

YOUR GUIDE TO
GOING OFF GRID

REVISION A

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OFFGRIDPERMACULTURE.COM



WHAT IS OFF GRID?

A lifestyle centered around independence and self-reliance, going “off the grid” can mean many things to different people. At minimum it means re-developing skills and systems to exist without access to one or more utilities. At best it means rebuilding a resilient culture, community, family, and self the will persist long after the materialist trappings of modern fall by the wayside.



WHY OFF GRID?

The question of why we “offgridders” left the flock to strike out in to this solitary adventure of off grid living is an intensely personal one. But, for me there are four big reasons to take the plunge –

Freedom

Without the ability to feed ourselves, warm ourselves, and keep dry independently of those who would control us, there is no hope for true independence in thought or action. And, independence of thought is the singular seed of great cultures and prosperous nations.

Sustainability

Industrial agriculture and global production cannot endure forever. Relinquishing these exploitive practices, going off grid means, to large extent, going local and taking an active role in producing the food and goods we use. Since we live from the land, we will work to preserve it and not trash it.

Family & Community

Modern culture withers the bonds that bind us together. A return to nature and simpler values gives us time and space to focus on what is really important in our lives.

Life

So much human potential is wasted going through the motions of trying to make it too retirement. By disconnecting from the debt hamster wheel, Offgridders make room for more of what really matters to them – building an abundant home, creating with their own hands, finding connection with nature, and prospering in the spirit of their own devotions.



IS OFF GRID REALISTIC?

Yes! Living off grid is obtainable for the vast majority of individuals and families who are reading this guide. But, it won't necessarily be easy.

At this time in history we have more opportunity to choose the life that we want to live, and build an abundant "modern homesteading" lifestyle than ever before. The technology exists to build a comfortable off grid lifestyle that doesn't require reverting back to the stone age of technology.

But, of primary importance is knowledge and free exchange of ideas. What makes this lifestyle possible is, foremost, that spark of inspiration passed from person to person. That insight that life can be more than a struggle to pay the bills.

And, secondly, you need the skills to make such a life reality. These skills are not taught in schools or on the job, you must seek out and develop them yourself. No government, corporation, or institution will push you toward independence, but rather they hope to scare you away. This because self-reliance diminishes their control over you and returns it to the source.

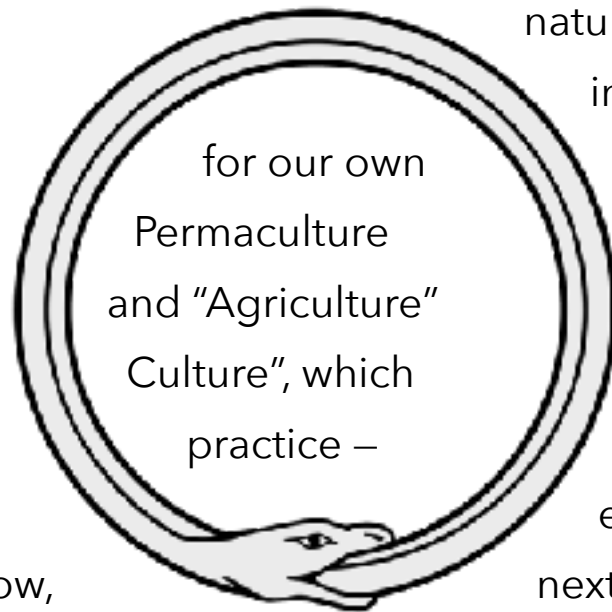
But, you will have friends on this journey. Join us!

WHAT IS PERMACULTURE?

"Permaculture is a philosophy of working with, rather than against nature; of protracted and thoughtful observation rather than protracted and thoughtless labor; and of looking at plants and animals in all their functions, rather than treating any area as a single product system."

– Bill Mollison

Permaculture is a method informed by that we as responsibility term "Permanent" "Human goal of the and healthy humankind now, centuries to come.



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TWELVE STEPS TO OFF GRID PERMACULTURE

Going off grid might seem daunting to someone just getting started. Where do you start? How do you know you are making the right moves?

