



BACKYARD FARMING

➤ *Make your home a homestead* ➤



HOMESTEADING

The Complete Guide to Self-Sufficiency

Growing • Planning • Livestock • Structures • and More

“EXPERT ADVICE MADE EASY”



Kim Pezza

 **hatherleigh**



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INTRODUCTION

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At one time, growing some (or even all) of your food was as commonplace as visiting the grocery store is today. Whether individually or as a community, the ability to raise one's own food and provide for one's self was historically a matter of life or death. As a result, it wasn't unusual to see chickens or a family milk cow in the backyard of a city home. Back then, consumers knew where most of their foods came from. But as society has become more urbanized and "civilized," things have changed; most people now rely completely on others for their food and nutritional needs, from sources hundreds or even thousands of miles away.

But recently, growing your own food has been making a comeback—a *huge* comeback. People are once again planting food gardens in their backyards and building rooftop chicken coops, keeping bees in the suburbs and tending container food gardens on apartment balconies. The homestead is making a comeback, and urban and suburban farms are making their entrance. And while zoning regulations and other laws both new and old can get in the way, many are now beginning to fight for the right to farm in their own backyards.

Why is homesteading coming back full circle? What is making people who have never had so much as a flower garden, now decide to jump into growing their own foods? The answers range from not wanting GMOs or pesticide in their food, to the sale of imported, tainted food affecting both humans and pets, to wanting the freshest foods possible, or simply wanting to know where their food comes from. Perhaps the two most important reasons that more people are returning to backyard farming is the desire to have as much control

as possible over what their family eats, and the economic sensibility of being able to grow something in one's garden that you might not otherwise be able to afford.

The face of the “family farm” or “homestead” is changing as well, to better fit our modern times. While most people's first thought when it comes to farms is a big red barn, with cows and horses out in the pasture, and huge fields of crops being tended by a farmer up on his tractor, the modern family farm is much smaller in scale, ranging anywhere from half an acre to over 200 acres. Some are limited to a single rooftop. And while the livestock selection may still include those cows and horses, it is no longer uncommon to see only a few chickens, along with a dairy goat and a couple of rabbit coops.



The dream of being able to grow something with your own hands while simultaneously providing food for your family has never been more possible than now. *Photo by Mantis (Schiller Grounds Care, Inc.)*

Alpacas, llamas, bison and donkeys, to name a few, have joined the ranks of cattle, horses and other livestock on the larger family farms. Meanwhile, miniature cattle, goats and horses have made their way to the suburban and urban farms and the smaller backyard farms, capitalizing on the need for efficient use of space. The focus now is on animals that can be kept and raised properly in

small out-buildings, on small plots of land or in an urban backyard. Instead of flowing fields and pastures, the new homesteader's crops come from gardens, raised beds or containers. Even the soil has changed, with traditional gardens now sharing space with non-soil mediums, and even fish! In aquaponic set-ups, the "garden" is hooked up to a fish tank of some size, depending on space and set up. The water from the fish tank is cycled into the garden, providing nutrients for the garden. The water is then cycled *back* into the fish tank to be clarified by the fish, before the cycle begins again. Relatively new (and still fairly expensive to set up), aquaponics is usually used in a backyard farm or homestead on a very limited basis. Regardless, it goes to show just how much can be possible for a backyard farm!

Backyard Farming: Homesteading is written to serve as a guide for all those interested in starting their own homestead, whether it's on several acres, in a suburban backyard, or on an urban rooftop. Built from basic ideas and offering thoughts on everything from the land (or lot or rooftop) to the harvest, and written to be easy to understand, *Backyard Farming: Homesteading* helps the novice homesteader or backyard farmer to take their first steps into this personally gratifying and endlessly rewarding lifestyle.



While no stranger to the barnyard setting, chickens do well in a wide variety of environments, from the rural to the urban farm. *Photo by Amy Kolzow.*



MEET THE EXPERT

Kim Pezza grew up among orchards, muck land, dairy and beef farms, having lived most of her life in the Finger Lakes region of New York State. She has raised pigs, poultry and game birds, rabbits and goats, and is experienced in growing herbs and vegetables. In her spare time, Kim teaches workshops in a variety of areas, from art to making herb butter, oils and vinegars. She continues to learn new techniques and skills and now spends time between her grandparent's mid 1800's farm in New York and in Southwest Florida, the first and oldest cattle area in America and origin of the American cowboy.





