

Chapter 1 : Getting Started With A Permaculture Garden - Survival Gardener

Getting Started in Permaculture delivers step-by-step knowledge for a variety of useful projects including: making herb fertilizers, compost, organic sprays for pest control, and much, much more. It also includes how to recycle your soft drink bottles, waste paper, and tires in a number of useful projects such as ponds, fruit fly traps.

So, then, where to begin? The simple answer is, in your own back yard if you have one! One of the important things you learn in Permaculture is design, for Permaculture is ultimately a multidisciplinary design system. The biggest obstacles are taking the first step, believing in yourself, believing you can do it, trusting it will work! This approach was all learned from first-hand experience, diving head first into my garden project, a full-time three month solo effort that transformed an average Melbourne home backyard into a demonstration Permaculture garden that is a living proof of concept and thriving success, which has seen several garden tours and hundreds of people since it was first built two years ago. By sharing this information, I hope to encourage more Permaculture graduates to dive in and make it happen! What is a Permaculture Garden The first step in building a Permaculture garden is to figure out what a Permaculture garden is to you. Having a finalised design means you have something to build, it ensures that you have committed your ideas to paper, and to do this they have to have some structure and form. Designs encourage decisiveness, some people like leaving their options open, which means nothing gets done. Decide what it is that you can do, and want to do, right now, not in some distant possible future, but at this very moment, then make the commitment to do it on a certain day and date, preferably now. What you need to decide at the outset is the degree of incorporation of Permaculture principles in garden design. The size of the garden will in part dictate this, the scale of the project, it can be anywhere between a balcony container garden all the way through to a broad-acre food forest. Principles of Permaculture, Emulating Nature The next step is to decide which Permaculture design principles you wish to use, or to which degree you emphasise them. Also, look at how you will choose to emulate nature in your Permaculture design. Here are some points to consider: Soil preservation – how do you intend to protect the soil? Mulches, ground cover plants, etc. Bare soil will be compacted by rain, which will degrade the soil structure, as well as wash away the top layer! Garden beds can aid in maintaining good soil, as long as they are a size you can reach into easily so you never step into the garden beds. Stepping on the soil destroys the soils structure by compacting it, preventing air and water penetration to the plants roots, which affects plant health, restricts plant growth and reduces productivity. Rebuilding soil – if your soil is pretty well dead, very little organic content and humus, if it is compacted, or damaged in any way, it has to be repaired. Soil building activities will be required to remedy the situation. You can use plants with deep tap roots such as fenugreek and dandelion to break up the soil If absolutely necessary, you can dig or fork the ground, once only, to loosen it up, then mulch it over to cover it up and protect it. Composting over the soil can be used to bring life back into it, either utilising compost heaps, or more easily and quickly, using the technique of sheet composting. Use of green manures, plants grown then chopped down afterwards, to generate lots of biomass to mulch the soil with, which will rot down to create humus. Using this layout allows a greater utilisation of space, and greater productivity for a given garden area. Succession planting – stacking in time Nature regenerates plant growth to protect soil – plants are replaced as other ones die off. Edge Effect – in nature, the edges of any ecosystem, where the environment transitions from one form to another, is the most productive. If you wanted to emphasise the Edge Effect Principle, you would perhaps lean toward curved edge garden beds, mandala design garden beds, or just use a large number of smaller rectangular beds. Microclimate – groups of plants planted together create differences in temperature, shade and humidity in comparison to the surrounding area, better supporting plant growth. Use plants growing together to protect each other from the elements wind, sun, etc. This will help them survive and create a more resilient garden. Remember, one plant on its own in a bare garden bed is like a man standing in the middle of a desert under a burning hot sun! Here are some ideas: Various vines such as grapes, kiwi fruit, passionfruit can be grown over trellises , arches, fences, and pergolas. Cucurbits, such as pumpkins, rockmelons, watermelons, zucchini, gourds, loofahs can be grown vertically up a wire mesh with widely spaced mesh big enough to fit