That's why I broke down the process into twelve steps:

1. Go Debt Free
2. Build Skills
3. Find Land
4. Develop Water
5. Construct a Home
6. Set Up Waste Management
7. Plan for Heating and Cooling
8. Install Renewable Power
9. Plant Your Garden
10. Bring in Livestock
11. Store Food
12. Build Community



1 GOING DEBT FREE

The single most important step when going off grid is taking back control of you finances.

Luckily, the skills required to overcome debt are the same skills required to become self-reliant – goals setting, follow through, and self discipline.

Take Stock of Your Resources

Step one of going debt free is to take an accurate accounting of your income and expenses. This can be as simple as a adding up what you spend in month on a piece of paper, or a as complex as a full blown budget spreadsheet.

Set Targets

Next, take the time to set compelling goals. Are you going to pay off that loan? By the plot of land? Have \$10,000 set aside to build up your dream homestead? Tiny home?

The most important quality that makes a goal a good goal is if you feel energized by it, and it drives you to take steps toward it each and every day

Downsize

We are blessed to live in an extremely affluent society, which means that you probably spend considerable money on things that aren't really necessary. The trap we fall in, however, is that we feel we cannot do without some particular luxury.

The best way to save money is to live more humbly, and realize that we are working toward a much greater reward – our own freedom and long term happiness.

Challenge yourself to make "impossible" cuts. Can you live on \$3 for food a day? Is there a way you could cut your rent in half? Could you live for a month without Netflix? How about a cell phone?

Don't assume what you can do. Rather, give it a 30 day trial, and find out for yourself what is possible and what isn't



Assets vs Liabilities

Most people confuse what is a real asset (ie wealth producing) vs what is a liability (wealth draining) in their life. Since the majority of people are poor, making less than average income, most people fill their life's with liabilities. Buck the trend and focus on accumulating assets:

Assets	Liabilities
Income Producing Properties	Large Home
Functional Vehicle	Flashy Vehicle
Tools	"Toys"
Online Business	Social Media
Books / Courses / Education	Entertainment
Healthy Diet	Eating Out
Warm Clothes	Stylish Clothes

2 BUILDING SKILLS

The biggest different between our ancestors and modern man is the deficiency of skills.

We pride ourselves on our book knowledge, yet most of us couldn't even conceive of how to build our home, grow and preserve our own food, or provide our own clothes. Compared to our grandparents and great-grandparents, we are children with much to learn.

Invest in Yourself

Two steps in and we haven't even built a chicken coop, or planted a seed! The road to self-reliance is not one filled with instance gratification or quick success.

But, early on in this process is the time to build up your skills. While you may be saving money, and stuck in a tiny apartment with a grind of a job, you still have time to invest in your own ability.



A Low-Cost Education

With so many free and low cost educational opportunities online and in person, no amount of budgeting should restrict you from bettering yourself.

- Scour Craigslist, Eventbrite, Meet Up, and local event pages for free educational events in your area. They are more common than you might think.
- Many local permaculture gardens and natural builders have periodic “work parties” where you get the opportunity to learn skills in exchange for volunteer labor
- If you have free time, consider WWOOFing (<https://www.woof.net>) as a type of free apprenticeship
- Search out online courses that interest you and see if the instructor / organization has a YouTube account. Many online businesses give out tons of free videos with great information as part of their marketing plan.
- Older books, which can be borrowed free in many libraries, often have the best information on self-reliance related skills like cooking, food preservation, and practical skills.
- Try growing a little container garden in what space you have. Just planting a sack of potatoes in a few plastic totes with freely obtained soil can produce a huge amount of food!

3 FINDING LAND

Searching for your own patch of dirt is both exhilarating and a little worrying at the same time.

