



7 STEPS TO SUCCESS:

FINDING LAND FOR THE PERMACULTURE HOMESTEAD & FARM OF YOUR DREAMS

How do you choose the RIGHT piece of land for your homestead, farm or agricultural goals?

Imagine the heartbreak you might feel upon realizing you bought the wrong piece of land for a homestead!

You tried to make it work but the land fought you every step of the way. Your bank account is empty. You are exhausted and think to yourself "It shouldn't be like this!"

But what happened??

It is not uncommon knowledge that a homestead or farm takes a lot of work, time and reasonable amounts of money.

Like a child trying to place a round peg in a square hole - adults sometimes unknowingly do the same thing.

Developing a garden on bedrock is not very easy. Tending an orchard on a 18-degree slope is a tedious chore. You want to avoid difficult scenarios when it is possible.

This book will help you get the round peg in the round hole, by guiding you through the areas to evaluate a piece of land.

It will help ensure that the land is well suited for your needs and that your needs are well suited for the land.

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Why careful evaluation of a homestead or farm site matters

To develop a farm or homestead, especially if a person is starting with raw land, takes years and hundreds of thousands of dollars.

Not every site is suited for every venture.

Humans tend to think we can do anything anywhere. This is true to some extent, but the cost is always added energy (time or money) or increased long-term maintenance.

Imagine starting a veggie farm in the Sahara Desert. Yikes.

It is doable - you might need to import incredible amounts of compost, grow indoors with cooling and truck in water, but it is doable.

But does it makes sense??

The true cost of these added energies to accomplish a goal is in the livelihood of future generations.

The degradation of the environment, use of fossil fuels and pollution added are all unseen casualties of something as simple as amending a garden.

Permaculture recognizes that **different types of land have different advantages and disadvantages** and aims to play these in our favor. We hope to reduce the overall energy (time or money) required to develop and maintain a homestead or farm.

The earlier example of growing veggies in the Sahara, while probable, when analyzed by most people might seem crazy.

That is the point - most anyone can recognize that the effort required to have a farm in the Sahara will outweigh the profits or the energy available by the farmer.

But can you recognize more subtle, but potentially still costly, disadvantages to a site?

A more likely scenario is selecting between several parcels in the Rocky Mountains of Montana for example. We can assume that they are all, in a broad-stroke similar, being in the same bio-region.

While there is not one correct piece of land, there are better ones than others for your specific needs.

Between the similar sites, how do you choose?

Every one of the sections in this book will help you determine how well suited a piece of land is for your intentions.

Use every tool available in this book to compare the advantages and disadvantages of potential homestead or farm sites.

1) Your Land Plan



What do you want to do with the land? Will the site and climate support it?

Human & Agricultural

Take some time to dream and scheme. Make a list of all the most important human and agricultural aspects of your homestead or farm-to-be. List them in rough order of importance. For example:

- 1) 1/4 acre veggie garden**
- 2) Green House**
- 3) Small Orchard**
- 4) Poultry (chickens, ducks & turkeys)**
- 5) Small Livestock (goats, pigs, and sheep)**
- 6) Pasture to support animals part of the year**
- 7) 2-5 acres for cereal crops**
- 8) Wild / Natural land**
- 9) Space for a rental unit**
- 10) Shop / Barn**
- 11) Etc.**

This list is not meant to be anything close to a final development plan. It is just a list to refer back to with your desires - the reasons you are wanting land.

Land Characteristics

You will also want a separate list of desired attributes of your land. Such as:

Must Have:

- 1) **Well, minimum of 20 GPM**
- 2) **Ag Soils**
- 3) **Power on site or nearby**
- 4) **8+ month growing season**
- 5) **Low fire danger**
- 6) **Plenty of Timber**
- 7) **Clay soils for natural building**
- 8) **Slopes less than 15 percent**
- 9) **Variety of micro-climates**
- 10) **Minimum of 20 acres**
- 11) **Mixed forests**
- 12) **Privacy**
- 13) **Etc.**

Nice to have:

- 1) **Structures**
- 2) **Year-round surface water**
- 3) **Close to town**
- 4) **County ditch water for supplemental irrigation**
- 5) **Etc.**

These lists will be useful in cross-checking a site and it's characteristics to determine how well you and the land fit.

2) Location



Where are you going to buy land?

Some of you already know where you want to live and this is already settled. This was our case. We had moved to a small community 4 years earlier and fell in love with the area. Which meant despite the high costs of land we bought there.

For some people, the possibilities of where to buy land might be wide open.

Bioregions

You want to consider the ecosystem, and its latitude, to look at what will be challenges and advantages of that region.

The following are the most common major regions where people may choose to homestead or farm.

Forest Bioregion

Forest ecosystems are broken into tropical, temperate or boreal forest based off their climate.

Challenges:

- Topography / Elevation can make moving & working around the land harder
- Tropical Forests don't have frosts to kill off pests or diseases
- Temperate / Boreal: Have frosts and snow
- Temperate / Boreal: Shorter growing season
- Temperate / Boreal: Might have challenging soils
- Temperate / Boreal: Somewhat brittle Environment (easier to damage*)

Advantages:

- + Often resources, such as timber, are abundant
- + Often water is abundant
- + Topography / Elevation can be useful for gravity fed systems
- + Tropical Forest: year-round growing season
- + Tropical Forest: Might have good soils
- + Tropical Forest: More non-brittle environment (harder to damage*)

* A fantastic [book](#) on ecosystems and how to restore them is Allan Savory's [Holistic Management](#). He has developed a classification system of land, based off the amount of humidity which dictates how brittle or not a landscape is. The more brittle the land, the easier it is for human actions such as grazing, to damage and subsequently turn the land into desert.

Grassland Ecosystems

Grasslands are typically temperate or tropical regions characterized by prairies, savannas, and shrubland.