hands through supported by posts. Espaliered trees can be used along fences or narrow spaces to maximise the productivity of large unused vertical spaces. Water gardens – aquatic ecosystems are the most productive ecosystems of all, and they have many design functions. Can be used to grow edible aquatic plants, such as water chestnuts, sagittaria, lotus, Vietnamese mint, and many others. Can support aquatic or amphibious life, that is, fish or frogs. Monocultures make plants more accessible to pests, and prevent the use of companion planting or plant stacking. Emulate nature by mixing plants up, if you have to go to some effort to find them, so will the pests that eat them! Monocultures of annuals take more work, effort and record keeping, as planting one type of annuals in the same spot for more than one season will lead to nutrient depletion, and susceptibility to pests and diseases. The choice is either to perform crop rotation, and keep accurate records of what grew where and when, and what goes where next, or you can just take the easier natural approach, embrace polyculture, and grow everything everywhere. Getting Started One of the biggest hurdles to overcome is building a Permaculture garden is starting the actual construction. Often people may agonise over the design for months to get it perfect, then come to a complete standstill when it comes to beginning the project. The critical human factor is motivation, overcoming the inertia of taking on a big challenge. One bite at a time! If you select a small task to complete, you make it easier for yourself, and the successful completion of each simple task will bolster confidence, self esteem, and provide the momentum for the next task which follows. My strategies for getting started are as follows: Factor in the maintenance for the garden too. A full-blown food forest, very closely resembling nature, will require far less maintenance and upkeep than an urban container garden. This becomes clearer when you think about root space, water availability, plant size, etc. Remember, nobody needs to water forests, prune them, or fertilise them! Determine the critical design elements – these include water, wind sun, orientation of garden, proximity to house, location of plants according to requirements. Also, remember to plant in the correct season, that is, not mid-summer! Modular design – a highly efficient way to build a large garden is to start small, use repeatable units including guilds that can be easily replicated to extend the garden to the desired size. Design element size priority- a critical construction priority is to put in the biggest elements on the design first, then design around them. For example, in a stacked food forest design, trees go in first, then the irrigation is put into place. Then all the progressively smaller plants are planted around the trees and the location of the irrigation lines. The smallest elements, such as ground cover plants are planted last. Nothing reinforces knowledge like the practical application of it. We learn best by doing!

Chapter 2 : Starting Your Permaculture Garden | Deep Green Permaculture

Getting Started With A Permaculture Garden survivalgardener March 20, March 20, How To's, Permaculture As more and more people realize the benefits of sustainable living, permaculture gardening will only grow in popularity.

Want to learn more about how I do that? Bill Mollison, often called the Father of Permaculture, first started to think about how all the systems around us should be integrated into a holistic approach. Instead of keeping the garden separate from all the other things going on in and around our dwellings, why not incorporate everything in a supportive way? There are many different versions of these principles, but here is the most commonly used: Get to know the land, the way the rainfall pools, where the sun falls and so on. Your land is unique and permaculture gardening is not cookie-cutter. Catch and Store Energy: From sun to water to waste, creating a closed-loop cycle is a key component of permaculture. Apply Self-Regulation and Accept Feedback: This could be feedback from Nature on what is working and not working, or even feedback from your neighbors. Ignoring the signs of a dysfunctional system spells disaster. Use and Value Renewable Resources and Services: A good example of this might be using small branches for a trellis instead of a plastic store-bought version. Precycle , recycle, reuse, compost Design From Patterns to Details: Look for patterns in Nature to work with, such as the way Nature chooses rounded edges and spirals to conserve energy. Integrate Rather Than Segregate: Some plants can support your trees, your trees can support your animals, and so on. By creating synergy, you create less work. Use Small and Slow Solutions: Good design takes time. The more you allow solutions to evolve, the more integrated and sustainable they become. Use and Value Diversity: Diversity creates health and minimizes the loss from disease, drought, etc. Use Edges and Value the Marginal: By increasing the amount of edges with things like keyhole gardens you can increase your own diversity. Creatively Use and Respond to Change: Perhaps one of our biggest agricultural challenges is our desire to shape Nature or circumstances to our ideas, instead of shaping our ideas to Nature and circumstances. Yes, this means some added upfront work, but the long-term payoff is a simple, sustainable system that requires much less time, energy, or resources from you. Using the principles above, here are some ideas to get you started. The basis for growing food crops begins with much more than just roto-tilling a patch and hurling some seeds at it. Solar orientation is going to be your first consideration in permaculture gardening. South-facing land will get the most exposure to sun; north getting the least. Knowing which direction the land slopes is key. The drainage of air and water can make a big difference in what you can crops you can grow. With water in short supply, or expensive if you happen to live in a place where your municipality supplies it for a price, the assessment will also include some way of harvesting and storing rain water and greywater too for later use. For some people, they might live on and observe the land for four full seasons to see where rainwater naturally collects, how the changing sun shifts on the property, and so on. Swales and earth work has to be done early in the project before fruit trees and bushes are planted. Swales and other changes made to the terrain can help prevent flooding, create water catchment, and divert water into gardens or orchards. One of the general guidelines in permaculture is that you should always use gravity wherever possible to move heavy or bulky items. Water fits into this category. Without relying on gravity, you will be pumping the water with electric pumps, an internal combustion engine, or by hand. If the water supply is higher in elevation than the garden, gravity-fed options mean less labor for the gardener, and less wear and tear on the environment. You can consider creating this by placing your water catchment at higher spots on your property, or possibly even on structures. Let gravity move the water, and irrigate the garden with drip irrigation systems to lighten the load even more. Making things do more than one thing, and using sustainable methods of growing crops, are crucial parts of permaculture gardening. Water should be used at least twice: Constructed wetlands, planted with cattails for mulch, or willows for crafts, bio-fuel, or chipping for garden pathways, are a way of cleaning water that has already been used. This way of filtering waste water can even provide potable water at the end of the cycle. Composting and worm farming make your kitchen scraps and garden debris do more than one thing: Crops and Ideas for Permaculture Gardening Biodiversity dictates that you should attempt to grow as many different and non-competing crops as possible principle 10 , so they will shelter and support each other

