls on a holiday, it will be moved to the following Monday.

Don't Miss These Upcoming Salons!

September 16 *Chris Schmidt*

"Lessons from Nepal: Supporting Farmers and Conserving Crop Diversity" — NS/S Director of Conservation Chris Schmidt shares insights from a trip to Nepal about groundbreaking work there to conserve crops while supporting farm livelihoods.

October 21 *Amy Schwemm*

"Holy Mole!" — Samplings and secrets from Amy's (Mano y Metate) kitchen.

November 18 *Brad Lancaster*

"Water in the Desert" — Brad brings us up to date with highlights from his new edition of *Rainwater Harvesting for Drylands and Beyond, Vol. 1*.

December 16 *Joy Hought*

"Test Tube Agriculture: Where Our Food Comes From" — NS/S Seed School Director Joy Hought offers a surprising look at the techniques used to breed modern crop varieties.



Chaco Canyon Tour

Explore the Ancient Past with NS/S October 10–15, 2013

Take a journey into the mysterious and beautiful past of Chaco Canyon with Native Seeds/SEARCH Directors Bill McDorman and Belle Starr. Join us for this exceptional 6-day adventure hosted by Piet and Mary Van de Mark of Baja's Frontier Tours and guided by second-generation Chaco archaeologist Gwinn Vivian. A portion of proceeds will go to benefit NS/S.

Visit www.bajasfrontiertours.com for more details and registration.

Trek to Nepal *continued from page 1*

inherent challenges are enormous, considering the many forces that have disfavored the traditional, small-scale, diversified farming model that an effective *in situ* program requires. How do you, on a local, regional or even global scale, support a large number of farmers to continually grow and save seeds from a diverse portfolio of crops?

Fortunately, pioneering initiatives around the world have attempted to address the urgent need for on-farm conservation. Nepal has been at the forefront of these efforts since 1997, when Bioversity, the Nepal Agriculture Research Council (NARC), and LI-BIRD initiated a research program on the implementation of *in situ* conservation as part of a broader global effort. Their work in Nepal eventually produced an integrated approach called Community Biodiversity Management (CBM) that is now being taken as a model for other countries. Featuring a number of concrete steps that create strong connections among institutions from the community to the national level, and a range of innovative on-the-ground practices, CBM provides a strategy to build local capacity for supporting crop conservation, seed sovereignty, and farmer livelihoods. These practices include ideas such as diversity fairs, demonstration plots (“diversity blocks”), diversity kits, custodian farmer networks, community seed banks (CSBs), biodiversity registers, participatory breeding, even support for rural poetry and drama about crop diversity. Look for more consideration of these ideas from NS/S in the future.

The first workshop, entitled “Enhancing the contribution of custodian farmers to the National plant genetic resources system in Nepal,” brought together custodian farmers from throughout Nepal (plus a few from Bhutan and India) along with LI-BIRD staff, key people



Participants of the custodian farmer workshop, including NGO staff, farmers, and key government collaborators. *Photo courtesy: Bioversity International*

from the National genebank and Ministry of Agriculture of Nepal, Bioversity scientists, and foreign NGO staff such as myself. The concept of a “custodian farmer” is an interesting one that highlights the important roles of particular farmers in the maintenance, adaptation and promotion of crop diversity within their communities. While we certainly have many custodian farmers in the U.S. and Greater Southwest, I believe that we lack a cohesive framework for understanding who these farmers are, what motivates them, and how we can support their efforts. For my part, I presented on the history, mission and strategies of NS/S and the custom platform we are developing to publically share and crowd-source information about Southwest agrobiodiversity.

I also had the great honor to lead the second workshop, which was specifically for LI-BIRD and community seed bank staff. While Nepal has among the best national systems for on-farm crop conservation that exists anywhere, they recognize areas for improvement and sought inspiration and training in three areas: better management of crop diversity within their community seed bank system; marketing of seeds to support their conservation activities; and strategies for crop improvement through simple breeding practices. Through a series of lectures and focused group discussions, participants developed plans of action to strengthen their efforts on these fronts. Perhaps the most surprising idea to emerge from the workshop was a strategy to discourage rhinos from ravaging a community’s lentil fields!