Challenges:

- Often, resources such as timber are less plentiful
- Water tends to be harder to find
- Harsh weather such as winds can be difficult
- Topography / Elevation is relatively flat or low making gravity fed systems harder
- Can have frosts and snow

Advantages:

- + Topography / Elevation is relatively flat or low in change making land more usable & accessible
- + Land can often be found cheaply

Desert Ecosystems

Desert ecosystems are areas that see less than 10" of precipitation a year.

Challenges:

- Little water
- Often, resources such as timber are less plentiful
- Water tends to be harder to find
- Harsh weather such as cold nights and hot summers can be difficult
- Soils are often less than desirable

Advantage:

- + Land can often be found cheaply

Latitude North or South of the Equator

Note the distance from the equator of the ecosystem. The closer to the equator a place is, typically, the warmer it is.

Conversely the further a place is from the equator, typically, the colder it is.

For example, a forest ecosystem in California will have different characteristics than a forest ecosystem in Alaska. California will have overall warmer temperatures, longer growing season etc and these are MAJOR differences despite being the same bioregion.

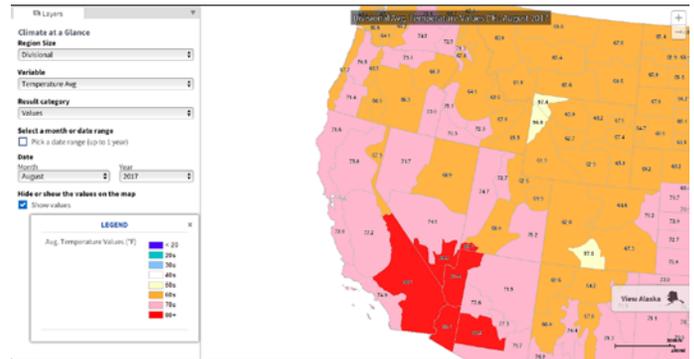
Climate

Looking at the history of weather data such as average, minimum and maximum temperatures, precipitation and wind for a particular area can help give you a picture of the overall climate.

NOAA has available many climate mapping tools that will help you get data including temperature, precipitation and more for most areas.

NOAA's Climate at a Glance mapping tool: <https://www.climate.gov/maps-data/dataset/monthly-climate-conditions-interactive-map>

The image to the right is average temperatures for August on the west coast of the US.



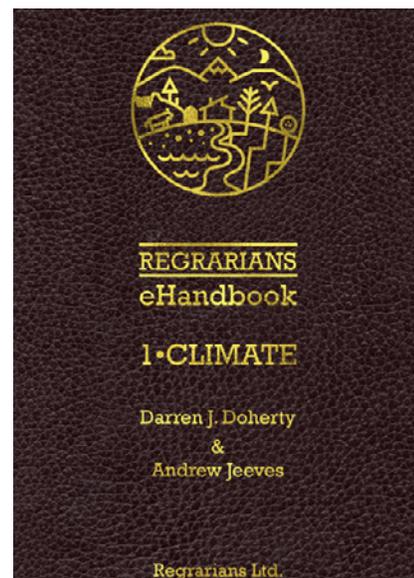
This climate information can give you a general sense of the weather of an area. It is important to keep in mind that these weather records are general, and from site to site may vary more than you would think.

You can begin to assemble a picture of what an areas climate characteristics are like and make broad assumptions about:

- Length of growing season
- Ability to harvest rainwater
- Precipitation / Drought cycles
- Difficult winter weather

For more information about climate (and more) check out the Regraian's Handbook:

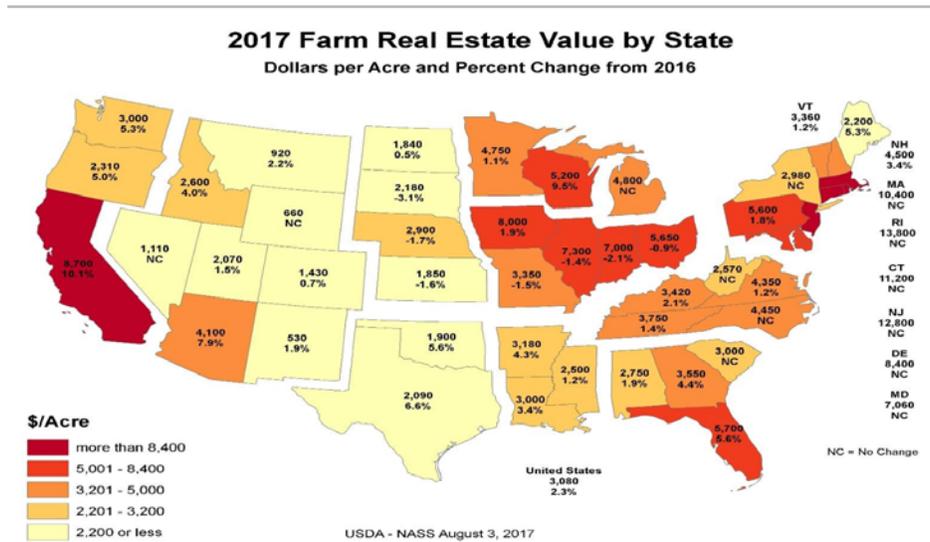
<http://www.regrarians.org/product/regrarians-ehandbook-1-climate/>