as they grow. They can provide shade, fruit, nuts, or other harvestable food crops, or building materials such as twigs for trellises to grow other crops on. They can also provide beauty, habitat for animals, or a food source for pollinators. In your area, there is most likely a pool of well-adapted and evolved plants that grow naturally; native types of plants can create a food forest that will produce many types of crops to harvest over the growing season. These can include hazelnuts, walnuts, crab apples, saskatoon, blueberry, strawberry and raspberry plants, and many, many others. Look in any old homesite or contact your local cooperative extension, and see which plants grow well, with little care. These are the ones to look for or raise from seed yourself. Vegetable gardens are an important part of permaculture gardening too, since saving money on organic food is one of the most popular reasons people decide to start gardening in the first place. Whether these are raised beds with a chicken tractor moving around them, a berm and swale arrangement, or a spiral garden, the biggest factor is a diverse selection of different types of plants. Growing the Three Sisters together creates a harmonic grouping for your permaculture gardening: Stacking, or growing several crops that all play well together in the same bed is a smart way to utilize limited growing space; as well as providing support, shade and shelter for each other, they also help protect each other from pests. Companion planting is a way of placing crops that complement and protect each other close together. The pests of one crop will be confused by the scent and shape of the other, which will prevent them getting a foothold. Animals that are commonly raised in permaculture gardens are chickens, especially Bantam breeds or heirloom types which are pest control, manure production and egg and meat producers all at the same time. You can read more about raising backyard chickens here. Fish, such as tilapia can be raised in tanks or ponds, and rabbits are raised in hutches placed above the water of fish tanks so their waste and scraps go into the water, which is then siphoned off to use as fertilizer. It just makes sense The management of all these interconnecting systems means that you as the orchestra leader will have to be on your toes. Once each part of the puzzle is integrated into the whole picture, your goal is to keep it finely balanced and working well together. Adding compost when needed, keeping an eye on pests and monitoring crops, protecting your garden and animals from wildlife predation and planting and harvesting crops is all in a days work. In concert with nature, your harmonious garden will burgeon with life. But each of these books has something unique to offer. Click here for more books on gardening, homesteading, and sustainability. Find her online at O-Garden.

Chapter 3 : Getting Started with Permaculture

Permaculture is a method for designing sustainable systems, yes. Permaculture is more than just design, though. It was created with a code of ethics to guide the design process.

History[edit] Several individuals revolutionized the branch of permaculture. A Permanent Agriculture, a book which sums up his long experience experimenting with fruits and nuts as crops for human food and animal feed. This book inspired many individuals intent on making agriculture more sustainable, such as Toyohiko Kagawa who pioneered forest farming in Japan in the s. Yeomans introduced both an observation-based approach to land use in Australia in the s and the Keyline Design as a way of managing the supply and distribution of water in the s. In the late s, Bill Mollison and David Holmgren started developing ideas about stable agricultural systems on the southern Australian island state of Tasmania. Dangers of the rapidly growing use of industrial-agricultural methods sparked these ideas. They responded with a design approach called permaculture. This term was first made public with their publication of their book Permaculture One. By the early s, the concept had broadened from agricultural systems design towards sustainable human habitats. After Permaculture One, Mollison further refined and developed the ideas by designing hundreds of permaculture sites and writing more detailed books, such as Permaculture: Mollison lectured in over 80 countries and taught his two-week Permaculture Design Course PDC to hundreds of students. Provision for all life systems to continue and multiply. This is the first principle, because without a healthy earth, humans cannot flourish. Care for the people: Provision for people to access those resources necessary for their existence Fair share: By governing our own needs, we can set resources aside to further the above principles. Permaculture design emphasizes patterns of landscape , function, and species assemblies. It determines where these elements should be placed so they can provide maximum benefit to the local environment. Permaculture maximizes useful connections between components and synergy of the final design. The focus of permaculture, therefore, is not on each separate element, but rather on the relationships created among elements by the way they are placed together; the whole becomes greater than the sum of its parts. Permaculture design therefore seeks to minimize waste , human labor, and energy input by building systems, and maximizes benefits between design elements to achieve a high level of synergy. Permaculture designs evolve over time by taking into account these relationships and elements and can evolve into extremely complex systems that produce a high density of food and materials with minimal input. Permaculture draws from several disciplines including organic farming , agroforestry , integrated farming , sustainable development , and applied ecology. Principles and Pathways Beyond Sustainability: By taking time to engage with nature we can design solutions that suit our particular situation. Catch and store energy: By developing systems that collect resources at peak abundance, we can use them in times of need. Ensure that you are getting truly useful rewards as part of the work that you are doing. Apply self-regulation and accept feedback: We need to discourage inappropriate activity to ensure that systems can continue to function well. Use and value renewable resources and services: By valuing and making use of all the resources that are available to us, nothing goes to waste. Design from patterns to details: By stepping back, we can observe patterns in nature and society. These can form the backbone of our designs, with the details filled in as we go. Integrate rather than segregate: By putting the right things in the right place, relationships develop between those things and they work together to support each other. Use small and slow solutions: Small and slow systems are easier to maintain than big ones, making better use of local resources and producing more sustainable outcomes. Use and value diversity: Diversity reduces vulnerability to a variety of threats and takes advantage of the unique nature of the environment in which it resides. Use edges and value the marginal: The interface between things is where the most interesting events take place. These are often the most valuable, diverse and productive elements in the system. Creatively use and respond to change: We can have a positive impact on inevitable change by carefully observing, and then intervening at the right time. Layers[edit] Suburban permaculture garden in Sheffield , UK with different layers of vegetation Layers are one of the tools used to design functional ecosystems that are both sustainable and of direct benefit to humans. A mature