We are grateful to the wonderful staff of Bioversity and LI-BIRD for making this invaluable trip possible and facilitating the mutually beneficial exchange of ideas. We will be working hard to adapt some of the strategies used in Nepal and elsewhere to improve the conservation and use of crop diversity in the Greater Southwest.

In a sentiment that NS/S strives to engender through everything we do, one custodian farmer in the first workshop stated, “Because of LI-BIRD I have become intoxicated with agrobiodiversity, and am now trying to spread that to others.” May we all strive to thusly intoxicate the whole world.

A longer version of this article with references can be found on our website (nativeseeds.org). If you are inspired by this work, please give generously in the enclosed envelope to support our efforts regionally, nationally and internationally!



Custodian farmers exchange seeds during the workshop. Pictured here are seeds or bulbs of common beans, cowpeas, chile, garlic, taro, mustards, snake gourd, various millets, and several unidentified local species.

VOLUNTEER SALUTE

Meet Will Larrimore

Like seeds carried by the wind, some volunteers find their way to us by chance and happily take root. **Will Larrimore** is one such wayfaring volunteer. Fresh off a stint in the Army, the 22-year-old Oregonian ventured down to his birthplace of Tucson earlier this year to search out opportunities. He rented a house with his cousin and immediately began digging up a garden. Growing food has been Will's lifelong hobby and passion. "When I was five I had my own plots of carrots," he recalls. "I used to think weeds were good to make the crops stronger because they had to fight it out. I've learned a lot since then."

It wasn't long before he noticed that his neighbor was something of an urban homesteader, complete with backyard chickens. Striking up a conversation about Tucson gardening, Will's new friend passed along a Native Seeds/SEARCH catalog. His eyes lit up as he scanned the pages stating NS/S's philosophy: desert-adapted, GMO-free, heirloom seeds. "It was exactly what I was looking for, one hundred percent up my alley!" he says. He promptly walked to the NS/S store, bought some seeds, and filled out a volunteer form.

Since that serendipitous day, Will has been one of NS/S's most dedicated volunteers, helping out with various tasks in the seed bank and tending our garden beds. In return, Will sees his time at NS/S as a unique educational opportunity. "I love volunteering here because I've learned so much. Talking with [longtime volunteer and former NS/S Board Chairman] Ed Hacskeylo about mycorrhiza and asking staff all my gardening questions has been a great experience."

It has been a huge help and joy to have Will around, but his sights are on other pastures. When his lease here is up, he plans to head back to Oregon and work toward starting his own farm with seeds he has been growing and saving. "Native Seeds/SEARCH has been my reason for being here," he says. "I've learned about the importance of plant diversity and saving seeds, which is something I never even considered before." We're grateful you drifted our way, Will. Thank you for all you do!

Want to Volunteer with NS/S? Visit our website for details or contact our Volunteer Coordinator: volunteer@nativeseeds.org, 520.622.0830 x107.



Volunteer Brunch

October 24, 2013—10am
NS/S Conservation Center
3584 E. River Road
Tucson, AZ 85718

Conserving and sharing the native seeds of the Greater Southwest is no small task. In many ways, the work NS/S does is a community affair—and no group is more to thank for this noble effort than our fabulous volunteers. Every day, they package our seeds, weed our gardens, assist with our events, and generally make this organization hum and sparkle, week in and week out.

As a small gesture of our huge appreciation, we welcome all our amazing volunteers to join us for a delicious brunch, NS/S style! We'll be serving up all manner of fresh, local, heirloom delights as we recognize and honor the contributions you all make for this organization. Without you, the enduring mission of Native Seeds/SEARCH would truly not be possible. So, please join us for a mid-morning feast and celebration!



News from the NS/S Shop

Whether you're a Tucsonan or just traveling through, be sure to visit the **Native Seeds/SEARCH Retail Store** (3061 N. Campbell Ave., one block south of Ft. Lowell).