Free Land

There are still ways to get free or low cost land if you are creative and willing to put in the work. My webpage has the most up to date information – [https://offgridpermaculture.com/
Finding_Land/Free_Land_Living_Off_Grid_With_No_Money.html](https://offgridpermaculture.com/Finding_Land/Free_Land_Living_Off_Grid_With_No_Money.html)

Where to Find Land

- Websites /online
- Craigslist
- Specialty land businesses
- Property record search / direct contact
- Tax auctions / Sheriff's sale
- Real estate agents
- Signs on the side of the road
- Print listing / classifieds
- Word of mouth
- Facebook groups
- Shared Land or Eco-Villages

Off Grid Property Checklist

- Access to water (well, surface, spring, rainwater)
- Road Access (driveway? easement?)
- Solar Access (south facing slope; not excessively shaded by trees / structures on other people's property)
- Legal Freedoms
 - Building Codes Allow What I Want to Do
 - Zoning Ordinances Allow What I Want to Do
 - Water Rights Available
 - No Existing Easements, Liens, Covenants, or other Restrictions
- Energy Availability
 - Do I Have Sufficient Solar, Wind, or Hydro Access?
 - If Burning, Can I Harvest Wood on Property or Near By?
- Acts of Nature
 - Are fires, floods, extreme storms, etc common or possible?
 - Can I get in/out all year even in heavy rains or snows

4 DEVELOP A WATER SOURCE

The most important first step to moving off grid is to develop a water source on you property.

While you can get buy for a while on water you carry in, the cost and effort involved tends to quickly derail off grid dreams.

Drilling a well can often be one of the more expensive parts of developing and off grid property, but there are other options –



- Deep water well
- Shallow well
- Surface water (stream, creek, river)
- Rainwater collection
- Spring

Some or all of these sources can be mixed to supply the water you need. In particular, rainwater collection is often a good, legal way to collect water in even the driest climates.

Water Systems

Inevitably you will need to move water around your property. For an off grid system, take the time to make your plumbing system as simple and efficient as possible. *Gravity fed water systems* are a good match for off grid life, since they have no pumps and require no electricity to operate.

Water Purification

Water sources other than deep water wells will probably need some form of purification before drinking. For more information on off grid water purification, see the link below –

https://offgridpermaculture.com/Water_Systems/Off_Grid_Water_Purification__Safe_and_Low_Cost.html

5 CONSTRUCT A HOME

Living off grid, you may choose to buy an already constructed home, or you may decide to build your own.

Building your own often allows you to save a lot of money, since you can build smaller, use recycled or natural materials, and provide “sweat equity.”

Also, custom building allows you to design a much more efficient home than most built today, by incorporating elements such as passive solar design, efficient wood heating methods like rocket mass or masonry stoves, ground heat exchangers, and other well tested techniques than don't find there way in many commercially produced homes.

Building your own home could be your proudest achievement. A feat that few are able to accomplish.



10 Ways to Build Off Grid

Unfortunately, a lot of people get stuck in “the way it’s always been done” when it comes to their home. This is a big mistake in that it costs you extra time and money. And, you miss out on the advantages of both newer techniques and revived traditional building methods inherited from our ancestors.

Here are ten ways to build an off grid home –

- Log cabin
- Cob structure
- Timber frame
- Straw bale
- ICF
- Yurt
- Standard stick framing
- RV or Trailer
- Underground
- Earth bag

For more info see the full article, which covers each method in detail:

https://offgridpermaculture.com/Sustainable_Housing/Best_Ideas_for_Building_Off_Grid___10_Ways_to_Live_Self_Sufficiently.html

6 WASTE MANAGEMENT

For off grid waste water management, septic is the old standard.

However, septic systems can be quite expensive. While they may be required in your area, there are a number of efficient and cost effective ways to do without one:

Composting Toilet

Toilets that turn waste into healthy soil. Both high end commercial and dirt cheap bucket models exist.

Search out the free "Humanure Handbook" for a detailed guide.

Humanure is a great way to get



started because it is super simple to set up. The waste material is composted using a 2–3 year technique that renders it safe and disease / parasite free and ready for use as fertilizer.

Biogas

Quite common amongst commercial farmers in Germany, biogas digesters turn animal, plant, and other waste in to compost tea and a combustable “biogas” that burns like propane. Small scale digesters are easy to build or can be bought, and the gas used for cooking or light heating.