ecosystem has a huge number of relationships between its component parts: Because plants grow to different heights, a diverse community of life is able to grow in a relatively small space, as the vegetation occupies different layers. There are generally seven recognized layers in a food forest, although some practitioners also include fungi as an eighth layer. Large trees dominate but typically do not saturate the area, i. Includes most berry bushes. Plants in this layer die back to the ground every winter if winters are cold enough, that is. They do not produce woody stems as the Shrub layer does. Many culinary and medicinal herbs are in this layer. A large variety of beneficial plants fall into this layer. May be annuals, biennials or perennials. There is some overlap with the Herbaceous layer and the Groundcover layer; however plants in this layer grow much closer to the ground, grow densely to fill bare patches of soil, and often can tolerate some foot traffic. Cover crops retain soil and lessen erosion, along with green manures that add nutrients and organic matter to the soil, especially nitrogen. Root layers within the soil. The major components of this layer are the soil and the organisms that live within it such as plant roots and rhizomes including root crops such as potatoes and other edible tubers, fungi, insects, nematodes, worms, etc. Guilds[edit] A guild is a group of species where each provides a unique set of diverse functions that work in conjunction or harmony. There are many forms of guilds, including guilds of plants with similar functions that could interchange within an ecosystem, but the most common perception is that of a mutual support guild. Mutual support guilds are groups of plants, animals, insects, etc. Plants may be grown for food production, draw nutrients from deep in the soil through tap roots, are nitrogen-fixing legumes, attract beneficial insects, and repel harmful insects. When grouped together in a mutually beneficial arrangement, these plants form a guild. Permaculturists argue that where vastly differing systems meet, there is an intense area of productivity and useful connections. An example of this is the coast; where the land and the sea meet, there is a particularly rich area that meets a disproportionate percentage of human and animal needs. This idea is played out in permacultural designs by using spirals in herb gardens, or creating ponds that have wavy undulating shorelines rather than a simple circle or oval thereby increasing the amount of edge for a given area. Frequently manipulated or harvested elements of the design are located close to the house in zones 1 and 2. Manipulated elements located further away are used less frequently. Zones are numbered from 0 to 5 based on positioning. Here permaculture principles would be applied in terms of aiming to reduce energy and water needs, harnessing natural resources such as sunlight, and generally creating a harmonious, sustainable environment in which to live and work. Zone 1 The zone nearest to the house, the location for those elements in the system that require frequent attention, or that need to be visited often, such as salad crops, herb plants, soft fruit like strawberries or raspberries, greenhouse and cold frames, propagation area, worm compost bin for kitchen waste, etc. Raised beds are often used in zone 1 in urban areas. Zone 2 This area is used for siting perennial plants that require less frequent maintenance, such as occasional weed control or pruning, including currant bushes and orchards, pumpkins, sweet potato, etc. This would also be a good place for beehives, larger scale composting bins, etc. Zone 3 The area where main-crops are grown, both for domestic use and for trade purposes. After establishment, care and maintenance required are fairly minimal provided mulches and similar things are used, such as watering or weed control maybe once a week. Zone 4 A semi-wild area. This zone is mainly used for forage and collecting wild food as well as production of timber for construction or firewood. Zone 5 A wilderness area. There is no human intervention in zone 5 apart from the observation of natural ecosystems and cycles. Through this zone we build up a natural reserve of bacteria, moulds and insects that can aid the zones above it. There has been a growing awareness though that firstly, there is the need to pay more attention to the peoplecare ethic, as it is often the dynamics of people that can interfere with projects, and secondly that the principles of permaculture can be used as effectively to create vibrant, healthy and productive people and communities as they have been in landscapes. Domesticated animals[edit] Domesticated animals are often incorporated into site design, ensuring the efficiency and productivity of the system. The nutrients are cycled by animals, transformed from their less digestible form such as grass or twigs into more nutrient-dense manure. A more specific explanation of how the animals can be used is seen in the chicken design. Chickens can be used to scratch over the soil, thus breaking down the top soil and using the fecal matter as manure creating a sustainable system. However, in the domestication of these animals, the complexity and elegance lie in an effectiveness and efficiency of the

