



# FREE FOOD FOR GOOD



**THE COMPLETE STEP-BY-STEP SYSTEM TO GROW YOUR OWN FOOD**

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## Introduction – Why Modern Homesteading Is Important

People talk about freedom all the time, but few are brave enough to actually achieve it. Few people even know what REAL freedom means or looks like. Fewer still are brave enough to grasp it when it is offered to them. Given that you are reading these words, we already know you're not one of those. You recognize that you are currently not free, and have taken the first important step toward doing something about that.

REAL freedom means being beholden to no one. Not for your income. Not for your food. Not for the roof over your head or the energy that powers your world.

Sadly, we can't do anything about your job, and electricity is such a big topic that we cover it elsewhere ((note to Jackson – cross sell opportunity here!)), but the roof over your head and taking command of your own food supply? Those are the two things this book is all about.

At first you might find the two topics to be somewhat disconnected. They aren't, and here's why: You will never be truly FREE if you're renting. In order to gain that freedom, and the flexibility to gain absolute food security, you need to own your own home, and at least a bit of land to grow food on.

For many people, the dream of home ownership seems distant, and there's a reason for that. When you start looking at homes for sale on the internet, they're hugely expensive. Even modestly priced homes cost a great deal more than many people can afford, and if you're thinking about buying a home WITH land? It can be downright depressing.

That's because you have been going about it all wrong.

That's not your fault. Society has conditioned you to look at the world a certain way, and that way of looking at the world shades and colors everything you do, including the way you look for houses to live in.

In this book, I am going to show you a very different, BETTER way.



The home of your dreams is NOT out of your reach, and neither is land. You will be learning ways to build your dream home for a lot less than you thought possible. In fact, if you have never been exposed to these ideas before, the things you're about to learn will seem almost magical to you. It is not magic, I assure you. It is just good, old fashioned common sense, and let's face it, the world has seen a great shortage of that in recent decades.

It is tragic, but you and I are going to change that together.

I am going to accompany you on this part of your journey toward absolute self-sufficiency. By the time you have finished with this epic course, you will have a fine, strong home that's much better, more robust, and capable than ANYTHING you can go out and buy on the market today. It'll be 100% custom, designed for your specific lifestyle, and it'll be stronger and sturdier than any of the crap that traditional building techniques produce. You will have something you can be truly proud of.

In addition to that, you will never have to worry about your family going hungry again.

You might think that you have to have tens (or even hundreds) of acres in order to feed even a modestly sized family. You do not. Again, we'll show you how, step by step, leaving no stone unturned.

To give you a sense of what's possible, I urge you to check out this website:

<http://urbanhomestead.org/>

In 1985, these guys...this family, bought a house just off the freeway, completely surrounded by urban sprawl. They made it their mission to grow as much food as possible on their paltry one tenth of an acre. No, that is not a typo, and yes, you read that correctly. One tenth of an acre. That's what they have to work with (the actual lot size is a fifth of an acre, and half of that is garden...66'x66', or 3900 square feet total).

On that tiny spit of land in the middle of the city, they produce more than six thousand pounds of food each year, and more than 350 varieties of vegetables. They also keep ducks, chickens, and goats. It is a truly remarkable place, and it not only provides them with almost all of their food, but it also produces enough to give them an income, as they sell their excess to local restaurants and the like.

If these people can do it on a tenth of an acre, imagine what would be possible on a full acre? Or three? Or even ten?

You may have heard that America is filling up.

Running out of room.

This is nonsense. There's so much land available that it boggles the mind, and much of it cheap! We're not talking about scrubland or desert, either. This is lush, fertile land that's just waiting for you to reach out and grab it.

Of course, if you really wanted to challenge yourself, you could even make these methods work in the high desert (see this video series for a taste of what that would look like: <https://www.youtube.com/watch?v=xzTHjlueqFI> ). Some of them, you could even make work in extremely harsh, cold climates.

We're going to make the assumption that you're looking to make things intentionally harder on yourself, so we're going to make the assumption that when you look for land, you're going to look in fairly temperate areas of the country. We'll show you the best places to look, and how to put the whole system together.

Note here, that you do not have to follow our advice to the letter. If you have already got land, use it. If you'd prefer to look in different areas than the ones we recommend, you can absolutely do that. The same techniques will work most anywhere.

The main thing to understand here is that in the pages that follow, we're going to show you a whole new way of looking at the world. A way that will not only reveal to you that the dream of home ownership is absolutely within your grasp, but also that you can have the home of your dreams and feed your family FOREVER much more easily and inexpensively than you ever imagined possible.

That's what true freedom looks like.

That's what you're about to learn. All you have to do to get started is turn the page....

## Chapter One: Land, Land, Land...

Before we can start talking about home building methods, or growing enough food to feed your family, we have got to talk about the land itself.

As we mentioned in the Introduction, you do not have to have the most fertile land on the planet to make this work. Just about any land, anywhere will do. You do not have to have a lot of it, either. As we mentioned earlier, there's a family RIGHT NOW, living in California, producing more than three tons of food a year from a paltry tenth of an acre.

You can do the same thing, or give yourself a little more room. Totally up to you.

We're going to show you how to find GREAT land in temperate parts of the country for a song.

There are three areas of the country you want to consider in particular. Again, you will find great deals pretty much anywhere, but these three areas offer outstanding value for the money.

### Top Areas To Consider:

- Anywhere in the rural Southeastern United States  
The great thing about this part of the country is that SO MUCH of it is rural. The climate ranges from warm to downright hot for most of the year, and the winters are extremely mild, giving you a much longer growing season than the norm (of course, with some of the methods we teach, the length of the growing season won't matter, because you will be growing food year-round). Land is plentiful and cheap here.
- Appalachia  
A huge area that tracks the course of the rocky mountains up the eastern portion of the United States. Commonly referred to as the most economically depressed area of the country, it might seem to be a poor choice at first glance, because finding a job here might be difficult. Fortunately, that's changing, and the region is rich in opportunity. Relatively few people have caught onto this fact, however, and land prices here are extremely attractive. If you love the idea of mountain living, then you will be genuinely excited about looking here.
- The Great Plains  
Here, you will find land cheaper than any other part of the country. The soil quality tends to be marginal to poor, but again, that's not an issue for you, because we'll show you how to steadily

improve the soil quality on your little slice of heaven. As soil quality improves, so will your land's productivity, and land in this part of the country tends to be ridiculously cheap. If you're not accustomed to cold winters and lots of snow, however, you could be in for a bit of a nasty surprise, so bear that in mind when if you're considering looking here.

At the end of the day though, the methods for FINDING great land are the same, no matter which part of the country you opt to look in.

There are two "key tips" to finding great land at a great price.

### Tip #1

The first is to consider looking at buying ten acres (or more). The reason is that at the ten acre mark, the price per acre tends to drop fairly dramatically. You might be able to find a three or four acre plot for \$5000-\$6000 an acre. In the same region, you will likely find ten acre plots selling for \$3000-\$4000 an acre. Sure, you will probably wind up spending more money overall, but you will get a lot more FOR your money, and once you start putting these ideas into practice, you could actually use the "extra acreage" to turn a tidy profit for you and your family. If you choose to take that approach, then you do not really need to worry so much about finding a job in the area you move to. You will have guaranteed employment for life!

### Tip #2

The second tip is simply this: Do not retain the services of a real estate agent right off the bat. Do your own searching and researching before you ever talk to an agent. The reason? An agent only gets paid when he or she makes a sale. That means, the moment you find an agent, he or she is going to start walking you through the process of making the purchase. Invariably, that leads to pressure. It might not be a high-pressure sales pitch, but it will be there. Save yourself the headache.

Besides, when you begin your search on your own, it gives you the time and opportunity to really get familiar with both the land in the area you have chosen to look into, and the prices you can expect. When you finally DO contact an agent, you will have probably already look at (and walked around on) several properties, and as such, you will have an excellent, and probably quite specific idea about what you're actually looking for. At that point, your chosen agent can do more in-depth property searches than are available to you on the internet, and can probably unearth a few hidden gems you didn't even know about. As long as those "hidden gems" fit your criterion, by all means, give them a look.

## Where To Look

There are a number of great places to find deals on property, but the three biggies are these:

**Landwatch.com** (<http://www.landwatch.com/>)

This is a website dedicated specifically to land. You can select specific states, and set a number of criterion (acreage and total price being the two biggies). Most of the land you will find here is for sale (offered by a variety of brokers), but sometimes, you will find land that's actually going up for auction soon. Auctions CAN BE a great way to acquire property. People will tell you that it is usually a bad idea to buy houses at auction unless you're really handy and/or really know what you're doing, but with land, it is a bit different. As long as you stay within your budget and do some basic checking to be sure the land is buildable, then you should be fine. Just remember not to get carried away and go over whatever budget you set for yourself!

**Craigslist.org** (<http://www.craigslist.org>)

Another often overlooked avenue for finding killer deals, Craigslist can be your best friend in terms of finding property that people are selling themselves, without going through an agent. Most of the time, the people selling here are just trying to save a bit of money. Most real estate agents charge fees ranging from 3-7%, and some people would just rather do it themselves in order to avoid paying that fee. Again, especially if you're just buying acreage with no buildings on it, this can be a no-brainer way to get a great deal.

**Google.com** (<http://www.google.com>)

Of course, Landwatch does not have EVERY property available listed on it, and if you have a pretty good idea about the area you're looking to buy in, you can just do a google search for "acreage in (the name of the area you're looking)". Your best bet here is to identify the specific counties you're most interested in and do a search on that county, so for instance, "Acreage in Carroll County, VA" would yield some finds that aren't listed on Landwatch.

I recommend using all three of these sources when conducting your initial search. That will give you a good feel for what's available in the areas you're most interested in, and once you have identified

## Things to look for

Not everyone will care about all of these, but in general, the following are good guidelines to use when conducting property searches.

### Buildable

The very first consideration when looking at any property is that it needs to be buildable. The property won't do you ANY good if you can't erect permanent structures on it. Usually, this question can be answered by means of a two minute phone call to whomever has the property listed.

### Utilities

You do not want to have to pay an arm and a leg to get utilities run to the property, so this is something else you will want to ask about when you make an initial inquiry into any given property. Do not forget to ask about internet access! It is not hugely important for everybody, but it IS increasingly important, and if it matters to you, then you will need to ask that question specifically.

### Well Water, Or No?

In a similar vein to the utilities question, you will want to find out if there's already a well on the property, and if not, are you allowed to sink one. If you are, then that puts you ahead of the game, and if there's already a well on the property, then that puts you even farther ahead. That's one less utility bill you will have. This one IS pretty important. Having control over your own water supply is every bit as critical as having control of your own food supply so if the property in question won't support, or does not have a well, then that's a pretty major strike against it in my book.

### No Neighborhoods

Even if you find a neighborhood without an HOA (Home Owner's Association) that's selling relatively large lots or tracts, steer clear of neighborhoods if you can. You might buy, only to find out that they form an HOA after you have settled in, they try to pass bylaws that will restrict what you can do on your own property. Best to just not take this chance. Remember, this is ultimately about becoming FREE. You can't do that if you have got people on an HOA telling you what you can and can't do on the property you own.

### Running Water

If you can find a property with a stream running through it, or that borders a river on one side, so much the better. You can use the water for irrigation, and if it is moving fast enough for power generation later. Of course, property with water on it is more expensive, so if money's tight, this one's not absolutely necessary, but it is something to keep in mind, and if your budget will support it, then it is generally better for you if you can get it.

### Partially Cleared

You want to be able to start building right away, so it is generally better to find a land with at least a couple of build sites already cleared. You will pay more for this, but only marginally. Note that you CAN

do well on property that has been totally cleared, but if you like the idea of added privacy then trees are good things. Not to mention, if you do buy a mostly wooded tract of land, then you can sell some of your trees to help pay for the home you plan to build, and/or the improvements you will be making when you start growing your own food. A great place to start if you're looking to make some money from the trees on your land is: <http://sellyourtrees.com/>

### Old Structures

This one's kind of iffy. On the one hand, an old, falling down structure is probably going to be in your way. You will likely need to knock it down to do everything you want to do with the property, and if you do not want to go through the hassle of doing that, then simply avoid it by looking for property with no structures built on it. On the other hand, people pay a lot of money for old, reclaimed barn wood, and like the trees we mentioned above, if you're willing to take the time, you can use this as a resource. This shouldn't be a deal breaker either way, but it is something else to keep in mind.

With these thoughts in mind, you should be able to fairly quickly narrow your search and find the ideal property for you and your family. Once you do, that's when you want to get an agent involved, and definitely take a look at any additional properties they may unearth for you. Remember, they've got access to more properties than you can find on your own, so do not JUST rely on your own searching. Obviously, if you find the perfect property on you and it is being sold by an individual, this means that you may never actually contact an agent. That's up to you, but an agent can definitely help make sure you haven't missed anything.

One final tip here. This is going to be your home. It is going to be the place where all your food comes from, so do not buy a piece of land sight unseen.

Get out on it. Walk the land. FEEL it. You will know if it is the right place for you and your family.

## Chapter Two – Your Dream Home – Shipping Containers

Okay, so let's jump right in! Early on, we talked about why having your own land was important (you can't be truly free if you're paying someone rent). Of course, having your own land does not mean much unless you have also got a roof over your head. We'll address the "roof over your head" part first, but as promised, in doing that, we're going to look at some very different construction methodologies. The reason? Traditional construction methodologies are expensive. A typical American house built by a builder will cost you about a hundred bucks a square foot. That's a huge expense, and we have found a variety of ways to do it differently that will save you a ton of money.

The first option is the lowly shipping container. There are literally hundreds of millions of these worldwide. They (like used tires, to give another example) are so ubiquitous that you could almost consider them to be a readily available natural resource, no matter where in the country (or the world, for that matter), you live.

You can buy used shipping containers for a song, too, which makes them cheap to build with.

### Hold On Though – I Do Not Want To Live In A Shipping Container!

At this point, I know what a lot of you are thinking. You do not want to live in a steel box! On the surface of it, it does seem like a silly idea, but hear me out. Not only can you get them on the cheap, but you can also buy several and arrange them into any configuration you want, to make your home as big as you like it.

See, most people who think about living in shipping containers tend to think of tiny homes (which is a topic we'll cover in another chapter, later), and it is true – a single shipping container makes a pretty small living space, but as you will see later in this chapter, that's not what we're talking about at all. In fact, using just two 8'x40' containers, we'll show you how you can parlay that 640 square feet of living space into twice that living space, and 1280 square feet is fairly respectable. Of course, if you want a bigger house, then it is easy enough to add a couple more containers to your plans.

Anyway, all of this to say, we're not going to try and cram your current life into a tiny space. If the tiny home movement appeals to you, we'll detail that later, but for the moment, let's think bigger than that.

Shipping containers have a host of other advantages too. They're solid and sturdy...much stronger than homes built using traditional building methods. A well-made shipping container home can withstand



high winds, including both hurricanes and tornadoes, and you can even easily turn your entire home into a Faraday Cage.

If you're not sure what a Faraday Cage is, let me put it to you like this: Say a terrorist group manages to detonate a nuke on US soil. The EMP (Electromagnetic Pulse) generated by such an explosion would instantly render all electronics inoperable...unless they're housed inside a Faraday Cage, which protects electronics from that kind of attack.

Think about that for a second. How awesome would it be if your ENTIRE HOME was a giant Faraday Cage? Even in the very worst circumstance imaginable, you would still have all your electronic equipment, even though everything and everyone around you was suddenly plunged back into the Dark Ages. Think about what that would do and how much that would improve your family's chances of survival in such a scenario. Pretty huge, right? A shipping container home can do that for you.

Strong, safe, secure, stable, and impervious to virtually everything. That's a pretty big selling point.

Of course, we all hope that the worst won't happen, but in the event that it does, wouldn't it be better to be prepared? Of course it would, so if this method of construction is starting to sound more appealing to you, then keep reading and we'll show you some amazing tricks where shipping containers are concerned.

## Where To Buy Them

There are a number of great sources for shipping containers, and we'll outline several of them below. If none of these sources bear fruit for you, you can always try Craigslist, although that's a somewhat rare item on that site (note: you will also want to search the term "Conex" on Craigslist if you do not have any luck finding "Shipping Containers" in a search). Even so, it is worth a look if you're striking out elsewhere. Failing that, you can also do a Google search on "Buy Shipping Containers in (your area)" for additional options.

## Buyer Zone

<http://www.buyerzone.com/>

A great, hands-free site. You will need to answer a few questions, but the form on the site is pretty simple and straightforward. Once you're done, they'll tell you how many vendors match the criterion you have established, and you will get an email with further information about contacting those vendors.

## CGI

[http://www.cgicontainersales.com/?gclid=CN2I-oOTvcUCFYgSHwodziUA\\_Q](http://www.cgicontainersales.com/?gclid=CN2I-oOTvcUCFYgSHwodziUA_Q)

CGI Container Sales is a big outfit with an enormous reach and great buying options. You can almost always find what you're looking for here, and at a reasonable price, too. You can get a quote from them via either their toll free number (1-800-255-4835) or by filling out the form on their website.

## Ebay

<http://www.ebay.com>

A great source for buying almost anything, and it certainly needs no introduction. When you search for shipping containers on Ebay, use the search term "Conex" if "Shipping Containers" does not net you any results. You will find dozens (or more) for sale here. In fact, you could use this as your go-to source, without even considering the other two (but we always like to give people tons of options).

## Buying Tips

- Buy "as-is" containers if you're looking for the best deals. You may need to do a bit of patching here and there, but you will save a ton of money.
- "Corten Steel" containers are the ones you want. These are the best for home construction, as they're rust resistant and extremely durable.
- Do not accept the first price you're offered. ALWAYS ask for a better deal! In practice, you will get one about forty percent of the time!
- Be sure to specify that you DO NOT need a "cargo worthy" container. Just a watertight one.
- Do not forget – if you strike out looking for "shipping containers," then change your search to "Conex." Most people do not know that, and they wind up missing out on a ton of great deals.

## Final notes

One of the hidden advantages of buying shipping containers in the US is the fact that we have a very large trade deficit with the rest of the world. That means, in a nutshell that we import way more stuff than we export. That, in turn, means that we wind up with a lot of empty shipping containers just sitting around here. It is too expensive to ship them back empty, so they wind up being sold. You can get a good "as-is" container for \$1500 or less, and THAT is an outstanding price indeed!

## Planning Your House

The first thing you will need in order to actually build a home around shipping containers is a plan. Specifically, blueprints. You want to have a master plan to follow, and it is worth your while to pay a professional to draw up plans for your future home. This is actually less expensive than you might think. There's only one person I use for this. Only one person I trust, and I am sharing that information with you.

<http://www.rye-homes.com/>

This guy produces great blueprints for a song. Forty cents a square foot, and you get a ton of critical information for that price too. Here's what his plans include:

- Roof framing plan
- Electrical plan and added material quantities to plan sheet
- Floor plan
- Elevations
- Foundation plan
- Energy efficient construction details
- A variety of 3d angles of what the finished home will look like
- 3x 11"x17" sets to have on-site (one for you, one for your builder, and a spare)
- Re-printable PDF

So basically, it is a one-stop shop with everything you need to get it right. I highly recommend that you spend some time playing around on Google Sketchup if you want to design something different than the one mentioned here. If you want to design something like what we mentioned, then sending the picture embedded here to the blueprint designer should be enough to get you started.

