



PERMABUNDANCE

The Exciting Permaculture Revolution!

Observation Journal

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SURVIVING AND THRIVING SERIES

Whether you're a complete novice or an experienced gardener, this Observation Journal will give you the knowledge and information you need to plan a regenerative and self-sustaining system on your property that can weather any future socio-economic events. Use this journal to start your journey towards a more sustainable and resilient future today!





PermAbundance Observation Journal

It is so important when you are assessing your property, to keep a journal and record all of your observations. First, there will be your preliminary observations before you start designing, and your continuing observations over the seasons and following years. This journal is merely a preliminary guide to get you started and make your planning simpler.

I originally created an observation journal for myself. I've learned so much over the years and this journal will reflect that and what things I didn't realize were so important when I was starting out. You too will learn from experience what issues matter most to you and how to address them as you gain more knowledge and confidence with your garden.

Observation is the most important skill of a PermAbundance gardener and will keep developing as time goes on. Some observations will be obvious, and others not so much! Once the initial work is done, all you have to do is maintain your garden.

There are no failures in PermAbundance! Just learning experiences! You will constantly be reassessing your observations as you go along. If something doesn't work out, figure out why and then rethink it. No work is ever lost. It just needs amendments now and then to meet your changing expectations and environment.

Keeping a journal is an ongoing effort to get as much information as you can about the elements of your site and their correlations and relationships. With it, you can be more aware of your PermAbundance garden or farm and develop strategies as it continues to evolve.

It's very helpful to go through magazines to find pictures of gardens you like. Cut them out or print them from your computer after doing some general research. It will get you to begin visualizing your own dreamy PermAbundance oasis!

Please read through this journal first as part of your observation preparation. I've included this journal separately so that you can print and reprint as many times as you need to.



USEABLE AREAS

Analyzing Your Property

Try to visualize all of the areas of your property covered with PermAbundance growth. Look at your land like it is already planted and covered with your dream vegetation and ecosystem.

What do you see?

What is your actual usable amount of property?

Are there useful areas along the edges of your property?



MAIN GOALS

Basic Motivations And Considerations

It is vital to assess your current and future plans for your property. These questions will give you aspects to consider regarding implementation of the goals you have and how you want your overall design to reflect your needs and desires.

Are you trying to increase your property value?

Are you looking to create an energy-efficient home? Any ideas on how to do that? Solar?

How important is it to design a PermAbundance plan for your land? Why?

Is your goal to live more sustainably? Why?

Would you like an edible garden? To eat food you grow yourself? To save money feeding your family?

Do you want to plant an aesthetically beautiful visual ecosystem? Such as a landscaped garden with flowers, trees, shrubs?

Goals For PermAbundance Design

Use your imagination and work from what you have, then decide what you really want. Dream BIG! Many of these things can be incorporated over time as you deem fit.

Which type of garden styles are your favorites? Check all of your choices.

*Vegetable Garden*____ *Formal Garden*____ *Cottage Garden*____
*Kitchen Herbs*____ *Edible Perennials*____ *Flower Garden*____
*Pollinator Garden*____ *Night (Moon) Garden*____ *Medicinal Garden*____

Determine what structures you'd like to have on your property. Check all that apply.

*Deck*____ *Fire Pit*____ *Garden Paths*____ *Arbor*____
*Pergola*____ *Gates*____ *Fences*____ *Patio*____
*Swimming Pool*____ *Gazebo*____ *Water Feature*____
*Trellises*____ *Pond*____ *Greenhouse*____ *Sauna*____
*Hot Tub*____ *Rain Catchment*____ *Sculpture*____
*Kitchen garden*____ *Barn*____ *Silo*____ *Sheds*____
*Potting Tables*____ *Rock Wall*____ *Cooking Area*____
*Benches*____ *Quiet Zen & Meditation Area*____
*Play Set*____ *Basketball Court*____ *Tennis Court*____
*Putting Green*____ *Tree House*____ *Bird Bath*____ *Other*____

What types of themes and shapes would you like to see in your garden design? Check all that apply.

Formal ____ *Informal* ____ *Circles* ____ *Curves* ____ *Oval* ____
Rectangles ____ *Squares* ____ *Tiered* ____ *Rustic* ____ *Other* ____

What specific types or textures and landscaping materials would you want in your design? Check all that apply.

Gravel ____ *Concrete* ____ *Brick* ____ *Stone* ____
Flagstone ____ *Slate* ____ *Wrought Iron* ____ *Other* ____

How do you want your landscape to make you “feel”? Check all that apply.

