**How to Start a Seed Library**

**What is a Seed Library?**

A seed library is a place where community members can get seeds for free and is run for the public benefit. Many seed libraries are located inside public libraries or community centers. For some communities, getting folks to garden and grow some of their own food is the focus. For other communities, seed libraries may be created as an important step to develop a network of seed savers, to create locally adapted varieties, to respond proactively to climate change or loss of gene integrity due to commercial hybridization and GMOs, or to preserve genetic diversity.  There are now about 500 seed libraries around the world.

**Why Save/Share Seeds?**

Saving and sharing seeds can help you become more self-sufficient and independent, can help you build meaningful relationships with your friends and neighbors, and can empower you to participate in building a stronger and more secure food system. Saving and exchanging seeds is a great way to discover new varieties, preserve heirlooms, and breed locally adapted varieties.

The widespread seed shortages following the Covid-19 pandemic illustrates how valuable it is to have a local supply of seeds in every community. There is no real food security without seed security.

Saving and sharing seeds also keeps seeds in the hands of individuals at a time when huge multinational chemical companies are buying up smaller seed companies. 60% of commercially available seed is controlled by three companies, Bayer (who purchased Monsanto), DowDuPont, and ChemChina (who purchased Syngenta). These three firms are all active in the production of herbicides, pesticides, and GMOs.

**Legal Support for Seed Libraries**

Federal: July 14, 2016, the American Association of Seed Control Officials (AASCO), adopted an amendment to the Recommended Uniform State Seed Law (RUSSL) that exempts seed libraries from commercial regulations. AASCO is a group of seed control professionals from each state department of agriculture that proposes the guidelines for seed that go out to every state legislature for consideration. [I moved this up since it happened first]

State of California: Friday, September 9, 2016, Governor Jerry Brown signed into law the Seed Exchange Democracy Act, an amendment to the California Seed Law, promoting food security, urban agriculture, and climate resilience by removing regulatory barriers to noncommercial seed sharing\* activities, including seed libraries.  AB 1810 exempts non-commercial seed sharing activities from industrial labeling, testing, and permitting requirements. The new law increases access to healthy and nutritious food by fostering stronger local seed systems and encouraging seed saving.

(\* “Non-commercial Seed Sharing” means that no monetary consideration or compensation may be transferred in return for receiving seeds.  Additionally, anyone distributing seeds under the rules of this definition may not expect, or create the expectation, that seeds must be returned in exchange for receiving seeds.)

**Who Starts Seed Libraries/Who Can You Partner With?**

Public Libraries

Gardening Clubs/Master Gardeners

Transition Town Initiatives

Permaculture Guilds

Culinary Gardeners

School Garden Educators

Community Gardens

Food Banks

UC Cooperative Extensions

Social Justice Groups

Individuals

**Where Are Seed Libraries Located?**

Venues that are frequented by the public are most commonly chosen. Many seed libraries are located in a branch of the local public library since it is open to the public and widely used by a broad spectrum of citizens.  Some are located at universities, museums, botanical gardens, or even online. Small seed sharing stations can be set up in food coops or second-hand stores. Some seed libraries are run by clubs and are “open” weekly or monthly when the club meets. In recent years, several “little seed libraries” (fashioned after “little free libraries”), have been erected in front of homes, churches, and other public places.

**HOW?**

**Things you might need:**

* A cabinet for the seeds. Rescued card catalogs from public or school libraries are frequently chosen, but so are other types of drawers.  Plastic shoe boxes and jars in boxes are sometimes used for smaller libraries. Consider that insects and rodents will be very interested in your seeds and make sure that whatever you use is vermin-proof and weather-proof!
* Seeds (donations from seed companies, local seed savers, gardeners’ stashes)
* Desiccant packets/thermometer with humidity gauge
* Brochures: one for how the seed library works, one on the basics of seed saving
* Membership forms
* Signage: your Seed Library sign, and a sign explaining how to use the library
* Seed Saving Chart
* Seed Saving Books (recommended titles at end of document)
* Local Planting Calendar
* Labels for the outside of the drawers
* Dividers for inside the drawers to separate the different types of seeds
* Labels for the dividers (Develop seed saving information: difficulty, pollination method, population size, isolation distance, potential crosses, etc.)
* Envelopes for the seeds being checked out/returned (#3 or #4 size coin envelopes)
* Labels for the envelopes  (2”x4” address labels)
* Scissors
* Tape
* Pens
* 2 -3 binders: Public binder for blank membership forms and handouts, binder for completed membership forms, binder for masters of your documents, clippings, financial (or other) records.
* Alphabet dividers for binder with completed membership forms
* As you do more outreach, a folding table, pop-up canopy, chairs and vinyl sign are nice