design, including factors like timing and habits to specific areas of a farm. For example, animals require daily attention in a way that is much more demanding than plants. It combines agricultural and forestry technologies to create more diverse, productive, profitable, healthy and sustainable land-use systems. Forest gardens, like other permaculture designs, incorporate processes and relationships that the designers understand to be valuable in natural ecosystems. The terms forest garden and food forest are used interchangeably in the permaculture literature. Bell started building his forest garden in 1978 and wrote the book *The Permaculture Garden* in 1988, Whitefield wrote the book *How to Make a Forest Garden* in 1991, Jacke and Toensmeier co-authored the two volume book set *Edible Forest Gardening* in 2005, and Lawton presented the film *Establishing a Food Forest* in 2007. It is not self-evident whether these tree gardens derived initially from experiences of cultivation and forestry, as is the case in agroforestry, or whether they derived from an understanding of forest ecosystems, as is the case for permaculture systems. Many studies of these systems, especially those that predate the term permaculture, consider these systems to be forms of agroforestry. Permaculturalists may obscure the distinction of permaculture and agroforestry when they include existing and ancient systems of polycropping as examples of food forests. Food forests and agroforestry are parallel approaches that sometimes lead to similar designs.

Chapter 4 : - Getting Started In Permaculture by Ross Mars; Jenny Mars

Getting Started One of the biggest hurdles to overcome is building a Permaculture garden is starting the actual construction. Often people may agonise over the design for months to get it perfect, then come to a complete standstill when it comes to beginning the project.

For those who are just learning about this style of gardening, they may have questions. All you need is a backyard or an area where you can garden, such as a courtyard or even a balcony. How do I get started? The beauty of a permaculture garden is that there is no one way to go about establishing yours. A person is free to individualize theirs as much as they like. In order for a garden to qualify as being a part of permaculture, it must utilize certain principles. The size of the garden will help to determine this, as well as the amount of permaculture principles you will include. Some may choose to incorporate more traditional designs, while others decide to go for a more full blown permaculture look. What are the principles of permaculture? Permaculture hinges on a few different points. First of all, soil preservation is key. Protecting the soil by using mulches and keeping it covered at all times is one way to work with nature, instead of against it. Covering soil allows it to remain safe from rain, which compacts the top soil and washes away valuable nutrients. It also enables the soil to avoid receiving too many direct UV rays, which causes the death of living things such as bacteria, fungus, and other micro fauna. A permaculture garden also uses the plant stacking technique, to emulate their growth in nature. The gardener is given a much better usage of space and a more productive growth season by using this method. It is important to cycle your plants properly, planting new ones as the old ones reach the end of their fruiting. This keeps a garden vibrant and healthy, while avoiding bare patches of soil. Certain perennial veggies can produce nutritious food for years on end. Permaculture gardeners plant their crops in groups, to better protect them from the elements. Your garden is much more resilient when you do not leave plants out by themselves. In addition to plants, various livestock can and should be incorporated into your garden system. How do I go about setting up my garden? Permaculture garden planning can be a large task, which is why experts recommend breaking it down into smaller tasks. Having a design that you know you will stick to is just the beginning. After that, you must determine the scale of the garden, whether it will be large or small. Adhering to the correct growing seasons is beneficial to gardeners. It is recommended that beginners start small and give themselves room to expand their permaculture garden as needed. By placing all the large elements of your garden first, you can work around them. Trees and larger plants should be planted initially, with smaller plants being placed last. Irrigation installation is made simpler by completing the process before all of your major plants have been planted. Building a permaculture garden does not happen overnight. It takes time, dedication and the ability to break one large task into several small ones. The only way to truly learn? By getting out there and doing it! Here are 2 big names in Permaculture that you might want to check out before you get started.

Chapter 5 : Little Homestead In Boise : Getting Started With Permaculture

Permaculture concepts and ideas can be applied successfully from small suburban units to large farming properties. "Getting Started in Permaculture" delivers step-by-step knowledge for a variety of useful projects including: making herb fertilizers, compost, organic sprays for pest control, and much, much more.