Cheerful ____ *Relaxing* ____ *Playful* ____ *Meditative* ____
Welcoming ____ *Bright* ____ *Social* ____ *Private* ____
Structured ____ *Calm* ____ *Peaceful* ____ *Other* ____

What types of edible plants, trees, etc. do you want to include? Any edible perennials (such as nuts, fruits, berries, etc.)?

Are there specific plants that you would really love to harvest?

Do you still want to maintain a lawn? What will it be used for and how much of it do you need?

What type of color schemes would you prefer?



BASIC OBSERVATIONS

"A system of design that provides all of the needs for humanity in a way that benefits the environment." – Geoff Lawton

History

It's helpful to know the history of your land such as previous owners and what the land was used for. Was it used as a farm or was there possibly some logging done on the site?

Local Rules

Be sure to check for local covenants and regulations that stipulate how you can use your land, such as establishing a chicken coop, raising grazing animals, or starting a compost heap for example.

Access Points

Make note of all boundary lines, property borders, roads, trails, pathways, creeks, streams, rivers, lakes and other access points that affect the flow of your property. What is currently there? What do you need?

Views

Make note of where all the best and worst views are on your property. What views would you like to preserve or cover up? How do you plan to address them in your design?

Privacy

Are there any privacy issues? Do you have noise pollution that you want to minimize?

Ideas about what can be done about it?

Septic Locations

Be sure you know exactly where your septic system and tank is positioned on your property. Also important, is to know where your leech field is located. Do you know where the sewer lines come into and cross over your land? Or do you have a well?

Income

Is the property currently generating any income and by what means?



Geographical Zones

First off, determine which geographical zone you are in. There are three overall zones in the world. You should know which zone your part of the world is in.

Temperate Zones

There are Northern and Southern Temperate Zones. These are places where the Sun never shines directly overhead and the temperatures range from warm to cool, usually with all four seasons.

Frigid Zones

These zones are the Polar regions in the extreme North and South of Earth. These are the coldest areas on Earth and are almost always covered in snow and ice. The rays of the Sun are always slanted, which is why it is so cold on the surface.

Torrid Zones

These are also called the Tropics. The Tropic of Cancer lies on the north and on the south is the Tropic of Capricorn. These are the hottest zones on the planet.

Notes

US Growing Zone Map

The US Growing Zone will tell you what your climate growing zone is. This is very handy when you are researching indigenous plants to grow to keep your ecosystem authentic and hardy. Here's the website:

https://www.brecks.com/zone_finder

Search The National Centers For Environmental Information

Here you will find a plethora of information regarding the weather history of your local area. Here is the website:

<https://www.ncei.noaa.gov/>

You can gather all sorts of historical data and up to date information on climate trends and averages. This should give you a great idea of what climate differences there are between seasons and what to expect in your local area on average, seasonally and yearly.

Specific Data To Research

After researching The NCEI and NOAA sites, make note of which direction the wind generally comes from and what the annual rainfall patterns are in your area.

Does this include flooding, snow, storms, tornadoes, fires, hail, hurricanes, earthquakes, mud slides, sinkholes or any other potential natural disasters etc?

What is the exposure of your planting areas to the direct (hot) sun, (cold) winds and shade?



STRUCTURES

Take into consideration your energy needs and which structures will need electricity, water, etc. It's a good idea to be sure your buildings are on a slope so as to create good water drainage and solar access. The ancient Greeks were masters of this.

What types of buildings, fences, barns, sheds, planting tables etc., and other structures are on your property? What is the condition of them?

Do the current structures make sense in your vision of how they will be used on your property? In other words, can they be used as is or do they need updating, rebuilding, demolition, modifying or perhaps moved to better suit your needs?



GEOGRAPHY

Observe your geography carefully. It's highly recommended that you use Google maps to get an aerial / topographic "base map" screenshot and terrain view of your property. Put in all the boundaries first. From there you can draw in the roads, large trees, access points, power lines, structures, paths, water elements and specific areas of vegetation, hills, etc. Sketch in where you find microclimates.

General Notes

Elevation

You should also obtain an elevational profile of your property. This is so helpful when you are trying to determine slopes and drainage as well as the effects of airflow.

Do you have contours and major changes in elevation throughout the property?

What types of ditches, swales, large rocks, and gullies are there? Draw those onto your base map.

Water Sources

Are there any bodies of water? Draw those in on your base map. Any unique features such as small creeks, waterfalls? What is their relationship to the rest of your property?

Unique Features

Determine where your highest spot and lowest spots are. These can also be drawn onto your base map and will help with visually seeing where your water runoffs and drainage spots are.

Potential Problems Or Challenges

Do you see any potential issues or problems that may arise due to the geography of your location? Such as very steep slopes, lots of erosion, overworked and infertile land or very deep ditches?

