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YMCA La Crosse Food Forest Guide



Andy Deremo

University of Wisconsin La Crosse

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Acknowledgments

Author:

Andy Deremo

University of Wisconsin La Crosse

Recreation Management & Therapeutic Recreation Department



Photo courtesy of: Andy Deremo

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Laurie K. Harmon, PhD

Associate Professor

Recreation Management & Therapeutic Recreation

University of Wisconsin - La Crosse

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Welcome!

Welcome to the YMCA La Crosse Food Forest Guide. This guide was developed to aid in your creation of your very own food forest. The guidelines set forth in this document will assist you



Photo courtesy of: YMCA La Crosse

in the step by step creation of your own food forest. It does not matter if you choose to create a small forest at home or a large-scale community project, this guide is here to help.



Photo courtesy of: YMCA La Crosse

What is a food forest?

Food forests mimic the architecture and beneficial relationships between plants and animals found in a natural forest or other natural ecosystems. Food forests are not “natural”, but are designed and managed ecosystems that model nature incorporating concepts into their design such as biodiversity to increase productivity and sustainability (“Permaculture Institute,” n.d.).

They are built on a series of guilds. Guilds are a combination of plants, animals, insects, fungi, and even people, where each guild has a role to play. Each guild participant contributes something valuable to the entire composition. For example, most plants need nitrogen, phosphorus, other nutrients, and pest control for healthy growth. By combining carbon fixing plants with nitrogen fixing plants, nutrient accumulators, and beneficial insect attractors, one can design and build a thriving edible ecosystem that reduces work and inputs on behalf of the gardener (“Permaculture Guilds,” n.d.).

The idea of forest gardens was first articulated by Robert A. de J. Hart in his book “Forest Gardening” and subsequently became one of the key concepts in permaculture. Along with others like David Holmgren and Bill Mollison, they laid the groundwork and key concepts for what would become the permaculture movement.

Some key components that you should strive to achieve in your food forest are sustainability, the use of organic plants and seeds and the use of native plant species. In a food forest, ideally each guild will be interdependent on one another and if you return plant material back to the soil, you should be able to achieve sustainability. Consider using organic plants and seeds when you are creating the forest. The reason for this is many plants and seeds have been genetically modified and could limit the number of beneficial insects that will come to the food forest. Use as many native species as possible in your food forest. Native plants have adapted to the climate, require fewer inputs, are better at attracting the types of insects you want in the forest and are not invasive species. You will soon realize that it is more than just you enjoying your food forest. You will attract many birds to your forest and those birds will deposit seeds all over the surrounding area. If you use native plant species your food forest will not be the source for birds to spread unwanted invasive species.

In addition to our local YMCA La Crosse Food Forest, I suggest that you check out the Beacon Food Forest located in Seattle, WA. Their website beaconfoodforest.org has many wonderful tips and links to assist you in the creation of your own food forest.

Key Terms

Permaculture: an agricultural system or method that seeks to integrate human activity with natural surroundings to create highly efficient self-sustaining ecosystems (“thefeedictionary,” n.d.).

Organic: Relating to, or grown with the use of fertilizers deriving from animal or vegetable matter, rather than from chemicals (“thefeedictionary,” n.d.).

Sustainability: the ability to be maintained at a steady level without exhausting resources or causing ecological damage (“thefeedictionary,” n.d.).

Native: originating, growing or produced in a certain place or region (“thefeedictionary,” n.d.).

Invasive species: the invasion of non-native plants or animals into a region that has detrimental effects on the native population (“thefeedictionary,” n.d.).

Guilds: Permaculture guilds have seven components (“Permaculture Guilds,” n.d.).

1. Food for people: Fruits, Vegetables, Staples, Legumes & Nuts, Fats & Oils, and Animals
2. Food for the soil: plant nitrogen fixers like legumes, and return organic material to the forest to decompose
3. Diggers: planting trees that are deep root and help to break up the soil and bring air and nutrients to the soil.
4. Groundcover: protect the soil from the sun, help to hold moisture, and help to keep weeds down. Examples could be sweet potato vines, pumpkin, cucumbers or anything that will vine and cover the surface
5. Climbers: Climbers help to maximize food production, and are especially useful in areas where land resources may be scarce or limited.
6. Supporters: These are stronger items that support the climbers and make the most of our space. Supporters can be living things like trees, bushes, stalks such as a maize or sunflower, or they can be non-living things
7. Protectors: Anything that helps to protect your guild is a protector. Examples being strong smelling plants to keep insects away. Natural predators can also be very helpful in controlling the insect problems in a guild.



Photo courtesy of: <http://www.theprepperjournal.com>

Site Selection

Check with the municipality to see if there are any regulations and restrictions that need to be met before a site can be selected. Once everything is cleared with the municipality it is time to determine a site for the food forest. Here is a list of things that should be considered when selecting a site.

Sun exposure

The sunnier the spot the better because sun is the most important ingredient for growing hearty vegetables. Most vegetables need full sun (at least six hours of direct sunlight per day) to grow to their maximum potential. Avoid spots that are shaded by trees or buildings during the heat of the day (“Fine Gardening,” n.d.).

To determine if your site has the right light conditions, stand facing the south with your left hand pointing east (in the direction the sun rises) and your right hand pointing west (in the direction the sun sets). Now take your east-facing finger and follow it to the southern sky and then down behind the western horizon. This is the course the sun will take throughout the day. If there are no major obstructions then you have a sunny spot (“Fine Gardening,” n.d.).

Soil

The soil in your food forest site should be well-drained, meaning water won't puddle. Waterlogged soil is anaerobic (oxygen deficient), which will result in drowned and rotted roots. Sandy soils don't retain as much moisture as vegetables need. To improve the soil's nutrient content and moisture holding capacity you will need to make additions to the soil. Soil improvement is as easy as tilling the soil and incorporating organic matter like compost or composted animal manure into it, ideally at least six weeks before planting. The pH (acidity or alkalinity) of your soil can have a big impact on how available nutrients are to plants. In other words, if your soil's pH is not between the range of 5.5 and 7.0, your plants won't get enough nutrients, no matter how much organic matter you use (“Gardening Solutions,” n.d.). You can obtain a soil testing kit from the internet or at your local garden supply store.

Drainage

Plants can't grow in waterlogged soil. The position of a food forest should be somewhat elevated. If the location of a food forest is at the bottom of a hill or in an indentation in the ground, it will have a hard time drying out and the plants will suffer (“Tips on Choosing,” 2016).

Water Availability

Securing a water source for your plants should be a major part of early food forest planning. Most people put their food forest near a faucet or hose to facilitate easy watering. If you are going to use an irrigation system for convenience or because your food forest site is far from the nearest water source, install it before planting so that you don't disturb roots (“Gardening Solutions,” n.d.).