## So...How Can I Build A Decent House From Shipping Containers?

Remember what I told you before. When most people think in terms of building a home out of a shipping container, they're thinking in terms of a single container, and a tiny, cramped living space. Hey, if that works for you and it is what you want, knock yourself out, but if you want a bit more room, you can have it (a lot more room, actually), with as few as two shipping containers. Here's how.

Imagine a concrete slab, 32 feet wide, and 40 feet deep (1280 square feet). On this slab, you will place two shipping containers (each 8'x40'), with 16' between them. That's the basis of your home.

I am sure you have seen covered picnic areas in parks, right?

The roof for this home is the same thing. You simply sink posts into the earth around your slab. What you end up with is a workable shell of a home. The two shipping containers on the sides can be cut away to create bedrooms, leaving a massive central living area in the center. All you need to do is finish the front and rear walls and frame the interior and you're essentially done.

If you do not want it to LOOK like you're living in a shipping container, you can easily side the exterior (for free) using slats taken from wooden shipping pallets (also available all day long, for free, on Craigslist). That's it. That's how you can turn two shipping containers into a decent sized home.

If you do not want to have to do the front and rear walls yourself, then you will simply change the dimensions slightly. Instead of having sixteen feet between your two containers, you will make it an even twenty (because shipping containers come in two main sizes, 8'x40', and 8'x20'). The sides of your house will be the forty-foot containers, and the front and rear will be the twenty foot containers. This will create a rectangle of solid iron, with a big open space in the center. Put the roof over it in the same way you did before, use a plasma cutter to cut out your windows and doors, and frame the interior. You wind up with 1440 square feet of living space, and all your exterior walls already in place.

Given that you can find "as-is" shipping containers for around \$1500 apiece, you're looking at about \$6k for the containers, another \$3k for the slab, and \$5k for the roof. Another \$5k to wire and plumb and you could move in, finishing the siding and interior walls as you go. Total cost for the 1440 square foot design would be around \$19k. If you only used the two shipping container design, it would cost you about \$13k for a 1280 square foot home.

Think about that for a second. For the 1280 square foot version, you're looking at a cost per square foot of \$10.15 per square foot. For the larger version, you're looking at \$13.19. Now, compare that to the average cost of a home built via "regular" construction techniques...about a hundred bucks a square foot. Do you begin to see the power of this idea? Can you imagine having a home of your own for that amount of money? It seems insane, but again, it is a simple matter of seeing the world in a different light and making use of readily available raw materials (and again, shipping containers are so numerous that you almost have to consider them to be a natural resource).

Do not worry if you do not have the funds to do it all at once. You can buy the land, then as you get the funds, get your plans made as you get the funds for it, then have the slab poured. You can buy all the shipping containers at once, or singly if your budget won't allow you to purchase them all at once. Once the roof's on, if you do not mind "camping out" while you're finishing the rest, you could theoretically move in right then.

If you're having trouble visualizing what the house would look like, you're in luck. Here's a Google sketchup of the front (you can save money by going with a simpler roof design – this model actually has even more square footage because it features a second floor, but still only uses two shipping containers).



Here's a video presentation that the designer made:

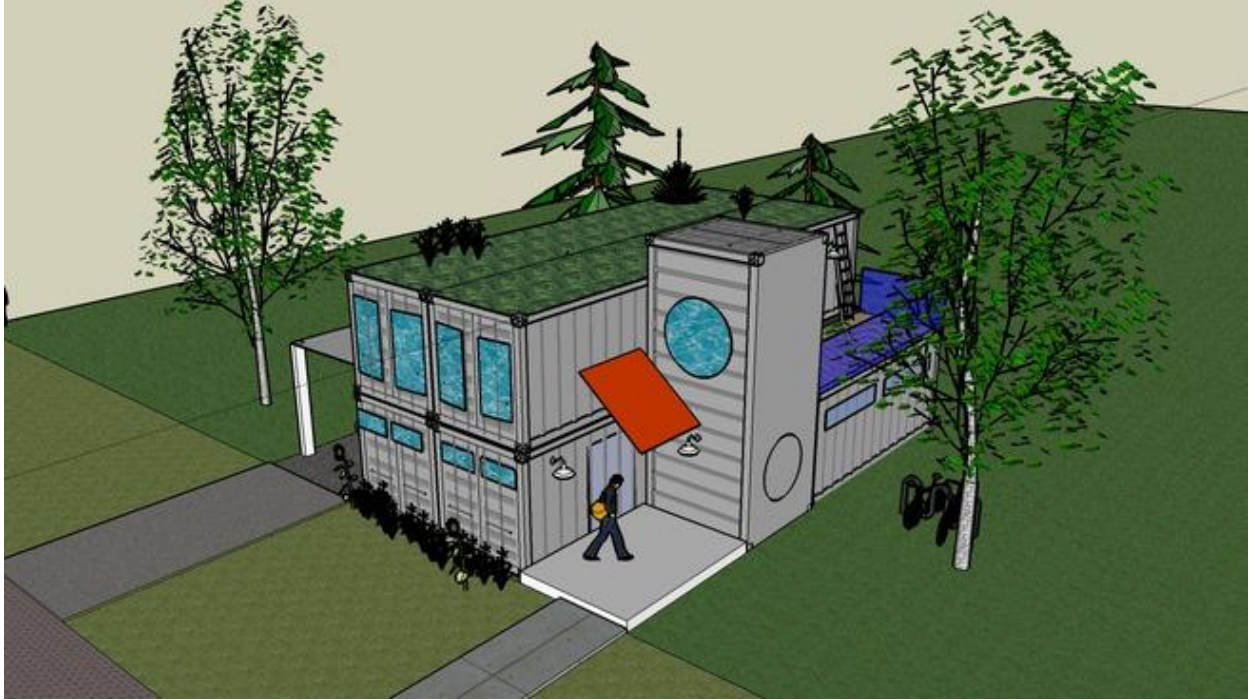
<https://www.youtube.com/watch?v=CuAVfobNBWA>

Of course, if you want to use more shipping containers, you can go crazy. Here are just a few freely available images from Google Sketchup that other designers have created.

### One Final Note

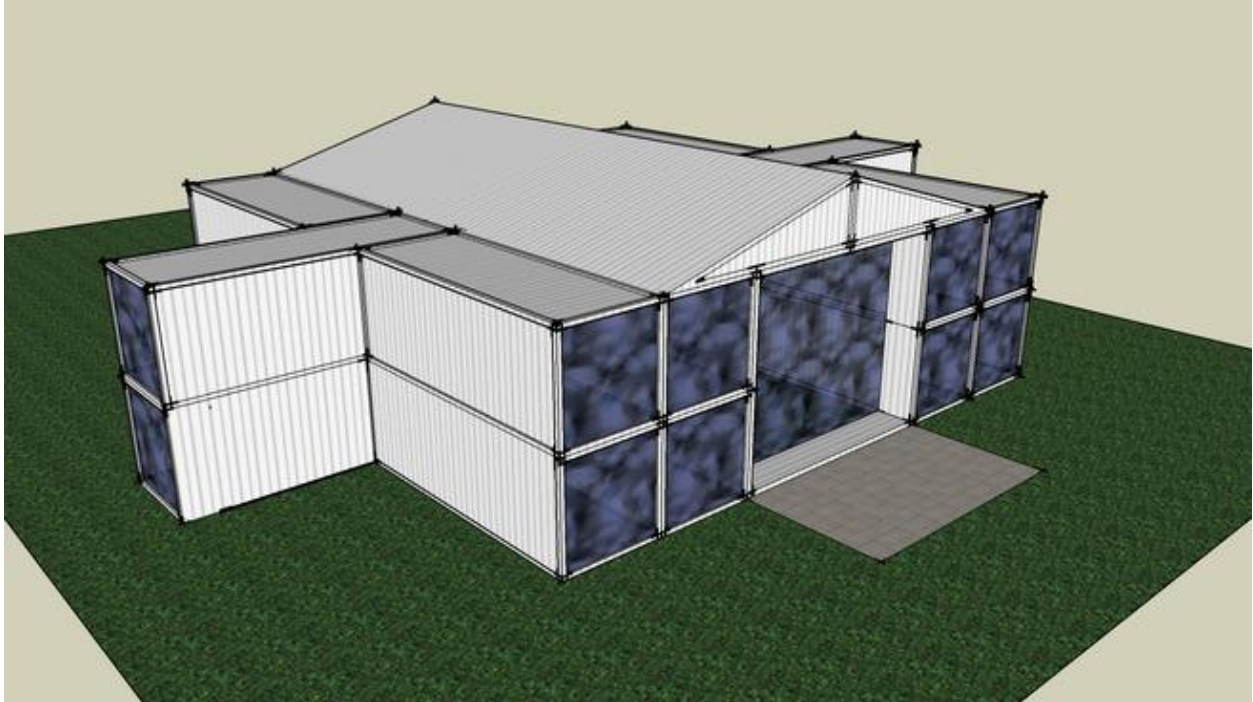
You may not be interested in adding solar panels onto your roof. If you're not, then disregard this. If you are, then you will want to make sure that the major surface areas of your roof are exposed to the east and the west. This is simply because with the majority of your roof facing in those directions, the arc of the sun will hit one side or the other of your roof all day long, maximizing the potential of your solar panels when you place them. Energy systems are beyond the scope of this book, but we would be remiss if we did not mention it here!











As you can see, we're not talking about some shabby, crappy-looking place here. We're talking about a fantastic looking homestead you will be proud to live in. I am willing to bet that you had NO IDEA you could have a nice home for as cheaply as what we have just revealed here, but this is just the beginning. Now that you have some idea of what's possible, let's look at some other fantastic options.

## Chapter Three – Your Dream Home – Geodesic Domes

While it is true that dome structures have been around for literally centuries, geodesic domes are something altogether different. Invented by Buckminster Fuller in the 30's, these domes are remarkable in so many ways that it boggles the imagination.

Domes are the most efficient building style in existence, enclosing the largest square foot area with the smallest amount of building materials. The bigger the dome, the stronger it becomes. Even modestly sized geodesic domes can withstand hurricane force winds with ease. That's why igloos are built the way that they are. That's why arctic monitoring stations are often built as geodesic domes.

Buckminster Fuller even mathematically demonstrated that a geodesic sphere, at least a half mile in diameter would weigh less than the materials used to construct it. Increase the air temperature inside the dome by a degree or two above the air temperature outside, warm air rises, and the sphere would rise into the air with it. It sounds like pure fantasy, but it is not.

Of course, we're not suggesting that you build a sphere a half mile in diameter. Not even close, but the fact remains that geodesic dome homes are both innovative and hugely efficient. They're ideal if you're also planning to install a home energy system like solar panels, because the dome is essentially all roof, giving you tons of surface area to work with.

It is possible to build a dome home yourself, but most of the kits that you can assemble on your own aren't commercial grade. In other words, they make great greenhouses, but aren't strong or durable enough to live in (we'll cover geodesic greenhouses later). For the time being, let's focus on the best vendors to look at if you're interested in having a geodesic dome home built. Note that it is still possible to build these industrial grade domes yourself, but in this case "yourself" is defined as you and about half a dozen of your buddies. This will not be a one or two person job!!

### Best Dome Vendors

A quick Google search will reveal literally dozens of vendors, all promising that they're "the best." They've all got some specific reason for it, of course – that's simply the nature of the business (any business, really). After all, they're trying to get you to open your wallet and spend money on THEIR product, as opposed to going with one of their competitors. We have evaluated dozens and dozens of such companies, and have come up with a short list to recommend, if you're considering going this route. Here they are:

## Natural Spaces Domes

<http://www.naturalspacesdomes.com/>

These guys have more than four decades of experience in building dome homes. They've even got a "Dome School" you can enroll in if you're interested in helping the crew build (which will save you money). The thing I like about this company is that they offer three "tiers" of domes, ranked for quality, A, B, and C. Domes that fall into the "A" category are built to the same construction standards as other homes you have lived in, but their shape makes them pound for pound stronger and more durable. The "B" category includes more custom features, while the "C" category is almost all custom and a true work of art.

If you opt for a standard dome home (category "A") and build it yourself, you will wind up spending about \$50 a square foot, which makes these homes about half the price of a traditionally built structure, and 40-50% more energy efficient. If you opt for the totally custom option, you will find yourself spending \$90-\$110 per square foot, so your finished product will cost about as much as a traditional home, but you will find that your finished product is truly remarkable. Here's an example, taken from the company's own site. I'll give you a minute to pick up your jaw.



### F-Domes

<http://fdomes.com/us/?gclid=CKvHotrRvcUCFdOQHwodPEUAaw>

The domes these companies sell aren't as strong or durable as other offerings, but they make up for that by being cheap. You can get their largest dome for just a bit over \$10,000. 39.5 feet in diameter and 19 feet high, these domes could easily be used for year-round, eco-friendly living, although if you opt to live in one of these, it will feel a bit like camping. The upshot here is that you, your wife and kids can build these with very little training. If you want something smaller, you can get the price of the kit even lower.

### Domerama

<http://www.domerama.com/geodesic-dome-plans/>

This company sells plans and blueprints, so you're on your own in terms of buying the actual building materials, but there are a number of fantastic designs available, so you have got tons of options to choose from, and the blueprints are fantastically priced. Depending on what kinds of deals you can get

on building materials, you will probably wind up spending around \$40-\$50 per square foot on the finished place.

### Timberline

<http://www.domehome.com/productinfo.html>

Timberline produces dome “kits” that you can build using nothing more than a socket wrench, a hammer, a ladder and a nail gun (scaffolding would be helpful but is not, strictly speaking, necessary). These kit-built homes are stylish, beautiful and have all the advantages of all other geodesic dome homes. There are a variety of styles and plans to choose from but you will typically find yourself spending between \$30,000-\$40,000 for the kit, which you and your family can assemble together with little in the way of outside help or supervision, making it an attractive option.

### Disadvantages of Dome Homes

Okay, I personally love domes, but not everyone does. The first, big disadvantage you will find where these kinds of homes are concerned is their overall look. People are used to living in square homes, not round ones. Sometimes, that’s enough to dissuade people from taking the leap. The other potential disadvantage is that dome homes are built around triangles, not squares. Triangles are somewhat difficult to plan around. Again, our lives are built around squares and rectangles. It can be hard to arrange a room that’s all odd angles. This is not a deal breaker for most people, but it IS something to think about.

## Chapter Four – Your Dream Home – Earthships

I will say upfront that of all the home building options listed here, Earthships are the most expensive. You will actually wind up spending a little MORE per square foot on an Earthship than you will on a conventionally built home. Then again, Earthships are unlike any other homes on the planet.

The company that makes them (Earthship Biotecture <http://earthship.com/>) calls their creations “radically sustainable buildings” and they are. When you build one of these, you’re building something using building materials that are indigenous to your local area, and something that, in addition to simply being the place where you and your family lives, also provides all your power, water, and even some of your food. It is a holistic system that works seamlessly together. They are beautiful, flowing structures and they are absolutely remarkable.

The exterior walls are usually constructed from used tires, which can be found in abundance just about anywhere. These are packed with mud, and one tire can weigh as much as nine hundred pounds when fully loaded. All that to say that these houses are nigh on indestructible.

They've got a clever water catchment system that catches rainwater from your rooftop and filters it into a cistern for drinking and home use. The "greywater" from your laundry and doing the dishes is cleaned, and then used to water the plants in the built-in terrarium. If built in an area with adequate wind, these homes feature a windmill on the roof. If built in areas with adequate sun, you will find solar panels. They've even got built-in waste water treatment systems. Yes, you read that correctly. These are some of the most sustainable, amazing buildings being built today (pictures from the company website below, for reference). They may be priced out of reach for some, but we could not mention modern homesteading without giving Earthships a nod. They are truly extraordinary.

You should know too that you'll probably be an active participant in building your own Earthship. The company works with you on the design and takes the time to study the area you're building in, so that they can better understand the raw materials that are indigenous and in abundance in the area. Once that understanding has been achieved, they encourage active participation, and you can easily turn it into an ongoing, extended family event. Be prepared to roll up your sleeves and get muddy, packing tires and maneuvering them into position. The best part about this approach though, is that when you're done, not only do you feel as though you've got new family members (having sweated and struggled with the people they sent to help you with the project, it's kind of hard NOT to see them as family), and you'll truly feel connected to your new home. It's a part of you, and you of it. That's magical. There's a lot to be said for that.











In looking at the pictures of the exterior, I'm betting you almost forgot that I said the exterior walls are usually built with mud-packed used tires, didn't you? It's easy TO forget that detail when you look at them – they just look like a natural extension of their environments. In the interior shots, you may have thought you saw coke and other glass bottles woven into the fabric of some of the walls, and you'd be right about that! As much as possible, these homes are built using recycled and reclaimed materials, which makes them that much more special.

## Chapter Four – Your Dream Home – Tiny Homes!

The tiny home movement has really caught on in recent years. It started out as a Hipster fad, born of the sad realization that the generation coming of age right now probably won't be as well off as their parents were – in response to that, the Hipsters took it upon themselves to think differently, and that's really where the tiny house movement started.

That may have been its genesis, but it didn't stay there for long (or at least not exclusively). Very quickly, it morphed into a number of independent projects aimed at helping the poor and homeless, and then began capturing the attention of the mainstream. At the time this document was written, there are more than thirty different "tiny house" projects all over the country, specifically designed with the poor and homeless in mind. Some are solo projects – artists and designers inspired to see how much of a difference they can make, and some are grass roots community level projects and non-profits determined to take this new idea and do something truly great with it.

Tiny homes come in all shapes, and are made from a stunning variety of materials. People have made tiny homes out of garbage bins, horse trailers, school busses, shipping pallets, used tires, recycled windows, cinderblocks, and more. There's really no limit to what you can build these great homes out of. The only thing they share in common is that they're all well...small. Tiny.

The point of the tiny home is to live more simply. They're not necessarily energy self-sufficient, though they certainly can be, but one thing they consistently do well is that they make excellent use of all available space. Because tiny homes tend to be about efficient space use and artistry, you will find that these are typically on par with standard sized homes from a cost per square foot perspective. Of course, you will still wind up paying tens of thousands of dollars less, because of their smaller size. And it should be noted that it is VERY possible to build a tiny home for little to nothing, if you get creative.

For our purposes, we'll outline some of the more popular building methods and some of the more popular materials used, and give you a number of tips and tricks for sourcing materials to build your own. Given that, we're going to focus primarily on two varieties of tiny homes. Those you can build for little to nothing, and "kits" you can buy to build quickly.

There are no right answers here. It all comes down to what kind of house you ultimately want to build.

## Homes in a Box

So let's start with tiny home kits. There are a number of companies selling turnkey packages that you can either build yourself, or have assembled for you, quickly and easily. Here are our top picks in this category:

### Small Homes Oregon

<http://smallhomeoregon.net/>

This company offers a variety of models, divided into two categories. Garden Homes and Small Homes. Sizes range from 158 to 325 square feet in size. The prices on these range from \$35,000 to about \$50,000. They're kits, and require no special tools to assemble. You and your family can probably assemble one of these in about a week. As with all small home designs, these make exquisite use of every square foot of space.