We have the largest and best selection of local heirloom veggie and wildflower seeds. Check out our very own Seed Library. Browse the latest book titles from your favorite authors and explore a constantly changing stream of local art, Native American crafts, and delicious foods.

If you can't visit us in person, shop online anytime at www.nativeseeds.org



Seed School is on the Move!

Our flagship educational program Seed School continues to break new ground. In late 2012, we launched our National Seed School series to bring this first-of-its-kind learning experience to future seed leaders around the country. We have continued to develop Seed Keepers courses for Native American groups to offer seed education in tribal communities. More than 300 students have now graduated from Seed School, hailing from across the nation and as far afield as Mexico City and Norway!

Interested in attending a Seed School session? Upcoming courses are listed below. Register online or by phone (520.622.0830 ext. 100).

Visit www.nativeseeds.org for more details.

Seed School (Buhl, Idaho) — November 3–8, 2013
with special discounted tuition

Seed School (Amherst, Massachusetts) — January 12–17, 2014

Seed School (Los Angeles, California) — February 9–14, 2014

Seed School (Tucson, Arizona) — April 13–18, 2014

From top: Lakes and natural hot springs await Seed Schoolers for our national session in Buhl, Idaho. Students examine maize seeds during a Seed School class.



AMAZING SENSE OF PLACE

The harvests are in — it's time to feast! NS/S announces a pair of fabulous dining experiences featuring our favorite fall season crop: **Corn**. We're teaming up with two of the region's best restaurants to create memorable evenings of exquisite maize-based dishes, served up with a true sense of place.

Support Native Seeds/SEARCH and savor the rich tastes and traditions of the Southwest.

Janos Downtown Kitchen (Tucson) — November 10, 2013

Phoenix Public Market Café — November 17, 2013

To reserve your place at either dinner, register online at nativeseeds.org or by phone: 520.622.0830 x100.

Maíz Mágico A Celebration of Corn

Maize is truly a magical thing. Worshipped by ancient Mesoamericans, today the delicious and diverse grain is one of the world's most important agricultural crops.

NS/S invites you to join in a celebration of corn in all its forms and flavors — from pinole and elotes to tamales and tortillas.

We'll have a "cornucopia" of maize-themed items for sale including crafts, jewelry, books, and food products. Bring the family for a festive day of hands-on activities, delectable treats, seed bank tours, and more!

Saturday, November 16, 2013, 10am–2pm
NS/S Conservation Center

News and Notes

Welcomes and Farewells

Our board of directors continues to grow with astounding individuals. We are pleased to welcome **Karen Jambeck** and **Marie Swanson** as our latest board members. A longtime supporter and friend of NS/S, Karen has been of great service to the organization leading valuable board governance trainings. She and her husband, Board Member Ron Wells are principals in the Wells Philanthropic Group. Marie joins us with a diverse background in education and health and was the Founding Dean and Professor Emerita at the University of Arizona Mel and Enid Zuckerman College of Public Health. It's an honor to have them both on the team.

Betty Moore joins the NS/S staff as our new Administrative Assistant. She comes to us with a wealth of experience after nearly 20 years as Office Manager and Facility Security Officer for Arete Associates here in Tucson. Betty has settled right in and is already proving to be a great asset to NS/S.

We are excited to welcome **Matt Prieto** as our new Retail Associate at the NS/S Retail Store. Matt started as a volunteer and has a deep passion for our work. Welcome aboard, Matt!

Congratulations to **Sheryl Joy** who has stepped up as Seed Distribution Coordinator after serving NS/S as accounting assistant, retail associate and distribution associate. A diverse and valuable employee, Sheryl is also a talented artist.

We received the sad news that longtime NS/S volunteer **Stan Stalker** passed away. Stan began volunteering with NS/S after retiring from a successful career in the military and as an engineer. A deep believer in our work and a joyful and caring soul, he will be greatly missed.

Board member and vice-chairman **Sage Goodwin** has recently left us to focus on his family. His warmth and wisdom helped steer the organization through many important decisions over the years. We are sure he will not stray far from the NS/S fold. Our deepest thanks for your guidance and friendship, Sage!