Ways to Water

Hand Watering - To hand water, you can use a watering can, pail, or hose. Hand watering can be an effective and efficient way to irrigate edible food forests, if you make sure to water the soil to a depth of several inches. Watering less will encourage your plants to develop shallow root systems and a dependency on frequent watering, making them much less drought-tolerant (“Gardening Solutions,” n.d.).

Drip Irrigation - Drip and micro-spray irrigation systems apply water directly to the soil around the roots of plants, where it's needed. They're the most efficient form of irrigation, losing minimal water to evaporation and wind drift. Drip irrigation systems rely on a system of plastic pipes to carry water to plants. They apply water more slowly than sprinklers, and can use a lot less. Drip irrigation systems are easy to find and install, but do require periodic maintenance to make sure the emitters are working properly. Drip irrigation lines can be placed under mulch, buried in the soil, or placed on the soil surface for easy access. They can also be used to water container-grown plants (“Gardening Solutions,” n.d.).



Photo courtesy of: baynature.org

Overhead Irrigation - Overhead sprinklers are inexpensive and easy to install, but are the least efficient way to water your food forest. Much of the water evaporates before being used by the plants, and overhead irrigation can also encourage disease (“Gardening Solutions,” n.d.).



Photo courtesy of: <http://www.climatetechwiki.org>

Soaker Hose - Soaker hoses are perforated hoses that soak the ground. The water sprays out in fine streams from slits or holes in the hose, usually moistening the plant's foliage, flower, and fruit as well as the soil. They can help conserve water, because they're placed where water is needed and their proximity to the soil means that less water is lost to evaporation than in overhead irrigation (“Gardening Solutions,” n.d.).



Photo courtesy of: <http://orserlandscaping.blogspot.com>

Method	Pros	Cons
Hand Watering	Inexpensive and you control the amount of water.	Time and labor intensive.
Drip Irrigation	Set on a timer, preserves water and better for disease control.	Initial investment is more expensive and the tubing can become visible.
Overhead Irrigation	Large area of coverage.	Least efficient way of watering due to evaporation and it encourages disease.
Soaker Hose	Water and soil conservation and a time saver.	Hose can deteriorate quickly, limited coverage and low output.

When to Water

It's best to water when the top half-inch to inch of soil begins to dry. Check your plants frequently for dropping leaves and other signs of distress. Thick-leaved plants like cabbage, collards, and broccoli won't dry out as fast as plants with large, thin leaves such as squash, cucumbers, and pumpkins. Young plants and vegetables with root problems may need frequent watering (“Gardening Solutions,” n.d.).

Water enough to thoroughly wet the soil and root zone, but never let your irrigation system run indefinitely. Not only will you waste water, but you can also encourage disease. Soil and foliage need time to dry, so the best time to water is early in the morning, preferably between 4 and 6 a.m. (“Gardening Solutions,” n.d.).

In sandy soil, a half-inch of water will moisten down to about six inches deep, which should be sufficient. In soils with more organic or clay content, and in food forest with a thick layer of mulch, you may need to apply up to an inch of water to wet the same depth. Of course, these soils will also hold moisture longer than sandy soil, meaning you can water less often (“Gardening Solutions,” n.d.).

Tool Care

Good tools need regular care to keep them working properly and safely. Take the times when you're doing less in the landscape to evaluate your tools for cleaning, sharpening, and other maintenance needs. Look over the cables and plugs of power tools for damage and make sure safety guards are intact. Take them to a professional if any repairs are needed. Check the oil levels and fluids in all gas-powered equipment. Sharpen all mower blades and other edged tools. Tools should be cleaned and stored in a dry location. This includes not only large items like shovels and rakes, but also smaller items like pruners and trowels. Be sure to remove soil from garden tools before stowing them. Clean garden tools are an important part of garden sanitation, and can prevent the spread of disease-causing pathogens (“Gardening Solutions,” n.d.).

Safety/Accessibility

When creating your plan for your community food forest make sure you addressing the requirements set forth by the *Americans with Disabilities Act (ADA)*. The following areas should be considered:

Make more space

Wheelchair users and other people with mobility impairments often need more space to get around comfortably. They also appreciate level pathways. While flagstones or bricks might be out of your budget, another option is planking, including engineered wood products that resist mold and mildew. You could also consider gravel paths. While not ideal, they are a better surface than uneven dirt. Think hard-packed, even materials (“8 Ways to Make,” n.d.).

Install Kneelers

For those who can bend or sit, it’s often hard to do so for extended periods of time. Kneelers next to ground-level beds that can’t feasibly be raised can still help bridge a gap by offering a resting spot. Consider installing a railing next kneelers to help people get up when they’re finished (“8 Ways to Make,” n.d.).

Add Seating

Food forest are all the lovelier when you can enjoy them, so add some strategic seating to allow people to watch flowers blooming or kale sprouting. Seating makes public spaces more accessible by giving disabled people an easy spot to rest. You might find that it makes a food forest more inviting to other people as well (“8 Ways to Make,” n.d.).

Ask People What They Need

If you’re adapting a public or community food forest, conduct a survey. Ask members with a disability in the community what would help them. Encourage them to drop by the food forest and audit the space to provide suggestions throughout the planning and execution process, and consider hiring an accessibility consultant to help the space shine (“8 Ways to Make,” n.d.).

Land Ownership

Make sure that the land that the food forest is going to be constructed on is your property or has been acquired for creating the food forest from the owner of the property.

Community Support

Determine whether a food forest is really needed and wanted, whom it will involve and who benefits. Invite neighbors, tenants, community organizations, gardening and horticultural societies, in other words, anyone who is likely to be interested (“10 Steps to Starting,” 2015).

Do a community asset assessment. What skills and resources already exist in the community that can aid in the food forest creation? Contact local horticultural societies and other local sources of information and assistance. Look within your community for people with experience in landscaping and gardening (“10 Steps to Starting,” 2015).

- Master Gardeners
- Department of Natural Resources
- Garden Centers
- Gardening Clubs
- Etc.

From this group comprised of people who feel committed to the creation of the food forest and have the time to devote to it, choose well-organized persons as food forest coordinators. Form committees to tackle specific tasks: funding and partnerships, youth activities, construction and communication (“10 Steps to Starting,” 2015).

Consider creating a special zone just for kids—including them is essential. Children are not as interested in the size of the harvest but rather in the process. A separate area set aside for them allows them to explore at their own speed (“10 Steps to Starting,” 2015).



Photo Courtesy of: YMCA La Crosse

Organizing your Volunteers

Volunteering is an important part of community interaction and necessary for many projects and programs. Volunteers in community food forests should work to their skill and physical levels, but there is something almost anyone can do. Planning is crucial to recruiting and organizing volunteers efficiently. If you have no plan, work will go slowly, volunteers may get frustrated and quit, and resources will not get used effectively. Start by thinking about the project’s goals

and the types of assistance needed. Community food forest volunteers may find you if you advertise in a local paper, put up signs or they simply hear about the project through local garden clubs, civic groups or other means (“How to Organize,” 2016).

