

Soil to Seed



Stephen and Cindy Scott own Terroir Seeds, based in Chino Valley, Arizona.

Family Company Fosters Seed Freedom

by *FRANCESCA CAMILLO*

“Terroir means soil,” explains Stephen Scott, proprietor of Terroir Seeds LLC, which is also home to Underwood Gardens. Stephen shares ownership of the open-pollinated heirloom garden and seed company with his wife, Cindy, and her parents, Allan and Eileen Davis, in Chino Valley, Arizona.

Stephen and Cindy decided to take a risk in 2008 and leave day jobs behind after decades of studying ecology and soil health alongside managing their home garden. They now dedicate their time to working with the natural environment and cultivating unique, hearty crops from seed. Their business model is smart, honest and founded on a holistic approach.

Through a rigorous process of seed selection that can stretch over multiple generations, they’ve developed a motto – “From the soil to the seed to the food you eat” – their mantra of clean, mindful living that’s nested within a detailed process of observation and partnership.

MAKING CONNECTIONS

Born in Texas and raised in Colorado, Stephen traveled extensively before and after his service in the Navy. Cindy, originally from the Palm Springs area, is the family’s resident grower and holds a degree in greenhouse management. The two met at college in Prescott, Arizona.

One connection between their experiences that precedes their convergence in Arizona rests on consumption.

“Interwoven within all [of the traveling] has been food,” said Stephen. “Looking back on travels ... I was always reminded of the aromas and flavors of the local food. That was one of the biggest drives.”

After their nuptials, the Scotts built a life founded on elements of holistic management in order to more thoroughly understand food systems and the process of ecological management. Their work in habitat and riparian restoration led them to learn about the importance of soil health, remediation and balancing biological systems.

“I remember one rancher in particular telling me that ‘the soil is hungry,’” said Stephen. “If we could get more ground cover on the soil with our current rainfall – which was less than 20 inches annually – we’d have some amazing growth.” And so began their

journey into holistic management on their terms.

“In the fall of 2008 we saw an opportunity to do something that we really wanted to do,” said Stephen. “We found Underwood Gardens for sale in Woodstock, Illinois. It was doing exactly what we wanted to and was a fantastic resource to spring from, so we jumped on the opportunity.”

One critical element of focus for Terroir Seeds is developing seeds – through selection and over time – that exhibit optimal traits for maximizing taste and a high-quality growing experience.

“After I got out of the Navy, I decided that I didn’t want to depend on someone else to provide good food for me; I wanted to take that on myself,” said Stephen. “It’s interesting to see how hungry people are for knowledge. We spend a lot of time educating people on how to improve and build better soil and why better soil gives you pest and disease resistance and weather tolerance and better production.”

TRIALING SEEDS

Arizona has vastly different soil profiles throughout the state. The Scotts’ trial garden is comprised of raised beds and “a big patch of sandy loam that needed a lot of organic amendments, compost and wood chips, etc.” Within these beds, Terroir Seeds has grown many generations of crops, selecting for specific traits.

“If you go 20 feet to the east, it’s all decomposed granite. About 50 feet to the north, there’s a patch of caliche clay, and to the west the sandy loam continues for a while then settles into caliche.”



Terroir Seeds’ ‘Australian Butter’ squash.



Terroir Seeds strives for superior flavor in all its varieties including the ‘Zapotec’ tomato.

The Scotts believe that soil can communicate its needs if a keen eye is primed to take note – nutrients it may need or the state of pests in an area can be culled from observation and creates a complementary relationship with soil testing.

“In the caliche area ... decomposition is stuck and calcium is not available. It was about a 20-foot area,” said Stephen. They realized that there are other lenses through which they should look to understand their soil needs. Observing how weed populations are proliferating and shifting the gaze from what needs to happen to what is happening, and asking why, can reveal much more about what is happening below the surface.

“The benefit is that once you figure this out, you figure out how to work with different soils,” said Stephen.

As part of their seed selection process, the Scotts perform a trial grow-out of a cultivar before sending it to the growers with whom they contract for subsequent observation and phases of growth.

“We will produce one or two different varieties of seed every year ... and we maintain about 500-600 varieties.”

Terroir Seeds has also created a complete growth and management resource for clients. They strive to be more than a purveyor of seeds and continue to cultivate and share their knowledge with clients and other interested folks.

“How were we going to be any different than anyone else selling seeds?

If [the grower] was having problems with germination or critters, or diseases ... you don’t go back to the seed company, you go somewhere else.”

To further connect them with clients and those interested in learning about seed selection and other treatments, the Scotts have created a framework with which to share their knowledge.

“We’ve developed a seven-part seed-saving course, mainly for home gardeners and smaller-scale growers.”