### Inhabit Dwellings

<http://www.inhabitdwellings.com/>

This company sells plans, rather than kits, so you will be on your own as far as sourcing materials is concerned, but later in this chapter, we'll show you where you can get materials for little to nothing, so do not be put off by that. Plans range in size from 200 to 700 square feet, so you will have access to larger dwellings than Small Homes Oregon provides. An interesting option and well worth considering.

### Katrina Cottages

<http://www.mariannekusato.com/#!portfolio/c8mm>

Offered by Marianne Cusato, these homes range from 308 to an impressive 1807 square feet! The designs were created with money from a government grant. On the heels of Hurricane Katrina, the government made funds available to people who were interested in coming up with affordable housing to help get the city of New Orleans and surrounding areas back on their feet. These designs were a direct outgrowth of that, and a great many of these cottages were built in Louisiana in the months and years following the storm. While the larger models are clearly not "tiny homes" by any definition, it is such a great offering that it absolutely deserves a mention here. Check the plans out and see for yourself.

### Tortoiseshell Homes

<http://tortoiseshellhome.com/Pricing.html>

Another great option, this company offers three models, all on wheels. The three sizes are 8x17 (136 square feet, priced at \$28,000), 8x17 (also 136 square feet, priced at \$32,000), and 8x28 (224 square feet, priced at \$38,500). They're small but mobile and absolutely great little homes. They're not for everyone, to be sure, but an outstanding option.

### Tiny Green Cabins

<http://tinygreencabins.com/>

These cabins tend toward the small size, ranging from just 96 square feet up to 176 square feet. Prices range from \$19,900 to \$52,000. If you do not mind living small, these are fantastic. A group of exquisitely designed homes.

### Solidbuild

<http://www.solidbuildwood.com/small-cabins/>

With cabins ranging from 195 to 560 square feet and prices starting at just \$8495 (and going as high as \$26225), these cabins represent one of the best kit complete options on the market. We saved the best of this category for last. If you're looking for a quick, easy housing solution, then this is an excellent all-around choice. Of all the "home in a box" options available, this one has the best overall pricing, so if you're on a budget and looking for a tiny home, it's hard to beat eight thousand dollars and change.

Kits are all well and good, but do not be "boxed in" (see what I did there?) by thinking that they're the only way to go. As we mentioned at the outset, people have made tiny homes out of an amazing variety of materials. For the rest of this chapter, we'll outline several options for you.

### Other Tiny Home Options

The possibilities are endless, but some materials are better and more readily available than others. Below, we'll outline some materials you can use for construction that are both easy to find anywhere in the country, and that you may not have considered.

### Used Tires

We have said this before. No matter where you go...no matter what part of the country you live in, used tires can be found in abundance. While nobody will outright pay you to take them off their hands, you can almost always get as many of these as you like, for free. Why? Because nobody wants them. The thing is though, they make fantastic building materials.

As mentioned in the section on Earthships, tires packed with mud and stacked make amazingly good exterior walls for your structure, although they are extremely heavy and can weigh up to nine hundred pounds when fully packed. Once in position, these can be covered with stucco to create an adobe-like

structure, and the tires themselves offer unparalleled insulation. Once your exterior is complete, it is a simple matter to put a roof over it and finish the interior as it pleases you.

### Cement Blocks

A very commonly available free item on Craigslist, you can gather these up over time and build a home of any size using them. As far as finishing the exterior is concerned, there are lots of options available if you do not want it to appear obvious that you live in a home made from simple cement blocks. It does not bother some people, but others find aesthetics to be more important. As with the tire suggestion above, stucco is an option, as is some kind of siding. Both are easily applied here. The reality is that in many rural communities, cement block homes are a lot more common than you might think. Too often, we drive right past them without even noticing, but now that you've read this, I'm betting you'll be paying more attention the next time you're out driving in the country. When you do, if you keep an eye out for them, you'll see a lot more than you think! There's a reason for that, and the reason is that it's such a cheap, easy to use, and readily available building material that it's tough to ignore.

### Shipping Pallets

Probably one of the greatest unsung heroes in the world of alternative building materials, the lowly shipping pallet is one of the most amazing, versatile resources you have got at your disposal. You can make anything from a fully functioning home, to siding for a home made from something else, to an amazing array of furniture. Even if you do not have a current project underway, you should never stop sourcing and acquiring shipping pallets. Again, you can commonly find these for free on Craigslist, and a quick tour around your town will probably reveal stacks of them that are simply going to waste. The overwhelming majority of the time, the people who own them will simply give them to you so as to get rid of them. They're pure gold in the right hands. Make those hands yours!

### Recycled Windows

Any time you find an abandoned building, see if you can find the owner and ask if you can strip it. They may want some nominal payment for it if they know that you're interested in the raw materials, but as often as not, they'll be happy to let you have what you want if you agree to tear the building down and haul of everything you do not keep for yourself. It is a good trade. A win for you, because you have access to a wealth of perfectly useable raw materials, and a win for them, because you're helping them get rid of something they consider to be an eyesore. You can actually build an entire home from nothing BUT recycled windows as a couple did, here: <http://inhabitat.com/couple-leave-their-jobs-to-build-a-recycled-windows-love-nest/>

### Old Barn (or other reclaimed) Wood

The same thing that holds true for recycled windows also holds true for old barn wood. Again, it is generally pretty easy to get access to this material. Sure, it requires a little elbow grease on your part, but more often than not, you can make a trade to systematically dismantle a decrepit building on

someone else's property, hauling it off for them and keeping the goodies you're most interested in for yourself.

These materials can almost always be sourced locally. People are generally thrilled to simply let you take this stuff off their hands. In fact, you can often find most of these items listed in the "free" section of Craigslist. If not, a quick trip around town will reveal stacks of unused and unwanted tires, shipping pallets, or falling down buildings. It is easy to simply walk up and ask if they'd mind if you took the materials off their hands. I can't tell you how many items I've gotten exactly that way. Just drive around, see something useful, knock on a door and...ask. Not rocket science, and no mystery to it. Simple and effective.

Also, do not worry that your finished product will look shoddy. All of the above are excellent building materials, and if aesthetic is important to you, it is easy to craft siding out of slats from shipping pallets, or, if you want to spend money on it, you can have your finished home professionally sided. Totally up to you.

### Shipping Containers (again!)

Can you tell we're a big fan of shipping containers? We absolutely are, and for good reason. I personally believe that we could END homelessness in America, and indeed, much of the world, by making use of shipping containers. For one thing, there are so many of them that they should rightly be considered a "natural resource" (like used tires), pretty much everywhere. You can find an abundance of shipping containers even in places like Somalia. Seriously. They're EVERYWHERE.

In addition to being everywhere, and in virtually unlimited supply, they're also really cheap. Armed with a shipping container and a plasma torch, you can basically carve your own home, making as many doors and windows as you like.

The first time we mentioned shipping containers (also called Conex, do not forget!), we showed you how you could take as few as two of them, and turn that into a home with more than 1200 square feet. You can also take a single shipping container and turn it into a tiny home, however, and there are a number of different designs freely available on the 'net to do just that. You will still want to have blueprints drawn up, so you do not make a misstep when carving out your doors and windows with the plasma cutter, but given the small size of the home you will be looking at when designing around a single shipping container, this won't be expensive at all (remember, our source for blueprints charges just \$0.40 per square foot, and the biggest shipping containers you can find easily are 8'x40' (so 320 square feet, total). Even so, since you can find these for as little as \$1500, you're talking about an AMAZINGLY inexpensive home here. Again, we return to Google Sketchup to pull some freely available examples of what's possible with a single (and in one of the examples) two shipping containers. You can go there

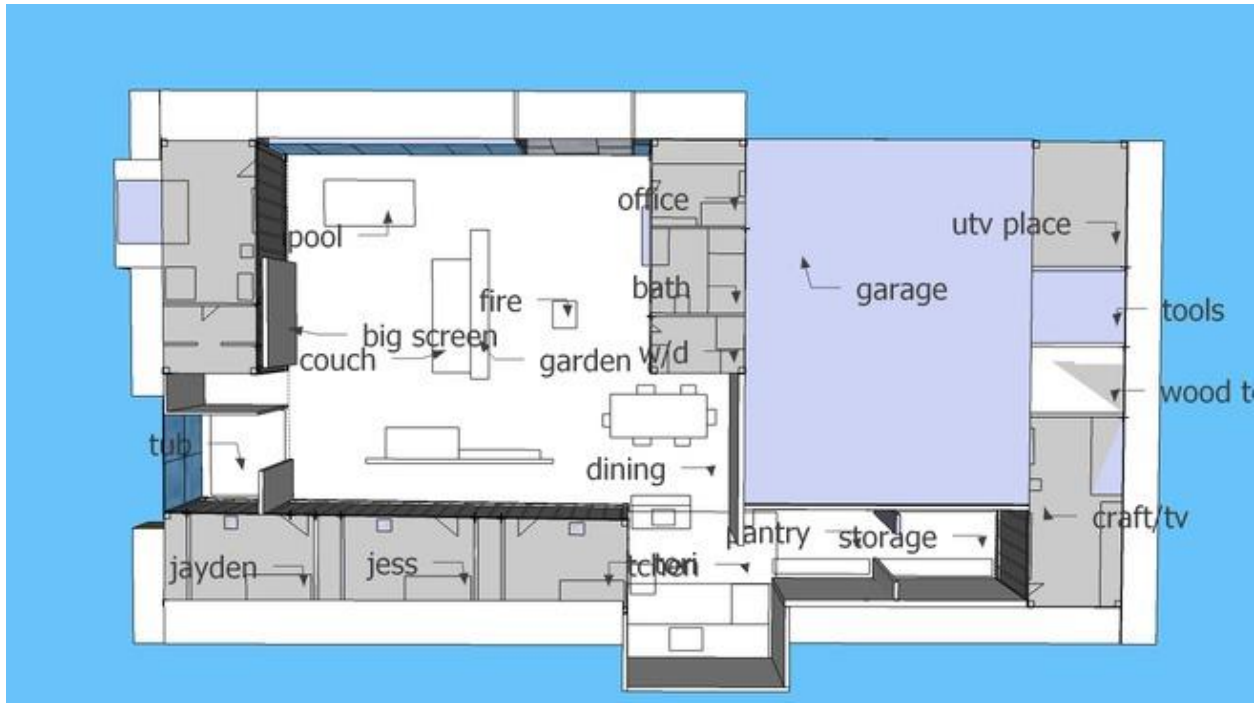
yourself and do a search for “shipping container homes” and find MANY more than just the examples we have pulled here. All of these designs are offered freely by their creators.











If you're not excited and amazed by the possibilities mentioned so far, check your pulse. This is amazing stuff!

### Insulation on the Cheap

Okay – so let's say you take the plunge and build a home using cement blocks, shipping pallets, Conex containers, or some other unusual or unexpected material. How warm and cozy can homes like that be? After all, a cement block house probably gets COLD in the winter, right?

The answer is...maybe. It can, sure, but again, with a bit of creativity, that doesn't have to be the case. Some of the materials we've discussed are extremely well insulated without having to do anything else. I can promise you that not much of anything is going to get into, or out of an exterior wall composed of a column of nine hundred pound, mud-packed tires! On the other hand, it's true that cement blocks, once they get cold, man – they STAY cold, and it can be hard to get them warmed back up again. And how warm can a house made out of a bunch of shipping pallets actually be?

Well, here are two ideas that address both the cement blocks and the wood pallet homes.

Where the cement blocks are concerned, you can take advantage of the holes in the blocks and use those to insulate the place. The idea here is to use the same strategy that the Earthship people use with the tires. Just pack them with mud! Mud...earth is a fantastic natural insulator, and if you take that

simple step, you'll find that your cement block home is actually much better insulated than you imagined!

Where shipping pallets are concerned (and of course, this idea can be used almost anywhere, regardless of your selected building medium), here's something that not many people have thought of yet. Used pizza delivery warming boxes.

You've ordered pizza and had it delivered before, right?

When you did, you probably saw the delivery guy bring your food in an insulated, collapsible box. Well, the pizza companies just throw those boxes out when they start to get worn, but they're still useful as insulation, and if you do a bit of networking, you can have every pizza joint in town saving them for you. They make FANTASTIC (free!) insulation, too!

Insulation is, or can be, fairly expensive, but as with everything else we've talked about so far, it doesn't have to be. Remember at the start I mentioned that one of the goals of this book was to help you see the world in a whole new way. This is an example of that. The goal here is to help you gain your freedom and independence. To help you create a system that will enable you to give that gift to your entire family, but in the course of doing that, we're also teaching you to look at the world with a different set of eyes. To see opportunity in what other people consider useless or worthless. Those opportunities exist right now, all around you. It's just a matter of seeing them for what they are and then acting on that recognition.

### Disadvantages of Tiny Homes

The biggest potential drawback to tiny homes is the fact that they're, as the name implies, small. If you have got a family of four, then living in a tiny house is not going to be practical, no matter how creative you get. I'm a firm believer in living simply and creatively, but there are limits. Then there's the fact that some people just won't be into radically downsizing their lives, just to live inexpensively. I can't say I blame them. We have, as a society, gotten used to a certain level of comfort, and a big part of that comfort is the room to move around and spread out in our own homes. Now, you can do that to a degree in a tiny house, because one of the things tiny homes excel at is making good use of outdoor space too. Most of the designs come with wide porches or decks, so the square footage of the home is a little misleading, because you've got a lot more space than "just" that, but even so, for some people, it won't be enough. Don't feel bad if you're one of those – that's specifically WHY we've included so many other options!

All that to say, the things described above are absolutely valid reasons for opting to pass on the tiny house movement. On the other hand, if you did have a family of four, rather than giving your kids their own room, it wouldn't be a stretch to just give them their own tiny house, and what kid wouldn't love that! All that to say that tiny houses certainly aren't for everyone, but the hope here is that if you're interested, you will have more than enough information to get started building one.

### **Final Note – Other Options**

As we mentioned before, you can make a home from most anything. People have successfully made perfectly livable homes from school busses, box trucks, and more. You're only limited by your imagination. As ever, when planning a home around any of these, it is imperative that you have a plan. That means having a blueprint to go by. It might seem a bit silly to have blueprints made for structures as small as these, but the reality is that their extremely small size makes it all the more important. In cases where you're fashioning a home from something unusual or unexpected like this, every square foot is important. Every square foot counts. That's why blueprints are so pivotal. Again, this guy can help. <http://www.rye-homes.com/>

## Chapter Five – Building Your Home Agronomy System

As important as your home is, it is only one part of your homestead, and it is actually the easiest part to get right. Significantly more difficult is to learn the fine art of growing tons of food in very small spaces, and that's why this section is the greater bulk of this course.

The reason that this is more difficult than getting a roof over your head is complex, because there are actually a number of different factors acting in concert. First and foremost, we, as a society, have forgotten so much of the wisdom of our agricultural past. There was a time, before the Industrial Revolution, that most of the nation's population was engaged in agriculture on some level. These days, almost no one is, and it has caused us to forget much of what we once knew about working the land and making it produce for us.

Another big part of it is cultural. We have been taught...conditioned by society to believe that large scale, monoculture farming is the only way to grow food. When we think of farms and farming at all, we tend to think of giant, corporate farms, tens of thousands of acres in size.

There are other factors too, of course, but these two, taken together, explain much of our current state of ignorance. Fortunately, this is a fixable problem. What has lost absolutely CAN be relearned. What has been forgotten can be rediscovered.

The reality is that large scale corporate monoculture is not only not the only way, it is not even the best way. Those gigantic corporate farms use unsustainable farming methods that destroy the land and the quality of the soil. The only way they're able to maintain productivity is by using ever-increasing amounts of chemicals, some of which invariably stay in the foot you bring home to your family.

Have you ever wondered why the incidents of cancer in our modern society, and in America in particular, are exploding? We're systematically poisoning ourselves. Does that sound like a recipe for long-term success to you?

Of course not.

Even if Big Agriculture DID use sustainable farming methods, the reality is that if you do not control at least a measure of your own food supply, you are not, and can never be truly free. Just like you can't

ever be free as long as you're paying someone else rent. Being beholden to another person (ANY other person, no matter how nice or well-meaning) for a roof over your head or the food you put in your family's bellies is the very OPPOSITE of freedom. Never put yourself in that position.

Now, I know what you're thinking. Farming is drudgery. It is time intensive, hard work. If you commit yourself to growing much (or even all) of your own food, you won't have time to go to your day job, much less have any leisure time left, right?

Those are the two biggest objections people tend to raise when the issue of food security comes up, but I am here to tell you that it is not true. It is just more conditioning. The powers that be WANT you to believe those things so they can control you, but you can take that control away from them any time you like. You can be the master of your own destiny.

One of the questions I get asked ALL THE TIME is, "if these methods are so great, then why isn't Big Agriculture" already using them?"

I always smile sadly when I get that question, because I understand the desperation behind it.

The thinking is that I must be trying to pull the wool over their eyes somehow. The reality is that Big Ag COULD use these methods, and they know it. If they did, their food production would skyrocket, and they know that too.

If their production skyrocketed, it would send food prices plummeting into the basement because that's how supply and demand works. The more you make of something, the less you can charge for it. Big Agriculture has invested TRILLIONS in its current infrastructure. Much of that infrastructure would be rendered unnecessary and obsolete, almost overnight if they were to switch to a different paradigm. It would be a financial disaster. Does that sound like something that ANY company would want to do? Of course not.

At the root, the reason people tend to ask that question is that they can't bring themselves to admit that they've been duped their whole lives by Big Agriculture. Duped into thinking that the current way is the ONLY way, or even the "best" way. It isn't. Not even close.

Not long ago, the World Bank commissioned a study to formulate strategies that would help Third World countries enrich themselves and slowly grow their way to prosperity. The thinking behind the

study was that with the rise and global reach of the internet, perhaps some innovative new ways could be found to help these impoverished nations. Sure enough, the World Bank study DID find some internet based opportunities that developing nations could take advantage of. The surprising thing though, was that when the study had been completed, the conclusion was that the very BEST way an impoverished nation could enrich itself was...agriculture.

Yes, you read that correctly. Agriculture was the number one most effective, surest way that a struggling, poor nation could enrich itself.

What's true for nations is also true for individuals. If you want to not only be free, but to truly ENRICH yourself and make a better life for your family, then agriculture is the way to go, hands down. Nothing will get you there faster or more reliably. That might come as a bit of a shock when you first read it, but here's the thing: You won't die if you can't surf the web for two months. You will if you can't eat for that same period of time. Everybody eats. Everybody.

Food security is probably the single most important aspect of regaining your freedom, and that is why so much of this course is devoted to that goal. We are going to show you two different ways to not just grow a little bit of your food, but virtually all of it (and we'll explain why there are a couple of notable exceptions). We're also going to show you how you can do that using a lot less space than you ever imagined possible, and without breaking your back or spending endless hours each day at it.