The best resource I have found for this is the “Biogas Handbook”, which discusses ways to build your own biogas digester.

Greywater Systems

The name for a wide range of water systems that return lightly used water from sinks and showers back to the Earth. Grey water can be used to water inedible plants, lawns, and orchards.

Some grey water systems have mechanical or biological filters that helps make the used water safe to return to the environment. But, all grey water systems need a little care about what you put in to them. Not all soaps, detergents, or cleaning supplies are safe for use with a grey water system.

More info:

https://offgridpermaculture.com/Water_Systems/Off_Grid_Water_Guide___Well__Septic__Sewer__Grey_Water__and_More.html

7 PLAN FOR HEATING & COOLING

In the off grid lifestyle, heating and cooling are particularly important considerations.

Both are extremely energy intensive, which makes them not a good match for off grid solar, wind, or most micro-hydro installations. While it is possible to run electrical heating and cooling on renewable energy sources, it is not usually cost efficient.

Passive Heating and Cooling

Passive refers to methods that do not require any electricity or fuel to function. Techniques such as solar window design, trombe walls, and thermal batteries use the green house effect to store heat from the Sun in the winter, but rejects summer Sun keeping the house naturally cool, like a cave.

Natural airflow can also be leveraged to cool in the summer.

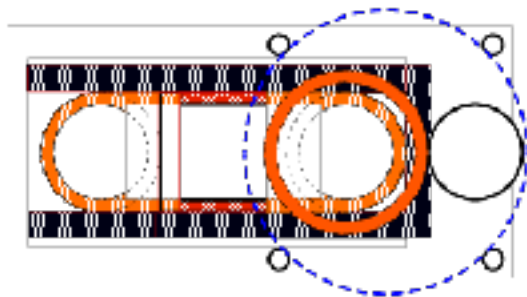
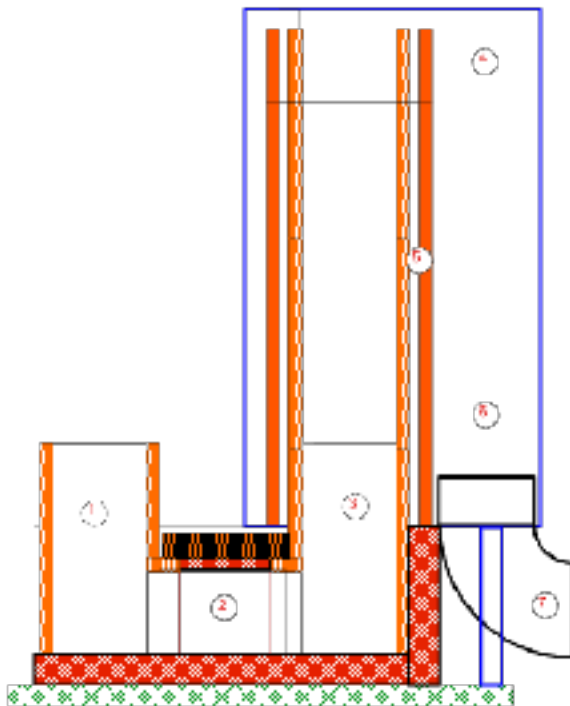
Unfortunately, the majority of modern homes completely ignore passive techniques.



Wood Heat

Many off grid homes are partially heated by wood in the winter. Wood is preferred because it can be locally sourced or may even grow on your property. And, firewood harvesting that promotes forest growth is carbon neutral.

While traditional cast iron wood stoves do work for many people, rocket mass heaters and masonry heaters are usually much more efficient.