This refers to the idea that using tractors and large non-renewable fueled machinery is very often not necessary. For gardeners, this can mean reducing the use of a lawn mower or chain saw, or tilling soil by hand. Now while hand-powered work takes longer, it encourages the body to work harder, promoting personal health and self-care. Equally, by extending the time it takes, it encourages teamwork to get the job done quicker, inciting community. These are all permaculture aspects that demonstrate the deeper value of building a garden. The following tools are a good start for getting yourself going with the garden: You will need to transport this with a good sturdy wheelbarrow. A wheelbarrow of low quality, that is too heavy, or is low in height will hurt your back, so make sure to find something that suits your height and strength. Hoe Hoes come in many shapes and sizes. Choose the wrong hoe, and you could end up with a back injury. They are mostly used for weeding, dragging soil or for taking off top layers of soil, however they can be used in a chopping motion when preparing the soil to create beds. Stirrup and diamond hoes are usually better for weeding, whereas an eye hoe is more suitable for chopping. This will help you move back mulch and dig a hole in your soil that is wide and deep enough to pot your seedlings without causing damage. Wood-handled trowels are better than plastic, which tend to snap if they hit anything hard. Garden Gloves While it might be a good idea to build a few callouses while digging, garden gloves can help protect you when carrying other material. Spikes and thorns can come out of nowhere, as can glass in your beds and some things that bite. Having garden gloves will stop your hands from experiencing wear and tear as such a rapid rate. Luckily garden gloves come in sizes, so make sure to get the right pair as gloves that are too big can make tasks more difficult. Hose or Irrigation A hose should be able to reach everywhere in your garden without dragging over beds and damaging plants, so make sure you have a line of hose long enough for your needs. Due to the damage that hoses can do, often people employ dripline irrigation or sprinklers systems that can be zoned off to water certain sections of the garden at a time. Pickaxe For those making raised beds, a pickaxe becomes a great companion to a hoe. Pickaxes help to break up tougher ground and can speed up the process, especially with compact soil. Design is especially important in order to create a well-thought out garden. However, getting started is just as important. Here are a few key pointers to get you on the rollercoaster. Observe and Record Biomimicry is the backbone of permaculture design. You want to create a garden that uses the natural patterns of nature and cycles biological resources through the site. This will allow you to create a sector diagram and a flow analysis. This will allow you to see how you can use these elements to your advantage, harnessing them and sculpting the land to enhance them. Next you should consider the natural state of the land. Test your soil to understand what it consists of and its pH levels. This will help you to further work out how the soil needs to be improved. After this, consider the natural flora and fauna that occur on the site. For example, if you can see a natural nitrogen-fixer in the garden, what other plants surround it? Are you seeing a ratio of 2: If so, you will want to plant in this pattern. Photo above, courtesy of <https://www.permaculturenews.com/2014/07/10/wild-guild/>: Wild guild of vetch edible nitrogen fixer, fennel edible insect repellent, dandelion edible dynamic accumulator, nettle edible dynamic accumulator. Lastly, consider what is missing. Maybe there is a distinct lack of pollinating insects. Perhaps the soil is so dense that there is no aeration occurring. In this sense, you can get an idea of what needs to be added to improve the land straight away. One thing that many people forget is to record the original observations of the garden. Only by looking back to see the changes you have made, will you be able to make real sense of what is going on. Design From Patterns to Details When you design in permaculture, you want to move from the big to the small. This works in terms of ideas as well as pen-to-paper design. Consider the function of the garden itself to understand what you want to use it for. Are you creating an edible landscape, a medicinal resource, or perhaps a garden for fiber or animal feed? Patterns to details refers to the design from larger concepts to the small. By understanding the functionality and therefore the elements, you can start to

understand the patterns in which they should occur to work together with one another. Equally, say you want to create a rainwater harvesting irrigation system, you take this bigger idea and then zoom into the details of that element, to work out how you will build that. Some might say that the patterns represent how the elements work together to fulfil functions; whereas the details explain how each element will conduct the functions.

Inputs and Outputs When you have a rough idea of the elements you want in your garden fruit trees, perennials, compost pile, rainwater harvesting system, etc , then you need to consider all their inputs and outputs. An input is something that an element needs and an output it something it produces. Take an herb spiral, for example. That herb spiral needs daily watering, sunlight, and healthy soil. Some of the herbs may need shade. It will produce herbs for culinary, medicinal, and cosmetic purposes, while serving as an insect repellent, aromatherapy source, ornamental feature, rainwater harvesting device, and herb nursery for planting elsewhere in the garden. By considering the inputs and outputs, you can more efficiently work out where to place this feature. The daily watering and usage suggest it is placed somewhere that is easy to access from the house. While an herb spiral is designed to shade some plants and provide light to others, you may consider aligning it so the Northern side is shaded by a tree to help protect the plants that need less sun, while its leaf fall will help to improve the soil and the transpiration process will create more moisture in the air.