**How big will your library be?**

Will it be contained in a couple of small boxes on a tabletop, or will you have a full-sized catalog?

**Organization**

If you plan on a larger seed library, you will need to decide how to organize it.

There are three main ways to organize your library, each with pros and cons.

* Alphabetical by common name (Beans, Beets, Corn)
* By family (Legume family, Nightshade family)
* By seed-saving difficulty (Easy, medium, difficult)

Our library has one small cabinet with drawers devoted to the type of seeds (flowers, dye plants, grains, herbs), and another larger cabinet with the drawers devoted to vegetables, which are arranged alphabetically by common name.

Some libraries, such as Little Seed Libraries, contain seeds arranged by crop type (broad categories such as Herbs, Leafy Greens, Roots, Brassicas, Flowers, and stock seeds according to seasonal planting recommendations.

**Orientation**

Signage and brochures can show patrons how to check-out seed. A number of seed libraries have produced YouTube videos explaining how to use their libraries. We use signage and a brochure, but still spend time explaining the procedure to patrons.

QR codes can connect borrowers to electronic versions of brochures, images, or videos and can guide them as they explore the collection and check out seeds.

**Check Out Procedures**

Check out procedures can vary quite a bit. Here are a few parameters to consider:

**Limits**

1. **Limited:** Limits on the number of packets that can be borrowed are sometimes in place and often range from 5-20 packets.

2.  **Unlimited:** Some libraries allow an unlimited number of packets and request that folks take only what they need. It's often recommended that people take 2-3 seeds per plant they intend to grow this season. For example, for 2 zucchini plants a person would take 4-6 seeds. If seeds are small, then a pinch of seeds is what is a recommended quantity. Signage is key.

**Self-Serve or Library Card Check-out**

1.  **Self-Serve:** Consider how much on-going commitment you are interested in making to maintaining the library. If you are a volunteer-run library, then a self-serve honor system may be more sustainable in the long run. Our library is self-serve, for the most part.

2. **Check-out:** If you have unusual things in your collection and are focused on genetic preservation, then an open system may not be the best to maintain your collection. If you decide to check out seeds with a library card, then there is a lot of time involved from repackaging seeds, making labels for all of those packages, getting barcodes (if it's part of a library checkout system) and connecting that information to the library circulation database. These on-going commitments need to be defined and supported by the public library administration or your organizing group before deciding on this system. Another consideration to make with repackaging is population sizes. If only 4 peas are put in a package, then folks are going to want to eat all of their peas and not save many (or any) to return. In addition, the population size in terms of genetics is too small and may cause some problems a few generations out depending on the species.

**Tracking Systems**

1.  **Paper:** A binder or some way of keeping membership check-outs on paper is by far the easiest system to set up.  This is what we do. On the back of the membership form is a log for folks to record which seeds they “check-out” and which seeds they return. We keep completed membership forms at our circulation desk in a binder and when folks check-out or return seed we give them their membership form, they fill out the information, and we replace their form in our binder.

  2.  **Computer:**

A few libraries have pioneered connecting their seeds to the library database. Embedded in the code is a way to take them off the list so folks aren't fined as they would be for overdue books.  Pima County Library uses computer check-out of seed.

3. **Presence / Absence:**

If you are just beginning, you may have a manageable inventory so that you only need to know which categories of seeds you have and which ones you don’t, If you are using a self-serve model and know how much (# of jars or envelopes) you had to start, you can take inventories every few weeks to track what needs to be replenished and how much is getting borrowed every month or quarter.

**Information Seed Savers (and Seed Librarians) Need to Know**

Part of a seed library’s responsibility is to provide education about seeds and seed saving to our community. Saving seed is not just a case of scooping seeds from a fruit and packaging them up.