One of the biggest stumbling blocks with a volunteer force is adjusting to people’s personal schedules. It can often be difficult to get a large enough contingent for a big part of the project due to work responsibilities, family duties and their own home management. The first thing to do at an initial meeting is to get a minimum commitment from volunteers. Holding meetings and keeping involved through email and phone calls to update volunteer schedules and cover work needs will help keep people involved and compelled to attend work parties. During the first planning meeting with volunteers, it is important to go through everyone’s skill sets, wants and needs. This will give you a basis upon which to create a schedule of both volunteers and parts of the project to tackle each time you meet (“How to Organize,” 2016).

Keep in mind community food forest volunteers may not be gardeners or even familiar with the rigors that may be involved. Volunteers in community food forest need to be aware of the demands and accepting of the potential risks. Once you have assessed each participant’s ability to contribute, you can then assign appropriate tasks. Starting a community food forest is a labor of love but with a little planning and the excellent assistance of professional resources, sponsors and devoted volunteers, the dream is possible (“How to Organize,” 2016).

Site Preparation

Once a site has been selected it is time to begin site preparation. Before you can place any plants in the ground you need to make sure the area is ready to receive them. One of the quickest ways to prepare an area is with sheet mulching.

Here’s what you will need for sheet mulching:

- Cardboard or newspaper
- Manure, compost or other nitrogen-rich material (i.e. fresh lawn or plant clippings)
- Straw, mulch, dried leaves, wood chips or other carbon-rich material
- Topsoil
- Optional: other additives you might like to put into the mix to improve your soil composition such as glacial rock dust, organic fertilizer, bone meal, lime or worm castings.

Note: If you are putting any large plants directly into this food forest, plant them in the ground first and build the sheet mulch up around it. Don’t worry if the plant is slightly buried as the sheet mulch will compact quickly over time (“Gorgeous Gardens,” 2012).

Step 1: Site plus cardboard

Sheet mulching begins with picking a suitable site. Create an outline of your beds to make sure that you can reach all aspects of the food forest from all angles for harvesting and maintenance. It is important to thoroughly wet down or soak the cardboard with water before moving onto the next step (“Gorgeous Gardens,” 2012).

Step 2: Nitrogen (manure, compost, dead green things)

Nitrogen is the key component in fertilizers but is easy to get naturally. On top of your cardboard goes your nitrogen source in a 1-2-inch depth. Depending on your resources this might be manure, compost, worm castings or fresh clippings (“Gorgeous Gardens,” 2012).

Step 3: Carbon (spoilt hay, straw, leaves, dead brown things)

Carbon will break down quickly and provide an ideal ‘humus’ layer for your plants. Carbon is what you need the most of in a sheet mulch. So now add a large pile of your carbon material at least eight inches thick on top of the manure and cardboard. Other carbon sources might include: seaweed, dry leaves, finely ground bark, or wood shavings (“Gorgeous Gardens,” 2012).

Step 4: Compost or good soil

On top of your carbon layer goes a nice 1-2-inch layer of finished compost or good top soil. This might be the most expensive layer if you aren’t making your compost at home but it is also the most important layer (“Gorgeous Gardens,” 2012).

This is the layer your seeds and seedlings will grow in initially until the layers below are penetrated by roots and broken down. You can mine soil from elsewhere, just try to keep out grass roots (“Gorgeous Gardens,” 2012).

Step 5: Carbon icing on your manure cake

Finally cover your precious, vulnerable dirt or compost with 1-2 inches of carbon: straw, leaves, sawdust etc. This layer of mulch will help lock in moisture and protect the sun from taking any nutrients out of your precious planting layer underneath. The mulch will also deter the sprouting of unwanted plants and allow you to favor and establish those you desire in the food forest (“Gorgeous Gardens,” 2012).

Step 6: Water, water, water

Okay, now water your whole sheet mulch down until you are satisfied it is thoroughly soaked. This will activate the decomposition process, attract the worms and help all your layers get to know one another more intimately through nutrient exchange (“Gorgeous Gardens,” 2012).

Note: It is best to let a sheet mulch sit at least a few weeks before you plant it or even a winter season if you can. Sheet mulch will be a lot more productive in the second and third year than in the first. For Wisconsin I would advise creating the sheet mulched area in the Fall and allowing it to sit all Winter before planting in the Spring.

