















## Plant breeder's work helps ensure bountiful gardens worldwide

"It's just like being

a farmer, except we

- PATTY BUSKIRK

Owner, Seeds by Design

Patty Buskirk can hold an entire vegetable garden in her hands. In one fist, she can clench hundreds of tomato plants. Ditto enough flowers to fill an entire neighborhood of homes. Truly, the seeds she holds represent the hopes and dreams for a bountiful season for home gardeners around the globe.

The California native is the owner and chief plant breeder of Seeds by Design, a well-respected seed supply company with offices in the rural Sacramento

Valley communities of Maxwell and Willows.

Buskirk describes Seeds by Design as a boutique breeding and production company, and says it aims to serve home focus on seeds." gardeners, preserve tried-andtrue varieties and also develop new varieties along the way. She

founded the company in 1994 and proudly points out many of her employees have been with her 15 years or more.

"When I started Seeds by Design, the home gardening seed trade wasn't offering a quality product," she said. "Someone needed to look out for home gardeners and make sure they could depend on what was going into the seed packets, to make sure they were labeled correctly and the seed would grow."

In its nearly 27 years, the business has developed a reputation for producing high-quality seed.

"It's just like being a farmer, except we focus on seeds," she said.

#### At home in the Sacramento Valley

Buskirk is in good company in the northern part of the Sacramento Valley. The area comprises about 50,000 acres dedicated to seed production, as well as

> more than 1 million acres of rice, almonds, walnuts and other row crops. Buskirk uses about 1,000 acres for her operations.

> "Nowhere else on Earth is there such a collection of seed companies and research stations, because the Mediterranean climate, fertile soils, dependable

weather and long growing season in the Sacramento Valley are perfect for growing seeds," she explained.

Her crops include squash, tomatoes, cucumbers, carrots, chard, watermelons, peppers, salad greens, sunflowers and herbs. Some are heirlooms, while others are breeder-created hybrid varieties. Seeds By Design produces enough vegetable and flower seeds each year to almost fill two 30,000-squarefoot warehouses.

Home gardeners near and far benefit from Patty Buskirk's specialty: growing seeds for seed companies around the world. Her crops include, clockwise from bottom, tomatoes, kale, pumpkins, eggplant and peppers.

True to her passion, Buskirk—who has a degree in agronomy from California State University, Chico—continues to dabble in plant breeding. She created a series of award-winning hybrid tomatoes called "Chef's Choice" based on the old-fashioned Brandywine tomato. Colors include orange, green, pink, red, yellow and black. She's also won awards for peppers, watermelons and cucumbers.

You won't see the Seeds by Design name on seed packets, however. Buskirk grows the seed for several hundred customers, many in the U.S., but others as far away as France or India. Customers include big names such as W.A. Burpee, Park Seed and Ferry Morse, as well as smaller companies including J.L. Hudson and Renee's Garden.

"Customers come to us a year or two in advance. They give us a list of what they want, and I contract with a grower," she said.

#### A global network

Cleaning and conditioning the seeds after harvest signals the beginning of another months-long process, so it can take as long as two years to go from order to shipment.

"The seed has to be milled. It has to be kept dry.

It has to be tested to make sure it meets germination and purity levels before it can be packaged," Buskirk explained.

Hybrid varieties take much longer from idea to market, as much as five to seven years.

Much of the seed is kept in her warehouses. It turns out California's Mediterranean climate also provides the perfect storage conditions for seed: dependable, hot weather and not too much moisture in the air, but not too little. Inventory ranges from a high of about 3,500 types of seed in winter to a much lower number in summer as stocks are depleted.

"One warehouse is mostly bin upon bin, bucket upon bucket of seeds," Buskirk said. "Seeds are a living, breathing inventory, so we don't want to seal them up."

Staff members package and ship the seeds directly from the warehouse to retail companies to sell. She calls the second warehouse her "conditioning warehouse." It holds seeds, of course, but also the equipment needed for milling, dust collection and conditioning.

"We work, we package and we ship every day," she said, adding that office staff work on rotating shifts so someone is on duty 6 a.m. to 6 p.m. "Calls come in from all parts of the world on different time zones. It's a global network."

### **Advice: Try something new**

Like any other farming operation, Buskirk's is subject to the whims of the weather, so trouble comes with the territory: early rains, late rains, wind, hail, insect damage, you name it, she said. Add to that the fact that seed production takes much longer than crop production. Often, seeds are harvested just before the fall rains hit. Timing is everything.

Yet she says nothing deters her or dampens her enthusiasm.

"My friends tell me I'm an eternal optimist. You can't be a farmer and not be an eternal optimist," she said. "I'm always looking ahead to see what next year's crop will bring. I gamble enough in my business, since I depend on the weather, so I don't need to bet on the card table."

Buskirk said she doesn't expect business to slow due to the coronavirus pandemic. In fact, she said business will likely increase in the years to come.

"I've always considered the seed business recession-

proof, especially for home gardening," she said. "I think the (pandemic) will change the way people think about their food, and is creating a new awareness for everyone, whether they want organic or conventional seed. The pandemic is definitely putting an interesting twist on the home gardening industry. This will change the marketplace."

She has this advice for home gardeners: Always try something new, and never underestimate the value and power of growing your own food. It could be a few herbs or a couple pots of vegetables on a terrace. Food gardening is a positive and powerful action anyone can take to control their diet as well as the quality of the food they eat, she explained.

Next time you pick up a packet of seeds, think about the power you're holding in your hands to change your life.

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Go behind the scenes with Patty Buskirk. Video at californiabountiful.com.



A transplanter and tractor, above, stand ready to plant watermelon plants for seed production. Buskirk's warehouses hold as many as 3,500 types of seeds, including ones for summer squash, right.





Rodolfo Meza and Raffaella Guzman, above, pack seeds for shipment, while Buskirk, right, inspects giant sunflowers.



# for spring and summer planting

A decade ago, seed catalogs for home gardeners arrived via the U.S. Postal Service. The catalogs would start trickling in around November and, during the next few weeks, it would become a deluge. Although this information is available online, most gardeners will tell you there's something relaxing about being surrounded by half a dozen seed catalogs with their colorful photos of fruits, vegetables and flowers. It can be storming outside, but inside it's spring and summer. Most companies offer a free hard-copy catalog upon request.

Whether on your laptop, tablet, smartphone or with a catalog in hand, you'll discover a whole world of flowers and produce. There are old-fashioned favorites, as well as modern hybrids bred for a longer growing season or more flowers. There are winter squashes with mysterious and romantic-sounding names, many of which have been grown for 100 years. It's a cornucopia with something for everyone. These unusual vegetable and flower varieties are finding their ways onto nursery center racks, too.

Stick with varieties easy to start if you're new to growing from seed. Easy vegetables include squash (winter and summer), cucumbers, peas, beans and melons. Easiest flowers include zinnias, sunflowers and nasturtiums.

Now is the time to begin ordering seeds. Most seed companies catering to the home gardener send their catalogs, whether electronic or hard copy, late fall into late winter for spring and summer planting. Or, if you prefer, you can do your browsing at the seed rack of the local garden center.