Rocket Mass Heater Design

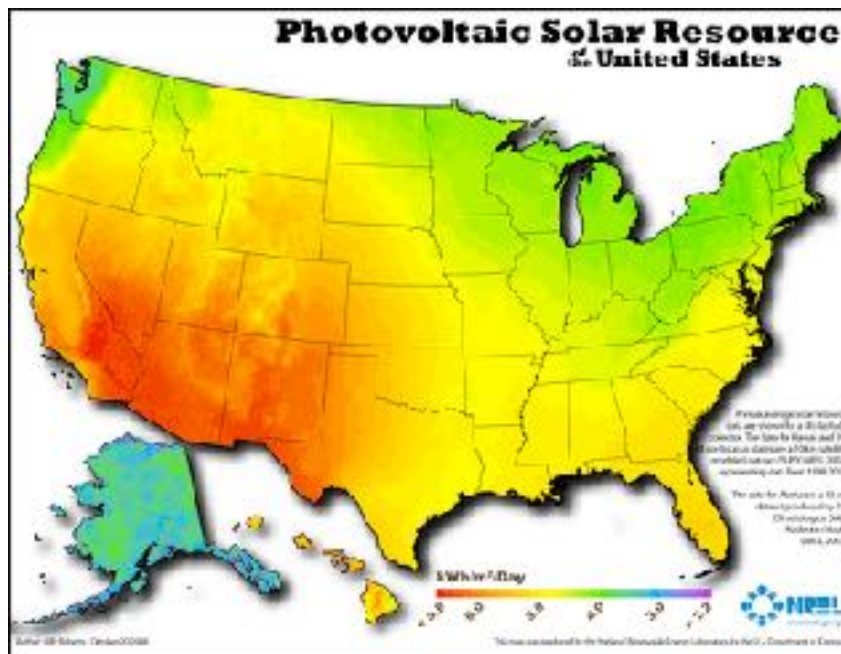
These wood burning stoves work by burning the wood quickly and completely in a combustion chamber, then storing the heat in brick and earth. This increases wood efficiency meaning you need less wood each year, and don't need to burn all day in order to keep warm.

8 INSTALL RENEWABLE POWER

There are three ways to get power off the grid;

- Solar panels
- Hydro-electric turbine
- Wind turbine

Of these, solar power is the most commonly available and most useful. Water turbines are by far the most consistent, and preferred if available, but very few properties have access to a suitable stream. Wind power is the least consistent, but can be a useful resource if your climate has strong wind almost daily.



Solar Power Availability in the United States

Off Grid Power Systems

Most off grid power systems have four main components – the generator (or solar panel), charge controller, battery bank, and inverter.

The generator provides the energy, and should be DC in most cases.

In the middle of everything, the charge controller manages the system, and protects the other

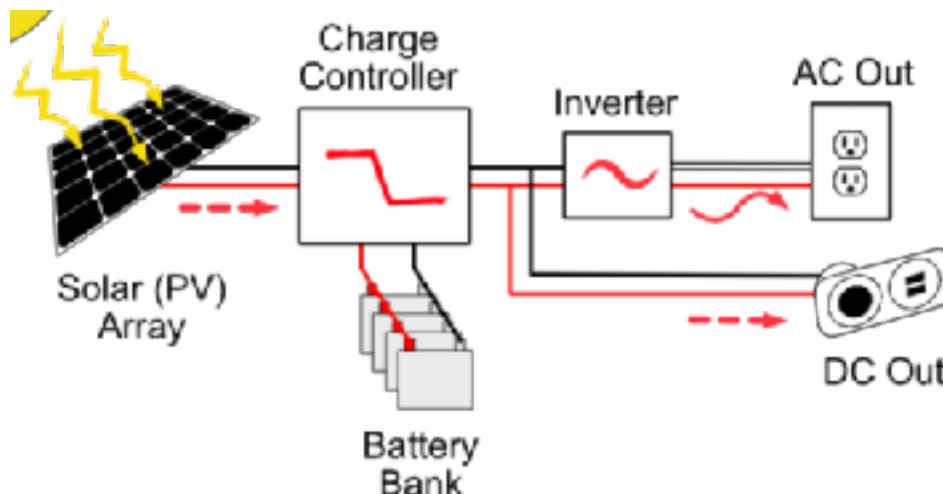
components from damage.

MPPT charge controllers also increase the efficiency of solar panels.

Batteries store energy for use at night or on cloudy/still days.

