



Saving Seeds in Good Company

Abbey Palmer
Queen City Seed Library
Marquette, MI

Seed saving is a way to empower people to feed themselves and others by learning an ancient practice which is deceptively simple and naturally complex. These are some seed saving activities that I have tried with help from friends, children, students at preschools and universities, gardeners, and with elders through the Queen City Seed Library in Marquette, MI. Think about what your audience would appreciate and enjoy when you decide to try these activities with them, and consider the safety of everyone involved when you offer an activity for a new group. These activities were inspired by many of my teachers, and can be used to teach the academic subjects one might expect from seeds: botany, genetics, ecology, cooking – but also history, geography, art, and other topics. Because food touches all parts of our lives, seeds can be related to nearly everything we do. I think that’s what makes these activities easy to adapt to different settings. And activities like these can be especially powerful for those who are reflecting on – or in the midst of – change, transformation, and growth.

Bean Buddy

Place a dry bean in a small plastic bag with a moistened cotton ball, and use a hole punch to make a hole for a string to pass through the top of the bag so that the bean buddy can be worn or hung in a familiar place (kitchen window, edge of computer screen, rearview mirror in the spring). The bean will show you stages of germination: radicle through cotyledon...and sometimes all the way to flower, if you continue to give it water! A biodegradable, 100% cotton ball can be planted in the garden. Try unusual beans, and ask what participants think the bean’s name might be: Calypso, Tiger’s Eye, and Black Valentine are all fun and quite distinct in appearance. Try this as a prelude to germination testing to introduce the concept that some seeds are alive and others are no longer viable, plant anatomy, germination period, and the nutrients that plants require at different stages of life. Thanks to Dixie for showing me this one!

Wet Seed Processing

Tomato seeds benefit from a period of fermentation to improve germination rates. Baker Creek has a video with Art: <https://youtu.be/bvcv19qfEnY>

After undertaking some tomato squishing – which should not be attempted by any participant wearing white – observe the gel sac that encases each tomato and explain that this clear substance inhibits germination. Start asking questions: What good is a seed coat that keeps a seed from sprouting? Why are tomato seeds like this? Use an example that has a few days' head start to show the mold, and ask: How is the fermentation process accomplished in the wild? This can, if you let it, lead the conversation to the Inca word *tomatl* and the origin of a familiar food plant that is the foundation of many childhood favorites: pizza, spaghetti, BLTs. The tomato functions as an unexpected starting point for a conversation about how foods travel, colonization, and superstition. Here's a *Smithsonian* article to get you on the scent to learn more about the history of the tomato: <https://www.smithsonianmag.com/arts-culture/why-the-tomato-was-feared-in-europe-for-more-than-200-years-863735/>

Dry Seed Processing

Savers' Exchange is a nice place to start for basic seed saving instructions, <https://www.seedsavers.org/how-to-save-seeds>. A collection of disposable aluminum roasting pans that are large, light, stack readily, and have high sides are helpful with seed processing in groups, as are paper plates for winnowing. If you get far into dry seed processing, you will not be able to pass a screen or sieve at a thrift store without pausing to evaluate it based on which seeds it might let you separate from their chaff. Thanks to my mother, Dawn, Ray, and Sue for sharing seeds with me.

Seeds have their different attributes – so grow or sustainably harvest some that waft on the breeze (lettuce, milkweed) and some that float (wintergreen, cranberry) and some that stick (burdock) and some that are designed to go through the digestive tract (blackberries, blueberries) and some that are traded and collected like gems (corn, beans) and talk about those differences. This lesson from Project Learning Tree is fun for thinking about this in an engineering context: <https://www.plt.org/stem-strategies/have-seeds-will-travel/>

Seed Paper

Make valentines, post cards, invitations to a seed swap, or book marks that can be planted outdoors when their usefulness as human-oriented objects has run its course. There are recipes and demonstrations of paper making online that will help you with the process – just add the seeds after pulp has been created because seeds don't always survive the blender. The addition of natural pigments such as beets can liven things up, as can including fabric in the creation of the pulp. Plan a second session to actually decorate, write on, and send the seed paper once it has had time to dry completely. In my experience, as long as seed paper conforms to the dictates of the US Postal Service for dimension and thickness, homemade postcards can be sent in the mail without an envelope. This can be a great way to use seeds whose viability is questionable. Don't include unidentified seeds, in case those seeds belong to an invasive species, and be aware of the ecosystem through which the seed paper will travel. Thanks to Geri and Grace for teaching me about seed paper.