CHAPTER 1

HISTORY OF HOMESTEADING

Farming has been a part of American heritage since the coming of the colonists. Although the number of farms in the United States has declined over the last 100 years, there are still more farms in the U.S. today than there were in the mid-1800s. The key difference is that today only a small percentage of the population's livelihoods depend on farming; for comparison, during colonial times 90 percent of the population depended on agriculture for their survival and welfare.

The influence that farming has had in the development of America extends even to the country's infrastructure. With farming being such a major part of society in colonial America, many towns were built along water features, such as bays and inlets, for the purposes of serving as a shipping point for export use.

This is not to say that all farms and farmers were prosperous. Typically, it was only the larger farms (and the merchants who owned them) that celebrated wealth; the smaller farms, homesteads and artisans had to struggle simply to get by, with most of what they raised either going towards their own family's use, or used to trade for the things they needed, but could not produce themselves. This is to say nothing of the oftentimes steep taxes that farmers were forced to pay.

Nor were all locations created equal, either. In fact, the only element that all regions of colonial America and their associated farmers had in common was **power**. With all the equipment of the time powered by horses, oxen or humans, there was always a limit on what a farmer could reasonably accomplish in a growing season.

For the colonial American farmer operating in the New England/Plymouth colony areas, much of the soil was not good for growing, with fields close to the ocean being the worst locations. The farmers were forced to rely on hardier crops, such as barley, peas, and maize (Indian corn). Combined with long, harsh winters that seemed to come earlier every year, killing off crops that had yet to be harvested and livestock yet to be slaughtered, the cold months could prove fatal to many a farmer and their families.

Meanwhile, the colonies in the middle of America's east coast were proving to be very prosperous, growing wheat, flax seed, oats, rye, corn and barley with relative ease for high profit. Their ability to sell their wheat and flour to the Europeans, in addition to a thriving export market for corn, helped farmers in colonies like Jamestown and other Virginian settlements thrive. The southern colonies were showing a similar degree of prosperity, focusing primarily on the recognized cash crops of tobacco, indigo and rice.

An Overview of the Colonial Farm House

The typical early colonial farm house consisted of a dirt floor and walls built from logs, with no more than two rooms (and sometimes a loft), where the entire family lived. Everyone in the household worked, including the children, as soon as they were old enough to be assigned a task. Usually, boys would work with their fathers, and girls with their mothers, allowing them to learn the skills that would be necessary once they became adults themselves. The typical family size was large, ensuring that there would be always plenty of workers for the farm—families tended to have many children (made even more necessary due to the high rate of infant mortality during those early days). The whole family worked six days out of seven, with the seventh day set aside for church.

In the early nineteenth century, **agriculture** was still a predominate part of the economy of the United States, with sugar and cotton in the south and grains in the mid-west comprising a large percentage of the nation's export business. By the mid-nineteenth century and very early twentieth century, new agricultural opportunities were

opening up as a result of the canals and steamboats. New railroads, connecting increasingly large portions of the nation to itself, served to bring immigrant farmers to these newly opened areas. Agriculture continued to serve as the driving force of progress for the nascent nation.

It was during this time period that most of the Great Plains was opened as free range for cattle ranchers. Contrary to popular belief, the farmers of the plains didn't lead as solitary a life as we might think; they actually led quite active social lives, turning barn building projects into barn raising events, inviting neighbors from miles around to come together and turn a construction project into a social event, complete with an assortment of foods (made for the occasion by the women). Agriculture, the great commonality between neighbors, even stronger than nationality, served to connect people to one another in mutually beneficial cooperation.

In 1862, **the Homestead Act** was signed into law by Abraham Lincoln, which gave 160 acre tracts of federal land to anyone 21 years of age or older (essentially, the head of the family). This land was provided free (or of little cost), as long as the recipient had never taken up arms against the federal government. The offer was even extended to women, immigrants and freed slaves, ensuring that the nation's agricultural industry and economy did not falter in the wake of the American Civil War.

To further cement this, the requirements of the Homestead Act stated that you had to actually live on the land, build your home there and make other improvements to the land, including farming it for a minimum of five years. You also had to be a citizen, or file intent to become a citizen (freed slaves were already included under the passage of the Fourteenth Amendment in 1868.) The result was a new, actively involved work force cultivating land that would otherwise have remained fallow, during what should have been one of the most chaotic periods in the nation's history.