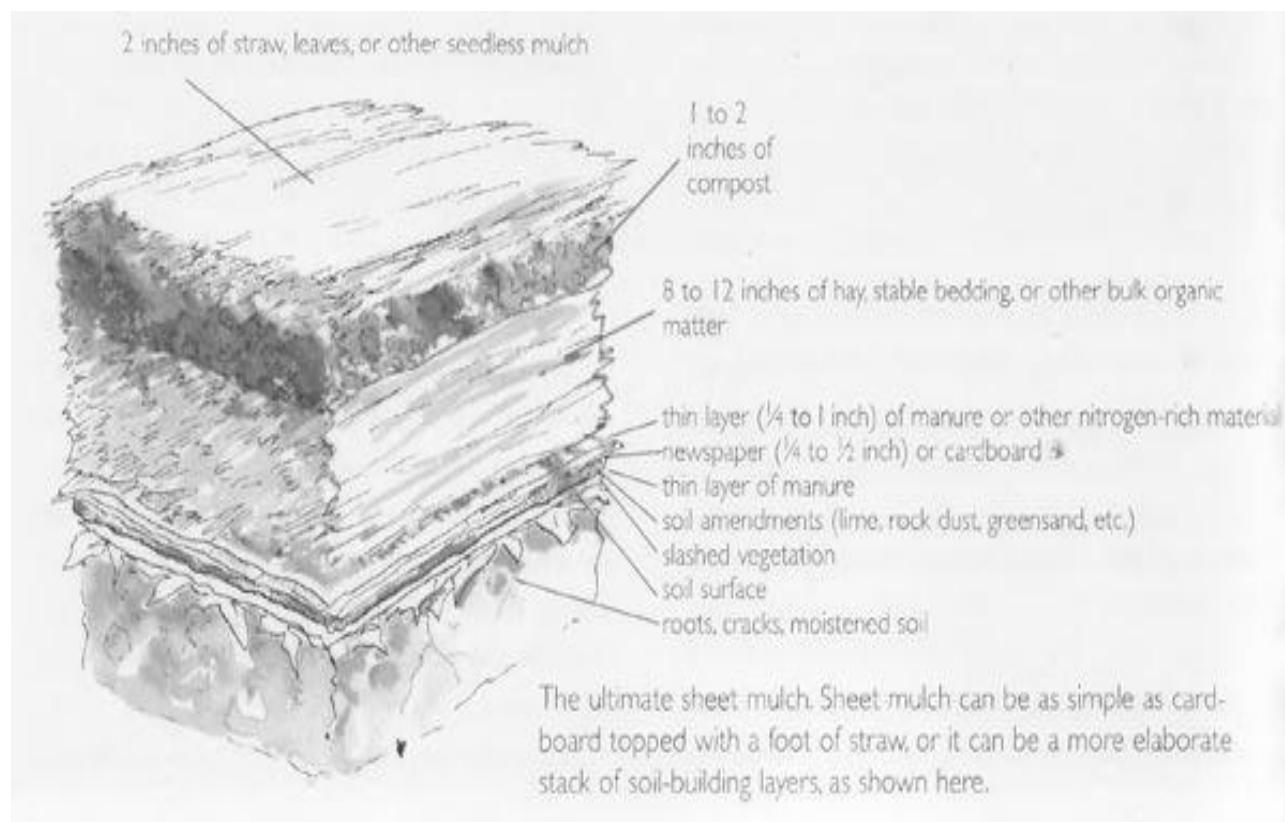


Photo courtesy of: garden.menoyot.com

Plant Selection for each Guild

Note: the list below is not all inclusive. Be sure to check your region to see the best plants and animals to use in your forest. For some workable guilds for the Southwest region of Wisconsin see Appendix A. For a complete list of the plants used in the La Crosse YMCA Food Forest please see Appendix B.

1. Food for the people:
 - a. Vegetables: peppers, tomatoes, onions, kale, broccoli etc.
 - b. Fruits: Strawberries, raspberries, blueberries etc.
 - c. Nuts
 - d. Animals: chickens etc.
2. Food for the soil:
 - a. Legumes: beans, peas, lentils etc.
 - b. Return organic material to the forest to decompose
3. Diggers:
 - a. Trees: Fruit trees, example cherry, apple etc.
4. Groundcover
 - a. Sweet potato vines, pumpkin, cucumbers etc.
5. Climbers
 - a. Pole beans
 - b. Peas
 - c. Squash

6. Supports
 - a. Sunflowers
 - b. Maize
 - c. Trees and bushes
7. Protectors
 - a. Strong smelling plants (“Companion Planting,” n.d.).
 - i. Basil- wards off whitefly
 - ii. Nasturtium- attracts aphids away from beans
 - iii. Alliums- protects against slug damage
 - iv. Lavender- confuses pests
 - v. Nettles- attracts butterflies
 - b. Helpful Insects (“Companion Planting,” n.d.).
 - i. Bees
 - ii. Lady bugs, will eat the aphids
 - iii. Lacewing
 - iv. Spiders

Beneficial Insect and Issues with Pesticides

The first rule to learn is the distinction between the “good guys” and the “bad guys”: Not all pests are a threat to your food forest plants, and many of them are helpful in fighting off other plant predators. You can classify the good guys using the three “P’s” system (“The Best Plants,” n.d.).

The three ‘P’s’ of beneficial insects are pollinators, predators and parasites. Pollinators, such as honeybees, pollinate flowers, which increases the productivity of food crops ranging from apples to zucchini. Predators, such as lady beetles and soldier bugs, consume pest insects as food. Parasites use pests as nurseries for their young. On any given day, all three ‘P’s’ are feeding on pests or on flower pollen and nectar in a diversified food forest. If you recognize these good bugs, it’s easier to appreciate their work and understand why it’s best not to use broad-spectrum herbicides and pesticides (“The Best Plants,” n.d.).

The use of such herbicides and pesticides can be detrimental to the complex relationships between plants, pests and predators — all the more reason why natural insect control works better. Because pesticides, even organic varieties, make no distinction between helpful and hurtful insects, in the end their regular use can have many negative impacts, including the suppression of the soil food web and pollution of waterways. Instead, encouraging the presence of predatory warriors that will defend and protect your food forest plants from common pests is not only an environmentally sound management strategy, it also encourages biodiversity and plant pollination (“The Best Plants,” n.d.).

Another issue with pesticides are, secondary pest outbreaks. With the removal of both the pest and the beneficial insects there is nothing left to help defend the forest against the next wave of invaders. This wave of invaders can cause even great losses in the food forest than the initial pests that you were trying to get rid of (“Planet Natural,” n.d.).

A good rule of thumb to follow when trying to promote beneficial insects in your food forest is to devote 5-10% of the space to plants that will attract these insects (“The Best Plants,” n.d.).

For a list of the Top 10 beneficial insects please see Appendix C.

Caring for your Food Forest

WATER, WATER, WATER! Until your forest is established it will require that you water regularly. Overtime the forest will become more self-sufficient and the need for watering will decrease. In times of drought or extreme heat even a well-established forest will need some help. You will need to weed the forest and care for the plants by trimming back runners and promoting growth. At the end of the growing season you will want to clean up the forest by chopping all organic material and returning it to the soil so it can decompose over the winter months. In the spring before planting you will need to make any repairs to the beds and prep them for the upcoming planting (“Gorgeous Gardens,” 2012).

Funding

Grants: there are several grants that can be applied for, below is a partial list.

- a. <http://govgrantsusa.org/>
- b. <https://communitygarden.org/resources/funding-opportunities/>
- c. <https://www.gardenabcs.com/grants.html>
- d. https://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs

When looking for and applying for grants you may want to follow the steps listed below. These steps are courtesy of Wikihow.com/Apply for a Grant.

Steps taken in grant funding

Identify potential grants - You can identify potential grant funding opportunities by searching the internet. Once you have preliminarily identified a list of potential grants, closely read the grant’s eligibility section and the full announcement to determine whether you meet the requirements.

Download a Grant Application Package - Once you have determined that you meet the eligibility and scope of work requirements, download the grant application. The benefit of downloading a grant application package is that it allows you to complete and review your materials offline before submitting the finished application.

Review instructions - Each grant will provide you with instructions in addition to the grant application materials. You must closely review the instructions when preparing your grant proposal.

Write your grant materials - Most grants require that you submit a grant proposal that clearly shows how you meet all of the grant’s requirements, a budget and what you intend to accomplish with the grant money. Generally, your proposal should include:

- Information that meets all the requirements of the grant.
- A typo-free and grammatically correct document that persuasively sets forth your project aims.
- Check for formatting requirements, such as font and page limits, and be sure to follow those requirements exactly.
- Any documents that were required or that support your grant application such as tax documents or business documents.

Submit the completed Grant Application Package. Once you have finalized your materials, you are ready to submit your grant.

Sponsorship/Partnership with local companies

Below you will find the step on how to acquire a sponsorship/partnership. These steps are courtesy of Wikihow.com/seek/sponsorship.

Look for companies that sponsor other events or activities like yours - Use the research that other organizations have done before you to help give you an edge.

Create a list of potential sponsors - A big list of potential sponsors is great, but you don't want to simply ask every person and company that you know to be a sponsor. Your list needs to be a list of actual potential sponsors, meaning people or companies that you think will consider your sponsorship request. Include companies that have been sponsors for you in the past, companies that have sponsored other ideas like yours and people or companies that you have a personal connection with that would be able to be a sponsor.

Research every company or person on your list - Having background information on the potential sponsor will go a long way in helping you gain a sponsorship. Look for reasons why it would benefit the potential sponsor to sponsor you.