Sure, in the beginning, when you're getting your agronomy system established, there WILL BE work involved. Nothing worth doing happens without effort. Having said that though, you will be able to see real, tangible results a lot more quickly than you imagined possible, and once you see those results, it will inspire you to scale your efforts until you achieve whatever level of food independence and security you desire.

This system has been refined and developed over the course of a number of years, and is built on the bones of well-established methodologies that have existed for decades, and in some cases, centuries. Our method takes the best aspects from a number of different systems, and combines them to create a cohesive whole. We have distilled it down, and refined it to the point that it is both devastatingly simple and effective.

### **Start Small, Start Slow**

We understand that a lot of people reading this may have never actually tried to grow anything before in their lives. It is been a few generations since most of us have had to. Much easier to just pop down



to the local grocery store and pick up whatever we need, right? Let's start changing that, but let's start small. Here's your first mission.

Build or acquire two to four window boxes, like this:

[http://www.amazon.com/Dynamic-Design-MB3612TC-Medallion-36-Inch/dp/B004DGIZGS/ref=sr\\_1\\_1?ie=UTF8&qid=1431559868&sr=8-1&keywords=window+planter+box](http://www.amazon.com/Dynamic-Design-MB3612TC-Medallion-36-Inch/dp/B004DGIZGS/ref=sr_1_1?ie=UTF8&qid=1431559868&sr=8-1&keywords=window+planter+box)

If you do not want to buy, you can make use of pretty much anything here. You know those plastic buckets that cat litter sometimes comes in? Start saving those. You can get comparable buckets from any bakery in town, because the frosting and other items they use come in five gallon buckets. They typically just throw them away, so make a new friend and ask for their empties. Those will work in a pinch if money's tight.

Remember back in the tiny house section when we talked about used tires? Yep, you can use those as makeshift planters too. Get a couple if you do not want to buy window boxes.

The point is, get a few of the items described above, fill them with potting soil, and plant SOMETHING (well, you know...something LEGAL! LOL). It does not matter what. Basil or other herbs if that's your thing. Tomatoes, lettuce, peppers...just whatever you personally like and use.

Plant seeds, water, and watch them grow. Harvest something.

This is an important first step, especially if you haven't ever actually grown anything before, because it will give you a much needed confidence boost for what lies ahead. After all, once you know you can tend to a few plants in whatever planter boxes (or tires, or whatever) that you have settled on, then you know you can expand your operation, right? It is the exact same principle, just on a larger scale, so do not skip this step. This allows you to get a feel for growing things without having to invest a lot of time or money into a system until you're sure that it is something you want to do.

When I was first starting out, I had a few window boxes, and a number of old flower pots of various sizes that weren't in use, so I started with those. Later, I put some sugar snap peas in a five gallon bucket. About a week after that, I was clearing some brush in the back of our yard, and stumbled (literally) across two Koi ponds that had been completely filled in with pine straw and dead leaves. I dug them up and put them into service as planters. Here was my version of the experiment I've just asked you to do.

On the front porch:



The Five Gallon Bucket (I think this originally had cat litter in it, but I do not remember now)



And one of the two Koi ponds I found later. The wood slat sitting IN the pond is a foot long, and just sitting there for reference.



Note that here, we're not abiding by, or adhering to any particular "system" of growing things. We're just sticking seeds into dirt, tending them and seeing a small but tangible result growing (literally) from our humble efforts. That's the whole point of the experiment.

While we're on the subject of harvesting, and before we get too deeply into the nuts and bolts, I want to share with you a "trick" I learned during this stage of my own experiment.

I was disappointed at the size of my peppers and tomatoes. They were tasty, but they were little. I had peppers the size of golf balls. They were REALLY strong, but I wanted bigger ones like you see in the grocery store. Same with the tomatoes.

I asked around and learned the following.

Plants are kinda single minded. They can grow stalks and leaves, or they can grow fruit. They're not so good at doing both.

When your pepper plants are first sprouting, watch them closely. Before long, they'll branch and the trunk will form a "Y." As soon as you see that happen, snip off the smaller portion of the "Y" so that you basically just have a pepper "stalk" with nothing on it.

The pepper plant will respond by putting all its energy into making its trunk bigger...fatter.

Eventually, it will "Y" again.

Snip it again, and the trunk will get even fatter.

Keep doing that until what you have looks more like a tree trunk than a pepper plant stalk, THEN let it grow and get bushy. It will produce some of the biggest peppers you've ever seen in your life!

The same basic thing holds true with tomatoes. When you see the vine start to branch, snip the little end. Keep the NUMBER of vines to a minimum. Then, when the tomatoes start appearing, there will be fewer of them, but they will be HUGE. It works. I didn't think it would, but it really does.

Anyway, once you have accomplished the modest goal of planting something in your window boxes and harvesting that first “crop,” it’s time to kick things up several notches. Time to take it to the next level. Turn the page....

## Chapter Six – Small Footprint Farming – The HYNA Method

HYNA (pronounced “Hyena”) is our own hybrid, small footprint farming method. It stands for “High Yield, Natural Agronomy.” It combines certain elements of Jeavons’ “Biointensive” farming method, and Bartholomew’s “Square Foot Gardening” system, and meshes a two thousand year old irrigation system with both. If little of that made sense to you just yet, do not worry about it. We’ll explain everything you need to know in order to be successful in the pages that follow.

Before we start talking about the particulars, let’s talk about the system in broad terms, to get an overview of what the finished product will look like.

The goal here is to grow as much food as we possibly can, in the smallest possible space. We also want to allow for the growing of crops year round. Additionally, we want to ensure that the quality of the soil steadily and consistently improves over time. The reason? Better, higher soil quality translates into better crop yields. Good dirt = good food and more of it. It is just that simple. So before we get into the nuts and bolts of planning your first crop, let’s talk about the overall shape of the system. Here’s what you will ultimately have when the dust settles:

### Components of the System:

- **A Greenhouse**

You will probably hear from detractors that greenhouses are horribly inefficient. They’re not. Not only do they allow you to better control the climate your plants are grown in, but they also give you a secure, organized place to grow your food, and allow for year-round crops, and they allow you to control the ingress of animals (rabbits, deer, etc.) that would be inclined to eat your crops. While it is true that you can grow an amazing amount of food in a greenhouse of any size, bigger is always better. You can make your own, or buy one. If you opt to make your own, you will find a number of blueprints and parts manifests to build them in a variety of sizes.

If you’d rather buy, then I have two recommendations. First, if you’re looking for a cheap, efficient way to get started, then you will be hard pressed to do better than Shelter Logic’s 10’x20’ greenhouse. While not as sturdy as some, it is a great, inexpensive way to get started. Find out more about it here: [http://www.amazon.com/Shelter-Logic-Greenhouse--Greenhouse-8-Feet/dp/B00BINXG18/ref=sr\\_1\\_1?ie=UTF8&qid=1431561914&sr=8-1&keywords=shelter+logic+10%27+x+20%27+greenhouse](http://www.amazon.com/Shelter-Logic-Greenhouse--Greenhouse-8-Feet/dp/B00BINXG18/ref=sr_1_1?ie=UTF8&qid=1431561914&sr=8-1&keywords=shelter+logic+10%27+x+20%27+greenhouse)

My second recommendation is this: Remember back homestead section when we talked about

geodesic domes? Yep, they make another appearance here. Geodesic greenhouses have all of the advantages of their livable counterparts, and are recommended for all the same reasons. There's a staggering number of them available in a multitude of sizes, and they're all good investments. You can find a vast selection of them here:

[http://www.ebay.com/sch/i.html?from=R40&trksid=p2050601.m570.l1313.TR11.TRC1.A0.HO.Xgreenhouse+geodome.TRS0&\\_nkw=greenhouse+geodome&\\_sacat=0](http://www.ebay.com/sch/i.html?from=R40&trksid=p2050601.m570.l1313.TR11.TRC1.A0.HO.Xgreenhouse+geodome.TRS0&_nkw=greenhouse+geodome&_sacat=0)

- **Raised Beds**

Yes, you can plant your crops straight in the ground, but you have more control over initial soil quality by investing in raised beds. They make it easier for you to tend and maintain your crops. You can buy them, sure (here's an example: [http://www.amazon.com/Greenland-Gardener-8-Inch-Raised-Double/dp/B003W040OC/ref=sr\\_1\\_1?ie=UTF8&qid=1431566091&sr=8-1&keywords=raised+beds](http://www.amazon.com/Greenland-Gardener-8-Inch-Raised-Double/dp/B003W040OC/ref=sr_1_1?ie=UTF8&qid=1431566091&sr=8-1&keywords=raised+beds))

You can also build your own raised beds, using shipping pallets. All you need is a pallet popper or some means to quickly and efficiently disassemble pallets (like this:

<http://www.ebay.com/itm/Head-for-Pallet-Disassembly-Tool/261885042292?trksid=p2047675.c100012.m1985&trkparms=aid%3D444000%26algo%3DSOI.DEFAULT%26ao%3D1%26asc%3D29906%26meid%3D68fb3ad129384878a13ddf2055d6ff34%26pid%3D100012%26rk%3D3%26rkt%3D10%26sd%3D261714178881> Note that this is just the "head" of the tool – you will need to attach this to a rod about three or four feet in length to use it) Basically, what this does is allow you to pry shipping pallets apart with ease. Then, you can use the components (slats and rails) to construct a raised bed

**TIP #1** – There are two ways to build a raised bed using pallets. One involves nailing the side walls from the outside in, and the other involves nailing the side walls from the inside out. From the inside out is ALWAYS better. This is because once you put the beds into service, the weight and pressure of the dirt will push the nails out if you do it the other way. Nailing from inside the frame outward puts that force to work for you, rather than against you. Found that out the hard way when I built my first one!

**Tip #2** – When cutting the slats to make the side walls of your raised beds, 8" is optimal. You certainly don't need any more than that, and could possibly get by with a bit less. The only other tools you'll need to make them are a saw and a hammer. You can use a hand saw and a regular hammer if you prefer, but that makes for some backbreaking work, and some long days, depending on how many raised beds you're actually making. When I made mine, I used a battery powered Sawzall for cutting (like this: [http://www.amazon.com/DEWALT-DC385K-18-Volt-Cordless-Reciprocating/dp/B0001LQLDS/ref=sr\\_1\\_2?ie=UTF8&qid=1431672016&sr=8-2&keywords=battery+powered+Sawzall](http://www.amazon.com/DEWALT-DC385K-18-Volt-Cordless-Reciprocating/dp/B0001LQLDS/ref=sr_1_2?ie=UTF8&qid=1431672016&sr=8-2&keywords=battery+powered+Sawzall))

In terms of a nail gun, this is the exact one I bought when I started my very first project (I've since upgraded to a bigger/better one, but this was a GREAT starter tool). The compressor: [http://www.amazon.com/Campbell-Hausfeld-FP209499-3-Gallon-Compressor/dp/B002O15NRS/ref=sr\\_1\\_1?ie=UTF8&qid=1431672208&sr=8-](http://www.amazon.com/Campbell-Hausfeld-FP209499-3-Gallon-Compressor/dp/B002O15NRS/ref=sr_1_1?ie=UTF8&qid=1431672208&sr=8-)

[1&keywords=campbell+hausfeld+compressor](#)

And the nail gun: [http://www.amazon.com/Campbell-Hausfeld-CHG00100AV-4-Inch-Stapler/dp/B0046RDW44/ref=sr\\_1\\_10?ie=UTF8&qid=1431672202&sr=8-10&keywords=air+compressor+nail+gun](http://www.amazon.com/Campbell-Hausfeld-CHG00100AV-4-Inch-Stapler/dp/B0046RDW44/ref=sr_1_10?ie=UTF8&qid=1431672202&sr=8-10&keywords=air+compressor+nail+gun)

They're fairly light duty tools, yes, but they're PERFECT for a project like this. Highly recommended. Note that the Sawzall I recommended it battery powered. That's on purpose because I had envisioned all along that after I finished with securing our food supply, I would immediately move to energy security. In our case, solar panels. I wanted all my tools to be battery powered so I could literally charge them for free, using the power of the sun.

- **Ollas**

These are for irrigation, and we'll get to this in a later section. They're essentially clay pots. If you buy Ollas from the store, you will pay through the nose for them. When we get to the section on irrigation, we'll explain how you can make your own for pennies. For now, just know that you will be using Ollas (clay pots) for irrigation. This works because when you fill a clay pot with water, the water will leech out into the soil and irrigate for you, automatically and naturally. You will find that when irrigating in this manner, you will use 75-90% less water than other methods of irrigation. Again – more on this later.

- **Compost**

We mentioned briefly the importance of improving your soil quality over time to increase your yields. Compost is the means by which you do that. Making compost can be a long, tedious process that can take up to four to six months. We have found a way to reduce that time to two weeks. We have got a whole section on soil quality, and will go into this in more detail there. For now, we just wanted you to know that it is an important part of the system.

- **Seed Station**

You do not want to just plant your seeds IN the raised beds. Rather, you will want to have a separate "seeding station" set up to let your plants take root. Then, once you have got healthy sprouts, you will take the best, most robust of these and actually plant in your raised beds. We'll go into this in more detail just below, but remember, the goal is to maximize the output of your garden. This is a part of that.

That's it. Those are the major components of this system. Having introduced them in general terms, let's get down to brass tacks and particulars.



## Building Your HYNA System

### Step 1 – Build or Buy a Greenhouse

Before you can start growing your own food, you need to have a firm foundation. You have probably noticed a trend with what we're doing here. Start with the foundation (the land), then establish the homestead. Now that we're onto food production, we're doing the same thing. Start with the foundation, but in this case, the foundation consists of two parts. The greenhouse and the raised beds.

Do not worry about the raised beds for now. The first priority is to build or buy a greenhouse and get it set up. Depending on the size of your family and exactly how much food you want to grow, you may need more than one greenhouse in operation. We recommend starting with just one and using it for a season or two to get a feel for how much food it will produce. Then, if needed, add a second to your mix until you achieve the total food output you desire. You may find that you enjoy it so much that you add an extra greenhouse or two beyond what you need to feed your family so you can start selling to your neighbors or to area restaurants.

If you are a do-it-yourselfer, then you should know that there are a surprising number of greenhouse designs offered on the internet for free. These vary in quality from one to the next, but some of them are quite good and quite complete. What's available changes on a fairly regular basis, but here are a couple of recommendations offered by sources that we think will keep their offerings up for the long term. Check these out!

### DIY Greenhouse Plans

- Ana White's "Barn-Style" Greenhouse  
<http://ana-white.com/2012/05/plans/barn-greenhouse>
- Jack Sanders' "BuildEasy"  
<http://www.howtospecialist.com/garden/greenhouse/free-greenhouse-plans/>
- Jack Sanders' "Small Greenhouse"  
<http://www.howtospecialist.com/uncategorized/small-greenhouse-plans/>
- The Florida Gardner Greenhouse  
<http://www.floridagardener.com/greenhouse/greenhousematerials.htm>
- The Solar Heated Greenhouse, offered by Mother Earth News  
<http://www.motherearthnews.com/diy/build-a-greenhouse->

[zmaz09onzraw.aspx#axzz2O5uSthk3](http://zmaz09onzraw.aspx#axzz2O5uSthk3)

- For the budget conscious, we include “The Fifty Dollar Greenhouse!”  
<http://doorgarden.com/10/50-dollar-hoop-house-green-house#more-44>
- Finally, while these aren’t plans, this link HAD TO be included for its inspiration value alone – a variety of greenhouses built from reclaimed windows and doors. A diehard Do It Yourselfer could probably easily craft plans simply by looking at these images.  
<http://www.inspirationgreen.com/greenhouses-made-from-old-windows-and-doors.html>

We’ve conducted a fairly intensive search, and tried hard to come up with a good cross section of greenhouse designs to fit a variety of needs and budgets. The idea here is that if you’re handy with tools and able to make something on your own, we wanted to give you a good variety to choose from so you could select the design that best fits your family’s needs. Of course, if you do not want to take the time to build, buying is always an option, and as mentioned a couple pages ago, there are some excellent options available.

If you build, you can expect the process to take the better part of a week, depending on your level of expertise, the difficulty of the model you select, and its size. If you buy, you can probably assemble it in a day, though larger models may take two. In either case, getting your greenhouse set up is the first order of business.

Remember too that even a modestly sized greenhouse is not really a one-man (or woman) job. You’re going to need help. Below, you will find a few pictures of the first one I ever assembled (a Shelter Logic 10’x20’ like the one I recommended in previous pages), starting with the call to arms. My first step was to rally my helpers:



Allow me to introduce my help. The kitten lying contentedly between the two dogs is little Dash (so named because she 'dashed' right out in front of my wife's car! She's a member of the supervisory staff, and although quite small, is absolutely in charge of her canine companions (she's a stray that my wife found wandering on the highway – when she stopped to try and get the kitten into her car, the kitten jumped up in the wheel well and refused to come out – she rode the whole way home there! Absolutely fearless little kitten!).

The dog up by the pillows is Molly. She was six at the time the photo was taken, and loves to be put to work. She helped by fetching pieces as they were needed.

The other dog (foreground) is Jynx. A loveable mutt puppy, not quite a year old there – not really much help, but VERY playful, energetic, and willing to try. She enjoyed being included, even if she wasn't sure what we were doing, and sometimes thought the smaller metal rods were bones to be buried...

Anyway, once the help was pumped up and ready to go, construction began:



This particular project took us about a day and a half. The first day was all about getting the “skeleton” in place, while the second day was all about putting the “skin” on, and anchoring it securely. Both are pivotal, so there’s really no shortcuts you can take. The project simply is what it is.



Jynx, checking out our handiwork!

## Step 2 – Build or Buy Raised Beds

Once you have got the greenhouse set up, now it is time to get it ready for planting. To do that, you will need a number of raised beds. When I assembled the Shelter Logic, I built a total of 8 raised beds out of pallets and put them in it. Remember when I told you that you wanted to nail your wooden slats to the INSIDE of your frame outward, rather than from the outside of the frame inward? Well, in the second of the two pictures that follow, you will see an example of both.

Here are the raw materials. These were given to me freely by a mini-storage company in the town where I live. People frequently just dump them on the property and the guys that run the place just stack them up...they didn't know what the heck to do with them, and told me I could come get as many as I wanted. It took me three trips to get all that they had, and I rented a small storage unit from them, gave them a key, and asked them to stack up any more that they got in my unit. They were thrilled!



And here are two of the beds. I made two sizes. 4'x4' and 2'x4'. Using this configuration, I put the two smaller beds at the back, and six of the larger beds in the rest. This gave me plenty of room to move in, around, and between them. This is an early shot, before the rest of the big beds were in place. As you can see, the two smaller beds have their slats nailed on the inside of the frame, outward, while the one big bed has the slats the other (wrong) way. About two weeks after planting, the soil had started to push the slats out of the big bed shown, and I had to dismantle and reassemble it. A TOTAL mess, but lesson learned. That is the kind of mistake you only make once, because it requires a ton of work to fix, especially when you have got the bed loaded with soil and plants!



I have found that it generally takes 1.5 shipping pallets to make one raised bed. In order to get my 8 beds, it took me 12 pallets. You might be able to do better, but use that as a general guide.

