Garden Basic: Growing and Saving Heirloom Seeds

The ornamental plants that grace our gardens and the foods we grow and savor come from a variety of sources. Seeds of many familiar plants were deliberately brought here by generations of immigrants that arrived at our shores from all over the world. Other plants that we enjoy today originated in the Americas; some played (and continue to play) important roles in the daily lives of Native Americans.



What is an Heirloom Plant?

Varieties of plants that have been valued over time — for qualities such as flavor, beauty, disease resistance, or adaptability — and have been passed down through the generations are often referred to as *heirloom* plants. They carry with them stories of the people who grew them, enjoyed them, and saved them to pass on to their progeny.

Heirloom plants are also repositories of rich genetic diversity that is now understood to be a vital asset that we may need to call upon at any moment. Much of the world's population has become increasingly dependent upon a relatively few food crops — and often just a handful of varieties of each of these crops. The lack of genetic diversity leaves these crops vulnerable to insect and disease outbreaks, newly evolving pests, and changing environmental conditions.

Fortunately, in addition to people who save seeds for their own use, there are also individuals and organizations that have shown the wisdom and foresight to preserve the legacy of many heirloom plants by saving, cataloguing, and storing their seeds and the genetic diversity they represent.

Learn more: Lesson: Seed Banks: https://kidsgardening.org/lesson-plan-seed-banks/

Sadly, innumerable varieties have been lost, and with them genes that might have been the key to breeding new varieties that are resistant to some yet-unknown pest, or that are resilient in the face of a changing climate.

Food varieties extinction is happening all over the world — and it's happening fast. ... Experts estimate that we have lost more than half of the world's food varieties over the past century.... It took more than 10,000 years of domestication for humans to create the vast biodiversity in our food supply that we're now watching ebb away. — "Food Ark," National Geographic Magazine, July 2011

Some of the troubling loss of varieties can be attributed to seed company consolidation

that took place in the 1900s. Seeds for plants that were widely adapted to a variety of climates, were easy to harvest and store, and had the most universal taste appeal



make the cut. (These qualities often made the varieties popular with large-scale growers, too.) Seeds with more specialized qualities and a smaller following tended to fall by the wayside unless championed by an individual, organization, or specialty seed company. Fortunately, there are now dozens of seed companies that include, or focus exclusively on, rare varieties.

Commonsense Reasons to Save Seeds

For many cultures, communities, and individuals worldwide, saving seeds at the end of one growing season for replanting the following spring was (and for some, continues to be) a simple fact of agricultural existence. Seeds are expensive, and saving seeds from the garden or farm for replanting was a financial imperative.

By saving seeds from your garden to plant the next season you're tapping into a tradition that's been around as long as agriculture itself — reason enough to participate in this enjoyable end-of-season activity. Here are a few more reasons:

Save money. A single flower seed-head or fruit may contain hundreds of seeds — often far more than a packet costing several dollars.

Maximize flavor. Was there a plant that produced a particularly flavorful harvest? Save the seed!

Share your bounty. You may end up saving more seeds than you can use. Arrange a seed swap with another school or gardening organization. Create packets of seeds and sell them to raise money for your school garden. Give the seed packets as gifts, or donate them.

Practice self-reliance. Saving and replanting seeds is a step toward self-sufficiency. It's a small but vital lesson in understanding how we can become a little less dependent upon outside sources for the essentials of our wellbeing.

Tune into the cycles of nature. Collecting seeds in fall and knowing that you have jars of saved seeds ready for spring planting is concrete reminder of the cycles of life. It's a connection to all the wild plants that produce seeds to ensure the growth of the next generation and, ultimately, to ensure their species' survival.

Keeping History Alive

By learning the stories behind heirloom varieties, and then growing them and saving the seeds, we keep those stories alive and join the generations of gardeners who've participated in this living history. Here are a few examples:

Hopi Blue corn. At one time this corn was a traditional staple corn of the Hopi people and



was used to make ceremonial *piki bread*. Hope Blue corn can be eaten as sweet corn if picked young, or allowed to mature and dry for grinding into flour. To make piki bread, the finely ground flour is blended with the burnt ash of juniper berries (which increases the availability of the nutrients in the corn) and enough

water to make a thin batter. The batter is spread over a hot stone and cooked, yielding a



smoky-tasting, crispy bread. The bread-making tradition — and the baking stone — were passed from mother to daughter, and young woman's expertise with the process helped prove her worth as a bride. (Photo courtesy of Native Seeds/SEARCH nativeseeds.org.)