The Disappearance of the Family Farm

By the late nineteenth to early twentieth century, most people were still living in rural areas. Although cash crops (produce intended for sale, rather than consumption) were now part of the picture, **self-sufficiency** was still the focus of daily life for many, and out-of-reach for some. It is at this point in history that **the Industrial Revolution** was beginning to hit its stride in America, with powered machinery beginning to be seen on the high-end, wealthy farms. While animal and human sources of power were still more important and more widely-used, systemic change in agriculture was on the horizon.



The introduction of farming machinery would change the face of American farming forever. Today, we still rely on high-powered machines to produce enough to feed the nation. *Photo by Andrew Stawarz under the Creative Commons Attribution License 2.0.*

But it would take something special to cause the down-to-earth American farmer to turn to machine power, revolutionizing the way agriculture was structured. That special something came in the first part of the twentieth century, a prosperous time for the American farmer, where U.S. farmers worked to fill the supply gap left by European farmers who had left their farms to fight in World War I.

The American farmer now became a major supplier to Europe, a period that saw the American farm beginning to expand to meet the new demands, with many farmers going deep into debt. And, as the new technology came into its own, the family farm began to disappear in favor of larger, more efficient farms.

But the end of WWI would put an end to much of this prosperity. European farmers were returning to their farms and producing for the European market once again. Meanwhile, the American farmer now found themselves producing more than they could sell, despite being deep in debt already.

The 1920s and early 1930s brought no relief to these issues, as the high level of debt incurred by the expansion, not to mention collapsing land and food prices, led to farmers needing relief (or else a new line of work). It was at this time that President Hoover created the **Federal Farm Board**, a committee established by the **Agriculture Marketing Act**, one of his responses to the Great Depression. Adopted in 1929, it basically tailored the level of crop production to the county's domestic needs, working to restrict over-production. Among their goals was the prevention of plunging crop prices, a real problem that farmers faced due to the buying, selling and storing of surplus crops. It also gave loans to farming-related organizations, which in turn offered loans directly to farmers for their seed and livestock. Things were improving, but too slowly to really get ahead of the issue.

Between 1933 and 1938, President Franklin D. Roosevelt's New Deal appeared on the scene. A series of domestic programs designed to address the issues of the Great Depression and return the nation to its former prosperity, the New Deal also contained a number of farming programs, including the **Farm Securities Act**, which raised farm incomes by reducing output; and the **Agriculture Adjustment Administration** and the **Agriculture Adjustment Act**, which set higher wholesale prices (and higher income for the farmer) by keeping production low. This was later ruled unconstitutional, and was replaced in 1936 with a similar program that paid farmers to raise soil-enriching crops (which would never reach the marketplace), instead of just leaving the cropland bare and

unproductive. Again, as with the Homestead Act before it, the intention was to keep the infrastructure of the agricultural industry strong and progressive. Many of these farm subsidies still exist in some form today.

These efforts eventually paid off. By World War II, agriculture was beginning to revive itself. As farming was still considered an important and necessary occupation, farmers were exempt from the draft. By the mid-1940s, farms were once again becoming larger, but the number of farms in existence was lower, in an effort to prevent a similar post-war collapse. Some farmers went part-time, while others sold out and moved to town or to the city.



Agriculture was so important to America's continued prosperity that growing crops was presented as a form of patriotism.

The second part of the twentieth century also saw a geographical shift in agricultural production, as farming became more common in the south and west. Electric motors and irrigation became more commonplace, offering higher levels of efficiency to even small-scale farmers. Electricity started to be more widely available in rural

areas, creating major innovations such as grain elevators and modern milk parlors. It also (for better or worse, depending on your view) assisted in the creation of confined animal feeding operations, or CAFOs, to better match the nation's demand for livestock and livestock by-products.

Today, there are fewer farms in America than there have been in the past, but their output and overall efficiency are much higher. And, as more people find their way back to the land, whether on a large farm, small homestead or backyard garden, this number will continue to grow. Too many people have lost their connection to where their food comes from; but many are trying to get it back, teaching their friends, children, and even grandchildren about the importance of fresh, local and home-grown food. As a result, we are seeing an upsurge in backyard farms, community food gardens and small homesteads.

And with consumer spending on "food" plants now higher than decorative plants, the trend doesn't seem to be going away anytime soon!





CHAPTER 2

HOMESTEAD BASICS

Although many people think of a homestead as the place where they were raised (as in “the family homestead”), a homestead actually refers to a small-scale farm. These days, this can even include the backyard farm or urban farm. The actual definition of a **homestead** is the main structure and outbuildings of a farm, including the land surrounding it. For our purposes, we will be looking at the homestead in the farming sense of the word.