**TIP!** When making raised beds, your slats do not need to be any higher than 8". When I made my first batch, I made my slats a foot high, which was a terrible waste of materials. Lesson learned! Also note, the only tools I used to make these were a Sawzall and a nail gun. Well, and a hammer to pry the nails out of the pallets (before I got a Pallet Popper, which is a fabulous tool)!

### Step 3 – Plan Your Garden

This is the fun part, really. It starts with you deciding what you'd like to eat a month or two from now. Think about the different vegetables you enjoy and make a list. The only things we'll NOT be recommending in your new greenhouse garden are wheat and corn (see the end of this chapter for our reasoning), but otherwise, anything that's tasty to you, put it on the list!

This is actually a harder exercise than it first appears. It's so easy, and we're so used to just popping down to the grocery store when we want something, it's a bit of a challenge to sit down and think, "now what...I mean what EXACTLY do I want to grow and eat?"

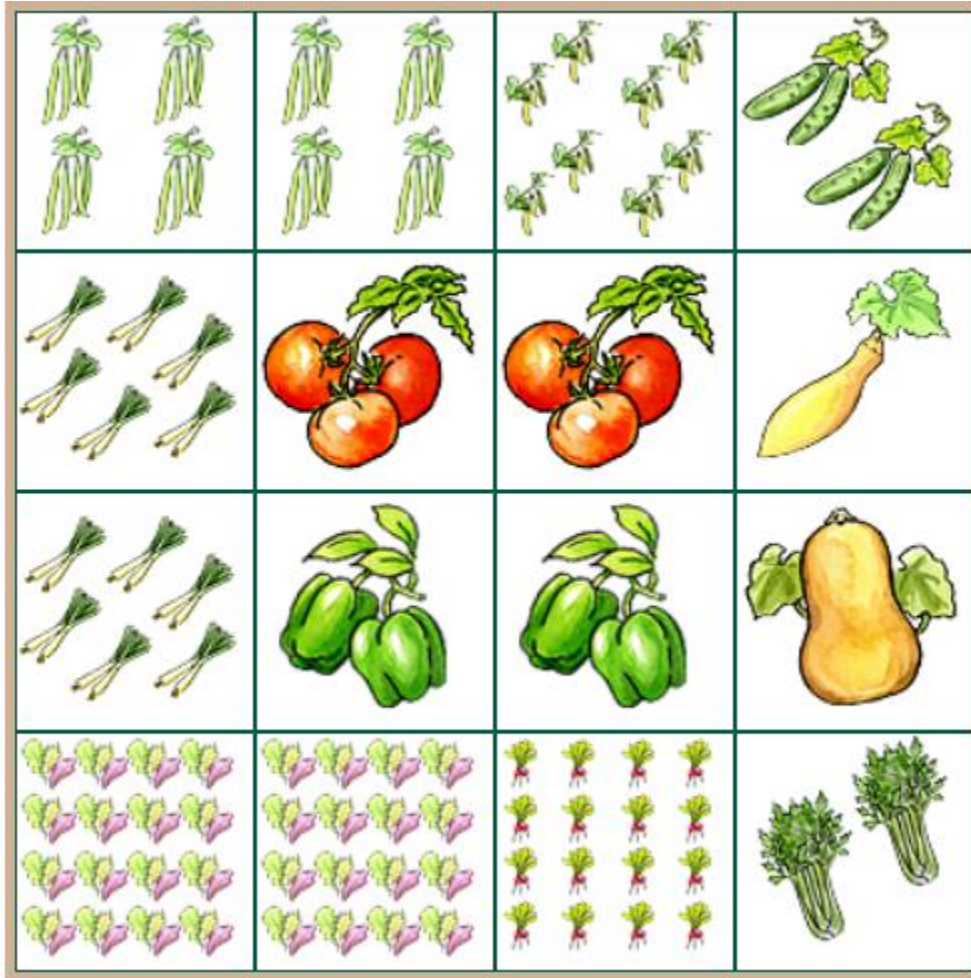
Then of course, once you have the short list, the next, and even more difficult question becomes, "and how much of it do I WANT to eat?" It's a fun exercise though, and something you can get the whole family's involvement and input in. After all, you're not just building and planting for you, so everybody's tastes have to be taken into account.

Since our methodology shares DNA with "Square Foot Gardening," we use the same planning and planting methodologies. To that end, all the same planning tools that work for Square Foot Gardening also work for HYNAs. Better Homes and Gardens has a GREAT free online tool that I TOTALLY recommend. You can find it here:

[http://www.bhg.com/bhg/xfile.jsp?item=/marketing/registration/splash\\_pages/bhg\\_splash\\_PAG\\_PlanAGardenGeneral&ordersrc=googlesearch65325Garden-Planner&gclid=CMn77f7HwMUCFdUYHwodEwQA1w](http://www.bhg.com/bhg/xfile.jsp?item=/marketing/registration/splash_pages/bhg_splash_PAG_PlanAGardenGeneral&ordersrc=googlesearch65325Garden-Planner&gclid=CMn77f7HwMUCFdUYHwodEwQA1w)

This is one of the garden plans I devised for one of my six "big" pallets (mentioned above)





If you can't tell from the graphics, this particular 4'x4' pallet has peas, string beans, cucumbers, leeks, tomatoes, two kinds of squash, bell peppers, lettuce, radishes and broccoli. As you can ALSO see by this chart, you can "fit" an amazing amount of food into a single pallet. I seriously overplanted the lettuce. We were able to harvest leaves multiple times from those two square feet, so we wound up getting lettuce faster than we could eat it! In any case, based on this single graphic, you can begin to get an idea of just how much food you can get out of a 10'x20' greenhouse. Remember that I had SIX raised beds of that size in the greenhouse, and two more half that size. An AMAZING amount of food, with a year-round growing season.

The great thing about using the Better Homes and Gardens tool is that it is already set up to work with Square Foot Gardening, and when you make the plan, it will tell you automatically how many of each plant can be planted on each square foot section.

If you DO NOT plan on using the Better Homes and Gardens tool, here's a handy chart that will tell you how many of each plant can be planted in a given square foot, so you can work out your own designs on paper, without using an online tool.

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**Square Foot Garden Planner** [InchSurvival.com](http://InchSurvival.com)

Aragula 16	Basil 2	Beans 4	Beets 9	Bok Choy 1	Broccoli 1	Brussel Sprouts 1
Cabbage 1	Carrots 16	Cauliflower 1	Celery 2	Chives 1	Cilantro 9	Hot Peppers 1
Collard (kale) 2	Corn 2	Cucumbers 2	Dill 9	Eggplant 1	Fennel 2	Garlic 4
Kohlrabi 4	Leeks 6	Lettuce 4	Melons 1	Onions 9	Oregano 1	Parsley 2
Parsnips 9	Peas 8	Peppers 1	Potatoes 2	Pumpkins 1	Radishes 16	Rosemary 1
Rutabagas 4	Sage 1	Spinach 9	Strawberries 1	Squash 1	Sweet Potatoes 1	Swiss Chard 2
Thyme 2	Tomatillos 1	Tomatoes 1	Turnips 9	Zucchini 2		

[www.inchsurvival.com](http://www.inchsurvival.com)
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[twitter.com/inchsurvival](https://twitter.com/inchsurvival)

**Tip!** – I wish I had thought of this when I first started out, because it would have changed my vegetable selections at the outset. Remember that this is an iterative process. You won't be growing 100% of your own food right off the bat. It's best then, after you make your list of things you WANT to grow, to price them. If you don't usually do the grocery shopping, then have your spouse price them. The idea here is that you want to start off by growing the stuff that's most expensive to buy. That way, when you begin harvesting, you get the biggest bang for your proverbial buck. This can be especially important if money's tight anyway, because the money you save from your first harvest can be reinvested back into expanding your system, creating a kind of snowball effect.

Unfortunately, I didn't have anybody to teach me this stuff, so I was basically making it up as I went. You, on the other hand, don't have to make all the rookie mistakes I did – go you! 😊

#### **Step 4 – Build Your Seed Station**

If you followed my advice about doing the small scale “test run” with the window boxes, then this step will be easy, because you can just reuse those same window boxes AS your seed station. That's what we do...all our seeds start life on the front porch, and then the best/healthiest ones get transplanted to the greenhouse.

Once your seed station is prepped and ready, you will want to go ahead and plant. Planting here, is done the way it is done in the “Biointensive” method, rather than the “Square Foot” method. We just think it works better.

What I recommend is to have a separate box, 5-gallon bucket, or large flower pot for each type of vegetable you like.

Rather than meticulously planting each seed and obsessing over spacing, just loosely scatter a few seeds into each planter, then sprinkle a handful of soil over them. Water and tend, waiting for sprouts to begin coming up. You want to wait until the sprouts are healthy and begin to differentiate. All sprouts tend to look about the same during their first few days, but after a week or so, you will begin to notice that some just seem more robust than others. These are the ones you want to (very carefully) uproot and transplant to your raised beds.

**TIP!** – You've got to be REALLY careful when watering your seedlings and sprouts, because they are so easily damaged. Sure, once they get a little bigger, they'll be fine if you use a watering can and pour water over them, or turn the hose on and hit them with the mister, but as seedlings, just starting to sprout, you can really damage your plants by watering them that way, and damage to them when

they're that small can either permanently stunt their growth, or leave them less able to produce fruit for you. Since that totally works against what you're trying to do here, care and caution are needed. This is actually the biggest reason that we prefer the Biointensive method of planting over the Square Foot method, which just sees you drop your seeds straight into the raised beds.

Taking a little extra care with your sprouts leads to healthier adult plants. No, we don't sing to them, or talk to them, or anything crazy like that. If you think it might help, give it a go and let us know! We do, however, carefully ladle sun-warmed water over them when they're young. It only takes a few extra minutes and we've consistently had a greater number of healthier seedlings for transplanting since we started doing that. I haven't kept accurate records on that front, but from being directly involved in it, I'd estimate that we've seen a fifteen to twenty percent higher transplant rate just by taking that little bit of extra time.

Again, this method undeniably takes more time than it would if we just planted the seeds directly into the raised beds. If you're REALLY pushed for time, you can certainly take the shortcut and do it that way, HOWEVER, if you do, know that you will be resigning yourself to consistently lower yields. By hand-selecting the healthiest, most robust plants from the outset, you ensure that EVERY plant that makes it into the greenhouse is a champion. That's ultimately what you're after, and really, transplanting a few seedlings every few days does not take up THAT much of your time. The net gains are worth the bit of extra time.

### Step 5 – Prep Your Raised Beds

This is probably the most backbreaking part of the job. The goal here is to put some good, nutrient rich soil in your raised beds and get them ready to receive your seedlings. You will read a lot of people's "secret recipes" for making good soil. They might work, and they might not – I couldn't tell you, as I didn't spend a lot of time messing with other people's recipes. I found one that works for me, and stuck with it.

Each raised bed I made got 2 bags of "regular" garden soil from Lowes (whatever brand was on sale), one bag of Miracle-Gro flower and vegetable garden soil, and one bag of organic compost (any brand should work). Note that later on, you will be making our own compost, so this is just to get things started.

Mix those ingredients into each raised bed and stir them all together with a garden rake. Wet thoroughly and let dry overnight, then mix again. That's it. You're ready for transplanting. Notice a few things here. We didn't get all new agey on you and do a strange "Voodoo Chicken Dance" to bless the land or anything, and we didn't load up on harsh chemicals. Yes, there are a few growth boosters in the bag of Miracle-Gro, and as you'll see, we'll be making one very light application of fertilizer later, but this is only for the initial crop, or until you run out of the one bag of fertilizer we recommend that you

purchase. By the time that bag runs out, your soil quality will be so good that you just won't need it. Ever.

### Step 6 - Transplant Those Seedlings!

Once you start getting healthy seedlings, transplant them into your raised beds in accordance with your garden plan. Note here that in general, you should be trying to get enough seedlings in one "batch" to completely fill a one square foot section. When I do it these days, my goal is to get enough seedlings to complete a whole raised bed in one go, then plant enough seeds to ensure that I get my next pallet fully seeded all at once. If you're new to it, that will take some trial and error, but you will find the right rhythm soon enough. Remember here that there are no "right" answers. Whatever rhythm works best for you, that's what you want to be doing.

Again, I want to stress here that at NO POINT are we going to tell you to load up on chemicals, and we're not even going to tell you to use bug spray. In fact, a little later on, we're going to tell you a neat trick to help invite more bugs to come in and join the party!

For now though, let's talk about fertilizer, and the one bag of fertilizer you will ever need. You should wait until your sprouts are about 2-3 weeks old, then sprinkle a small amount of "10-10-10" fertilizer around them. This is all natural stuff and it is good for your plants.

If you have kids, then you know that when your children hit a certain age, they go through a sudden growth spurt, and when that happens, it seems like they're bottomless pits. You sometimes wonder if they're going to eat you out of house and home or not (parents, you know what I am talking about here!).

The same thing is true of plants. When they hit a certain age, they go through an insane growth spurt. Sure, we could have told you to sprinkle down a little of that fertilizer right when you transplanted the seedlings, but if you had, then a lot of it would have gone to waste. By waiting a bit, you give those seedlings the burst of nutrients they need, right when they need it the most, and THAT kicks your garden into overdrive. Do you not believe me? Try it for one growing season without doing that, then try it the NEXT growing season, taking my advice. Oh yeah, if you do not want to get the fertilizer from your local shop, they'll deliver it to your door: <http://www.amazon.com/dp/B001D227IM?psc=1> For the small amount you will be using (no more than a scoop for the whole raised bed), a 40-pound bag of this stuff will last you about half of forever.

Note two things. First, we haven't talked about irrigation yet (that's next), and second, we haven't talked about soil quality yet (that's right after irrigation). The specific reason for that is that it was important to lay out the basic plan for you first, then fill in with those details after.

The above IS the basic plan. That's what's going to see you growing an amazing amount of food in a very small space, and so far, I think you will agree that we haven't done or suggested ANYTHING that's rocket science.

There are no strange hoops to jump through. There are no complexities here. Again, we have taken pains to distill this down to its purest essence. This is, after all, about growing lots of food, NOT finding ways to soak up hours and hours of your day! Now though, let's turn our attention to the other aspects of HYNA that make it truly shine.

### A Word About Pests

Some bugs are good. We WANT pollinators to come visit your garden, and in a later section, we'll teach you how to attract them. For right now though, let's talk about pests. Those nasty bugs that devour your plants, rather than pollinate for you.

It's going to happen. If you put plants into the ground and start tending them, sooner or later, bad bugs are going to find your little oasis of green and come for a visit. When that happens, habit has taught you to reach for the Roundup, or other chemical solution.

Don't do this.

Remember that when these plants bear fruit, you and your family will be eating them.

Do you really want a RoundUp-flavored salad?

Do you want your children to have one?

Just say no.

I'm going to tell you the single best bug killing substance on the planet.

Food Grade Diatomaceous earth. [http://www.amazon.com/Diatomaceous-Earth-Food-Grade-10/dp/B00025H2PY/ref=sr\\_1\\_1?ie=UTF8&qid=1431675884&sr=8-1&keywords=Food+Grade+Diatomaceous](http://www.amazon.com/Diatomaceous-Earth-Food-Grade-10/dp/B00025H2PY/ref=sr_1_1?ie=UTF8&qid=1431675884&sr=8-1&keywords=Food+Grade+Diatomaceous)

Buy a bag of this and keep it on hand. When the bad bugs come around, sprinkle some of it on the leaves of your plants and around their stalks. No more bugs! For bugs like grasshoppers, this stuff acts like glass. It's chalky to human touch, and perfectly safe to eat (it doesn't really taste like anything, actually, but if you wanted to prove the point, you could stir a spoonful into a glass of water and chug it with absolutely no effect). If your pets get into it, it won't hurt them in the least. It won't have any impact on the fruits and vegetables that ultimately come out of your garden, but it is LETHAL to bugs like grasshoppers. As they move, it gets between their joints and literally cuts them to ribbons.

It's also lethal to slugs and the like, and slugs love nothing better than to strip tender stalks bare. This stuff dries them out in no time flat. It's amazing. Use it once and you won't know how you ever did without it.

Here's another tip. Scientists in India discovered that putting Pepsi in a spray bottle and spraying your plants with it is actually more effective than pesticides. Not because the Pepsi acts as a poison, but rather because of the high sugar content. The bugs gorge themselves on the Pepsi, which they gravitate to first, because all animals (us included) love sweets, and are simply too full to feast on your plants afterwards. And Pepsi, by the way, is a LOT cheaper than pesticides.

So there you have it. Those are the two "chemicals" I use to keep pest insects away from my food. Dirt and Pepsi. That's it. Seriously. And I'm happy to report that I've NEVER had an insect problem.

### Expanding Your System

Note that the "Square Foot" planting method assumes that your raised beds will be...well, square. You can use the same principles though, no matter what shape your beds actually are. Remember the image I showed you above of the little Koi pond I found and dug up to put into service as a planter? It had a piece of wood in it that I mentioned was a foot long? That's what I use that piece of wood for. To measure out the one-foot increments of my garden.

Now, some people get pretty advanced here, and will use push pins and string to precisely measure out each and every square foot. You can do that if it makes you feel better, but me personally? I just use my stick and draw a faint line in the dirt (sorry, soil). That's really all you need, so don't overcomplicate it. After all, the only thing you need to do is mark the area until you get your seedlings in the ground.

After that, Mother Nature takes over and does her thing, and your little arbitrary markings are...well, maybe not meaningless, but they sure don't mean much.

Anyway, the point is, just because it's called the SQUARE foot method of planting, don't let a round planter dissuade you. The same basic approach can be used, regardless of the shape of the bed. You've just got to do a little math (or guesswork, if math's not your strong suit) to figure out how many plants of a given type go in the sometimes slightly less than a square foot areas. All that to say, since you can probably get a virtually unlimited number of used tires, there's absolutely no reason you couldn't use them as raised beds, either in your greenhouse, or outside it. Just be sure to arrange them in such a way that you can easily move among them when you're harvesting. In general, you will need at least two feet of space to move through, although if you'd like a wider corridor, you can certainly do that. Just remember that everything's a tradeoff. The more room you leave for yourself to move about, that's less room you're using for planting food! You're almost always better off minimizing the space you use to navigate through the greenhouse in order to squeeze a few more plants in.

Once you have got your raised beds in place, if you notice any small areas that are un-utilized, consider buying or making a few smaller beds or bringing in window boxes to use for planting to fill in those spaces. Even unused flower pots will work. The goal here is to make sure that as much space as possible, minus a little bit to move around in, is dedicated to green, growing things.

For our family, the one greenhouse turned out not to be enough, so we dedicated half of the front porch to being our "seed station" and used the other half the front porch for growing (we mostly had tomatoes on the front porch, but again, you can grow whatever you want to eat).

Once we had done that, my wife came to me with a request. She wanted potatoes, and I hadn't planned any room in the greenhouse FOR potatoes, but I got to thinking about it, and came across a clever potato growing idea, that I want to share with you here (you can thank my wife for this one!).