The invert converts battery DC energy to AC used in wall sockets. Not necessary on some systems with all DC appliances

https://offgridpermaculture.com/Off_Grid_Energy/Off_Grid_Solar__A_Beginners_Complete_Guide.html



9 PLANT YOUR GARDEN

Off grid survival gardens should grow crops that are suitable for the climate, can be easily stored, and are open pollinated. Use of succession planting and crop rotation is recommended. Care should be taken to have energy efficient irrigation and compost in place to support plant growth.

Plant What You Like

Eating from a garden can be a bit of an adjustment. So, while the common advice people give is to just plant the things you already eat a lot of, I think this misses the mark a lot of the time, unless you already grow a lot of your own food.

Fit Your Climate

While people in to gardening as a hobby are frequently obsessed with pushing the boundaries of what is possible, for the off grid garden this can be a mistake. You may have to come to terms with the fact that, tomatoes say, don't really grow that well in your climate.

Compost Pile

A compost pile should be the first order of business. It doesn't need to be anything fancy, perhaps just a few pallets and baling wire, or even just a pile of dirt on the ground.

Succession Planting

Garden beds should be fully utilized as much as possible, both to increase efficiency and to reduce damage to soil that can occur when it is left uncovered.

https://offgridpermaculture.com/Healthy_Food/How_to_Grow_Food_Off_Grid__A_Self_Sufficiency_Survival_Garden.html



10 **BRING IN LIVESTOCK**

Animals make an incredibly valuable addition to the self-sufficient farm or homestead. They are a valuable source of fat and protein, as well as providing services that actively promote other food production methods, such as eating pests and providing manure for compost.

Choose the most beneficial livestock

Chickens – meat, eggs, eat kitchen scraps, pest control

Pigs – meat, eat kitchen scraps, clear land by rooting

Goats – meat, milk, eat brush, clear land

Cows – meat, milk, eat grass, improve pasture land health

Plan and build the barn / coop

Start any new livestock project by planning out and building their living quarters, as well as how they will get from there to where they eat. Traditional coops and barns still work just fine along with paddock fencing.

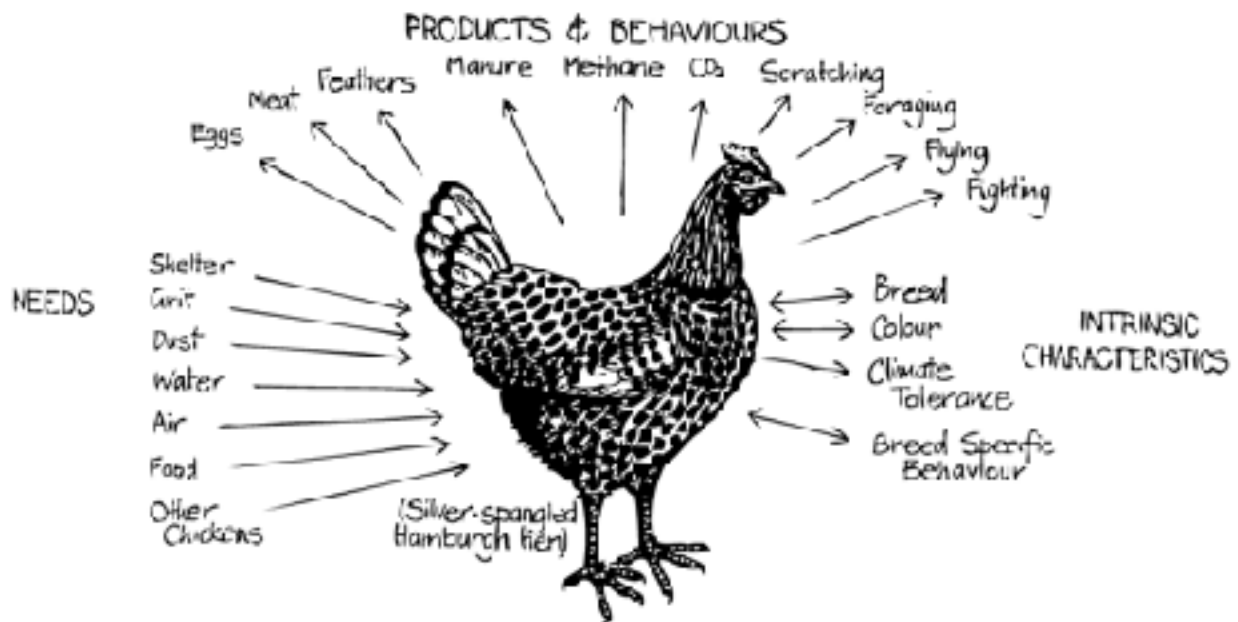
Newer methods include things like:

- Chicken tractors (movable cage / coop)
- Portable electric fencing

Housing should also include some plan for storing feed if you plan to supplement feed over the summer, or plan to keep animals over the winter.

Buy in young animals

With all the necessary equipment in place, you are ready to buy in young animals or ready to milk cattle for use on your off grid homestead!



11 STORE FOOD

For many off gridders, growing and hunting the food is the fun part but the real challenge begins when you try to store it for later. Nature dictates that food is much more plentiful part of the year, and so those who wish to live freely and independently from the industrial food system need to know how to stock up their pantry for good eating all year long.

Our ancestors used a wide variety of techniques to store their food, including:

- Canning
- Smoking / Salting / Drying
- Pickling / Fermentation / Vinegar
- Root Cellar
- Dry Storage
- Cold box
- Chest freezer on off grid power
- Suet / Fat Storage
- Wood Ashes / Slaked Lime
- Honey

https://offgridpermaculture.com/Healthy_Food/Off_Grid_Food_Preservation__Techniques_You_Need_to_Know.html



12 BUILD COMMUNITY

In the final step of going off grid, I'll cover essential community building measures that help cement your new homestead in to a home.

Plan how you will handle emergencies

Consider potential natural disasters or human made disasters in your area. How would you handle a flood, forest fire, land slide, dam break, or other unfortunate occurrence?

At the very least, your family or land mates should be appraised and know what to do in such a situation. You may also want to have emergency equipment or a "bug out" bag in place in case you need to leave in a hurry.

This is also the time to consider you neighbors and family. Approaching people who live near by about how you could handle fire safety as a community is a good way to open a dialog. You

may even be able to put in place a community emergency plan or fire brigade, where neighbors can pitch in and support each other through emergency situations.

Make room for fun and entertainment

A homestead is not all about work, but should be very much about play as well. Inviting family, neighbors, and members of your community to share your lifestyle help build good will and understanding. This could include fun gathering such as –

- Barn or timber frame structure raising
- Cob building workshop
- Harvest festival
- Pumpkin patch & pumpkin carving
- Home grown thanksgiving feast

Give back to the community

At the heart of every off grid enterprise, there should be some core activity that gives back to the community and to nature. Take pride in what you have built, and undertake to make the

world a better place than when you started. This could take the form of –

- restoring disturbed natural habitat
- building spaces for wildlife
- protecting the land from excessive development
- giving excess food to charity or the needy
- providing seeds, plants, or cutting
- advice or mentorship for young people
- hosting WWOOFers
- starting a blog or YouTube channel



ABOUT THE AUTHOR

Daniel Mark Schwartz

I learned to love nature from a young age. Growing up in southern Oregon, I spent countless hours exploring the wilderness near my home, or trekking with the scouts. At the same time, I fell in love with philosophy, mathematics, and eastern wisdom. Thick books were my constant companion around the camp fire.



Over the next decades, I grew my life experience and honed my skills. During my wanderings, I through various trainings –

- Buddhist Meditation, Thailand
- Yoga, India
- Natural Building Apprenticeship, Arunachal Pradesh
- Shamanic ceremony, Peru

Ultimately, I came to the realization that my life purpose was to serve the public by researching and educating in the field of sustainability and self-sufficiency.

My dream is to empower anyone to enrich their life by living in an increasingly nature focused and sustainable manner.

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