Zone Plotting

In Chapter Three you will find a section outlining 'Permaculture Zones'. The purpose of these zones is to create a positive flow of energy throughout your entire PermAbundance oasis, starting with your house (Zone 0). It is to place areas that need the most attention and are the most active, as close to the home as possible. For example Zone 1 is the closest to the house and is where you will plant herbs and vegetables or drop off things in the compost pile. These are the areas you access the most. The farther away the zones are situated, is where the least amount of activity is needed.

Add your Zones to your base map. Get a good idea how far apart the zones should be and where your pathways to each zone are. This is an exercise in efficiency. The more efficient, the less work for you.



WATER SOURCES AND SUPPLY



How your garden or farm gets its water is a top consideration and priority when plotting out your designs.

Water Sources

Are there any large bodies of water on your property? Such as, a river, lake, beach, stream, creek, pond, etc?

Where does your drinking water come from on your property? For example, on-site water cistern, your own well, or municipal water supply?

How much rainfall on average can you count on? What times of year is it generally expected?

Where does water gather on your site? Are there areas of standing water?

Where does water go when it drains from your property? Such as, mountain or hill run offs, arroyos, ditches, swales or into other water sources?

Catching Water And Storing It

Calculating Water Storage

You should calculate how much water you will need to give your garden or farm. Here is a website that will do the calculations for you after you enter in the amount of rainfall and the surface area.

<https://www.calctool.org/other/rainfall-volume>

Be sure that your main water storage container is at the highest point of your property. You can divert runoff water to your main water storage containers by creating water harvesting drains. Reticulate plastic irrigation pipes to divide and set up a network that utilizes gravity with your stored water. This also works great when catching roof top water from your gutters. Don't forget to include gray water, rain barrels and containers.

General Notes And Observations On Water Catchment



PLANTS, TREES, FOLIAGE

Identifying the plants, trees and weeds around your property can be a daunting task. With the use of new technology, you can now easily identify many species of plants, trees, and weeds. Mobile apps make it as simple as taking a picture on your phone of the flowers, leaves, stems, bark, branches, etc.

Fortunately, there are many apps and a lot of them are free or have some limited free features. This makes identification quick and easy so you can decide which plants, trees and weeds are beneficial and which are not to the design of your PermAbundance heaven. Some allow you to choose the specific “organ” (leaf, flower, fruit, stem, bark etc.) This makes identification a lot less work and hassle.

Here is a link to the current top ten apps according to [BackGarden.org](https://backgarden.org). I am not endorsing any of these apps. I’m just giving you a place to get you started. There are so many to choose from and not all are on this list. Do your research on which app you think will best meet your personal needs.

Be sure to research each plant or weed you find to determine if it’s useful or not to your garden.

(Top 10 by [BackGarden.org](https://backgarden.org) as of February 2023):

<https://backgarden.org/plant-identification-apps/>

Identify Weeds

Where are weeds currently growing in your garden or farm?

List the indigenous weeds.

List the invasive weeds.

Which weeds can be useful in your PermAbundance garden or farm?

Identify Plants

Identify and list edible plants and flowers by name and designate whether they are indigenous or invasive.

Identify and list non-edible plants and flowers by name and designate whether they are indigenous or invasive.

Which of these are wild and/or poisonous?

Are there any mushrooms? Identify and list here.

Does the growth of any plants on your property look sick or failing? Can you tell what the symptoms are?

Which of your plants are self-seeding?

What are the most dominant and healthy plants in your growing spaces?

What plants do you want to keep and which ones will you remove?

Identify Trees

Identify your trees and determine their purpose. Is it useful to your design or are they random? Are they indigenous and healthy? Are they planted strategically, such as wind breaks?

Tree Planting

Determine the density of the trees you have and plan how you want to use these areas. Decide on which tree systems you need to fulfill your plans. Do you want farm forestry, or to create an orchard or food forest? Maybe all three!

Does anyone living on the property have allergies specific to any of these weeds, plants or trees?

Fences

It's advisable to plant along a perimeter fence. Something you can install to follow the main roads and connect with your other fences. Use hedgerows and plant "living" fences everywhere possible.

Notes For Planting On The Edges

More Things To Consider With The Growth On Your Property

Look for wind shearing which can tell you a lot about strong, steady, recurring winds and also the moisture levels of your soil. Plants want the ultimate situation to grow strong and healthy. Observe the nature of your garden or farm and remember that indigenous plants learn to survive their environments. So try to imitate nature as much as possible to create beneficial relationships in your ecosystem. You don't want your plants to compete for resources. You want your plants to cooperate with each other. If you have a windy area, choose plants that have small leaves so they don't lose as much moisture. You should also choose these types of plants, trees and shrubs to create natural windbreaks. Nature has a way of helping itself! This should be a focus of your design.