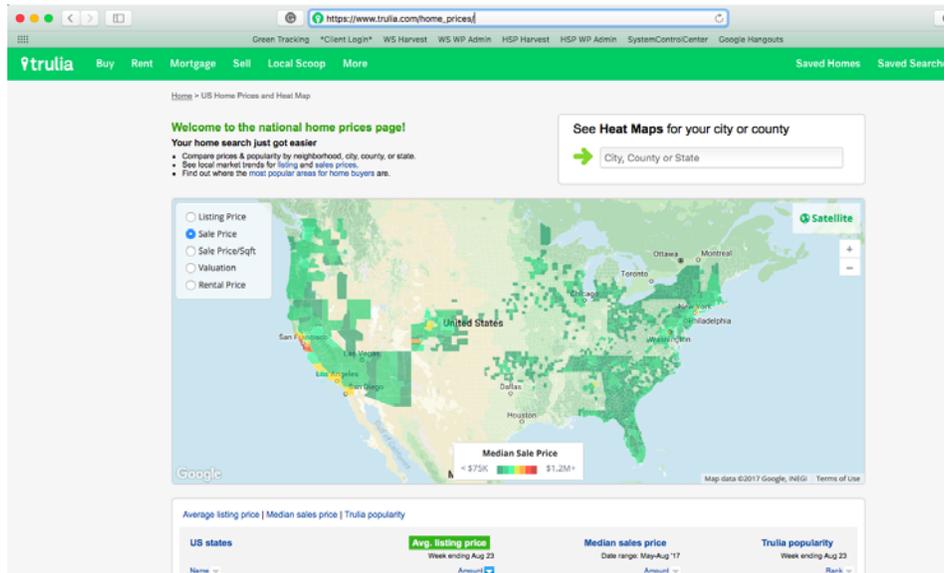
Land Cost per Location

Different areas have drastic price differences for land. What we paid for raw land in California would have gotten us a complete farm in Ohio for example.

The USDA offers a great PDF with details about farm land pricing across the United States: <https://www.usda.gov/nass/PUBS/TODAYRPT/land0817.pdf>



Trulia offers a pricing map for home prices across the United States: https://www.trulia.com/home_prices/

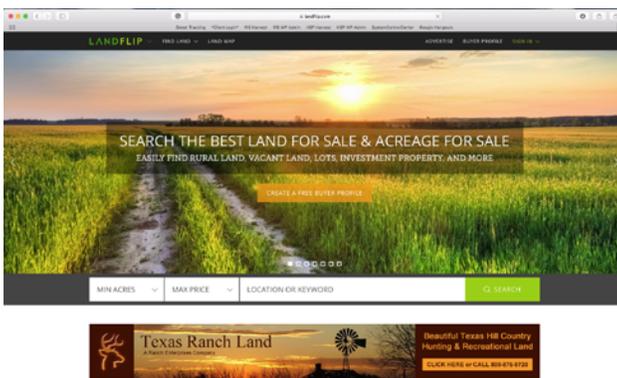


Note that these are rough prices and they should just be a guide to get to an area in your price range.

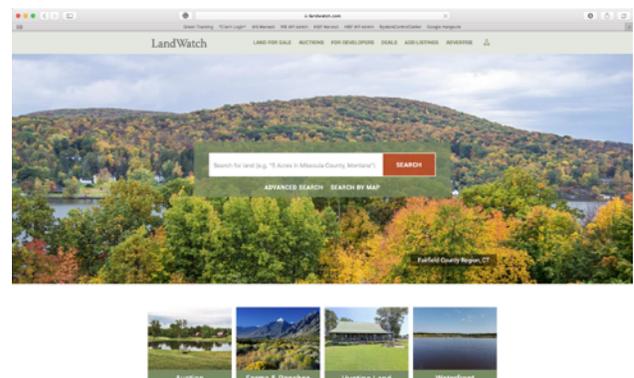
For example, the USDA chart shows California ag land to sell for \$8,700 an acre in 2017 but we bought ours for \$6000 just the year before (prices did not change that much in our area).

Locating Land Online

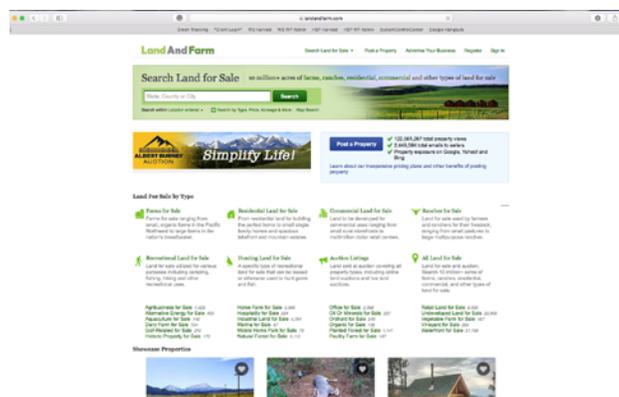
Aside from the well known route of using a relator, and to some degree Craigslist, there are a few dedicated websites to locate land for sale.



<https://www.landflip.com>



<https://www.landwatch.com>



<https://landandfarm.com>

Town

Once you have narrowed down a region, GO SPEND SOME TIME THERE.

Once you have started considering specific parcels, consider how far out of town they are. Trust me on this - the trips to the hardware store and feed store add up!

As much as I wanted to feel “out there” (if I had my choice I might have ended up in nowhere Alaska), my partner wanted to be close to town for social and community reasons.

We lucked out and found land that was just 15 minutes outside of a town of 2500 people and the land was very private. I did get my “out there” feeling and am happy that my trek to town is very reasonable.

Community

Reality is you will have to spend time in town and with your community so take some time to get to know them. Spend a few nights in a potential town you want to be outside of.

In my case I actually moved to these towns for a few months in order to get integrated with the community to see if they were who I wanted to spend the next umpteen years with. At first glance many places will seem attractive but as I discovered not all are gems and you move on for one reason or another.

Even in the same county, towns can vary from one to the next. For example, our town is very into music, arts, local food, permaculture and is just plain progressive. Which I’m into so it works.

However, even some nearby towns, even just 20 minutes away, are very different from our town. I’ll leave it up to your imagination.

3) When You Find Land



Say what? You found one that you love and are wanting to put in an offer!?!

Exciting I know. But let's do some due diligence here my friend.