An **open-pollinated** variety breeds true from seed. Heirlooms are OP varieties with a history (~50 years) of being preserved.  (Cherokee Purple is a famous heirloom tomato.)

A **hybrid** is created by crossing two varieties. Hybrids are not stabilized and will not breed true from seed. Seed savers should not save seed from hybrid varieties (e.g. Sun Gold tomato), unless they are part of a landrace project and inform people they share seed with.

A **landrace** is a local variety of a species of plant or animal that has distinctive characteristics arising from development and adaptation over time to conditions of a localized geographic region and that typically displays greater genetic diversity than types subjected to formal breeding practices. (Merriam-Webster definition)

It is important to know how plants are pollinated as it will give you an idea of how likely they are to **cross pollinate**, what the **isolation distance** needs to be, and how large the **population size** needs to be (to prevent **inbreeding depression** over many generations).

Beans, peas, lettuce, and tomatoes are mostly **self-pollinated** and are the easiest plants for beginners to save seed from.  (Isolation distance between varieties is about 10 ft. and population size 10-20 individuals.)

Plants that are **insect pollinated** are outbreeders and require more isolation distance for absolute purity, ¼ of a mile in many instances. They often need population sizes in the 40-80 range. (Consult a crop-specific seed saving chart.)

Plants that are **wind pollinated** require isolation distances of ½ mi. to 2 miles and may need populations in the 80-200 range.

**Annual crops** grow and produce seed in one season (beans, corn, and tomatoes, for example). Several common vegetables require two seasons (**Biennial crops**) to produce seed (beets, several brassicas, and onions, for example).

Names matter! **Know your plants’ genus and species**. Plants belonging to the same genus and species can cross-pollinate and create unexpected results. (In the squash family, acorn, delicata, spaghetti, patty pan, yellow summer, and zucchini are all *Cucurbita pepo* and will cross.)

A crop type can include several different species. For example, there are several different major squash species: *maxima, moshata, argyrosperma,* and *pepo.* You can grow one variety of each and not worry about crossing because they belong to different genus–species groups.

The inverse is true: one species can include several crop types. Broccoli, Brussels sprouts, cabbage, cauliflower, collards, kohlrabi, and some kales are all the same species, *Brassica oleracea*, and will cross.

**Seed Maturity**: You can collect some seeds when the fruit is ready to eat, as in tomatoes. Some you need to wait until the plant is well past market-ready, like cucumbers.

**Seed Storage**: Dark, cool, and dry. (Storage temperature in F° + humidity < 100)

**Seed Viability**. Parsnip and onion seeds remain viable for about 1 year. Bean and pepper seeds last about 4 years. Tomatoes, 5. Melon and squash up to 7 years. Stored in a fridge, they can last even longer. Consult a seed saving chart (and *none* of them agree with each other!) and look to your experience as a guide.

**Returns Policy**

What is your expectation for seed returns? It is important that seed savers follow protocols to help ensure that the seeds in your library are what the label says they are and that they will produce healthy plants.

Remember that legally, under rules of “non-commercial seed sharing,” libraries cannot *expect* borrowers to return seed. (Libraries are also exempt from industrial labeling, testing, and permitting requirements.)

Seed quality is a concern in seed libraries. To ensure the quality of your stock, since most folks don't know much about seed saving, having people learn and return seeds that are "super easy" is a great starting point. You will want to provide some guidance on population size and isolation distance, which are minimal with “super easy” plants. (Sharing a seed saving chart is helpful.) Some "super easy" plants are beans, peas, tomatoes, and lettuce.

Let folks know that they should not return seeds from “advanced difficulty” plants -- especially the *brassica* family (ex. broccoli, Brussels sprouts, cabbage, cauliflower, collards, kale, mustard) or *cucurbit* family (ex. cucumbers, melons, pumpkins, squash) -- until they have learned more about seed saving.

Most libraries create a form for incoming seed, asking for name of plant, variety, location, and year grown.  Some libraries ask specifically about the health of plants the seeds were taken from, population size, and isolation distance.

**How to Keep Seed Quality High**

Besides asking about the health, source, and growing information of the seeds taken into the library, take these steps to ensure seeds are of good quality.