Anticipate the needs of each potential sponsor - If you learn the demographics, business model, and the goals of your potential sponsors, you can start developing some sense of the way you might pitch the sponsorship.

Creating a Sponsorship Packet

Write an executive summary - A sponsorship packet must always start out with an executive summary, or mission statement about the venture you hope to have sponsored. This should be around 250-300 words that describes in detail what a sponsorship will fund, why you seek sponsorships, and how being a sponsor will benefit them.

List the different sponsorship levels - If you haven't already, outline your budget among the business or venture, and decide what it is you hope to acquire from sponsors. Create different

"levels" of sponsorship that potential sponsors may commit to and explain what you are asking for at each level and why you need sponsors for each level.

Provide a call to action - Your call to action can be a form they fill out and send to you or your contact information asking them to call you to set up the sponsorship.

Cut to the chase - You're writing to marketers, entrepreneurs, and business people, not academics. This isn't the time to pad out your writing with lofty diction and fluff to sound smart. Make your argument, outline the business advantages for the sponsors, and end it quickly. Short and sweet.

Sending out Packets

Avoid the scattergun approach - It may be tempting to send out as many packets as possible to as many different places as possible, using a bland broadcast designed to reach as many different avenues as possible. Wrong. Be judicious in sending out packets, sending packets only to the companies you honestly think will work with your venture.

Send the potential sponsors on your list your individualized sponsorship packets - Personalize every single email, packet, and correspondence you send out. Taking the lazy way out will only ensure that your project never gets the sponsorship it deserves.

Follow up with a phone call - Wait a few days and then call the people you sent sponsorship packets to. Ask them if they have received your request. Find out if they have any questions. Make sure they know where to reach you when they decide.

Customize your approach to each sponsor as they get on board - If you've got one company contributing \$10,000 to your event, how will you treat them differently than the other company contributing a couple hundred bucks? The difference should be notable and substantial; from the perks you offer to the publicity to the way you talk with them on the phone. It's the time to wine and dine to make sure you keep them happy and on the hook.

Other Funding options:

Community Involvement

1. Bake Sale
2. Car Wash
3. Raffle

Private Donations

Private donations can be handle in the same general way that you approached funding sponsorship/partnership. You want to make it personal.

Conclusion

A food forest is a great way to bring a community together and to help educate the public about healthy organic food, sustainability and the environment. This guide was created to help assist you in the creation of your own food forest. The guide provides you with many of the core

concepts that you will need to make your food forest a success. Starting with the need for funding, finding both volunteers and experts in the community that can assist in the project, the need for safety and accessibility, site selection, preparation and plant selection for the forest. I hope that you have found this guide to be useful and that it will help to get your food forest project off the ground and growing.



Photo courtesy of: YMCA La Crosse

Supplemental Reading List

The Top 10 Permaculture Books as voted for by Permaculture Association. For a summary of each book please see appendix D.

Earth Care Manual - Patrick Whitefield

Permaculture: A Beginners Guide - Graham Burnett

Permaculture Design: A Step by Step Guide - Aranya

People & Permaculture - Looby Macnamara

Permaculture Principles & Pathways Beyond Sustainability - David Holmgren

A Designers' Manual - Bill Mollison

The Permaculture Garden - Graham Bell

Creating a Forest Garden - Martin Crawford

Gaia's Garden: A Guide to Home-scale Permaculture - Toby Hemenway

Earth User's Guide to Permaculture - Rosemary Morrow

Earth Care Manual - Patrick Whitefield

References

- Permaculture Institute. (n.d.). Retrieved May 18, 2017, from <http://www.permaculture.org/>
- Permaculture Guilds. (n.d.). Retrieved May 18, 2017, from <http://www.neverendingfood.org/b-what-is-permaculture/permaculture-guilds/>
- Gorgeous Gardens From Garbage: How to Build a Sheet Mulch. (2012, July 20). Retrieved May 18, 2017, from <http://permaculturenews.org/2012/07/20/gorgeous-gardens-from-garbage-how-to-build-a-sheet-mulch/>
- Companion Planting for Vegetable Gardens. (n.d.). Retrieved May 18, 2017, from <http://www.growveg.com/guides/companion-planting-for-vegetable-gardens/>
- Hadley, D. (n.d.). 10 Insects That Are Great for Your Garden. Retrieved May 18, 2017, from <https://www.thoughtco.com/top-beneficial-garden-insects-1968404>
- Grant, B. L. (2016, March 23). Community Garden Volunteers: How To Organize Volunteers For Community Gardens. Retrieved May 18, 2017, from <https://www.gardeningknowhow.com/special/urban/volunteers-for-community-gardens.htm>
- Permaculture Association. (n.d.). Retrieved May 18, 2017, from <https://www.permaculture.org.uk/research/top-ten-permaculture-books>
- W. (2017, May 18). How to Apply for a Grant. Retrieved May 18, 2017, from <http://www.wikihow.com/Apply-for-a-Grant>
- W. (2017, May 18). How to Seek Sponsorships. Retrieved May 18, 2017, from <http://www.wikihow.com/Seek-Sponsorships>
- Fine Gardening. (n.d.). Retrieved May 18, 2017, from <http://www.finegardening.com/>
- Rhoades, H. (2016, May 01). Tips On Choosing A Garden Location For Vegetables. Retrieved May 18, 2017, from <https://www.gardeningknowhow.com/edible/vegetables/vgen/choose-the-location-of-a-vegetable-garden.htm>
- 8 Ways to Make Gardening Accessible for People with Different Needs. (n.d.). Retrieved May 18, 2017, from <http://www.care2.com/causes/8-ways-to-make-gardening-accessible-for-people-with-different-needs.html>
- 10 Steps to Starting a Community Garden. (2015, June 15). Retrieved May 18, 2017, from <https://communitygarden.org/resources/10-steps-to-starting-a-community-garden/>
- Gardening Solutions - University of Florida, Institute of Food and Agricultural Sciences. (n.d.). Retrieved May 18, 2017, from <http://gardeningsolutions.ifas.ufl.edu/>
- Organic Gardening Since 1991 | Planet Natural Garden Supply. (n.d.). Retrieved May 18, 2017, from <https://www.planetnatural.com/>

Publications, I. O. (n.d.). Organic Pest Control: The Best Plants to Attract Beneficial Insects. Retrieved May 18, 2017, from <http://www.motheearthnews.com/organic-gardening/pest-control/plants-to-attract-beneficial-insects-zl0z1005zvau>

Dictionary, Encyclopedia and Thesaurus. (n.d.). Retrieved May 18, 2017, from <http://www.thefreedictionary.com/>

Appendix A

Workable Guild for the La Crosse, WI area.