You need to evaluate this piece of land as much as possible before you place an offer, or while in escrow.

Here is how to do just that.

Topography

Find topographic maps of the area and get an understanding of the slope of the land you are looking at and around it.

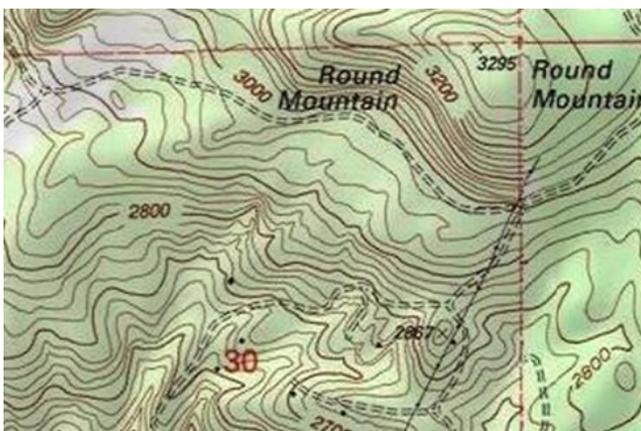
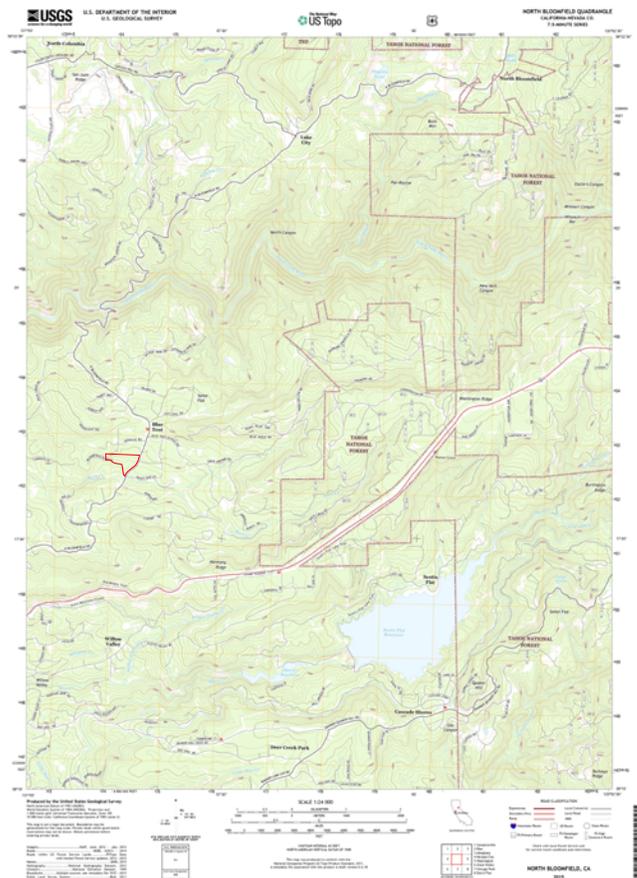
Topography tells us about the shape of the land. The more topographic differences, the higher the number of microclimates will be - this is almost always good. Topography tells you if there may be water running on site (valleys) or where it might be dry (on the ridges).

Too steep of a land is hard to work or unusable. Too flat of a land and you won't be able to take advantage of things like gravity feed water. Find the goldilocks zone somewhere right in between that is just right.

Outdoor gear stores often stock the USGS 7.5 Minute Quadrangle maps for about \$8. Buy one. If not you can download the maps (<https://www.usgs.gov/products/maps/topo-maps>) and take it to a print shop and have it printed LARGE - like 24"x36".

Here is our property line outlined on one of the USGS topo maps to the right.

Topographic maps are a fundamental tool for understanding the usability and potential for a site.



If you see contour lines that are very close together, as in the picture above, then the land is very steep.

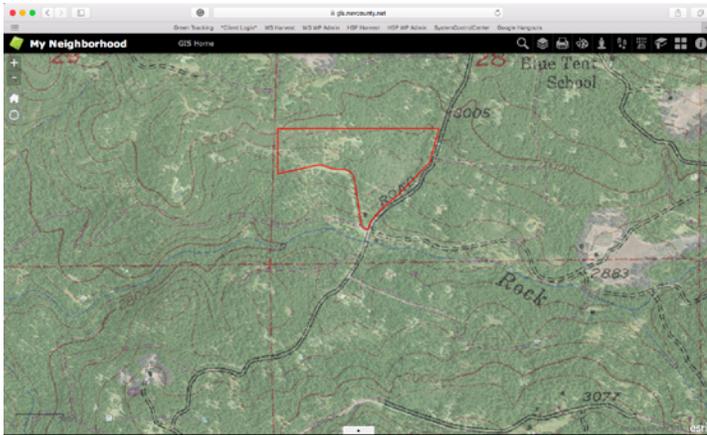


However, counter lines that a further apart, like the image above, show land that has a gentler slope.

Having property lines on a topo map, a google map, or a hybrid is useful when evaluating land.

Some counties offer an online tool to view their GIS data, and with that you can get a local topographic map with the parcel boundaries in place.

Do a google search for the county and see if they offer any of these tools.



The image to the left is our property, viewed on our county's GIS portal. You can see they even have a feature to overlay Google Earth images and USGS topographic maps!

This is the most useful map you can have when going to evaluate a parcel.

By being able to see the property boundary overlaid with the Google Earth image you can more easily walk a site and determine if you are within the boundaries of the parcel.