We recently said goodbye to **Maureen Moynihan**, our Administrative Assistant at the NS/S Conservation Center. Over her four years with Native Seeds/SEARCH, Maureen helped to manage the complex mailings and communications across our organization. We wish her the best.

Our Assistant Retail Manager **Mary Gregory** has recently left us to work with her husband in their business, Rincon Window. During her time at NS/S, Mary contributed greatly to the success of our retail store and seed library, which she helped to keep organized and vibrant. Mary will continue to help out at the store during the busy seasons and in a pinch.

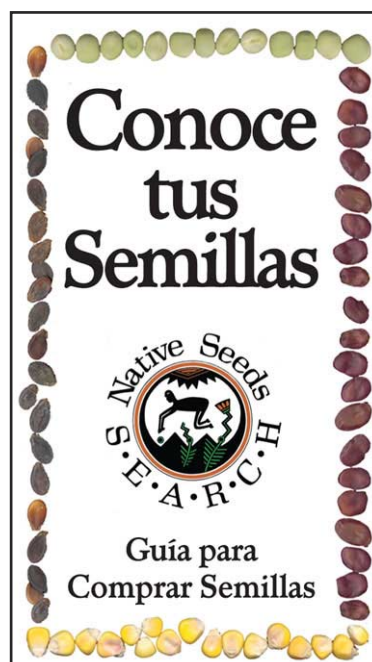
We also bid farewell to board member **Letitia McCune**, who has moved on from her position to focus on other projects. Letitia has played a central role in developing our intellectual property rights policies with regards to Native Americans and will continue to advise NS/S on best practices. Thank you, Letitia, for all you do!

It is with a heavy heart that we remember **Deborah Dempsey**, who has sadly passed away. Deborah cleaned our Conservation Center, always graciously and with a smile. Our thoughts are with her family and loved ones.

Find us on Facebook and Sign Up for Our Alerts!



This beautiful agave windspinner adorns the NS/S courtyard in memory of our dear volunteer Marci Donaldson, who passed away last June. It was created by her husband Bill Gillespie and her friend Jenny Adams.



We are excited to announce a new Spanish-language version of *Seed Watch*, our popular seed buyer's guide.

In collaboration with the Community Food Bank of Southern Arizona, this free pocket guide has been translated and printed to serve our Spanish-speaking community.

Copies will be available through the Food Bank and NS/S soon!



Native Seeds/SEARCH
3584 E. River Rd.
Tucson, AZ 85718

Non Profit Org
US Postage
PAID
Tucson, AZ
Permit # 2157

We envision the Greater Southwest as a place where farms and gardens, kitchens and tables, stores and restaurants are brimming with the full diversity of aridlands-adapted heirloom crops; people are keeping the unique seeds and agricultural heritage alive; and the crops, in turn, are nourishing humankind.

NS/S Staff Contacts

Agricultural Conservation Center 520.622.0830

Executive Director	Bill McDorman <i>ext 102</i>
Deputy Director	Belle Starr <i>ext 104</i>
Director of Finance & Operations	Leilani M. Rothrock <i>ext 103</i>
Administrative Assistant	Betty Moore <i>ext 100</i>
Director of Conservation	Chris Schmidt <i>ext 111</i>
Collections Manager	Melissa Kruse-Peebles <i>ext 106</i>
Development Associate	Stephen Thomas <i>ext 101</i>
Distribution Coordinator	Betsy Armstrong <i>ext 113</i>
Distribution and Wholesale Manager	Laura Jones <i>ext 107</i>
Seed Distribution Coordinator	Sheryl Joy
Retail and Distribution Associate	Liz Fairchild

Conservation Farm 520.394.0227

Farm Operations Technician	Benito Gutierrez
Farm Manager	Evan Sofro

Retail Store 520.622.5561

Retail Manager	Vivian MacKinnon <i>ext 5</i>
Retail Associate	Matt Prieto
Retail Associate	Nancy Reid