Cherokee Trail of Tears bean. The pods can be harvested when they're young and tender and eaten as snap beans. Or the black beans (seeds) can be allowed to mature and dry inside the reddish pods. The beans were carried from Tennessee to Oklahoma by the Cherokee people during their forced migration by the U.S. Federal Government in the 1830s. This mass upheaval and the relocation of an entire people and culture along a treacherous migration route is known as the "Trail of Tears" in remembrance of the heartbreaking suffering and loss of life that occurred during and after the difficult journey.

Grandpa Ott's morning glory and German Pink tomato. In 1975 Diane Ott Whealy was in bequeathed seeds of these two heirloom varieties that her great grandfather had brought from Bavaria to America more than 100 years earlier. Wanting to preserve such unique varieties, Diane and her husband, Kent, established the Seed Savers Exchange as a place where people could store and trade the seeds of their own past. The exchange, which now boasts more than 13,000 members, has its headquarters are near Decorah, lowa, on an 890-acre property called Heritage Farm, devoted to seed saving, storage, and stewardship in perpetuity. If you ever visit in summertime, take a morning walk and look for the old red barn covered with the deep purple, freshly opened flowers of Grandpa Ott's morning glory vines.

Fish peppers. Believed to have originated in the Caribbean and brought to the U.S. in the 1800s, this pepper variety became a must-have ingredient to flavor fish chowders made by African Americans who lived in the Chesapeake Bay area, as well as in seafood cream sauces made by black caterers in the Baltimore/Philadelphia area. The peppers were dried and ground to make a white paprika that imparts a distinctive heat without discoloring the sauce as a red paprika would. The peppers weren't specified by name in recipes, but were rather part of an oral tradition. The variety was nearly lost, but was rediscovered by William Woys Weaver, a seed historian in Pennsylvania. In reviving the story of Fish peppers, Weaver also keeps alive an historic culinary tradition.

Seeds Saving How-To

By saving seeds year after year from the plants that perform the best in your garden, you'll begin to create a strain of plant that is increasingly adapted to your particular conditions. The plants may become more uniformly vigorous and productive in the face of challenges like the insects and diseases in your region, late spring cold snaps, extreme midsummer heat, high humidity, chilly summer nights, timely presence of pollinators, etc. Keep in mind, however, that by being so selective in your seed-saving and replanting only the seeds you've saved, you are reducing the genetic diversity of that crop in your garden. Remember to introduce an additional variety or two of the same crop on a regular basis.

For important information about the differences among hybrid, open-pollinated, self-pollinated and cross-pollinated plants, and how these classifications can influence which seeds you decide to save, visit *Saving Seeds* https://kidsgardening.org/gardening-basics-saving-seeds/.

Seeds are borne in all sorts of places and ways on plants. Some hide in pods or fruits, others are exposed, still others tucked into capsules. Here are some examples of seeds you might want to collect in your garden.





Acorn squash (and other winter squash): Scoop out the seeds and carefully rinse to remove any flesh clinging to the seeds. Allow them to dry until you can snap them in half. (Read Saving Seeds, link above, about challenges — and opportunities — that come with crops like squash that readily cross-pollinate.)



Peppers: Leave the pepper on the plant until it matures to its full color (which may be red, purple, yellow, orange, or another color, depending on the variety). Cut open the pepper, remove the seeds and spread them out to dry for a few weeks.



Dill: The seeds are ready to save when the seed heads turn brown and dry and the seeds fall easily away.



Coreopsis: These plants bloom prolifically, and you'll often find ready-to-harvest seed heads alongside freshly opened blossoms. The C-shaped seeds are easily separated from the dry, brown seed heads.





Nigella. Commonly called love-inmist because the flowers are tucked among fine, thread-like foliage, this is an old-time cottage garden favorite. Both the flowers and the seedpods are popular in flower arrangements. You'll know the seeds are ripe when the seedpod

opens; you can simply shake out the small, black seeds.





delightful seed pods punctuated with star-shaped seeds.

Scabiosa. Sometimes called pincushion flowers, scabiosas are popular cut flowers. *Scabiosa* stellata is a particularly fascinating. Although the flower is less showy than some of its cousins, it forms



The seeds are ready when the seedhead turns completely brown and the seeds fall away.





Sunflower. You'll be lucky to get to the ripe seeds before the birds! Foil hungry birds by covering the seed head with row cover fabric until the seed heads turn yellow and the seeds fall out easily from the head. Learn more in the KidsGardening Growing Guide: Sunflowers



Canna. These dramatic tropical plants are commonly grown from rhizomes. Because the most popular varieties are hybrids, growing from the rhizome ensures you'll get the plant you expect. However, it's possible to grow them from seed. Simply let the seed pod mature and dry, and you can easily pop out the big, black seed. You may get a similarly looking plant, or something quite different — but likely still beautiful. (For information about saving seeds from hybrids, visit the

KidsGardening Garden Basic resource Saving Seeds.