Google Earth

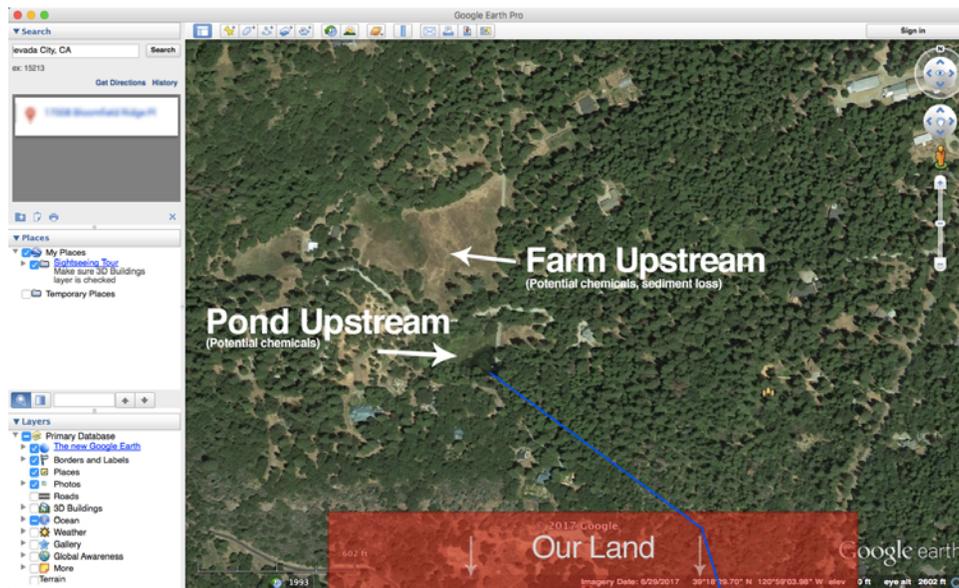
Look at Google Maps Satellite View or Google Earth. Who is around you and what do they appear to be doing? Can you see any history on this parcel in question?

<https://www.google.com/earth/>

Check out what the neighbors are doing especially uphill and upstream of you.

Are they gardening or farming? If so are they using any chemicals to be worried about? Do they have a pond? If so, how are they maintaining it? Many ponds are maintained by dumping chemicals unfortunately, as manual or mechanical means are labor intensive.

Are sediments moving downstream from activities above the land? Are there any mines, junk yards, dumps or other hazardous sites that could have toxic runoff coming into the parcel?



Here is a Google Earth shot of the area north or our land.

A few neighbors doing some gardening, a pond and mostly forest. There is not much to be concerned about running off onto our land especially since the pond is not treated with chemicals.

Soil

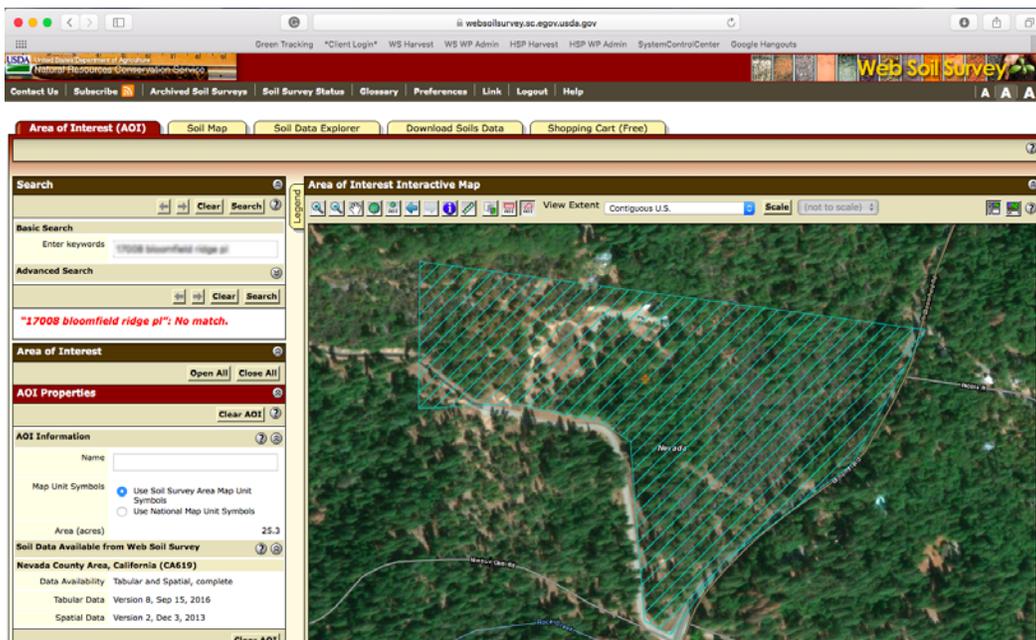
There are aspects of a site that can be changed, such as soil, and aspects of a site that can not be changed such as climate and water.*

For this reason, soil quality in many cases, should not make or break a decision on a site.

That said, it may take 5 years or more to build soil, so it certainly is a large consideration especially if your looking to do production agriculture or commerical growing.

You will want to know how much clay, sand, rock and topsoil a site has to evaluate the capabilities of a site.

The USDA did a soil survey of the ENTIRE united states and you can get that data here: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>



* P.A. Yeomans & Bill Mollison's scale of permanence is a ordering system of elementals on a site based of the degree one can alter them. [More Information](#)

Here is the soil survey map generated for our land:

Keep in mind these are not totally accurate maps as they are areas defined by an average of samples in the area.

As well, human actions can drastically alter the top layers of soils and change what is 'supposed to be there'.



The map tool estimate is close, but some observations on the ground can get it dialed in.

What the soil maps defiantly tell is what types of soil are probably there and give a picture of the advantages and challenges of soils on a parcel. Nature can also change the soils, especially since these surveys were made in the 1970's, plenty of time has passed.

In our case the slope of the land and the vast amount of oak trees have built up a 6" layer of topsoil adding to the ability for us to farm with our soil which is not accounted for in the soil reports.