Selection requires time and observation in order to fortify specific

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Terroir Seeds helped revive the 'Concho' chile.

traits in a plant. Extracting and saving seeds from plants that exhibit desirable characteristics requires patience – with the growth cycle, environmental conditions, soil health and factors outside of ecological conditions.

According to Stephen, after three or four generations, or sometimes more, those desired traits will begin to emerge.

“You’re not introducing an outside gene; you’re just reinforcing specific direction of characteristics of the plant,” said Stephen.

RARE CULTIVARS

“The story starts with chef Rick Bayless in Chicago ... about 5 years ago, he started looking for a particular chile, the ‘Chile de Agua,’” said Stephen.

Terroir Seeds played an important role in helping the ‘Chile de Agua,’ which originated in Mexico’s Oaxaca region, be sourced stateside.

“It’s a medium-sized chile, [slightly] bigger than a jalapeno. It has wider shoulders that taper to a point. It grows straight up, which means that it’s a more primitive chile. The more domesticated chiles hang down.”

After a trickle-down communiqué that relayed from Chef Bayless to a Chicago-based mentor, the Scotts inherited a mission. In less than one week, after a rapid-fire process of

finding someone with access to the seeds and importation, they were able to launch into a trial grow-out of the chile.

“It took us two years to grow it in our garden,” said Stephen.

A large part of their analysis is to determine whether or not the plants resemble one another physically and within their flavor profile.

“You’re looking for the quality of the consistency. One of the things I need to be careful of as a seed company is that, whenever I represent a variety it really needs to be what it is.”

This requires their small staff to spend time with the plants so that the seeds can be vetted and the traits of the yield will fall within the threshold of their self-imposed germination guidelines.

“From there, we send the seed samples – we probably send about a ¼ cup of seed – to our grower. She will evaluate it and put it in isolation ... in a mesh cage so that nothing else can get in.”

If the seedlings and the plants that they become pass the Terroir Seeds assessment test, and “if things look good that first year, all of that seed will be used to grow a bigger crop the second year. It depends on the crop. Chiles tend to be prolific with seed, but there are some that don’t produce much. ...

These end up being very expensive to grow.”

On the other hand, some plants are more consistent and bring down the costs of experimenting with new or different crops.

“If it’s an established crop, like the ‘Kentucky Wonder’ pole bean, and the seed is readily available, I’ll send it to my grower, and if I get it early enough in the season, I can have it for the next year.”

Another example of reviving a once-obscure cultivar is the ‘Concho’ chile, a land-raised variety that few knew about prior to Terroir Seeds’ partnership with an eastern Arizona lavender farmer.

They established a partnership with a farmer in the area that had started to grow the chile, and they were able to acquire the seeds – because they were a waste product for the farmer and he had no use for them – grow them and eventually introduce to home gardeners, according to Stephen. Most significantly, chefs were enjoying having access to the unique variety.

The ‘Collective Farm Woman’ melon is another good example. Originally from the Ukraine, said Stephen, “It’s a smaller yellowish-orange melon. It has a ton of fragrance, white flesh, really crisp.”

Being able to offer this melon is something that Terroir Seeds takes pride in, as it serves a dual purpose: it expands the bounds of the crop’s distribution and exposes people to a wider variety of food options.

“When people are looking for something besides a honeydew or a cantaloupe in their garden, I’ll suggest this.”

Being mindful of the thresholds that the USDA has developed, Terroir holds themselves to stringent standards.

“We’ve developed a set of standards for our own seeds,” said Stephen. “The USDA has the Federal Germination Guidelines. We do germination testing on every variety of our seed every year, and we track how they do. The challenge becomes plotting the germination versus sales. This is what Cindy does; projecting with the grower how much we need for the next year. ... It’s a peace of mind factor that the lowest

we'll let most germination go is about 85 percent. Ninety to 95 percent is what we're more comfortable with."

Some plants – like rosemary – can have low yields.

"If you were to grow rosemary from seed, you're going to plant one packet and if you wind up with two rosemary plants in your garden, you're doing pretty well," said Stephen.

Although that may not seem optimal, taking a qualitative look at plants that are either grown from seed or a cutting can reveal important details. Why bother when you can just get a cutting and propagate from a cutting?

The primary reason revolves around flavor.

"Rosemary that grows from seed is more intense. There's a lot more oil and aroma than something from 3-4 cuttings. Every time you do a cutting, the aroma drops off. It's like making copies of copies."

As Terroir Seeds knows, certain varieties often gain popularity due to a handful of factors.

"Our biggest seller is the red round tomato because that's what most people

look at and buy," said Stephen. "But if I can get you to grow a purple tomato or a black tomato, or a green tomato, the flavors will be amazing – people need the taste test."

The Scotts take pride in introducing varieties that were either on the brink of extinction or not widely known.

"Anything that's unusual I try to point people toward because we've been educated by supermarkets for the past 75 years."

NEED MORE INFORMATION?

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