Functions Served by Many Elements For a permaculture garden to be effective, it needs to be resilient. Resilience is created through diversity and this is exactly what can be seen in every aspect of the garden. In the wider sense, look at every function that occurs in the garden. This could be water collection, energy capture, growing food, making medicine, providing shade. Every single function should have more than one element doing that function. This function should be served by many elements such as sheet mulching to hold water in the soil, rainwater barrels for storage, an electric and a hand-pump, a hose straight to a faucet, and so on.

Elements are Multi-Functional To create an exponential level of resilience and efficiency, we want all our elements to be multi-functional. If each plant or element only does one thing, then we end up managing a lot more. For example, say you want to brighten your garden with some flowers. Why not choose to plant Marigolds at the edges of your beds. Marigolds excrete a toxin from their roots that kills harmful pests, while the orange flower attracts pollinators that help the garden to thrive. Not only that, marigolds are edible and taste like citrus on salads and in soups. As a medicine, Marigolds can be used to treat poorly healing wounds, reduce inflammation and swelling, deal with ulcers on the skin, reduce fever, and help with muscle spasms. The flowers you wanted to increase the aesthetic now serve 4 functions beyond looking pretty.

Relative Location In this manner, it makes logical sense to group certain things together. Guilds, for example, are a way of having different plant elements serve functions in their own mini universes throughout your garden. You may have a plant that fixes nitrogen, one that taps minerals, one that attracts pollinators, an insect repellent, a wind barrier, a weed suppressant, and so on. Alternatively, you may consider that plants that need a lot of water should be placed in areas that receive a great deal of rainfall or where the water source is located. An example of this is people planting mint under water spickets so it can benefit from the hose drips.

Relative location refers to placing the elements of your garden logically to help them serve and preserve their functions. Imagine a function to be its own mini system. You take one element and consider which mini systems it is involved in. You then place it in the most logically energy efficient place for it to work in all those systems effectively. Consider all the inputs that your garden is going to need. Before jumping to buy all those things, also look at your outputs. If any cross over, then you can strike them from the list. During this stage, you may want to get a plant nursery going so you can start to sprout seedlings. Not everything needs to be grown this way; some seeds can be planted straight in the ground. It also means you can grow seedlings and take cuttings, rather than having to buy and plant lots of seeds. Rainwater harvesting can be far more ingenious than this and covers a whole host of techniques. The main idea of employing rainwater harvesting in the garden is to slow, stop, and spread water around your site, before it runs off. This allows the plants to use water that would otherwise have trickled away. By doing this, you will need to water your garden far less frequently. While there are many rainwater harvesting techniques, some of the most famous are terracing, swales, raised beds, and waffle gardens. Terracing, for example, refers to the process for cutting steps on contour in to a sloped garden. If you are building a garden on a hill, rainwater rushes down the hill without having time to sink into

the soil. Terracing, through the creation of steps, gives a plateau for rainwater to stop and slow down. It can then spread along this platform.

Chapter 6 : Permaculture - Wikipedia

Download getting started in permaculture or read online books in PDF, EPUB, Tuebl, and Mobi Format. Click Download or Read Online button to get getting started in permaculture book now. This site is like a library, Use search box in the widget to get ebook that you want.