Here is a spec chart on one of the soils present on our land:

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AfC	Aiken loam, 9 to 15 percent slopes	2.3	9.2%
CoD	Cohasset cobbly loam, 5 to 30 percent slopes	23.0	90.7%
Ct	Cut and fill land	0.0	0.1%
Totals for Area of Interest		25.3	100.0%

We ended up with Aiken Loam on portion half of our property, which is in the realm of better ag soil.

The other soil we have is Cohasset Cobble - not great for farming but it is full of clay which is useful for building earthworks like swales or natural building.

Clay holds nutrients, so it is a better base than sand for building ag soil.

The cobble, while a pain to sort out, has been super useful for control water in

AfC—Aiken loam, 9 to 15 percent slopes

Map Unit Setting

National map unit symbol: hv9
Elevation: 2,000 to 4,000 feet
Mean annual precipitation: 48 to 58 inches
Mean annual air temperature: 54 to 58 degrees F
Frost-free period: 140 to 230 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Aiken and similar soils: 85 percent
Minor components: 12 percent
Estimates are based on observations, descriptions, and transects of the mapunit

Description of Aiken

Setting

Landform: Hills
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium derived from conglomerate and/or cobbly andesitic colluvium derived from tuff and/or residuum weathered from conglomerate and/or tuff

Typical profile

A - 0 to 29 inches: loam
Bt - 29 to 52 inches: clay loam
BCt - 52 to 64 inches: clay loam
Cr - 64 to 68 inches: bedrock

Properties and qualities

Slope: 9 to 15 percent
Depth to restrictive feature: 48 to 96 inches to paralithic bedrock
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Hydric soil rating: No

While the soils report give you more technical specifications of the soil, the USDA also produced a series of guidebooks to go along with the soil reports, broken down by county.

You will have to do some Google searches to get the eBook for your county

Jean D. Britton
SOIL SURVEY OF
Nevada County Area, California



United States Department of Agriculture
Soil Conservation Service and Forest Service
In cooperation with
University of California
Agricultural Experiment Station

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Aiken Series

The Aiken series consists of well-drained soils underlain by cobbly andesitic tuff and conglomerate. These soils are on tabular volcanic ridges and colluvial side slopes. The soils on ridges are undulating to steep, and those on side slopes are strongly sloping to steep (fig. 3). Slopes are 2 to 50 percent. The vegetation is conifer-hardwood forest and an understory of brush, forbs, and sparse grass. Elevation ranges from 2,000 to 4,000 feet. The annual rainfall is 48 to 58 inches, and the average annual air temperature is about 56° F. The frost-free season is 140 to 230 days.

In a representative profile the uncultivated surface layer is littered with such forest debris as pine needles, oak leaves, and other vegetative material. Similar material below the surface becomes more decomposed as depth increases. The mineral surface layer is about 21 inches of dark-brown, and yellowish-red loam and heavy loam. Reaction is slightly acid and medium acid. The subsoil is about 48 inches of yellowish-red and reddish-yellow heavy loam to heavy clay loam and clay. Reaction in the subsoil is medium acid. Weathered andesitic tuff and conglomerate is at a depth of about 64 inches.

Permeability is moderately slow in these soils. Effective rooting depth is 48 to 60 inches or more.

The Aiken soils are generally used for timber production. Small acreages are used for pasture, grazing, or deciduous orchards.

Water

Even a modest garden with water-conserving drip irrigation will require upwards of a thousand gallons a week. Overhead irrigating pasture, depending on how much land, can be thousands of gallons a day! Conservative water use in a house, with no flush toilets, will be around 100 gallons per day for two people.

Chances are your land will be rural and will rely on off-grid water sources.

Well

Most properties will rely on well water for drinking and agricultural use.

Well flow is measured in gallons per minute. A low producing well is about 5 gpm, an average producing well is 10gpm and an excellent well is 30-90 gpm. This of course will vary by bio-region - don't expect 90 gpm in most desert regions for example.

You can buy land much cheaper without a well but it is a complete risk.

Even if a neighboring parcel has a good well it does not mean yours will.



Testing a wells flow rate

Our land was sold to us with a 60gpm well advertised and we tested it at 30gpm maxing out the pump. That sounded great considering the average well in our county is 9gpm. But our neighbors well - who live maybe 1500 feet away from our well has only 6gpm!

Local well drilling companies can look at well drilling history and give you data on what might be expected.

If the land already has a well drilled - have its flow tested and its potability tested.

Many wells will require some form of water filtration and that can add thousands of dollars to the cost of a water system.

Spring

A few properties, often the more remote ones, might have spring water.

If this is the only source of water you will want to approach it like a well - test it for potability and flow rate. Ideally have a backup source of water in case it runs dry.

Ditch Water

Some rural areas offer ditch water for agricultural use - allowing large quantities of water, such as several miners inches, for non-potable use.

This can be a great asset to have, in addition to a potable source like a well, so that you are not taxing your groundwater by drawing too much.

This would be sought after for larger farming operations irrigating 10+ acres that will use high quantities of water, and just a super bonus for your average small homestead or farm.

For further information on wells and groundwater:

A Guide for Private and Domestic Well Owners:

https://www.waterboards.ca.gov/gama/docs/wellowner_guide.pdf

Basins of Relations

<https://oaec.org/publications/basins-of-relations-a-citizens-guide/>

Access

Access is all about the roads, trails and bridges to get to you land and to get around on it.

Many rural properties have paved roads running to them, but some are a bit more off the beaten path, requiring travel on dirt road or even four-wheel drive roads.



Grading vehicle access

When looking at land consider how long it takes to get to the land from a common place you will travel to - such as to town.

Dirt roads and four-wheel drive roads will be slower to travel, potentially hazardous when wet or snowy and require occasional grading to keep them drivable.

Consider your part in plowing the private roads if you are in an area that gets snow.

Once you have crossed the threshold from public or private roads and you drive onto the land - look that the onsite roads or driveways.

