

SEED SAVIOR

Preserving our edible heritage is Amy Goldman's life work.

BY THERESE CIESINSKI | PHOTOGRAPHY BY MATTHEW BENSON

TO AMY GOLDMAN, the roughly 400-year-old 'Petit Gris de Rennes' variety is the "champagne of French cantaloupes." 'Fordhook Gem' melon's flesh varies in color between shades of "sea foam and growing grass," with "melting, sugary, peachlike flavors." Blue-ribbon winner 'Hero of Lockinge' tantalizes with "hints of fig." If these melons are unfamiliar to you, it's because they need a bit of TLC and are hard for commercial growers to provide. But they are household names to Goldman. That they are still grown at all is due in part to her efforts. She is the voice of these rare and precious varieties, proclaiming their virtues and keeping their profiles aloft among gardeners, farmers, chefs, and food lovers across the country.

Goldman may be best known to gardeners as the author of her award-winning books on heirlooms (with

This 200-acre farm in Rhinebeck, New York, where she lives with her husband, Cary Fowler, a conservationist instrumental in starting the Svalbard Global Seed Vault in Norway, is also her laboratory. It's here that she grows, tests, and saves seed from hundreds of obscure varieties of domesticated plants in danger of vanishing, not only from modern-day agriculture but also from our memories.

Since Goldman started actively growing heirlooms in 1989, she's grown thousands of varieties—all for the purpose of keeping these fruits and vegetables available for people to enjoy. This year she took it easy and kept the garden "small," planting only 38 varieties of tomato, 61 of winter squash, and 41 watermelon, 52 melon, and 115 pepper varieties.

According to the Food and Agriculture Organization of the United

diseases. This can create stronger and healthier plants that can be enjoyed by the gardener now, and relied on by people in the future. Heirloom seeds—which are often passed down within families or communities—are also important for sustaining genetic diversity in a time of plant patents and monocultures. Goldman extols these little-known varieties for their flavors, usefulness, and rich histories.

She is deeply involved with Seed Savers Exchange, a nonprofit in Decorah, Iowa. A former chairman of the board, she is now a Special Advisor. Goldman has also been a member of the New York Botanical Garden board of trustees since 1999 and will assume the chairmanship at the end of 2018.

"No one in the nation has done more to tell the story of heirloom seeds than Amy. Her fierce and unflagging support for those working to preserve heirlooms has been invaluable," says Neil Hamilton, director of the Agricultural Law Center at Drake University.

Micaela Colley, program director of the Organic Seed Alliance based in Port Townsend, Washington, says of Goldman: "She recognizes that seeds are living entities and their preservation and stewardship go hand in hand to pass on our food heritage to the next generation." You might say that Amy Goldman wants to feed the world, forever.

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photographer Victor Schrager): *Melons for the Passionate Grower* (Artisan, 2002), *The Compleat Squash* (Artisan, 2004), and *The Heirloom Tomato* (Bloomsbury USA, 2008). Each celebrates the beauty as well as the utility of these unusual edibles.

Her most recent book, *Heirloom Harvest: Modern Daguerreotypes of Historic Garden Treasures* (Bloomsbury USA, 2015), was the result of a 15-year collaboration with daguerreotypist Jerry Spagnoli. Its silvery images are an homage to the fruits (and vegetables) of Goldman's labors as well as to the 1780s farmstead that she rescued almost 30 years ago from its weedy, dilapidated state.

Nations, in the last century about 75 percent of crop genetic diversity has been lost as farmers worldwide switched to genetically uniform, high-yielding varieties and abandoned local varieties. And since 60 percent of our food energy needs come from only five plants (rice, wheat, maize, millet, and sorghum), this lack of diversity means our system is vulnerable—think of the Irish Potato Famine where a disease decimated a primary crop. This is part of the big picture that lends urgency to Goldman's mission.

The seeds on her farm are heirlooms and reproduce true to type, unlike modern first-generation hybrids that don't produce offspring like their parents. Replanting seeds harvested from the best-tasting, best-performing varieties over time allows the plants to adapt to the climate and soil and to develop resistance to local pests and





Amy Goldman tends to plants in a greenhouse on her farm in Rhinebeck, NY. Here she is pruning rocoto chile peppers, *Capsicum pubescens*, an uncommon species of hot pepper.

Opposite: Saving seed from heirloom beefsteak tomatoes is popular with beginning seed savers because it's easy. Shown here are the yellow-skinned 'Great White' (introduced in 1991), the bicolor 'Big Rainbow' (preserved by a member of Seed Savers Exchange), and the red-skinned 'Dr. Lyle'.



“Seeds are wondrous germs of life, living links between generations, evoking the past and present and future.”