Food for people

Beets: *Beta vulgaris*



Photo courtesy of: morethanborscht.wordpress.com

Chard: *Beta vulgaris*



Photo courtesy of: <http://www.harvesttotable.com>

Hazelnut: *Jefferson Corylus avelana 'Jefferson'*



Photo courtesy of: backyardfruit.com

Food for the soil

Blue False Indigo: *Baptisia australis*



Photo courtesy of: <http://www.landscapeofus.com>

Purple Prairie Clover



Photo courtesy of: <http://imgarcade.com>

Diggers

Apple Liberty: (*Malus domestica* 'Liberty')



Photo courtesy of: <https://www.waimeanurseries.co.nz>

Apple Yellow Transparent: *Malus domestica* 'Yellow Transparent'



Photo courtesy of: <http://imgarcade.com>

Cherry Dwarf: *Prunus 'North Star'*



Photo courtesy of: www.flickr.com

Ground Cover

Bloodroot: *Sanguinaria Canadensis*



Photo courtesy of: <http://www.suburbanforagers.com>

Pennsylvania Sedge: *Carex Pennsylvania*



Photo courtesy of: <http://mowildflowers.net>

Climbers

Beans: *Phaseolus spp.*



Photo courtesy of: <http://www.hydroponicsequipment.co>

Supports

Corn: *Zea mays*



Photo courtesy of: <https://areallysmallfarm.com>

Protectors

Bee Balm: *Monarda fistulosa*



Photo courtesy of: <https://www.gardeningknowhow.com>

Columbine: *Aquilegia Canadensis*



Photo courtesy of: <http://www.suggest-keywords.com>

Appendix B

Complete list of plants at the La Crosse YMCA Food Forest. This list was provided by Coulee Region Ecoscapes.

Plant	Scientific Name	Pot Size	Number	MAIN FUNCTION		Abbreviation Guide
Apple Liberty	<i>Malus domestica</i> 'Liberty'	5'	1	FT		
Apple Yellow Transparent	<i>Malus domestica</i> 'Yellow Transparent'	5'	1	FT	FT	FRUIT TREE
Aronia	<i>Aronia melanocarpa</i> 'Autumn Magic'	2 Gallon	8	FS	FS	FOOD SHRUB
Asparagus Jersey Knight	<i>Asparagus officinalis</i> 'Jersey Knight'	Bare Root	20	HF	HF	HERBACEOUS FOOD PLANT
Beans	<i>Phaseolus</i> spp.	Seeds	2	AV	AV	ANNUAL VEGETABLE
Bee Balm	<i>Monarda fistulosa</i>	3"	32	POL	POL	POLLINATOR
Beets	<i>Beta vulgaris</i>	Seeds	2	AV	NF	NITROGEN FIXER
Black Currant	<i>Ribes nigrum</i> 'Consort'	1 Gallon	2	FS	GC	GROUND COVER
Blackhaw Viburnum	<i>Viburnum prunifolium</i>	2 Gallon	5	FS	HM	HERBACEOUS MEDICINAL PLANT
Bloodroot	<i>Sanguinaria canadensis</i>	Bare Root	18	GC	DM	DYNAMIC ACCUMULATOR
Blue False Indigo	<i>Baptisia australis</i>	1 gallon	9	POL NF		
Borage	<i>Borago officinalis</i>	3" Pots	9	POL HF		
Carolina Rose	<i>Rosa carolina</i>	3 Gallon	3	FS		
Chamomile	<i>Anthemus nobillus</i>	3" Pots	12	HM		
Chard	<i>Beta vulgaris</i>	Seeds	1	AV		
Cherry Dwarf	<i>Prunus</i> 'North Star'	5'	2	FT		
Chives	<i>Allium schoenoprasum</i>	Seeds	1	HF GC		
Columbine	<i>Aquilegia canadensis</i>	3" Pots	32	POL HF		
Comfrey	<i>Symphytum officinale</i>	Bare Root	15	DM POL HM		
Corn	<i>Zea mays</i>	Seeds	2	AV		
Dill	<i>Anethum graveolens</i>	Seeds	1	AV POL		

Elderberry	<i>Sambucus canadensis</i>	3 Gallon	3	FS MS		
Hazelnut Jefferson	<i>Corylus avelana</i> 'Jefferson'	2 Gallon	1	FS		
Hazelnut Theta	<i>Corylus avelana</i> 'Theta'	2 Gallon	1	FS		
Horseradish	<i>Armoracia rusticana</i>	Bare Root	3	HF DM		
Junegrass	<i>Koeleria macrantha</i>	3" Pots	32	POL		
Kale	<i>Brassica oleracea</i>	3" Pots	9	AV		
Lettuce spp.	<i>Lactuca</i> spp.	Seeds	1	AV		
Little Bluestem	<i>Schizachyrium scoparium</i>	3" Pots	32	POL		
Mints spp.	<i>Mentha</i> spp.	3" Pots	15	POL HM HF GC		
Mizuna	<i>Brassica juncea</i> var. <i>japonica</i>	Seeds	1	AV		
Nasturtium spp.	<i>Tropaeolum</i> spp.	3" Pots	12	AV		
Nodding Wild Onion	<i>Allium cernuum</i>	3" Pots	32	POL HF		
Ostrich Fern	<i>Matteuccia struthiopteris</i>	1 Gallon	25	HF		
Pale Purple Coneflower	<i>Echinacea pallida</i>	3"	32	POL		
Pear Patten	<i>Pyrus</i> 'Patten'	5'	2	FT		
Pear Summercrisp	<i>Pyrus</i> 'Summercrisp'	5'	2	FT		
Pennsylvania Sedge	<i>Carex pennsylvanica</i>	3"	352	POL GC		
Plum Superior	<i>Prunus</i> 'Superior'	5'	1	FT		
Plum Toka	<i>Prunus</i> 'Toka'	5'	2	FT		
Prairie Dropseed	<i>Sporobolus heterolepis</i>	3" Pots	32	POL		
Prairie Wild Rose	<i>Rosa setigera</i>	3 Gallon	2	FS		
Purple Coneflower	<i>Echinacea purpurea</i>	3"	32	POL		
Purple Prairie Clover	<i>Dalea purpurea</i>	3"	32	POL NF		
Ramps	<i>Allium tricoccum</i>	Bulbs	50	HF		
Raspberry Fall Bearing	<i>Ideas rubrus</i> 'Autumn Britten'	1 Gallon	13	FS		
Raspberry June Bearing	<i>Ideas rubrus</i> 'Latham'	1 Gallon	7	FS		
Red Currant	<i>Ribes rubrum</i> 'Red Lake'	1 Gallon	6	FS		
Sage spp.	<i>Salvia</i> spp.	3" Pots	6	HM		