The roads and driveways, especially on larger properties, are essential to the functioning of the homestead or farm.

Roads are also a huge opportunity to harvest rainwater and direct it to good use in the landscape.

Consider the following questions when evaluating a site for roads:

How hard will it be to grade driveways and roads on the site?

Will there be large cuts and fills that require engineering and permitting?

Are proposed structure (Zone 0 locations) going to be easy to get to?

Are the grades steep and how much maintenance will I need to preform?

Are all areas of the parcel easy to gain access to or will some areas require engineering / bridges / culverts etc?

If there are existing roads, can you harvest rainwater off of them?

For detailed reading on farm and ranch roads check out:

Handbook for Forest, Ranch & Rural Roads:

<http://www.pacificwatershed.com/roadshandbook>

Water Harvesting from Low-Standard Rural Roads:

http://altarvalleyconservation.org/wp-content/uploads/pdf/1597-A_Good_Road_Lies_Easy_on_the_Land.pdf

Power

On-Grid

With raw land the biggest question for those that want to grid-tie power is: how far away are you from a power transformer or power pole?

Bringing the power grid to a parcel is very expensive - it can cost \$50k - \$100k depending on distance. That cost is not including onsite power infrastructure.

Having a power pole / transformer onsite is a huge perk for raw land.

Some people might be considering getting a building loan to develop a home or the land. You will want to look into power requirements with potential lenders as most we talked to would only loan if the building was grid tied.

Look into the local power company and find out how they generate their power. It might create some peace for those who want the “green feeling” of solar.

For example, our local power company generates nearly half its energy from solar panels!

Note: By “green feeling” I like to introduce the thought to people that going solar is not the answer to saving the environment. On top of using highly toxic batteries, being constructed out of petroleum-based materials, it still promotes used of petroleum based products. It is a small step towards getting people to think eco-consciously yes, but it does not address the larger issue of mass-produced and consumed products.

Off-Grid

In instances where grid-tie is not desired, or impossible, solar is the best alternative but still expensive.

A Modest 100 amp systems with batteries, in parts alone, was around \$20k when we looked into systems.

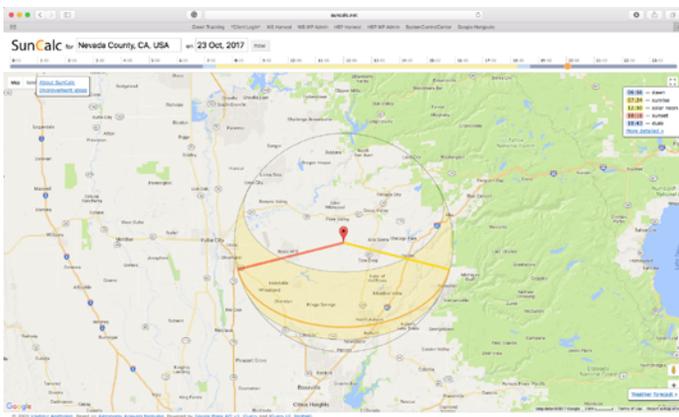
Batteries are the most expensive part and require replacement every decade or so.

Solar doesn't work in all locations in all seasons - you will want to evaluate your energy needs and your solar availability on site throughout the darkest times of the year.

Solar Planning Tools

The following two tools are useful for both off-site and on-site observations of the suns position relative to a place. This will assist with solar installation, site selection, garden location planning, building locating and more.

Sun Calc



<http://suncalc.net>

Sun Surveyor (App)



<https://www.sunsurveyor.com>

Existing Infrastructure

Land with existing structures can give you a big head start.

Not having to build a house, barn, tool shed, well house, or other structures will get you closer towards developing your agricultural systems sooner.

I won't go into too much detail here about assessing the existing structures as your home inspections will be taking care of that and there is plenty of internet resources about this.

Some permaculture concerns to look at:

- Does the structure have sun exposure in the summer or winter?
- Does the structure have shade in the summer or winter?
- How well insulated are the structures?
- Is the road steep to get to the structure and if so does it snow and freeze (Making access difficult)?
- If more than one structure, how far apart are they? Will there be a lot of time going back and forth between them?
- How much power does the site have? 100amps? 400amps?
- What are the sources of water? Are they potable? Is there enough water for your ag needs?
- What are the water harvesting potentials of roofs, roads and other hard surfaces?
- Are roads/driveways paved or dirt/gravel? They will need maintenance.

“Waste” Water

On every site, you will need to deal with both grey and black water produced from the people and activities on the land.

Septic Systems

Many counties require the use of a septic system, an underground waste water treatment system, for disposal of at least the blackwater.

Black water is the water containing human waste and greywater is often all other water (e.g. shower water, sink water). From county to county this can be different - sometimes kitchen sink water is defined as black water for example.

If you are looking at raw land without a septic system ask if there has been a perc & mantel test done on the land. This is a simple test to determine how quickly, or slowly, the soil discharges water.

This test will tell you what kind of septic system is required - a standard one or an engineered one. There is a cost difference of about \$20k between the two so knowing which type of system is needed is helpful.

Greywater

The title of this section uses the word waste in quotes. This is because the water is not really waste water - it can be reused.

Water not including human waste can be directed into greywater systems that irrigate outside of structures. This water can be used to irrigate plants via

mulch basins for ornamental plants or fruit trees (it can not be used with plants that grow on the ground and come into contact with the water).

For more information on greywater use:

Greywater Action: <https://greywateraction.org>

Composting Toilets

A sustainable alternative to flush toilets and septic systems is the composting toilet. Human manure is composted in place, often with wood shavings, to create usable compost (similar to grey water - it is not used with crops that contact the soil).

Check with the county to determine if composting toilets are permissible. At this point in time, many counties are not yet that progressive.

For more information on composting toilets:

Humanure Handbook: <http://humanurehandbook.com>

4) Environmental & Ecological



Plants

Take an inventory of the vegetation on the land.