—AMY GOLDMAN

Left, top: Goldman keeps seeds for about 100 watermelon varieties. When saving seeds, she recommends storing them in airtight containers in a cool, dark, dry place. If you store them properly, they will remain viable for at least 5 years.



Left, bottom: The squash patch in Goldman's quarter-acre Far Garden is covered in black plastic, which warms the soil and suppresses weeds. The tall stakes are inked with each variety's name.

Opposite, bottom: 'Petit Gris de Rennes' needs coddling, but its melt-in-your-mouth brown sugar flavor is worth the trouble. In *Melons for the Passionate Grower*, Goldman said it's "so good it gives me the chills." According to Seed Savers Exchange, it was first discovered nearly 400 years ago.

GD: How do you define an heirloom?

GOLDMAN: An heirloom is a treasured variety that reproduces true to type from seed (if prevented from crossing with other varieties in the same species). Growers value heirlooms for various reasons. Outstanding performance under adverse conditions (including heat, drought, cold, wet, poor soil conditions, and pressure from pests and diseases) would be at the top of the list. They select and save harvested seed to regrow plants that perform well in their gardens and fields and produce an abundant harvest. And they select for traits they value, such as novel shape, color, texture, or flavor. In my own garden I look for "happy accidents"—the result of spontaneous crossing/hybridization or mutations—like the sweet green cherry tomato I named 'Green Doctors'. It has olive yellow skin, spring green flesh, and a flavor that's sweet and tart—it makes the mouth water. I select and save those seeds to regrow and spread the bounty.

Why are they important?

There is strength in their diversity. Heirlooms, landraces (local cultivars that have been improved by traditional agricultural methods), and wild species in particular are the genetic resources that professional breeders rely on to help crops adapt to a changing climate—perhaps agriculture's biggest threat. I value heirlooms for their beauty, history, diversity, the joy they bring, the deliciousness they impart.

What was your first experience with heirloom varieties?

My heirloom education began around 1989, reading Ros [Rosalind] Creasy's book *Cooking from the Garden*. I was already a gardener, and was probably growing heirlooms before then, but I wasn't aware of what they were. Ros' book opened my eyes. I joined Seed Savers Exchange and immersed myself in that whole world.



The north and south greenhouses are separated by the potting shed where Goldman starts her seeds. The south greenhouse (at right) is where Goldman grows seedlings before she plants them outdoors. The north greenhouse is warmer and is where Goldman houses ornamental edibles such as bananas, citrus, pineapple guava, olives, date palms, and loquats. Near the greenhouses is a circular herb garden that contains dozens of herbs, including unusual ones, such as rue, heart seed, and betony.

Do you have a favorite?

I love the fruiting vegetables, melons, watermelons, and pumpkins for their luscious, mouth-filling savoriness or sweetness. Not the leafy ones so much, though I grow them.

Melons are my first love. One is 'Crimson Sweet' watermelon: sweet, crisp, juicy, with "red door red" flesh. But I have



so many favorites—dozens and dozens. Walking into a watermelon and melon patch is like walking into a candy store.

Why do you save seeds?

I save seeds because there is a certain complacency and societal pressure not to garden, not to save seeds, because they are perceived as unnecessary and too much bother. Seeds are wondrous germs of life, living links between generations, evoking the past and present and future. I save vegetable seeds because of what they become.

What are the misconceptions among gardeners about heirlooms and other open-pollinated varieties?

That they are not as good as modern hybrids, and are more difficult to grow. I don't find that to be the case. The challenge is getting people to try something new, to cross that threshold. The rewards are amazing.

Seed saving is another threshold that gardeners hesitate to cross because they think it's too hard. Start with the easy, self-pollinating stuff. Start with tomatoes

and peppers. Then try one melon and one watermelon. If you're growing for fruit, you can grow for seed, too.

Which vegetables are disappearing and should be more widely grown?

Crops with a biennial life cycle, including the brassicas/cabbage family, and carrots and beets. Some heirlooms are more popular than others—tomatoes are wildly popular—but who is growing heirloom carrots and biennial crops?

Do you still contribute seeds to Seed Savers for exchange?

Absolutely! This is my 25th consecutive year. My moniker is "NY GO A," which is short for "New York, Goldman, Amy." This year I am offering 48 varieties of vegetable seed to other SSE members (seedsavers.org).

What book do you recommend on seed saving?

The best book out there on the subject is *The Seed Garden: The Art and Practice of Seed Saving* (Seed Savers Exchange, 2015).

Who is doing interesting work with heirlooms?

Seed Savers Exchange, which promotes *in situ* (on farm and in garden) and *ex situ* conservation through its seed bank, with safety duplication at the Svalbard Global Seed Vault. SSE members, many of them amateurs, work mainly with old varieties (family and commercial heirlooms) to hybridize and select "the next best thing."