Serviceberry	Amelanchier alnifolia 'Regent'	2 Gallon	5	FS		
Showy Goldenrod	Solidago speciose	3" Pots	32	POL		
Side Oats Grama	Boutelia curtipendula	3" Pots	32	POL		
Solomon's Seal	Polygonatum biflorum	4" Pot	18	HF		
Sorrel	Rumex acetosa	3" Pots	12	HF		
Spinach	Spinacea oleracea	Seeds	1	AV		
Squash	Cucurbita spp.	3" Pots	10	AV		
Strawberry	Fragaria spp.	4" Pot	20	GC HF		
Strawberry spp alpine				GC HF		
Sunflower spp				POL HF		
White Woodland Aster	Aster divaricatus	3" Pots	64	POL		
Wild Ginger	Asarum canadense	4"	18	GC		
Willow	Salix spp.	2 Gallon	12			
Woodland Sunflower	Helianthus strumosus	3" Pots	32	POL HF		
Yarrow	Achillea millefolium	1 Gallon	12.95	GC POL DM		
Zigzag Goldenrod	Solidago flexicalus	3" Pots	32	POL		

Appendix C

Top 10 Beneficial Garden Insects

Green Lacewings



Most of the beautiful adult lacewings feed on pollen, nectar, and honeydew. Green lacewing larvae, however, are voracious predators. Nicknamed "aphid lions," the larvae do an impressive job of devouring aphids by the dozens. Larvae hunt for soft-bodied prey, using their curved, pointed mandibles to stab their victims (Hadley, D., n.d.).

Lady Beetles



Everyone loves a ladybug, but gardeners hold them in especially high regard. Lady beetles eat aphids, scale insects, thrips, mealybugs, and mites—all the pests' gardeners despise. With lady beetles, you get more bang for your buck, because both the adults and the larvae feed on pests. Lady beetle larvae look like tiny, colorful alligators. Learn to recognize them, so you don't mistake them for pests (Hadley, D., n.d.).

Assassin Bugs



Assassin bugs know how to take care of business. These true bugs use trickery, disguises, or just plain brute force to capture a meal. Many bugs specialize in certain kinds of prey, but as a group, assassins feed on everything from beetles to caterpillars. They're fun to watch, but be careful handling them because they bite—hard (Hadley, D., n.d.).

Praying Mantis



Contrary to popular belief, it is not illegal to harm a praying mantis. But why would you want to? Praying mantis can handle even the largest pests in the garden. You need a good eye to spot one, because their coloration and shape provide them with perfect camouflage among the garden plants. When the nymphs hatch, they're so hungry they sometimes eat their siblings. In fact, praying mantis are generalist predators, meaning they're just as likely to eat a helpful lady beetle as they are to catch a caterpillar (Hadley, D., n.d.).

Minute Pirate Bugs



You probably have minute pirate bugs in your garden, and don't even know it. Minute, indeed—these predators are tiny! Minute pirate bugs usually measure a mere 1/16th inch long, but even at that size, they can put away a good number of aphids, mites, and thrips. Next time you're in the garden, take a hand lens and search for them. Adults have black bodies with a white chevron pattern on their backs (Hadley, D., n.d.).

Ground Beetles



You've probably overlooked the ground beetles in your garden. Lift a stepping stone, and you might see one skittering away. The dark-colored adults often have a metallic sheen, but it's really the larvae that do the dirty work of pest control. Ground beetle larvae develop in the soil, and prey on slugs, root maggots, cutworms, and other pests on the ground. A few species will venture up a plant stem and hunt for caterpillars or insect eggs (Hadley, D., n.d.).

Syrphid Flies



Syrphid flies often wear bright markings of yellow-orange and black, and can be mistaken for bees. Like all flies, though, the syrphids have just two wings, so take a closer look if you see a new "bee" in your garden. Syrphid maggots crawl on garden foliage, searching for aphids to eat. They're quite good at squeezing in the curled-up leaves where aphids hide, too. As a bonus, the adults will pollinate your flowers. Syrphid flies are also called hover flies, because they tend to hover over flowers (Hadley, D., n.d.).

Predatory Stink Bugs



Though many stink bugs are plant pests themselves, some predatory stink bugs keep pests in check. The spine soldier bug, for example, feeds on caterpillars, sawfly larvae, and grubs. Most predatory stink bugs are generalist feeders, so they might also devour your lady beetles or even their own kin. You can recognize stink bugs by their shield shaped bodies, and the pungent odor they produce when disturbed (Hadley, D., n.d.).

Big-Eyed Bugs



Predictably, you can distinguish big-eyed bugs from their closest relatives by looking at their large, bulging eyes. Like many other true bugs, their bodies are oval and somewhat flat. Big-eyed bugs are quite small, reaching an average of just 1/8th inches in length. Despite their diminutive stature, both adults and nymphs feed heartily on mites, aphids, and insect eggs (Hadley, D., n.d.).

Damsel Bugs



Damsel bugs use thickened front legs to grab their prey, which includes aphids, caterpillars, thrips, leafhoppers, and other soft-bodied insects. Nymphs, too, are predators, and will feast both small insects and their eggs. With their dull brown coloring, damsel bugs blend in to their environment quite well. They look like assassin bugs, but are smaller (Hadley, D., n.d.).

Appendix D

Earth Care Manual - Patrick Whitefield

Book summary: This is the complete permaculture book, bursting with useful information, photos, diagrams, tables and plant lists. It is the first major permaculture book from outside Australia, written specifically for British conditions and highly relevant for other temperate countries. It is an exploration of permaculture specifically for cooler Northern Hemisphere climates is finally here! Already regarded as the definitive book on the subject, The Earth Care Manual is accessible to the curious novice as much as it is essential for the knowledgeable practitioner.

Especially recommended for: those interested in an extended insight into the principles and practice of permaculture principles (“Permaculture Association,” n.d.).

Permaculture: A Beginners Guide - Graham Burnett

Book summary: Whether you are aged 12 or 120, this concise yet information rich graphic guide provides the answers, and will encourage you to apply the ethics and principles of sustainability and working with, rather than against, nature to your land (whether it’s a window box or a 1000-hectare farm), your community and your life.

It’s a nice 76-page introductory look a permaculture — a very readable booklet to get you looking at the world, and your garden, through the permaculture lens. It’s in no way a substantial, technical how-to type manual, but rather a good inspirational dose of permaculture principles with a broad smattering of practical examples of how to apply them. In short, it’s a great tool to get one started on the permaculture pathway.

Find out: What is Permaculture? Why do we need Permaculture? What are Permaculture ethics and the principles of working with nature’s patterns? What are the Basics of the Permaculture design process? What are concepts such as Zones, sectors, edge, stacking and succession, and how they can work for us? How can you use Permaculture practically in your life, home, garden, land or community, whatever your situation? Plus, Practical tips, including; reading your land, saving energy, year-round food from your garden and how to use your weeds....

With its concise yet information, rich text and clear graphics and diagrams, Graham Burnett’s ‘Permaculture A Beginner’s Guide’ is the perfect accompaniment to any Permaculture Design or Introductory Course, and a great ‘additional extra’ reference book to give to your students. Updated and revised third edition published November 2012 by Spiralseed

Especially recommended for: beginners, and those who are particularly interested in a vegan perspective (the author is vegan and focuses on the vegan understanding/ application of permaculture) (“Permaculture Association,” n.d.).