Walk the entire parcel if possible, being as careful as you can not to go onto other properties, and observe the patterns in the vegetation.

Some questions to ask:

- Are there grasses or low growing ground cover or bare soil?
- Is the understory dense and a fire hazard?
- Are the trees deciduous (which help build soil) or coniferous?
- Are the plants healthy? For example, are the trees dying out because of moss or fungus?
- Are there any signs of past fire on the tree trunks?
- Are there useful native plants that are edible?
- Are there any edible plants that were planted previously, e.g. old apples, plum or nut trees?

This inventory can help you assess the value of the land to you.

A piece of property that has an existing orchard would save you thousands of dollars in trees and years of waiting for them to produce.

Land that has been brushed might save you years of manual labor or thousands of dollars in clearing costs from a professional.

Animals

Similar to the vegetation, take inventory of the animals that are present while exploring the land.

- Did you see any wildlife?
- What signs of wildlife do you see? Trails, dens, scat?
- If there are waterways are there amphibians? Amphibians are good indicators of healthy ecology due to their sensitivity to toxins in the water.
- Are there birds? Birds are also an indicator of a healthy ecosystem
- Talk to neighbors to ask what wildlife they have seen

Wildlife is a good sign of the health of an ecosystem - if animals are there chances are the ecosystem is healthy.

But animals can also pose challenges. Raccoons love to kill chickens, bears love to get into your trash, compost and eat fruit trees for example.

Site Analysis - Sectors & Microclimates

If possible spend time assessing the sectors of the parcel, even if only in your head while visiting the land. Take note of the:

- Winds
- Sun
- Water
- Noise
- Pollution
- Privacy

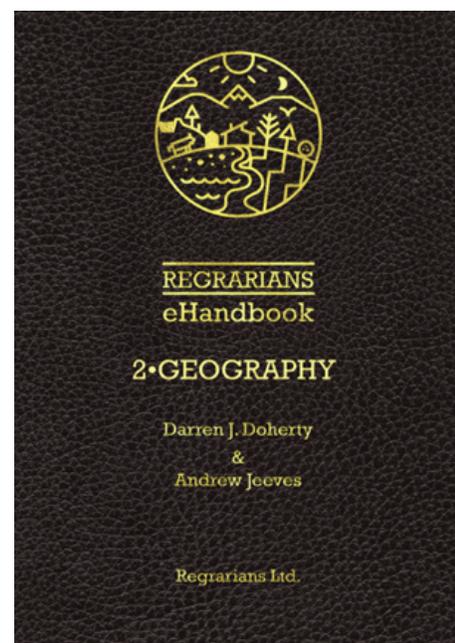
Observe what is on the site that will be an advantage or a challenge. Is there a lot of firewood available? Good soil to harvest? Is it super hot or very windy?

Walk the entire property and keep an eye out for changing ecologic zones and microclimates.

Is the forest changing from Pine to Oak? Are there patches of chaparral? Valley and ridges? Cold spots and hot spots?

For a ton of information on site analysis, geography, cartography and more check out chapter 2 of the Regrarians Handbook:

<http://www.regrarians.org/product/regrarians-ehandbook-2-geography/>



What does the land want?

Ask yourself this many times. Tune into what the land might be wanting.

Not every enterprise works well on every piece of land.

A parcel that is often waterlogged is way better suited for rice than it is for grains for example - it would be super energy intensive to force a wet parcel to do something it doesn't want to.

Conversely, a dry ridge is not going to be an easy place to harvest water and grow rice.

Observation of the capabilities of a landscape as it exists, or could be if utilized to its potential, is a cornerstone of applying permaculture to land evaluation.

Think about the cities built in flood zones. Huston, New Orleans, Sacramento for example, all have technology or infrastructure in place that prevents them from flooding.

If we develop against the will of the land it will always cost something - time, money, energy, lives or all of these.

The goal is to minimize the inputs to develop and maintain a piece of land with intelligent decisions up front!

5) Regulations & Hazards



Many properties will have legal restriction or identified hazards of some kind that you will need to find out about.

You will want to find out if any of the following are applicable to a parcel:

- Easements
- Regulations (Home Owners, CCR's etc)
- Land Zoning (Ag, Residential, etc)
- Protected Areas or Protected Species
- Hazards such as identified landslide area or flood zone

A realtor will have access to much of this information and these details are usually disclosed in the escrow process.

These legal constraints may affect how you use your land. For example, residential zoning will likely have strict limits to livestock that can be kept.

Obviously, knowing if a parcel is in a potentially hazardous area may change it from appearing very desirable to not an option!

6) How will I know that it is the one?



The use of permaculture in land evaluation for a homestead or farm will help you recognize a well fitted match between your goals and the lands capabilities.

The use of permaculture in land evaluation for a homestead or farm will help you recognize a well-fitted match between your goals and the capabilities of the land.

Step 1) Define your goals on the land

Step 2) Identify your area

Step 3) Evaluate the capabilities and limitations of possible parcels

Step 4) Compare these evaluations to your original list of goals

How easily do your goals fit within the existing landscape?

How much alteration (time, money & energy) would be necessary to achieve your goals?

No piece of land will be a perfect match between all desired attributes for your homestead or farm.

This is where your discretion to the balance of giving and taking, between desired attributes of a piece of land, will come into play.

There is also a non-analytical aspect of finding land. This is what the heart tells you.

For us, the moment we stepped onto our land, we knew it was the one.

This was the final confirmation - the land checked out for our needs analytically and our hearts were all in.

If you can find a piece of land that meets these two criteria, I am confident you will succeed with it.

Happy homestead hunting!

Bret Glassett

High Sierra Permaculture

7) Want to learn more about permaculture homesteading or farming?

Visit the blog: <http://highsierrapermaculture.com/permaculture-articles/>

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