We got a (free, from Craigslist) used tire, put a bit of soil in it and planted some spuds.

Soon, the spuds began to grow, and as they grew, they started creeping out of the tire. So I put a second tire on top of the first and let them continue to grow.

Same thing happened in a few weeks. The plants started spilling over the tire, so I stacked a third one.



When it came time to harvest, all I had to do was remove all the tires, and voila! All the potatoes just fell out, ready to be picked up off the ground. Dead simple.

Eventually, we started using tires for beds, scattered about the yard. My wife painted them different colors so she could glance out the window and tell which plants were what (yellow tires had squash, red had tomatoes, green had peppers – not really necessary, but she thought it was cute...lol).

Later still, when we got some more cement blocks, we wound up using those to create more raised beds right out in the yard. Now it is true that raised beds in the yard can't be used for year round planting, but it enabled us to continue to grow more and more, so that we had a surplus during the spring, summer, and fall. She canned and preserved some of this, and in the winter, when we were down to "just" the greenhouse, we had a nice stockpile to fall back on. You can do the same thing too, or, if you'd rather have more year round growing space, you can always invest in a second greenhouse and simply replicate what you did the first time, changing your garden plan in each bed to account for your individual tastes, and the amount you want of each.

One more side benefit I forgot to mention is this. You can't eat grass. Forget about those pretty, sculpted lawns. Convert as much of your yard as you can to growing things you can eat. Not only will it help you in your ongoing quest to feed your family, but every raised bed you plant in your yard is that much less lawn you have to cut and tend to. I do not mind cutting grass, but I'd rather harvest food for my family!

### **Do not JUST Think About The Ground!**

Your greenhouse is more than just the earth it encloses, so do not think in just two dimensions. If you have built your own, then you can install shelving racks along either of the side walls of the greenhouse, and along the back wall. This shelving can house MORE planters (probably window boxes, but you can also use simple flower pots here). The point is, do not just think in terms of your raised beds sitting on the ground. You can get a LOT more planting done in your greenhouse without having to build a second one, simply by installing shelving and going "up" once all the ground is occupied by planters. In fact, in the next chapter, we'll go into building "Grow Towers" which you can also make use of, either in your greenhouse, or on the porch, or even indoors or along the sides of your home. We're nowhere CLOSE to being done yet!

If you have taken our recommendation about the Shelter Logic 10'x20' greenhouse, then they make rack mounted shelving that's designed to go IN their greenhouses, and you can simply by that as you're able and continue to add planting space. You may be interested in getting a second greenhouse up and running quickly, but honestly, it is cheaper and more efficient to add shelving and truly maximize the planting space in the greenhouse you have already got before you consider adding a second. Up to you, but you will get more food for less money by doing it that way.

Of course, depending on your food needs and the size of your family, the day may come when you will need to add a second greenhouse for year-round growing, but there's no point in building something before you need it, especially not when you have got other, cheaper and less time-intensive options.

### The Importance of Wildflowers

Before we close out this chapter, let me say a few things about wild flowers. It is true that you can't eat them, but you may want to consider planting a few of them in your green house, scattered in and among your vegetables.

What we have done is, we plant vegetables in the raised beds, and scatter a few flower pots in and around those raised beds, going all the way to the back, that have an assortment of wildflowers. In a couple of cases, we have actually just set a window box on the ground next to the planting beds, and filled those with wildflowers. The reason? Flowers attract insects. Insects pollinate. You want to be sure to leave your greenhouse open as much as you can on the warm days when your little army of pollinators are active, so they can go in and pollinate for you. The flowers will help draw them in. Trust me, you do NOT want to have to sit in your greenhouse for hours and hours with a paint brush and manually pollinate. Let the critters do it for you. Planting a few wildflowers will help make them feel right at home.

I know that's a lot to take in, and you might want to go back and re-read this chapter again, but that, in a nutshell, is the whole system. That's how my family and I were able to take control of our food supply. We started on the front porch to demonstrate to ourselves that we could grow things, then jumped into the greenhouse, and over time, added a water catchment system and more and more beds. This is the exact blueprint for what we did, and you can do it too!

### Final Notes

There are two things we do not recommend focusing on growing. The first is wheat. Wheat is a fantastic crop, but it is extremely labor intensive. If you want to do anything with it (say, making bread), you have got to put in a ridiculous amount of work. Part of our goal here is to minimize the time you spent in the pursuit of growing your own food, and to that end, we cut wheat out. Bread is cheap anyway, so you do not really gain a lot by trying to grow your own wheat, mill it, and turn it into bread. It is just not worth the time and effort. Plus, it takes quite a lot of land to grow enough to be useful to you. Of course, if you followed the advice laid out in the earlier chapters, you will have enough land, and if the shit hits the proverbial fan, you can always take it up at that time, but until then, save yourself the headaches.

The same is true of corn. Corn is cheap and ubiquitous in the US, and tends to be a high maintenance crop. If you have your heart set on growing corn, you can absolutely do so, but it is not something we recommend. It is so cheap and readily available that it is just not worth the time.

## Chapter Seven – Grow Towers!

In the last chapter, we talked briefly about the importance of thinking in three dimensions, not just two. If you have got a greenhouse and you haven't installed shelving (rack mounted or otherwise), then you're not yet making optimal use of all the available space you have got.

One further refinement to maximizing your greenhouse growing space would be that along the back wall, you can set up a line of "grow towers." You can also build these and use them to surround your patio or back deck, have them running along the side of your house, and pretty much anywhere else you can think to place them.

Grow towers help to optimize your outputs by going "up," when all the available ground-based space is full. That's important because you may not have a few acres (or more) to work with, and it is all about making optimal use of what space you have. Also, remember here, we're trying to show how much can be accomplished with a fairly small footprint, so even if you followed our advice in the first chapter and landed yourself a sweet ten acre tract, you do not want to have to devote all of that acreage to food production, and you certainly do not have to!

### Making A Grow Tower

Grow towers are actually insanely simple to make, and the best part is, you can make them for virtually no money, using materials you have probably got in your house right now.

To construct a grow tower, all you need to do is start saving 2-liter soft drink bottles. These will serve as the basis for your towers. You will also need something to tie your tower to. This can be a fence running along the boundary of your property, the side of a building, or even a trellis that you'd normally have roses or ivy or something creeping up. Any of that will work. Basically just something to affix the tower to, and some zip-ties to attach them.

To make the tower, all you have to do is cut the bottoms off of your drink bottles. You will want to leave the cap on the bottle you use for the tower's base, so that the water (when you start watering) does not all leak out the bottom. Make your cut just a bit below the label that comes on the bottle, then peel that label off and wash it good before use.

**Important Note!** ONLY the bottle at the base and at the top (your watering bottle) will have their caps on. For all other bottles in the tower, leave the caps off. Also, on the base bottle, you will want to punch two small drain holes, not in the cap itself, but about 2-3 inches down (or up, since the bottle will

be cap-side down) on either side of the bottle. Make these about as big around as a ballpoint pen. This way, any excess water will have two easy places to drain from so you won't get a buildup.

You fill each of these cut up bottles with your soil mix (as outlined in the HYNA chapter), and stack them, one atop the other, as high as you want to make them. Do not make them too high though. You will want to be able to easily reach the top of the tower, as that's how you will be watering your plants!

**Important Note!** When filling your growing bottles with soil, do not fill them to the top. Leave an inch or so of open space at the top of each – you want to make sure that your bottles can “stack” easily.

Anyway, stack these as high as you want to, affixing each one, nested one inside the other with the “top” of the bottle resting inside the bottle beneath it, all filled with your soil. The bottle you affix at the very top won't have soil in it, and will keep its cap, just like the bottle at the bottom kept its cap. This is your watering system for the tower.

Take a small nail (a picture hanging nail, for example) and use it to punch a small hole in the bottle cap of that topmost bottle. The idea here is that you can take a watering can and fill the topmost bottle with water. The small hole you punched will only allow a bit of water through at a time. This water will seep down, eventually dripping into the next bottle in your tower, and so on, until it reaches the bottom (and it can't seep out of the bottom, because you have left the cap on that bottle).

That's it – you have just built a grow tower! But I know what you're thinking – we haven't planted anything in it yet, and how can we!? Well, there's one more thing we have to do.

Once the tower is installed and in place, you will want to take an exacto-knife or a utility knife and make three cuts, to create a small “flap” that you can open outwards (see picture).



(Image credit: <http://pad1.whstatic.com/images/thumb/1/1e/Build-a-Vertical-Garden-from-Soda-Bottles-Step-15.jpg/670px-Build-a-Vertical-Garden-from-Soda-Bottles-Step-15.jpg> )

That's where your seed goes. When it takes root, the plant (whatever you planted) will grow out of that space and spill downward. And that's it. That's literally all it takes to build a grow tower, and USING this idea, you can radically increase the amount of space you have to work with. It is clever, it is innovative, and it uses materials that you have probably already got around the house.

There are a lot of people doing this kind of gardening, but the Grand Master of the Bottle Garden, at least as far as I am concerned, is Willem Van Cotthem. He has a whole series of videos that can show you just how far you can take this idea. It is fantastic and will really open your eyes to the possibilities.

<https://www.youtube.com/watch?v=K9vN2eudWcQ>

## Other Ideas

You can almost turn it into a game, finding new and innovative ways to grow more and more food in small spaces, making use of unusual and sometimes unexpected materials. Here's another simple idea that I lucked into.

In the town where I used to live, there was a small businessman. "Dan, The Gutter Man!" – Nice fellow, Dan. Anyway, as the name of his business suggests, Dan replaced the gutters on people's houses. I got into a conversation with Dan one day, and asked him what he did with the old gutters when he stripped them off of people's homes.

As it turns out, Dan just took them to the local landfill. Sensing an opportunity, I asked him if I could have them, if I'd come pick them up after a job. The deal was, he'd call me when he was at a job site, and I'd swing by and cart them off for him. Dan got to save time (and a trip to the landfill) and I got some great raw materials. Win-win.

I took the old gutters home and cleaned them up. Then, I got some "L" brackets (about \$0.60 apiece) like this:

[http://www.amazon.com/Ultra-Hardware-96117-Shelf-Brackets/dp/B009PXR5FG/ref=sr\\_1\\_13?ie=UTF8&qid=1431643173&sr=8-13&keywords=shelf+bracket](http://www.amazon.com/Ultra-Hardware-96117-Shelf-Brackets/dp/B009PXR5FG/ref=sr_1_13?ie=UTF8&qid=1431643173&sr=8-13&keywords=shelf+bracket)

Armed with my brackets, it was a simple thing to attach the gutters to the side of a friend's storage building (he saw what I was doing with my small footprint gardening and was interested). And just like that, he had a planter box that spanned the entire length of his shed on both sides. A little potting soil and some seeds, and he was set (I heard that sometime later, he re-mounted these, moving them higher to make room for a row of grow towers underneath)!

I am sure that almost every town has a "Dan the Gutter Man," and I am also sure that when they finish a project, they take the old gutters to the landfill. You see where I am going with this, right? The point is, the opportunities are ENDLESS and you can use materials that most people consider trash – garbage, and turn those things into viable growing systems.

Now granted, a few 2-liter bottles and/or some used gutters by themselves will not enable you to grow all your own food. Obviously not, and that's not really the point anyway. Remember, you're not going to achieve 100% food self-sufficiency overnight. It is going to be an iterative process. It is going to be a work in progress, with each new step building on the ones that came before it. The great thing though,

is that at every step along the way, you will be getting tangible output for your effort. That output, in the form of food on your family's table, will see you progressively running to the grocery store less and less. Each week, each month as you continue to add to your system, you will see your grocery bill shrink further and further, and there's no real limit to how far you can take it. That's the beauty of this system. Since it is designed to work in small spaces, if you actually have a few acres to work with, you can grow MOUNTAINS of food – significantly more than your family needs to meet their needs, which gives you a valuable resource you can trade or sell. That's freedom. That's power. When you get to that point, you're no longer beholden to ANYONE. If something happens...if some catastrophe occurs that knocks the national food supply back on its heels, you and your family will be just fine. And even if NOTHING happens, you will be better than fine, because you will essentially not have a grocery bill anymore, so the money you were spending on food, you now have free for other things. The same is true for the house you built (assuming you followed the advice in the first section of this book). You will wind up with a nice house for pennies on the dollar compared to what everybody around you is spending, and you will be able to pay it off in no time flat. No mortgage and no food bill each month...that puts you in a powerful position indeed, even if disaster never strikes.

Welcome to your new life.

Welcome to true freedom.



## Chapter Eight – Irrigation Techniques

### Ollas – A Blast From The Past

Olla is a Spanish word, but as an irrigation technique, it actually dates back to ancient Egyptian times. I say that not to show off my knowledge of the origins of words, but rather, to let you know that this is a time tested method, as in, time tested for CENTURIES. This works. Unquestionably. In addition to working, it is the least water intensive method of growing I know of. You will save tons of money AND water. What's not to like about that?

As I mentioned previously, you can go online and FIND Ollas for sale, for something like twenty bucks apiece. If you just like needlessly shelling out money, then buy a bunch of them. In fact, buy a bunch and send to me while you're at it! ☺

If, on the other hand, you can think of better things to do with your money, then here's a great alternate way to make your own Ollas for next to no money.

I am sure you have seen those little reddish/orange clay flower pots, right? You have probably got some lying around the house.

I want you to take one of them and throw it on the ground, hard.

Yes, you read that correctly. Breach it into several medium sized pieces.

Go ahead, I'll wait.

Okay, I am going to assume you vented a little rage and took out some aggression on a defenseless terra cotta flower pot.

Assuming you have done that, now I want you to find two more, both the same size, but treat these with tender, loving care.

Set one of the two flower pots on the ground.

Take one of the pieces from the broken pot and place it inside, over the little hole at the bottom of the flower pot so that it covers the hole.

Take some weatherproof caulking and seal it in place to create a permanent plug (note: if you didn't have the heart to smash a defenseless flower pot, you can use a rock, or pretty much any convenient thing to plug this hole...the goal being, of course, to not let the water escape that way).

Then, take the second flower pot and put it on top of the first. This one will be upside down so that the "mouths" of the two pots are together.

Seal them together with more of the caulk and let dry.

You have just created an Olla, congratulations!

What you will do here is that you will bury them in your raised beds and fill them with water. Over time, the water will leech out of the Ollas and into the surrounding soil. All you have to do is refill your Ollas from time to time. That's it. The plants get the water they need, and no more. You get a basically hands-free method of irrigation.

The question, of course, becomes how many of these things do you need? Is one per raised bed enough?

Fortunately, you do not have to guess. Here's a chart that shows you how far the water seeps out from Ollas of various sizes. Using this chart as a guide, you will be able to quickly arrive at the exact number you need, based on the sizes of Ollas you have in service.

**Olla to Water Spread Ratio (inches)**

Olla Diameter	Water Spread Diameter	Ratio WS.d.:Olla.d.
6	9.5	1.583
8	18	2.250
6.5	9.5	1.462
6	9.75	1.625
11.8	39	3.305
	Average	2.045

**Calculated Olla Spacing Based on Average WS.d.:Olla.d. (in. unless noted)**

Olla	WS.d. = Olla Spacing	Radius	D (in feet)	R (in feet)
4	8.2	4.1	0.7	0.3
6	12.3	6.1	1.0	0.5
8	16.4	8.2	1.4	0.7
10	20.4	10.2	1.7	0.9
12	24.5	12.3	2.0	1.0
14	28.6	14.3	2.4	1.2
16	32.7	16.4	2.7	1.4
18	36.8	18.4	3.1	1.5
20	40.9	20.4	3.4	1.7
22	45.0	22.5	3.7	1.9
24	49.1	24.5	4.1	2.0

Note that your square foot garden plan does NOT take into account the presence of an Olla in the bed, so where one is present, you will need to adjust the garden plan accordingly.

If you do not have any terra cotta flower pots, you can find them at most any store that has a garden department, and they are ridiculously cheap!!

**One Drawback...**

Now, having spent time extolling the virtues of Ollas and why you want to use them, I am going to tell you about the flip side of the coin and give you a couple of reasons why you might want to consider other options.

If water is an issue (and it very definitely is, in certain parts of the country), then water management is really important, and the Olla (clay pot) watering system is the hands down most water efficient method of irrigation.

On the other hand, it has one fairly significant drawback.

Think about your raised beds.

Very limited space. Your bigger beds are only going to be 4'x4'. That means if you want to grow a lot of food in those beds, you have got to make every square inch count, and the square foot gardening tools we told you about definitely do that.

The problem though, is that if you're burying Ollas in your beds according to the spacing in the chart we provided, the space that they're occupying can't be used for planting crops. Sure, you save on water, but the tradeoff is that you need more beds to grow the same amount of food.

Only you know the particulars of your situation. If water is the more precious resource, then use Ollas. If space matters, and you want to grow the most food with the fewest number of planting beds in service, then you're going to want to use a more water intensive method (probably a garden hose with an attached mister) and just eat the added water consumption. Both can work. In fact, both work equally well, it is just that one will wind up "costing" you more water.

If you decide you want to go the route of optimizing food output in each of your raised beds, then below, you will find some tips for mitigating the water usage.

### Building A Rainwater Catchment System

The first thing you can do to mitigate your water use is to use the natural resource that rainwater represents. Your house probably already has rain gutters on it, and when it rains, the water simply travels down the gutters and runs out into the lawn all around your house.

You can buy durable plastic barrels at just about any hardware store, and you can often find fifty gallon drums either free or insanely cheap on Craigslist. The idea here is that you will cut a small opening (the size of your gutter downspout) in the top of these barrels, then cut off part of the gutter that runs down your house so that you can fit the barrel underneath it to collect the water that runs off of your roof.

If you opt for this approach, you will need to do three things:

- First, you will need to buy or acquire enough barrels/drums to catch the water from all four corners of your house, or however many downspouts you have got on your gutters. No point in letting any of that water go to waste!
- Second, you will want to pick up a few cement blocks (also free on Craigslist) to set your barrels on, so they're not sitting flat on the ground—you will see why in a minute). The cement block platform you build for each one needs to be as high as your watering can is tall, so at least two

blocks high, and possibly three).

- Third, for each barrel you install, you will also want to mount a tap near the bottom of the barrel so you can easily access the water without having to take the top cover off. That's a simple matter. The taps cost a couple bucks each, and can be installed as easily as drilling an appropriately sized hole, sliding the tube into the hole you made, and sealing it with caulk. Presto! You're done. If your house is like most, you have probably got four downspouts (one at each corner), and if you pick up 4 fifty gallon drums from Craigslist (free or cheap), then you have instantly created a two hundred gallon water supply without adding anything to your monthly water bill. Any time you need to water your plants, just tap the fullest barrel and water away!
- Optional Fourth Step – if you're worried that the water from your roof might contain contaminants, you can install a simple filtration system at the top of each barrel. This can be done by taking another plastic barrel and cutting the top and bottom off of it, at a height of about a foot. You will want to check the diameter of the barrel you're mounting this into, and make sure that your filtration section is the same diameter, so you have really got to work it to shove it into the top of the barrel.