* Keep seeds in cool, dry, dark places away from pests, direct sunlight, excess humidity, and extreme weather.
* Examine the “packed for” or collection dates on labels.
* Inspect seed jars and envelopes periodically for damaged packaging or compromised seed
* Remove seeds from your inventories that are split or broken, moldy, show holes from pest damage, or are over 5 years old.
* If you have connections to a garden group, ask if they would like to do a germination test of bulk seed if you are unsure of its viability.

Seeds that have “aged-out” can be used for non-growing projects (pinecone bird feeders, seed mosaic art) or donated to school gardens or other groups at the end of each intake cycle.

**Seed Quality Policy**

Display signage that states your library’s intention for sharing quality seeds. Include any disclaimers about seed quality that goes beyond the responsibility of the seed library. Here is an example adapted from Richmond Grows:

You should know that we share seed grown by community members with love and care like our ancestors have done for thousands of years. It may not meet state germination or labeling standards. We do not knowingly accept or share any seeds that are chemically treated, patented, or genetically modified.

At *[name of your library]* we try our best to ensure the quality of our seed using best practices in inventory care and labeling. Nonetheless, seeds are alive and people using the seed library have varying degrees of skill in saving seeds. You should know that you might experience low germination rates or receive seeds that were not properly labeled. This is a volunteer-run project, and we do the best we can with the time and resources we have.

If you do have any problems with the seed you get from the seed library, please let us know so we can try to fix it for future users of the library! Tell us in person or email us at *[your email address]* .

Thank you for your interest in local seeds!

*Content developed and contributed by Rebecca Newburn of  Richmond Grows Seed Lending Library, adapted by Community Seed Network.*

**Sources for Commercially Grown Seed**

Most libraries start off with, and continue to get, donations from companies. You can write to different companies explaining your project and request seeds. The late fall season is a good time to request seed. Many companies have started to ask for shipping. Most will give you seeds from the previous season. (Shipping costs may not be up to date.)

* Botanical Interests donations@botanicalinterests.com  (supports community gardens, schools, and gardening education. Will donate for events, but not to stock libraries $30 for 200-250 packets)
* Bounty Beyond Belief info@bbbseed.com ($8 for 1-1/2 pounds of packets)
* High Mowing Seeds http://www.highmowingseeds.com/donations.html ($5 for 25 packets)
* Peaceful Valley/Grow Organic https://www.groworganic.com/community-support
* Seed Savers Exchange http://www.seedsavers.org/seed-donation-program ($15 for 50 packets)
* Southern Exposure donations@southernexposure.com
* Sow True Seed https://sowtrueseed.com/pages/donations
* Territorial  https://territorialseed.com/pages/donation-request
* Victory Seed Co. https://victoryseeds.com/pages/about-charity

It's helpful to create a document of seed companies with addresses, contacts, and when and/if you received from the different companies.

When you get your seed donation, if you get several packets of the same variety of seed and your system is self-serve, then you may not want to put all the packets out. Some members may see 5 packets of Cherokee Purple tomatoes and take an entire package and your collection can be wiped out quickly. If there are limited quantities of each, people may be more mindful and take what they need. Also be sure to have signage out such as "Take only what you need" or "Take 2-3 seeds for each plant you intend to grow or a pinch of smaller seeds."

Take the time to thank the company that sent you seed. If you have a Facebook page, thank them there, as well.

**To Repackage or Not to Repackage?**

You will likely need to repackage bulk donations and donations from individuals in the community. But what about commercial donations? When we started, we repackaged everything. It was time consuming. Now we put out the commercial seed packet and ask patrons to remove just what they need and repackage that into the coin envelopes we provide. There are drawbacks: people taking an entire package, spills, people who don’t label their envelopes with all the information they should have. But we don’t have time to repackage everything with the limited number of volunteer-hours we have. (During Covid-19 library closures we went back to repackaging seed and putting it out at grab-and-go stations for people.)

**Consider Joining Seed Savers Exchange’s** Community Seed Network (https://www.communityseednetwork.org/, an update to Seed Savers Exchange CSRP) They are promoting seed libraries. You may be able to find some local seed savers in their catalog who could give you seed, provide mentoring, or teach classes. (See their contact info in Resources, below. They now offer a free 1-year membership to qualifying Community Seed Groups.