Sound of Seeds

Put different seeds in opaque plastic containers (Easter eggs taped shut can work) and use as percussive accompaniment to a song. This could be any song the group already knows and likes, or the layered polyrhythms of Fela Kuti, or it could be as simple as saying *shake it fast, shake it slow, shake it high, shake it low* together. Ask participants to guess at seed size and shape, open containers and inspect, and reveal seeds like buckwheat, wild rice, chia, quinoa, sesame, split pea, whole coffee beans. I like to include something that is not a common food allergy to share on the spot, such as sunflower seeds. Thanks to Vera and Susie – and Ellen! for teaching me how to sing with a group.

Get the Garden Started

Use paper towel squares for direct seeded crops that have small seeds or relatively low germination temperatures such as carrots, beets, cilantro, spinach, and others. Lay out a paper towel square, use biodegradable glue or wheat paste to stick seeds in position, cover with another paper towel, label with the variety, allow to dry, and store until it is time to plant. This is a pleasant indoor activity that lets participants handle seeds and plan the garden during the late winter as you wait for warmer weather. In the garden, lay out paper towel squares and cover lightly with soil, water in, and observe to be sure they stay moist and remain in place. It is essential to use recycled paper towels or those that are 100% paper, as the paper towel brands that are more durable, like shop towels, often contain plastic and don't disappear readily in the garden. For information about plant spacing in a square foot context and an introduction to crop planning and predictive yields on a back-yard scale, check out Mel Bartholomew's book *Square Foot Gardening: A new way to garden in less space with less work*.

Anatomy of a Seed Packet

Gather seed packets from several companies and pass around or ask pairs to take and analyze a seed packet. Begin asking about differences in how the packages are designed, what kind of information is included, what colors are used, and which audience might find that marketing appealing. This can become a discussion of how consumers interact with seeds (before and after they buy them), the politics of seed breeding, and the food system as a concept.

Extend this conversation into activity by inviting participants to create their own unique seed packets. I like to start with images of seed packets from the golden era of US packet distribution through the US Mail, about 1890-1920, for inspiration and then design seed packets using paper, coin envelopes, colored pencils, markers, collage materials, or other media to design a packet for seeds saved in your community. This can be a way to honor or recognize the work of your local seed savers. We use packets like this to decorate a community Christmas tree that is stationed near the Queen City Seed Library cabinet, but they could also be designed as calling cards, invitations, or puzzle pieces.

Other Ideas

- Share (or make and eat together) a snack with seeds: popcorn, poppy seed muffins, gluten free crackers with seeds
- Fill a grocery bag with different fruits and vegetables to cut open together to look for seeds – the conversation becomes more interesting, even with adults, when you include vegetables that we eat prior to flowering and fruiting (like lettuce or spinach) and roots (carrots or potatoes)

- Get help packing seeds for your seed swap or library by providing bags or envelopes and guidelines for how to pack and label seeds, with prizes for first to complete 5 and 10 packets, or tidiest work area, or best at following directions
- For a seed ID game, package 10-12 types of seeds in clear containers and bring empty seed packets with pictures of plants and ask participants to match the packet with the seed
- Start a sunflower seed in a clear plastic cup and watch the root development until the plant is a transplant and ready to move outside
- To talk about prediction, averages, and the unbelievable bounty of nature, hand each participant or pair a cherry tomato, then ask them how many seeds they imagine are in a cherry tomato, record their guesses, then help them to actually open a cherry tomato and count the seeds – there's some fun data to work with for teaching math and the future of food on this island Earth.