Drill a series of small holes in the bottom of this "bowl," and fill it with about six inches of sand. The water flows off your roof, the sand filters it, and the holes allow the filtered water to drip into the barrel for use later. Personally, I do not do this, and have never had a problem, but I would have been remiss if I had not mentioned it.

### Other Tips On Irrigation

The same approach described above will work on ANY building you have got. If you have a storage building, for example, you can easily mount gutters on it, and further expand your free water supply.

Where watering itself is concerned, your soil and your plants will tell you what they need if you pay attention. Your soil should always be moist, but should never have standing puddles of water, even immediately after a good soaking (the water should absorb down into the soil pretty quickly). If you're watering too much, the leaves on the lower section of the plants will begin to curl and turn color (they do this also if they're not getting enough water, but in this case, your soil will begin to dry out too, and will look notably different than healthy, moist soil.

## Chapter Nine – Composting

We have said it before, but it bears repeating. The better your dirt (soil), the more food you're going to get out of it. Your goal then, should be to continually improve the quality of your soil. You do that by way of composting.

When I was first writing this, I was tempted to call this chapter "Composting – It is the Shit!" except that would have been misleading. Sure, you can use feces as composting material, and if you do, you will probably want to invest in composting toilets for your home, but that's generally a bridge too far for most people. There are some purists who are doing it (and have amazing small footprint gardens as a result), but let's get it straight right up front. You do not have to recycle your own feces in order to make amazing compost. If it is your thing, go for it. I personally do not, and we have got an amazingly productive garden.

Having gotten that out of the way, let's talk about non-crap-tastic ways to create compost.

### What IS Compost, Anyway?

Compost is decayed organic material. That's the simplest way to put it. Its stuff that was once alive, is not now, put in a pile and "cooked" until it decomposes into a musky, earthy smelling soil. This soil is AMAZINGLY rich in minerals, and when you mix it into the soil you have got in your raised beds, it will do great things for the vegetables you grow there, in terms of the size of the vegetables produced, their flavor, and the amount ultimately produced.

Having outlined what compost IS, that means that there are some things that compost IS NOT. It is not tin cans, plastic, or modern materials that make up so much of our daily lives, so if you're going to start composting, you're going to need to start by separating your garbage into "stuff for the compost pile," and everything else.

Everything else can be taken to the local landfill, or picked up by your trash service, but you're going to want to start keeping all your composting material (which can include cardboard egg cartons and old newspapers, but not the plastic egg cartons or magazines with "slick" paper). Kitchen scraps should always go in the compost pile, as should grass cuttings, and yes, the plants from your garden, once they've given up their fruits and died.

Good compost needs to be a mix of “greens” and “browns.” Greens are your grass cuttings, dead plants from the garden and the like. “Browns” are dry materials. Paper, shredded cardboard, small sticks and twigs, pine straw, etc., with kitchen scraps tossed in for good measure.

There are two ways to generate compost, the slow way, and the fast way.

If you do not mind waiting 4-6 months for a batch of compost, you can either create your own compost pile (some chicken wire will be fine for cordoning off a space to put it). If you do it this way, you will need to “wet” your compost pile every few days, and buy a pitch fork to “turn” it in order to keep it well mixed. In a few months’ time, you will be able to dig down to the bottom of the pile and start harvesting your finished compost. Messy, but low cost.

The other “slow” option would be to head down to your local hardware store, or buy a compost bin online, like this one:

[http://www.amazon.com/Lifetime-60058-Compost-Tumbler-80-Gallon/dp/B0030GG2FS/ref=sr\\_1\\_2?ie=UTF8&qid=1431645459&sr=8-2&keywords=compost+tumbler](http://www.amazon.com/Lifetime-60058-Compost-Tumbler-80-Gallon/dp/B0030GG2FS/ref=sr_1_2?ie=UTF8&qid=1431645459&sr=8-2&keywords=compost+tumbler)

Much less mess, and neatly contained in a sturdy plastic enclosure, you won’t need to “turn” your compost with a pitchfork, because every time you add new material, you just give this a few spins, and it automatically keeps it mixed for you. The compost will filter to the bottom, and you can harvest it periodically to take over to your raised beds. That’s a pretty good solution, but if you’re like me, you probably do not want to wait upwards of half a year to start getting compost you can use to begin improving the quality of your soil, so how does two weeks sound?

If you’re looking to make compost fast and easy, with a minimum of fuss, then check out this device by Nature Mill:

<http://www.naturemill.net/compostbin.html>

It is about the size of a cooler you’d take fishing with you. Plugs into the wall and uses about fifty cents of electricity each month. Open the top bin and put your scraps and other materials in, and while you’re doing your thing, the Naturemill is quietly churning and stirring, cooking your compost.

In two weeks’ time, you can open the bottom tray, where the finished compost automatically falls, and carry it out to one of your raised beds. But the bottom tray back in and get ready for the next batch. It

is the quickest, cleanest, easiest way to make compost for your garden, hands down. Totally recommended.

As your soil quality continues to improve using whatever method of generating compost you choose, you will find yourself relying less and less on that big bag of 10-10-10 fertilizer I recommended that you purchase several chapters ago. It is still a good thing to add to the mix when your seedlings hit their big growth spurt in week two or three, because it is like an extra dose of vitamins for them, and your yields will improve even more, but that one bag will probably last you two or three years, once you get your system up and running. By the time you run out, you may decide you do not even need it any more. Again, up to you, but you will have amazingly rich and fertile soil. If you treat it right, it'll treat you and your family right. It is just that simple.

### Scaling Your Efforts

If you have followed the advice in this book so far, then by now, you will have some great land, an awesome house on it that you paid much less for than anything your neighbors are living in, and you're growing most of the vegetables that your family will eat in a given year. At this point, you may want to consider ramping things up further.

It is nothing to go from this, to adding a small chicken coup for egg production (and harvesting the occasional chicken for meat, of course). Ducks are also an excellent choice, as are goats (for milk, cheese, and even meat, if you like). Of course, all of these animals produce waste too. It is a bit messy and smelly, but that waste would make an EXCELLENT addition to your compost pile, and give you even more compost of even higher quality, in addition to expanding your diet beyond just simply vegetables. It is absolutely worth considering, and again, if you have followed all of the advice to this point, then you will have the land to do that. Well worth considering, because I am sure a lot of the people reading this aren't vegetarians, and you have probably been wondering when we'd get to the point of covering the meat in your diet.

Note the one animal we DIDN'T mention was cows. You can certainly add them to your land if you have got the room for it, but personally, I find that they're more trouble than they're worth, and they need a lot of grazing room. I'd rather use the land for other things, although my family and I are considering adding pigs (we haven't yet, but we're kicking the idea around). In any case, do not think that you have got to become a vegetarian to follow this system. Sure, you may make a few trips to the grocery store to pick up some steaks now and again, but if you add the animals we mentioned above, not only will it help you improve the quality of your soil even faster, but you will have all sorts of delicious new items on the menu, and you can always trade your surpluses with the guy down the road if HE has cattle....



## Chapter Ten - Aquaponics

HYNA is good, there's no doubt. It is been responsible for keeping my family fed, and giving us a healthy surplus every year. We can grow things year round, and never have a shortage of foods to choose from. Our trips to the grocery store have been replaced with trips to the back yard to pick whatever we want to eat that day. You can't beat the freshness or the flavor, and I know for a FACT that there are no chemicals in the food I am giving to my family. I swear by the system, but the fact is that it is not the only way you can meet your family's food needs, and this book would not be complete without a chapter on Aquaponics. It's something we have just started to get into, but before I show you what my family and I are using, let's go over some basics first.

### What is Aquaponics?

In brief, aquaponics is the merging of two farming methods (just like HYNA merges the best elements of two other farming systems). In this case, what's being merged together are hydroponics (growing food without soil, in water), and aquaculture (raising fish—usually Tilapia, but you can use others).

The tank is hooked to a pumping system made with PVC pipes and controlled by a computer. You can periodically turn the pump on to pump all the fish waste (instead of compost), to your plants so they can gain nourishment from it. The plants filter the water, returning it back to the fish tank clean and ready to be reused. The plants produce AMAZING quantities of food in huge sizes (because plants love fish crap, apparently, and can't get enough of it!). Basically, this creates a closed loop, symbiotic system where each part nurtures and nourishes the other – the fish provide food for the plants, which clean the water for the fish.

### Notes For The Do It Yourselfer

If you're a diehard do-it-yourselfer, you can design your own aquaponics system, but this is a HUGE undertaking with a lot of variables. There are a number of good video instruction guides available if you're interested in doing it yourself. One of the best I've seen is here:

<http://theurbanfarmingguys.com/aquaponics-how-to?gclid=CKqWrebAwsUCFdQXHwodXLAAUw>

The best part about this site is that they've got a forum staffed and populated by people who are currently in varying stages of developing their own systems, and they're always happy to help new people. If you decide to head there, odds are good I'll bump into you!

Here's another great video showing what a non-profit group is doing with three acres:

<https://www.youtube.com/watch?v=jV9CCxdkOng>

## The Perfect Turnkey System

But maybe the do-it-yourself model isn't for you. It's true that you can put a DIY system together for just a few hundred bucks to get a taste for it, but if you're like a lot of people, you're looking for something turnkey that you can have up and running in a matter of days, without a lot of trial and error (and let's face it, if you're going the DIY route, there will be a fair bit of that!). So if you're looking for a kit, there's really only one thing to recommend, and that's the portable farm system, found here:

<http://portablefarms.com/>

Here's a short video explaining what's possible, and you will get to see ACTUAL portable farms in action:

<https://www.youtube.com/watch?v=mCCN4nq7BIQ>

This is absolutely revolutionary technology, and by just installing a single "portable farm" module (10'x20') you can feed a family of eight FOREVER. Odds are good that you do not have a family of eight, which means that this one module can feed your family and leave you with a surplus which you can trade or sell to your neighbors. Yes, you read that correctly, and no, it's not a typo. ONE module (\$2500 at current prices) will feed your family forever. No more trips to the grocery unless you just want something you do not grow as a special treat. Also note that while you can get a single module for the \$2500 mentioned, you can get two modules (2-10) at just \$1400 apiece, so for an extra three hundred bucks, you can double your food production.

Think about what that means for just a second. Let that really sink in. We hope it never does, and IF disaster never finds you, then you have got a simple, effective way to feed your family and make a nice profit with the excess. If the worst happens and we're faced with a calamity that shuts down the food supply, then with this system in place, YOU and your family will be one of the pivotal people in your area that helps put the country back together again. THAT is the power you now have at your fingertips. There's just nothing like it, anywhere. It is the best, most robust system of its kind on the market today, and this technology alone can change your life. Even if you IGNORED everything else in this book, this one technology can shift the paradigm for you and your family. It's that good. Seriously.

## Chapter Eleven – Tying It All Together

Now that you have seen all the component parts, let's start looking at them as a cohesive whole, because this is where the real magic happens.

If you think back to the introduction of this book, you begin to realize that, just like we described aquaponics as a closed-loop, symbiotic system, actually, it's just a part of a much larger closed-loop, symbiotic system, which is this entire book.

### Systems Within Systems

We start with the land.

On the land, we place...you. In a robust, custom designed home for pennies on the dollar compared to what you'd spend if you built using traditional means.

One YOU and your family are secure, we set about designing systems of food production, such that the land you're on...the land you purchased and own, and that no one can take away from you begins to feed you. We have provided two complete small footprint farming methodologies, depending on your needs and interests (let's face it, some people just do not like fish, and that's okay). Either of these systems can work well for you. Hell, for that matter, use them both and see which one you like better.

In the case of the HYNA system, we see another closed-loop, symbiotic subsystem whereby you provide the waste materials (compost ingredients) that feed the plants, and the plants feed you in return. Every growing season, your soil gets richer and better and more productive, and you grow progressively more food, until you reach whatever level of food productivity you desire. If you have followed the advice in the book, then you will have access to more than enough land to feed your family, and in fact, you will likely be able to feed much of your local community if it came to that, on a ridiculously small plot of land when you compare it to the ten thousand acre corporate monoculture farms in use today. Then, we ended the HYNA section by describing how you could even begin to add selected types of animals to the mix, both to provide sources of meat, dairy and other protein, while further helping the development and enrichment of your soil.

On top of that, we also outlined aquaponics, and described how it worked. Yes, technically you can launch a DIY project and save money as compared to turnkey systems available, but DIY projects come with hidden pitfalls and steep learning curves. I am not trying to dissuade you from pursuing it if that is

your goal, but you need to understand that you're going to get it wrong several times before you get it right and wind up killing your fish stock when the ammonia levels get too high, or waterlogging your plants and losing your entire harvest. Probably both of these will happen at least a few times before you get it right. It's not rocket science but there is both an art and a science TO it.

On the other hand, if you have got at least a modest amount of resources to apply to it, you can get a turnkey system that will take all the guesswork out of it (the price of the training is included with that turnkey system, so not only are you getting a proven blueprint to follow, but you're also getting the knowledge you need in order to maximize your chances of success here). What it really comes down to is time versus money. You can use money to save yourself time. If you do not have money (or at least, not much of it), you can spend more time and do it more cheaply. Again, there are no "right" answers here – it is just a matter of how you would prefer to spend two of your most valuable resources.

In any case, what we are really talking about here is building a complete system from the ground up with pieces that interlock together to form a stronger, cohesive whole. Yes, you can build your own food generating system on land you own, and continue to rent somewhere else, but I am sure you can see how and why that would be less than an optimal solution.

Likewise, you can buy land and build your dream home on it, but not grow any food, preferring instead to continue making those endless trips to the grocery store, but if you are reading these words, then I know you already understand the underlying weakness of that approach.

No, the reality is that if you want to be free, and I know that you do, then you need to begin thinking in terms of systems within systems, just as we have described here. Systems that will help you see to your family's safety and security on a variety of levels. That is exactly what this course provides. It gives you everything you need to build those systems and make your family safe and secure FOREVER, no matter what may happen to, or in the rest of the country, or even the world. You will have your very own island of sanctuary and security that will protect you and yours, come what may, and you can't really put a price tag on that.

At the end of the day, what it amounts to is as we said at the start. Freedom. Real, true, enduring freedom, and the peace of mind that comes with it. Sure, there's work involved in establishing a system like this, and yes, there's work involved in its maintenance, but not nearly so much as you have been led to believe.

You and I have reached now reached the end of this part of our journey together, but really, this is simply the end of the beginning. The days and weeks ahead will be exciting times for you, and I hope that you will write in and let me know how your own journey progresses. I also want you to know that

I'll never be far away. If you get hung up on something, this book and all the resources we have included with it will always be right at your fingertips, and you will be able to access them any time you need to. More than anything though, I hope that this book has opened your eyes to the possibilities, and made you think about and look at the world in a whole new way.

Everything you need is right here, at your fingertips. The power to achieve that level of dreamed about that you may have been imagining for yourself and for your family for much of your life. All that remains now is to roll up your sleeves and make it a reality, just as so many others have. Good luck, God Bless, and Godspeed.

R. Richards

PS: We're not quite done yet – there is one more chapter in this book. It's a summary and quick checklist of everything we have covered here. This, so you do not have to go flipping back through the pages to find the information you're looking for at the moment.

## Chapter Twelve - Homesteading Quick Reference Guide

After you have read and digested everything in this book, use this section as a kind of “cheat sheet.” All the important points have been distilled here, in bullet-point format to help you put your hands on any specific information on any topic covered in the work you just finished reading. This will save you from having to dig through the book looking for an important link or detail.

### Purchasing Land – Where to Look

The following are the best places to find great deals on land in your area. The first, necessary step toward gaining control over your own food supply is to secure the land you’ll need to be in a position to grow it all. You DO NOT want to build this system on rented land!!

- **Landwatch.com** (<http://www.landwatch.com/>)  
Highly customizable searches possible here. Consider this to be your “go-to” source for land searches. You can literally buy, search, or watch land all over the world from this one portal.
- **Craigslist** (<http://www.craigslist.org>)  
Craigslist should be considered your “go-to” source for just about everything from land to free, or low-cost building materials and supplies. I’ve found everything from fifty gallon drums to chickens for free on Craigslist – an absolutely indispensable resource!
- **Google** (<http://www.google.com>)  
Just do a search on “acreage near (your area)” – you will undoubtedly find a few things that aren’t listed on Landwatch.

### Top Considerations When Evaluating Land

These are the primary questions and/or considerations you want to keep firmly in mind when evaluating whether or not a piece of land you’re interested in will “do” everything you want and need it to do.

- **Buildable**  
If you can’t build on it, you don’t want it, no matter what other advantages the land might have.
- **Utilities**  
Find out if hookups are already available, or if you’ll have to pay to tie on – and if the internet is important to you, find out what kind of connectivity (type and speeds) are available in that area.
- **Well Water, Or No?**  
A well can secure water independence. If the property already has a well, so much the better. If

one can be sunk on the property, it gets bonus points. The absence of a well, or the ability to dig one isn't, by itself, a deal breaker, but you won't be AS independent unless you can secure your own water supply too.

- **No Neighborhoods**  
No matter how large or attractive the tract, NEVER buy in a neighborhood. If an HOA forms, you might find yourself restricted on your own property. Not good.
- **Running Water**  
Especially important if you want to produce your own power, but not absolutely essential, as even if you're planning to produce your own power, there are many other ways besides Micro-Hydro.
- **Partially Cleared**  
You don't want to have to clear trees just to start growing food, so get something that's at least partially cleared to save time. If you have excess trees you want to get rid of beyond that, you can contact these guys and pick up some money to help fund building your Agronomy System. <http://sellyourtrees.com/>
- **Old Structures**  
You may want these, and you may not. Up to you, but an old barn or something can be torn down and the wood reclaimed. Some people will pay a pretty penny for it!

## Building Your Home

Once you've secured your land, and before you can start thinking in terms of food systems, the next necessary step is to put a roof over the head of you and your family. Sure, you can pay a builder to come drop a house on the property for you...at an average cost of \$100 per square foot, but that can be ruinously expensive. Use these sources and bullet points to locate low-cost alternative means of housing, and remember, just because it's vastly cheaper doesn't mean you can't build the home of your dreams – you absolutely can!

## Shipping Containers (sources)

- **Buyer Zone** (<http://www.buyerzone.com/>)
- **CGI** ([http://www.cgicontainersales.com/?gclid=CN2I-oOTvcUCFYgSHwodzoUA\\_Q](http://www.cgicontainersales.com/?gclid=CN2I-oOTvcUCFYgSHwodzoUA_Q))
- **Ebay** (<http://www.ebay.com>)

## Shipping Container – Points To Remember

- **Corten Steel**  
Don't buy anything else. These are incredibly durable, strong, and weatherproof. They can stand up to almost anything.
- **“As-Is”**  
If you want the best deals on shipping containers, get the ones listed in “as-is” condition. Sure, you may need to do some light patching, but you'll save a ton of money. Far and away the cheapest option.
- **Watertight**  
You want a container that is listed as “Watertight,” NOT “Cargo Worthy” – you'll pay more than you need to otherwise.
- **Conex**  
Don't forget that Shipping Containers can also be searched under the term “Conex” or “Conex Containers.”