Other Observations Of The Current Ecosystem



Good quality and healthy soil is vital to the success of your garden or farm. It's very important to know what type of soil you have and what condition it is in. Refer to Chapter Two and Chapter Five in "PermAbundance, The Exciting Permaculture Revolution".

Types Of Soil On Your Property

In Chapter Two, I go over the different types of soil. Be mindful that you may have different types of soil in different locations on your property. It's important to observe which types of soil you have and where they are located. Also important is where drainage occurs on your soil.

In order to determine what type of soil you have, you must test your soil. There are four tests you can perform yourself to determine the pH levels in your soil. This at home pH test is explained in Chapter Five in the 'Soil Test' section. Or you can send your samples to a professional laboratory for a more accurate analysis which will give you a better picture of what your soil may be lacking.

Your Soil

Which of the following types of soil do you have on your property? Clay, sandy, silty, loamy, chalky or peat? Or possibly combinations of these types of soil?

Have you seen any issues with drainage, such as water leaking into your basement or cellar?
Puddles on your property with standing water?

Do you see any soil erosion? Make note of where it's located on the property.

Remember that you can repair and build up your soil and amend it with compost, peat moss and sand. Add mulch and cover cropping to protect and build up your soil's organic matter. In the book you will also find natural and completely organic bio-fertilizing methods such as using compost teas to infuse microbes into your soil.



ANIMALS AND INSECTS



First of all, be sure that you have room to establish pastures and specific crop areas, if you plan on using larger domestic farm animals such as cattle, sheep, llamas, pigs etc. Don't forget that you will need to grow feed crops for those critters as well.

Watch carefully and identify animals, snakes, birds and insects that traverse your property. Observe what they eat and denote those things, such as other insects, flowers, leaves or other animals, etc.

Wild Animals

What wild animals live on or cross through your property? Cougars (mountain lions), coyotes, wolves, beavers, squirrels, skunks, raccoons, rabbits, moles, badgers, wild pigs, etc? List them.

What is their life cycle? Are they seasonal or yearly neighbors? What do they eat?

Birds

What species of birds visit your property? List them and designate whether they are seasonal or all year round species. Most likely all of them are indigenous.

What do they seem to like eating? Insects, flowers, or plants (veggies, berries etc.)

Insects

What types of insects (indigenous and invasive), flying and not, and worms are there? Bees, butterflies and moths?

List any lizards or amphibians as well as spiders (i.e. Black Widows) and scorpions. Observe where the concentrations and nests of these creatures are.

Pay attention to where these creatures are thriving. Around water sources, dry patches, fields and near the structures as well as around any plants and trees.

Bats

Bats are pollinators and also great for gardens. They eat all the bad insects and their guano (feces) is free. It's a completely natural fertilizer and loaded with soil building ingredients. Look for areas that could be nesting areas for them. Usually they like dead trees. You can also build them box style houses on tall poles where they can rest during the day. There are lots of instructions online for building these bat houses.

Don't forget that all of these critters, including insects, will need and use water so look to see where their nearby sources are on your property.



LOOK FOR PATTERNS



CI

PermAbundance with permaculture is a design system that tries to mimic natural ecosystems and relationships to create sustainable, healthy, resilient and self-sufficient human habitats. Be sure to pay close attention to every pattern you see. There are several types of patterns that occur in permaculture.

1. Observe and map the natural and built up areas surrounding your land so that you can identify patterns of energy flows, such as water, sunlight, wind and wildlife movements. This information will assist you or your designer to plan the placement of different elements in the design to best take advantage of these energy flows.
2. Permaculture designers use polycultures, which are mixtures of plants that grow well together and provide multiple benefits such as soil health, pest control, and nutrient cycling, rather than relying on single crops. Observe the polycultures that currently exist on your land and look for patterns.
3. Where different ecosystems meet, there is often an area of increased biodiversity and productivity. Pay attention to the patterns surrounding the edges and hedgerows. The edge effect can increase the diversity and productivity of a permaculture design by creating intentional edge areas between different zones and elements.
4. Permaculture designers try to create designs that provide multiple functions and benefits, often by stacking different elements together. Be sure to look for plants that can be stacked together and observe the patterns that come from that. For example how one helps the others around it. How do they intermingle to provide benefits to each other? Observe the benefits of those patterns and jot them down on the next page.

Miscellaneous Notes And Other Observations

That's it! Now you're prepared and ready to get busy digging in, planting and enjoying the fruits of your labor! Have FUN and be sure to involve the whole family. Happy PermAbundance!