The field is constantly changing, as pioneers discover new best practices. Every winter I hunker down with a few of my favorites and try to glean new insights. My library has large-scale design manuals, like *Edible Forest Gardens*, with countless reference tables that are incredibly valuable when it comes time to planning the nitty-gritty details of a new food forest. I also love more practical references, that take you through smaller scale real-world operations, like *The Suburban Micro Farm*. These are truly textbooks of permaculture, laying out every single micro-detail in a no-nonsense manner. This book covers everything, and is literally the textbook for permaculture. The *Permaculture Handbook* While *Edible Forest Gardens* is written like a textbook, *The Permaculture Handbook* takes much of that same information and brings it to life with practical examples and a more accessible writing style. This measured approach still lets you keep your excitement while at the same time reining you in so that you still get it done in the end. I also really love how he includes animals Ch. Though animals are not for everyone, some people find them essential to their home production happiness and you need to know how to incorporate them appropriately so as to not destroy your plantings. You cant reasonably tend 30 acres. Just about any permaculture book, including *Edible Forest Gardens*, will tell you that starting with more than an acre is unrealistic. The suburban micro farm has all the information you need to get started in your own backyard. Everything is very accessible and written to appeal to both suburban permaculturists the target audience as well as larger scale landowners trying to intensively manage a small area of land. In his alpine environment, his use of micro-climate is one of the keys to his great success. He ranges pigs, cattle, and poultry along with low maintenance perennials, and skillfully planted annuals to feed his family in an otherwise unforgiving climate. This guy is basically the permaculture Macgyver, and he finds a way to make everything work with ingenuity and limited resources in an otherwise unforgiving climate. Most of the principles are best applied to large landowners with at least 5 acres to work with, rather than small urban permaculturists. *Farming the Woods* With a very different take on permaculture, *Farming the Woods* gives practical and actionable advice for earning money and producing crops within existing woodlands. All the discussions are based on the notion of profitability, which may not appeal to all readers. Actionable instructions and sustainability focus. Not for suburbanites, as everything is based around owning at least a few acres of woodland. It also only focuses on profitable crops rather than homestead food crops. Mushrooms and mycorrhizal associations are key to any permanent forest-based ecosystem, and just about every other permaculture book only barely grazes the subject. Each section starts with a super technical discussion of mushroom growing conditions think agar plates, fume hoods and chemistry labs. The author then breaks it down for the laymen and gives you simple backyard based instructions. He provides practical solutions for people to use what they have to improve soils and harvest a bountiful mushroom crop, what more could you want? Everything you need to know to grow mushrooms or incorporate mushrooms and fungal relationships into your permaculture setup. It can get a little technical at points, but the author always breaks it down afterward. It was still a relatively obscure term, and the editors thought it would just confuse potential readers. When the second edition came out in , permaculture is listed right in the subtitle, front and center. The setups are beautiful and designed for maximum curb appeal. With spectacular photos in the book as well. These books are excellent resources, but not appropriate for the casual backyard permaculturist. While manipulating earth and contour is central to permaculture as a system, most permaculture books focus on the plants and biological interactions. They only give passing attention to the very practical need to prevent erosion and maximize stability in long-term permanent plantings. Our land is incredibly wet, and we have a lot of work to do in capturing and sequestering water to prevent runoff and flooding during heavy rain events. The downside€it covers it from a very technical and professional viewpoint. The pictures are also all in black and white and not that clear. *The Permaculture Market Garden: A Visual Guide to a Profitable Whole-systems*

Farm Business The Permaculture Market Garden is one of the very first attempts to create a business and marketing strategy for permaculture farmers. For the most part, permaculture methods are confined to home gardeners and idealists, but if permaculture is going to be a viable long-term solution it needs to be a viable business as well. He obviously has a talent for drawing, and instead of pictures, the figures are hand drawn or watercolor painted landscapes, designs and visions for a permaculture food system. He provides detailed succession plans for annual growing beds, interspersed with perennial plantings and herb alleys. The book proposes a bit of a hybrid system, as it does still advocate row crops and the use of machine harvesting while sticking to the basic tenets of permaculture. Beautifully illustrated and provides practical solutions for turning home permaculture into a way to feed the world on a large scale. The book still embraces many conventional agriculture practices, row crops and machine use which may not be practical for casual home permaculture enthusiasts hoping to earn a side income.

Chapter 7 : Best Permaculture Books – Practical Self Reliance

Permaculture is as much a point of view as it is a set of principles and techniques, and in a culture that focuses mostly on things instead of processes and relationships, it can sometimes be hard to wrap your mind around the interconnections that permaculture makes. Being with others who get it really helps.

The basics you need to get started in permaculture confidently are here. [Click here to take the course now.](#) Definitions of sustainability are usually very fuzzy. In permaculture, we have a metric for measuring sustainability: So, What is permaculture? To learn more, read the article [What is Permaculture](#). Permaculture is a method for designing sustainable systems, yes. Permaculture is more than just design, though. It was created with a code of ethics to guide the design process. To learn more, see the article [Permaculture Ethics Design Fundamentals](#) A lot of people get caught up in the techniques of permaculture and lose sight of the design fundamentals. Techniques are how you solve a very specific problem, whereas design is about the way your system functions. Design involves using a clearly defined goal to develop a plan of action, which is adjusted according to real-world feedback. To illustrate the difference between design and technique, and the importance of design, compare two examples: Insert key in ignition. As you can see, to carry out the design i. Without the design, however, there is not much point to the technique. Going back and clarifying your goal from time to time is a good practice to get into. I cannot stress enough how important the design fundamentals are. Without a good grasp of the design basics, you will only create a project you are happy with by accident. I highly recommend taking our following free online courses: Whether you are designing a house, a water-harvesting system, or an agricultural system, you will need to use approaches that are appropriate to the climate you are in. If you would like to be notified of our updates and courses, subscribe to our mailing list.

Chapter 8 : Getting Started in Permaculture - Melliodora Wholesale

I recently started my journey in permaculture and I'm already finding the process a little overwhelming. I am studying an online PDC so as to at least have a basic understanding of the principals with a view to buying some land and setting up my own permaculture system. The question i have to people.

Chapter 9 : 9 Steps to Create a Permaculture Garden – New Life On A Homestead | Homesteading Blo

Permaculture gardening means "permanent agriculture" and it is defined as working with natural forces - the wind, the sun, and water - to provide food, shelter, water, and everything else your garden needs besides plants and seeds.