Organizations like the Organic Seed Alliance that promote breeding projects involving amateurs and professionals. And professional breeders who use existing diversity, including wild species, to make vast improvements in our food crops. I admire Mike Mazourek, who has worked with squash, melons, cucumber, snap peas, and peppers at Cornell; Paul Bosland, a breeder of ornamental chile peppers; Johnny's Selected Seeds founder Rob Johnston, Jr., who breeds squash; and Harry Paris, who's working with acorn and summer squash in Israel.

What's your latest project?

I'm working on second editions of the melons book and the squash book. Then I am working on a book on peppers with photographer Victor Schrager. I've grown 500 varieties over the last 5 years. I taste-test multiple times and keep field notes. Some standouts are the pimento peppers, both the cheese (squat and fat) and heart-shaped ones, with their sweet, firm, thick-meated red flesh. And I love the 'Aji Amarillo' chile pepper. The flavorful pods can be used as both a vegetable and a dried spice.

I toyed with the idea of doing a book on eggplants. Grew a ton of them, tested them. I discovered that I was not in love with eggplant. I have to be in love or I won't spend 5, 10, 15 years with the plant. I like eggplant, but there isn't the diversity of flavor or texture. That's why I love peppers. There are so many, and they have value as a vegetable and a spice.

Describe the art you create from vegetables.

More than 15 years ago, Victor suggested that since I'm growing these amazing melons and squash, to have them cast in bronze. There was a local foundry, so using the lost wax process I made castings of 'Old Time Tennessee' muskmelon, 'Prescott Fond Blanc' melon, and 'Yugoslavian Finger Fruit' squash.

I made the first specimens for my own enjoyment. Then I started producing small editions. My mission is to preserve heirloom varieties in facts, seeds, words, and art. This is another way to celebrate them.

Below, left: Goldman celebrates the beauty of rare vegetables by sculpting them. Here, a black, bronze-cast African warty 'Bule' gourd and a green 'Crown of Thorns' gourd are shown with their real-life counterparts.

Below: 'Hero of Lockinge' melon, known for its sweetness, was introduced in Britain in 1881. It was named for the founder of the British Red Cross, Lord Wantage of Lockinge.



AMY'S FALL FAVORITES

Here are seven of Goldman's favorite heirloom or open-pollinated squashes, pumpkins, and melons and why she loves them.

'BLUE KURI' SQUASH

They say blue, but 'Blue Kuri' is really a dull green. It's a Japanese open-pollinated kabocha-type squash. Because it's small, it's easy to store. It has a chestnutlike flavor and good mouth feel. The color and flavor hold for months.

'BURGESS BUTTERCUP' SQUASH

A descendant of buttercup squash. I adore the buttercups. They are American royalty. This one was introduced in 1952 by Burgess Seed & Plant Co. It's my favorite of the buttercups. It's the most beautiful, with a dark green rind. The texture is so floury and fine it almost melts, and it tastes nutty.

'SCARCHUK'S SUPREME' SQUASH

I have grown many acorn squash in my life, and this is the sweetest open-pollinated acorn squash I've ever had. You can eat it raw—there's no fiber. When cooked, it tastes like chestnuts, and that's the highest honor I can bestow on a squash.

'SMALL SUGAR' PUMPKIN

A pumpkin domesticated by Native Americans. Good quality, sweet, not very fibrous. It's sold in stores, and is also known as sugar pumpkin. It's also good for pie.

'WINTER LUXURY PIE' PUMPKIN

My favorite orange pumpkin, and the finest pie stock in the land. Fabulous flavor and a smooth, velvety texture. It's a hard-to-find pumpkin; you can't buy it in stores. Apart from its qualities as food, I adore its shape and looks so much I cast it in bronze. I always have 'Winter Luxury Pie' on my table.

'IRONDEQUOIT' MELON

A thick, sugary, and juicy orange-fleshed muskmelon with nice fruit acid. A New York state heirloom developed in 1944.

'DE ALMERIA' MELON

This is a sweet and savory and juicy type of Spanish casaba melon that is at its best when the growing season is long, hot, and dry. The flavor is habit forming.



Above: In her book *The Compleat Squash*, Goldman writes, "Acorn squash is more American than apple pie and decidedly less fattening—even if halved, baked, and embellished with butter, brown sugar, honey, or maple syrup." Shown here, clockwise from top left: 'Table Queen', 'Gill's Golden Pippin', 'Paydon's Heirloom', 'Thelma Sanders', and 'Fordhook'.

Right: In her book on melons, Goldman writes 'Collective Farm Woman' is a "must-have" for its crunch and sweetness. This melon from Ukraine was almost lost to cultivation but was preserved with the help of Seed Savers Exchange.