Permaculture Design: A Step by Step Guide - Aranya

Book summary: Are you excited about permaculture but unclear how to put it into practice for yourself? In this unique, full color guide, experienced permaculture teacher Aranya leads you through the design process from beginning to end, using clear explanations, flowcharts and diagrams. It is based on course worksheets which have been designed, refined and tested on

students over time. Linking theory to practice, he places the ethics, principles, philosophies, tools and techniques directly into the context of the process itself.

While written for anyone with a basic grasp of permaculture, this book also has plenty to offer the more experienced designer. This guide covers: Systems and patterns ~ Working as part of a design team ~ Land and non-land based design ~ Design frameworks ~ Site surveying and map making ~ Interviewing clients ~ Working with large client groups ~ Identifying functions ~ Choosing systems and elements ~ Placement and integration ~ Creating a design proposal ~ Project management ~ Presenting your ideas to clients ~ and much more. A great reference for anyone who has done, or is thinking of doing, any kind of permaculture course.

Especially recommended for: those who are already familiar with the ideas and basics of permaculture and now keen to get some specific and practical guidance into how to apply this into practice (“Permaculture Association,” n.d.).

People & Permaculture - Looby Macnamara

Book summary: This is the first book to explore how to use permaculture design and principles for people - to restore personal, social and planetary well-being. People & Permaculture widens the definition of permaculture from being mainly about land-based systems to include our own lives, relationships and society.

This book provides a framework to help each of us improve our ability to care for ourselves, our friends, families and for the Earth. It is also a clear guide for those who may be new to permaculture, who may not even have a garden, but who wish to be involved in making changes to their lives and living more creative, low carbon lives. People & Permaculture transforms the context of permaculture making it relevant to everyone.

Part 1 - provides a detailed introduction to permaculture design and principles as applied to people. Part 2 - looks at the tools and techniques we can use in our own lives; how we can transform our internal landscape, enhance our well-being and be at our best. Part 3 -investigates ways of creating harmony in our relationships and groups, through our communication and decision making. Part 4 - explores a wider vision for our social systems, health and education. Part 5 - moves on to explore how to expand our feelings of connection across the globe. Part 6 - focuses on how we can manifest a positive future with the use of a new design framework specifically created for people-based designs.

Including over 50 practical activities, People & Permaculture empowers readers with tried and tested tools to initiate positive change in their lives. It is a hands-on yet powerful guide to creating a sustainable world.

Especially recommended for: those who are interested in reading about permaculture from a more holistic angle (“Permaculture Association,” n.d.).

Permaculture Principles & Pathways Beyond Sustainability - David Holmgren

Book summary: Holmgren's seminal work, drawing together and integrating 25 years of thinking and teaching to show a whole new way of understanding and action behind a simple set of design principles. Principles and Pathways draws together and integrates 25 years of thinking and teaching to show a whole new way of understanding and action behind a simple set of design

principles. Relevant to every aspect of how we reorganize our lives, communities and landscapes to creatively adapt to ecological realities which shape human destiny.

Especially recommended for: Essential reading for permaculture designers and accessible to a wide range of critical thinkers (“Permaculture Association,” n.d.).

A Designers' Manual - Bill Mollison

Book summary: Permaculture (permanent agriculture) is the conscious design and maintenance of agriculturally productive ecosystems which have the diversity, stability, and resilience of natural ecosystems. It is the harmonious integration of landscape and people providing their food, energy, shelter, and other material and non-material needs in a sustainable way. Without permanent agriculture, there is no possibility of a stable social order. This is still the classic permaculture textbook. It hasn't been available in the UK for years, so the Permaculture Association delighted to be able to make it available again.

Especially recommended for: generally, more advanced users, to avoid feeling overwhelmed. Highly recommended for all diploma apprentices, designers, international practitioners, educators of every kind, in fact just about everyone with a keen interest in permaculture (“Permaculture Association,” n.d.).

The Permaculture Garden - Graham Bell

Book summary: Even the smallest back yard can be transformed into a beautiful and highly productive garden, if you work in harmony with nature. This book shows you how to plan your garden layout for easy access and minimum labor, save money by creating a beautiful garden in recycled containers, use garden crop successions for year-round harvests and healthy soil, choose the best plants for different sites and enjoy the benefits of plant communities (“Permaculture Association,” n.d.).

Creating a Forest Garden - Martin Crawford

Book summary: (Working with nature to grow edible crops.) The long-awaited definitive book on forest gardening. Martin takes you step by step through the process of designing, implementing and maintaining a forest garden. Trees, shrubs, perennials, short-lived plants and fungi can all be integrated into one system and this book tells you how to do it. Includes descriptions of many uncommon edible plants suitable for temperate climates. If you want one book on forest gardening then this is the one to get (“Permaculture Association,” n.d.).

Gaia's Garden: A Guide to Home-scale Permaculture - Toby Hemenway

Book summary: The first edition of Gaia's Garden sparked the imagination of America's home gardeners, introducing permaculture's central message: Working with Nature, not against her, results in more beautiful, abundant, and forgiving gardens. This extensively revised and expanded second edition broadens the reach and depth of the permaculture approach for urban and suburban growers.

Many people mistakenly think that ecological gardening which involves growing a wide range of edible and other useful plants can take place only on a large, multiacre scale. As Hemenway demonstrates, it's fun and easy to create a backyard ecosystem by assembling communities of plants that can work cooperatively and perform a variety of functions, including: Building and

maintaining soil fertility and structure, Catching and conserving water in the landscape, providing habitat for beneficial insects, birds, and animals, growing an edible forest that yields seasonal fruits, nuts, and other foods.

This revised and updated edition also features a new chapter on urban permaculture, designed especially for people in cities and suburbs who have very limited growing space. Whatever size yard or garden you have to work with, you can apply basic permaculture principles to make it more diverse, more natural, more productive, and more beautiful. Best of all, once it is established, an ecological garden will reduce or eliminate most of the backbreaking work that is needed to maintain the typical lawn and garden (“Permaculture Association,” n.d.).

Earth User's Guide to Permaculture - Rosemary Morrow

Book summary: In this fully revised and expanded edition, Rosemary Morrow brings us up to date with our need to measure, monitor and reduce our ecological footprint. This book is a manual of practical permaculture. Drawing on her years of experience in Australia, Vietnam, Cambodia, India and Africa, the author communicates the essence of permaculture ethics, principles and design with enthusiasm, converting Holmgren and Mollison's rather theoretical concepts to an accessible 'here's how to do it' approach.

Rosemary Morrow is known and revered worldwide for her pragmatic and effective approach to creating permaculture systems across an incredibly broad range of environments. Rosemary has successfully implemented community-scale permaculture systems in such diverse biospheres as Uganda, Ethiopia, Cambodia, Thailand, the Middle East, Australia, and northern Europe, to name but a few. Her knowledge on how to create abundance, food security, and successful sustainable farming models, no matter what the country, is unparalleled in permaculture education today (“Permaculture Association,” n.d.).