## Cheap Blueprints

- **Rye Homes** (<http://www.rye-homes.com/>)  
This guy only charges \$0.40 per square foot for his plans. That's an insanely low price, and it's well worth the money to have a working set of blueprints when you start a build. It will save you from making a VERY expensive mistake!

## Geodesic Dome Sources

Dome homes are fantastic, but kind of a specialty item. There are a number of vendors dealing in them, but not all vendors are created equally. These are among the best we've found.

- **Natural Spaces Domes**  
<http://www.naturalspacesdomes.com/>  
Top pick – a bit more expensive, but the end product will be as much a work of art as a home.
- **F-Domes**  
<http://fdomes.com/us/?gclid=CKvHotrRvcUCFdOQHwodPEUAaw>



Remember, while these domes are livable, this will be more akin to camping (permanently) than the other sources.

- **Timberline**

<http://www.domehome.com/productinfo.html>

Good quality dome kits, built to current industry standards. Honestly, if you're going this route, this is probably your best bet overall, unless you've got the money to get one of the custom Natural Space designs.

## Earthships

There's nothing quite like an Earthship. True, you'll pay a premium for these homes, but you're getting a lot more than a home. You're getting a place to live, yes, but also a wastewater treatment plan, a terrarium that can grow some of your food right there in the house, a water and water purification system, and a power system, all built as a single unit.

- **EarthShip Biotecture** (<http://earthship.com> )

## Tiny Homes (Sources for Kits – Homes in a Box)

None of these are really "better" than any other, but they're all quite good. It comes down to what your budget is, and what exactly you are looking for as to which one of these companies you'll gravitate to.

- **Small Homes Oregon**  
<http://smallhomeoregon.net/>
- **Inhabit Dwellings**  
<http://www.inhabitdwellings.com/>
- **Tortoiseshell Homes**  
<http://tortoiseshellhome.com/Pricing.html>
- **Solidbuild**  
<http://www.solidbuildwood.com/small-cabins/>

## Other Materials To Build Homes From

The reality is that you can build your home from almost anything, and many of the sources listed below can be found free, or incredibly cheaply on Craigslist. With a little imagination, any of these materials can be used to make a magnificent looking home, so when you see something like "used tires," don't

make the mistake of thinking that your finished product will look like you're living in a junk yard. It absolutely won't! Remember how great the exteriors of the Earthships looked? Those outer walls are made from used tires!

- **Used Tires**
- **Cement Blocks**
- **Shipping Pallets**
- **Shipping Containers/Conex Containers**
- **Recycled Windows**
- **Barn, or other Reclaimed Wood**

## **Small Footprint Farming Quick Reference Guide**

Once you've secured a place to live, the next logical step is to begin seeing to your food security and independence.

### **General**

These are good generalized resources that will help you see exactly what's possible when you put these methodologies into practice for yourself and for your family. The first one is an example of many of these methods in use in an urban setting, and the second, in the desert in the Middle East. If these ideas can work in those settings, imagine the level of success you'll have in a much more temperate, rural environment!

### **The Urban Homestead**

<http://urbanhomestead.org/>

A GREAT all-around resource. When you are just beginning to set up your system, check out the methods that these guys use. Anybody who can generate three tons of food on a tenth of an acre is a person (or in this case, a family) worth watching. They also have frequent "music nights" and other fun things on their YouTube channel.

## The Greening of the Desert Project

<https://www.youtube.com/watch?v=xzTHjlueqFI>

Another fantastic resource to study, especially if you are living in an arid environment. It is a great resource that shows you what is possible, even in very harsh conditions, and is proof positive that these methods can work ANYWHERE.

## The HYNA System

HYNA stands for “High Yield, Natural Agronomy.” It is a hybrid system that combines elements from the “Biointensive” method of farming pioneered by John Jeavons, and the “Square Foot Gardening” method pioneered by Mel Bartholomew.

- **Start Small, Start Slow**

Begin simply, by deploying a few window boxes like these:

[http://www.amazon.com/Dynamic-Design-MB3612TC-Medallion-36-Inch/dp/B004DGIZGS/ref=sr\\_1\\_1?ie=UTF8&qid=1431559868&sr=8-1&keywords=window+planter+box](http://www.amazon.com/Dynamic-Design-MB3612TC-Medallion-36-Inch/dp/B004DGIZGS/ref=sr_1_1?ie=UTF8&qid=1431559868&sr=8-1&keywords=window+planter+box)

This will enable you to “get your feet wet” and prove to yourself that you can stick seeds in the ground and get something back for your efforts. This early work will also morph into your “seedling station” later on, so don’t skip it!

Also don’t forget – if you don’t have the money to buy window planters, and you can’t, or don’t want to make them yourself, you can save those plastic bins that cat litter sometimes comes in. You’ll also want to make friends with area bakers and caterers, as their frosting, shortening and other ingredients comes in similar five gallon buckets, and you can probably get a nice supply for free.

- **Greenhouse**

Three basic options here. You can build your own (see the enclosed plans), search for more free plans on the internet, or you can buy one. If you opt to buy, then the biggest, best greenhouse for the money is the Shelter Logic 10’x20’ greenhouse, which will enable you to grow an INSANE amount of food! Here’s the link to that one: [http://www.amazon.com/Shelter-Logic-Greenhouse--Greenhouse-8-Feet/dp/B00BINXG18/ref=sr\\_1\\_1?ie=UTF8&qid=1431561914&sr=8-1&keywords=shelter+logic+10%27+x+20%27+greenhouse](http://www.amazon.com/Shelter-Logic-Greenhouse--Greenhouse-8-Feet/dp/B00BINXG18/ref=sr_1_1?ie=UTF8&qid=1431561914&sr=8-1&keywords=shelter+logic+10%27+x+20%27+greenhouse)

- **Geodesic Greenhouse**

If you’re into geodesic domes, they also make geodesic dome greenhouses. You can find a selection of them here, in a variety of sizes:

[http://www.ebay.com/sch/i.html?from=R40&trksid=p2050601.m570.l1313.TR11.TRC1.A0.HO.Xgreenhouse+geodome.TRS0&\\_nkw=greenhouse+geodome&\\_sacat=0](http://www.ebay.com/sch/i.html?from=R40&trksid=p2050601.m570.l1313.TR11.TRC1.A0.HO.Xgreenhouse+geodome.TRS0&_nkw=greenhouse+geodome&_sacat=0)

- **DIY Greenhouse Plans**

- Ana White's "Barn-Style" Greenhouse  
<http://ana-white.com/2012/05/plans/barn-greenhouse>
- Jack Sanders' "BuildEasy"  
<http://www.howtospecialist.com/garden/greenhouse/free-greenhouse-plans/>
- Jack Sanders' "Small Greenhouse"  
<http://www.howtospecialist.com/uncategorized/small-greenhouse-plans/>
- The Florida Gardner Greenhouse  
<http://www.floridagardener.com/greenhouse/greenhousematerials.htm>
- The Solar Heated Greenhouse, offered by Mother Earth News  
<http://www.motherearthnews.com/diy/build-a-greenhouse-zmaz09onzraw.aspx#axzz2O5uSthk3>
- For the budget conscious, we include "The Fifty Dollar Greenhouse!"  
<http://doorgarden.com/10/50-dollar-hoop-house-green-house#more-44>
- Finally, while these aren't plans, this link HAD TO be included for its inspiration value alone – a variety of greenhouses built from reclaimed windows and doors. A diehard Do It Yourselfer could probably easily craft plans simply by looking at these images.  
<http://www.inspirationgreen.com/greenhouses-made-from-old-windows-and-doors.html>

- **Raised Beds (Buying)**

You can make your own pretty easily, but if you're dead set against it, then you can buy them too. Here's an example of a good one that's reasonably priced: :

[http://www.amazon.com/Greenland-Gardener-8-Inch-Raised-Double/dp/B003W0400C/ref=sr\\_1\\_1?ie=UTF8&qid=1431566091&sr=8-1&keywords=raised+beds](http://www.amazon.com/Greenland-Gardener-8-Inch-Raised-Double/dp/B003W0400C/ref=sr_1_1?ie=UTF8&qid=1431566091&sr=8-1&keywords=raised+beds)

- **Raised Beds (Building)**

If you're going to build your own raised beds, then you'll need a few things. They are as follows:

- A "Pallet Popper" – Trust me, this handy device is worth EVERY PENNY. Without it, you could spend upwards of an hour (or longer) dismantling a single pallet. With this tool, you'll have it done in about ten minutes. Save your back, and save yourself the frustration and headache.  
[http://www.ebay.com/itm/Head-for-Pallet-Disassembly-Tool/261885042292?\\_trksid=p2047675.c100012.m1985&\\_trkparms=aid%3D444000%26algo%3DSOI.DEFAULT%26ao%3D1%26asc%3D29906%26meid%3D68fb3ad129384878a](http://www.ebay.com/itm/Head-for-Pallet-Disassembly-Tool/261885042292?_trksid=p2047675.c100012.m1985&_trkparms=aid%3D444000%26algo%3DSOI.DEFAULT%26ao%3D1%26asc%3D29906%26meid%3D68fb3ad129384878a)

[13ddf2055d6ff34%26pid%3D100012%26rk%3D3%26rkt%3D10%26sd%3D26171417888](http://www.amazon.com/DEWALT-DC385K-18-Volt-Cordless-Reciprocating/dp/B0001LQLDS/ref=sr_1_2?ie=UTF8&qid=1431672016&sr=8-2&keywords=battery+powered+Sawzall)  
[1](#)

- Remember, you can source your pallets on Craigslist – people are giving them away on there all the time!
- You'll also need a Sawzall or other type of saw. You COULD use a hand saw, but that's just an evil amount of work. Here's the tool I used when I started out:  
[http://www.amazon.com/DEWALT-DC385K-18-Volt-Cordless-Reciprocating/dp/B0001LQLDS/ref=sr\\_1\\_2?ie=UTF8&qid=1431672016&sr=8-2&keywords=battery+powered+Sawzall](http://www.amazon.com/DEWALT-DC385K-18-Volt-Cordless-Reciprocating/dp/B0001LQLDS/ref=sr_1_2?ie=UTF8&qid=1431672016&sr=8-2&keywords=battery+powered+Sawzall)
- A nail gun will save you a ton of time too. Sure, you can hammer all the nails in by hand, but it will double or triple the time it will take you to make one. Here's the nail gun and compressor I used (and still have to this day) Compressor:  
[http://www.amazon.com/Campbell-Hausfeld-FP209499-3-Gallon-Compressor/dp/B002O15NRS/ref=sr\\_1\\_1?ie=UTF8&qid=1431672208&sr=8-1&keywords=campbell+hausfeld+compressor](http://www.amazon.com/Campbell-Hausfeld-FP209499-3-Gallon-Compressor/dp/B002O15NRS/ref=sr_1_1?ie=UTF8&qid=1431672208&sr=8-1&keywords=campbell+hausfeld+compressor)

And the nail gun: [http://www.amazon.com/Campbell-Hausfeld-CHG00100AV-4-Inch-Stapler/dp/B0046RDW44/ref=sr\\_1\\_10?ie=UTF8&qid=1431672202&sr=8-10&keywords=air+compressor+nail+gun](http://www.amazon.com/Campbell-Hausfeld-CHG00100AV-4-Inch-Stapler/dp/B0046RDW44/ref=sr_1_10?ie=UTF8&qid=1431672202&sr=8-10&keywords=air+compressor+nail+gun)

- Remember - when nailing to the frame, remember to nail from the inside OUT, not from the outside IN...if you do it outside in, the weight of the soil will push your nails out and your slats will start falling off your beds!

- **Ollas**

As mentioned in the manual, you can BUY Ollas, but you'll pay upwards of twenty bucks apiece. Or, you can make your own by caulking two terra cotta flower pots together, mouth to mouth and sealing up the bottom hole. MUCH cheaper, and it accomplishes the same goal.

- **Compost – Slow Way**

Remember, compost takes half of forever to make the slow way, but it's also cheaper to do. Here's a great, well-priced composting bin with an 80-gallon capacity if this is the route you want to go:

[http://www.amazon.com/Lifetime-60058-Compost-Tumbler-80-Gallon/dp/B0030GG2FS/ref=sr\\_1\\_2?ie=UTF8&qid=1431645459&sr=8-2&keywords=compost+tumbler](http://www.amazon.com/Lifetime-60058-Compost-Tumbler-80-Gallon/dp/B0030GG2FS/ref=sr_1_2?ie=UTF8&qid=1431645459&sr=8-2&keywords=compost+tumbler)

- **Compost – Fast Way**

If you are looking for a faster, easier, and more efficient way of creating compost than having to

hand turn it in the big, cumbersome 80-gallon drum, and if you just don't feel like waiting for up to half a year to start getting your first compost, then SERIOUSLY consider the NatureMill composting appliance. It can turn your scraps into compost in just two weeks, and it only uses fifty cents of electricity a month. Really fantastic device, and highly recommended:

<http://www.naturemill.net/compostbin.html>

- **Garden Planning Tool**

The best way to optimize your garden is to plan it online. Better Homes and Gardens has a fantastic tool that will allow you to do just that. Best of all, it's designed to work with the "Square Foot" method of planting, and will tell you in graphical form exactly how many of each type of vegetable you select to plant in a given square foot on your raised bed grid. You can find the tool here:

[http://www.bhg.com/bhg/xfile.jsp?item=/marketing/registration/splash\\_pages/bhg\\_splash\\_PA\\_G\\_PlanAGardenGeneral&ordersrc=googlesearch65325Garden-Planner&gclid=CMn77f7HwMUCFdUYHwodEwQA1w](http://www.bhg.com/bhg/xfile.jsp?item=/marketing/registration/splash_pages/bhg_splash_PA_G_PlanAGardenGeneral&ordersrc=googlesearch65325Garden-Planner&gclid=CMn77f7HwMUCFdUYHwodEwQA1w)

- **Soil Prep**

Each raised bed should get 1 bag of Miracle-Gro flower and vegetable, 2 bags of regular topsoil (brand doesn't really matter – just whatever's cheapest) and 1 bag of organic compost

- **10-10-10 Fertilizer**

You'll probably only ever need one 40 pound bag, because you won't be using much of it, and by the time you run out, your soil will be of such high quality that you won't really need it. You don't want to sprinkle a small amount of this stuff onto a newly transplanted seedling. Give it a chance to recover from the move and about a week to grow on its own, then hit it with a little of this and watch it take off like a rocket!

<http://www.amazon.com/dp/B001D227IM?psc=1>

- **Think in 3d – Shelving**

The Shelter Logic greenhouse has rack-mounted shelving that was made to go with it. If you've built your own, you'll almost certainly be able to add shelving to your project, and doing so can dramatically increase your available square footage for growing crops

- **Think in 3d – Grow Towers**

Grow Towers can be made with recycled 2-liter soft drink bottles, and a few zip ties. These are another fantastic way to go "up" in order to get more growing space. The guy who knows more about Grow Towers than almost anyone else is Willem Van Cotthem. Check out his video here for inspiration on what can be accomplished with this idea alone:

<https://www.youtube.com/watch?v=K9vN2eudWcQ>

- **Think in 3d – Reclaimed Gutters**

If you know someone who replaces gutters for a living, ask for the old ones that he or she takes from a house when the new ones are installed. You can probably get them for nothing, because it saves the guy who stripped them off the house a trip to the landfill. When you have them in

hand, you can mount them to the side of a shed or other outbuilding (or even your home), with brackets like this: [http://www.amazon.com/Ultra-Hardware-96117-Shelf-Brackets/dp/B009PXR5FG/ref=sr\\_1\\_13?ie=UTF8&qid=1431643173&sr=8-13&keywords=shelf+bracket](http://www.amazon.com/Ultra-Hardware-96117-Shelf-Brackets/dp/B009PXR5FG/ref=sr_1_13?ie=UTF8&qid=1431643173&sr=8-13&keywords=shelf+bracket) for a quick and easy way to get yet MORE growing space. Note that you can mount them fair high, so as to allow room for a row of “Grow Towers” underneath!

- **Rainwater Catchment System**

If you’re looking to conserve water or make use of free water, then consider building a rainwater catchment system. The components are as follows:

- A fifty-gallon drum, or other type of barrel to catch water
- A “stand” made up of (free, sourced from Craigslist) cement blocks
- A tap (easily installed toward the bottom of each barrel)

Once you’ve assembled the pieces, it’s a simple matter of cutting part of your gutter downspout away so that your barrels fit beneath them and can capture the water. You can have easy access to it simply by using the taps you installed.

- **Adding Animals To The Mix**

You don’t have to, but odds are that you’re NOT a vegetarian. If you’re looking for animals to add to your small-footprint farm, consider the following:

- Ducks
- Chickens
- Goats
- Pigs

(you may be tempted to add cows, but remember that cows require ENORMOUS grazing areas, and we’re trying to keep your footprint as small as possible – a better option would be to continue focusing on your food production and trade for red meat when you want it!)

- **Insects**

- Use wildflowers planted in and among your garden to help attract pollinating bugs in
- Consider Pepsi (or Coke) in a spray bottle to keep the bad insects at bay. It doesn’t hurt your plants or your family, and the bugs gorge themselves on sugar, and are too full to bother your plants – this sounds silly, but actually works!
- Use Food Grade Diatomaceous Earth to protect your plants against “bad bugs” like grasshoppers and slugs. Perfectly human and pet safe, but LETHAL to bugs.  
[http://www.amazon.com/Diatomaceous-Earth-Food-Grade-10/dp/B00025H2PY/ref=sr\\_1\\_1?ie=UTF8&qid=1431675884&sr=8-1&keywords=Food+Grade+Diatomaceous](http://www.amazon.com/Diatomaceous-Earth-Food-Grade-10/dp/B00025H2PY/ref=sr_1_1?ie=UTF8&qid=1431675884&sr=8-1&keywords=Food+Grade+Diatomaceous)

## An Aquaponics System

Aquaponics is, like HYNA, the cross-breeding of two different systems. In this case, it is the synthesis of aquaculture (raising fish) and hydroponics (growing plants without soil, in water). Aquaponics creates a closed-loop, symbiotic system. There are two basic approaches you can take here. The Do It Yourself Route, which is cheaper, but bears a STEEP learning curve, or the turnkey system, which is more expensive, but has almost no learning curve. You can build your own Aquaponics system for less than a thousand bucks. You can buy a turnkey system for about \$2500. The choice is yours. Money or time. That's what it comes down to.

- **General Info**

This, and related videos will give you a good idea of how far you can push the scope and scale of your own home Aquaponics system. VERY informative:

<https://www.youtube.com/watch?v=jV9CCxdkOng>

- **Do It Yourself**

If you're going to do it yourself, then this is the place you want to start. It's a whole, global community, built around Aquaponics: <http://theurbanfarmingguys.com/aquaponics-how-to?gclid=CKqWrebAwsUCFdQXHwodXLAAUw>

- **Turnkey System**

If you're looking for the simple, fast solution to get you up and running in a matter of days, then "Portable Farms" is what you want. Hands down, the best turnkey system on the market:

<http://portablefarms.com/>

Here's a related video that goes into more detail:

<https://www.youtube.com/watch?v=mCCN4nq7BIQ>