**Events**

After you are up and running you may want to put on events to help inspire and educate your community to grow food and save seeds. Here are some events we regularly host in our community.

* Seed packaging parties
* Seed exchanges
* Plant exchange/give-away
* Planting parties at the Farmers Market
  + (We provide seed, soil, six-packs, and plastic plant labels. You will need plenty of markers. Have the local market save beer/soda flats for you so people can carry their filled six-packs. We don’t provide water.)
* Monarch Waystation project  (monarchwatch.org/waystations)
* Tomato Tastings
* Screening Events - documentary films about seeds or agriculture
  + (Learn about Public Performance Rights and secure rights before showing a film.)
* Education/workshops: basic gardening, seed starting, seed saving
* Seed-grow out projects/Seed Library Garden

**Promote Your Library!**

* Contact SeedLibraries.net and register your library
* Create a Facebook page
* Post your events to local community Facebook groups as your page posts will *not* reach all your fans
* Write a press release to send to local papers
* Start an email group or MailChimp account to reach members
* Posters around town (Canva.com is free and lets you design beautiful posters)
* Radio Announcements

**Books to Check Out**

**On Seed Breeding and Saving**

***Breed Your Own Vegetable Varieties*, by Carol Deppe, Chelsea Green, 2000.**

***The Seed Garden: The Art and Practice of Seed Saving,* edited by Lee Buttala *et al*, Seed Savers Exchange, Inc., 2015.**

***The Organic Seed Grower: A Farmer’s Guide to Vegetable Seed Production*, by John Navazio, Chelsea Green, 2012.**

***The Complete Guide to Saving Seeds: 322 Vegetables, Herbs, Fruits, Flowers, Trees, and Shrubs*, by Robert Gough, Storey Publishing, 2011.**

***Cultiva-Cosecha-Comparte, Semillas Para Todos,* by Sole Saburido y Jenn Ungemach, Mexico: Sustainable Harvest International, 2017.**

***Salvando Nuestras Semillas: La Práctica y Filosofía,* by Bevin Cohen, Small House Farm, 2020.**

***Basic Seed Saving*, *3rd edition*, by Bill McDorman, Higher Ground, LLC, 2016**

***Landrace Gardening: Food Security through Biodiversity and Promiscuous Pollination***, by Joseph Lofthouse, Father of Peace Ministry, 2021

***Seed Propagation of Native California Plants*, *2021 Edition***, by Dara E. Emery, Santa Barbara Botanic Garden, 2021

**On Seed Libraries**

***The Role of Community Seed Projects in Protecting Seed Diversity*,** by Charlotte Dove, London Freedom Seed Bank, 2016

***Seed Libraries, and Other Means of Keeping Seeds in the Hands of the People***, by Cindy Conner, New Society Publishers, 2014

***Civic Seeds: New Institutions for Seed Systems and Communities-A 2016 Survey of California Seed Libraries***, by Daniela Soleri, Agriculture and Human Values (2018) 35: 331-347;

https://link.springer.com/article/10.1007/s10460-017-9826-4

**Online Resources**

* **https://frvpl.org/seed-library/**

(You will find links to our brochures, seed saving charts and handouts, and more. Feel free to use anything you can to help your community develop a thriving seed library.)

* **https://napacoseedlibrary.org/borrow**
* http://www.richmondgrowsseeds.org
  + *THE* website that got many of us started, tons of information including photos of different seed libraries, sample brochures, lesson plans for workshops, etc.
* http://seedlibraries.net
  + The other great resource with tons of information, copies of brochures, membership forms, etc. in use at seed libraries around the country. It is a slick, updated version of what you can find at Richmond Grows.
* http://seedlibraries.org (A social network)
* https://www.communityseednetwork.org/
  + [Resources and information for seed saving, sharing, and networking, and a detailed seed saving chart: https://www.communityseednetwork.org/wp-content/uploads/2021/04/SS-Seed-Saving-Chart-English.pdf

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**The Seed Library at the Round Valley Public Library, February 2023**

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