Today, we typically see the homestead and homesteading in one of a few different ways (we will be touching on all of these types in [Chapter 4](#)):

- The **small farm type homestead**, which could be anywhere from a few acres to a few hundred, and which is usually in a rural area.
- The **suburban homestead**, somewhere between the rural and urban farm. Being in the suburbs, acreage will likely be around the 5–10 acre mark, or less.
- The **urban farm**, which can take on multiple forms. When we talk about urban farms, usually we are thinking of small backyards, community gardens in empty lots, window boxes on apartment balconies, and even rooftop gardens, all of which have become quite popular in cities worldwide. (Some rooftop gardens/farms may have a chicken coop, a beehive or two, or even a greenhouse!)

Self-Sufficiency through Backyard Farming

Having a homestead doesn't mean that you must be totally self-sufficient. In fact, most of today's homestead owners and backyard farmers are not. Many grow only enough vegetables to use as fresh ingredients while in season, with enough to preserve for later when the season is over. Others, including many urban farmers (due to space concerns) will select just a few things that they really want to have homegrown, and dedicate themselves to that. That said, the sheer variety of vegetables and fruits that rooftop farms can and do produce, due to the incredible space that many of them have, can rival even suburban backyard farms.

However, if it is your intent to have a self-sufficient homestead, you will need to look at everything differently. Instead of merely supplementing your food supply, you will be responsible for most, if not all, of your food needs. This is no simple task, and should never be attempted without first doing your homework. At the same time, it can also be very rewarding to have the satisfaction of knowing where all of your meals come from.

Unfortunately, for reasons that range from time constraints to space limitations, most people cannot afford to be totally self-sufficient. But this doesn't mean that you have to be kept in the dark about the origins of your food. With farmer's markets and farm stands popping up all over the country, you can easily supplement what you grow with produce from other local farms and growers.

Back to Basics

Before tackling any type of homesteading project, there are things that you will need to learn. Some things will depend on the size of your farm; nevertheless, you will need to acquire skills you probably never thought of learning. Some of these skills will be learned slowly, beforehand; others, you'll need to learn on the fly. For example: when the goats get out at 1 A.M. because one of them broke

through the fence, and now the fence has to be fixed but the stores are closed, and you have no extra fencing on hand ...

You can't plan for the unexpected, and there is always an element of the unpredictable in farming, from the weather to the soil to the crops themselves. At times like these, you'll discover a bag of tricks you never knew you had, as you learn to make do with what's at hand. When the cat knocks over the tray of seedlings you had started on the counter, you'll be surprised how quickly you can learn to identify seedlings!

And if you are planning on keeping any kind of animal, you will need to put your veterinarian hat on. It never fails; when things go wrong, it will be either after hours, or a holiday weekend, or when the vet is away on business. Get used to it; you will need to know what to do when you get that midnight emergency call.

Running a homestead, be it very large or very small, means that you can't be afraid to get your hands dirty—literally. You can't have a garden without getting your hands in the dirt, and you can't have livestock—be it a herd of cows or half a dozen chickens—without getting into the muck every now and again. In short, this isn't a hobby for those who live for manicures.

And, should you choose to homestead, backyard farm or garden on a larger scale, you will find that **preserving your harvest** is an important skill to have. With many ways of food preservation to choose from, including canning, freezing, drying/dehydration and smoking/curing, you can either learn the method you like best, the method that works best for you, or the method that you actually have time to use. There is no excuse for not having at least one of these methods under your belt.



Red peppers on a drying rack. Drying and dehydrating can be a great way of preserving your produce, especially vegetables and herbs. *Photo by graibeard under the Creative Commons Attribution License 2.0.*

With gardening, you will also discover that Mother Nature calls the shots in the end; the slightest weather change can affect your garden crop, field crops or harvest, and an unexpected hard rain, dry spell or early frost can take your harvest from bountiful to scant in a matter of hours—or even minutes.

Learn to label; the plants in the garden, the food in the freezer, the canning jars, the seed envelopes that you have prepared, the seedlings in the trays, label it all.

You'll learn how to handle livestock. While rounding up chickens can be akin to herding cats, calling in the family milk cow isn't quite as simple as calling in the family dog (although if you *can* get her into a routine, it won't be that difficult). While anyone can handle a chicken or a turkey, you'll have to learn how to second-guess the goat who always seems to find the way out, or the pig that seems to be smarter than you are. It is important to learn the personalities and characteristics of your animals, both for your safety and theirs.

A word to the wise: make the effort to get over any squeamishness you may have. In managing a homestead, regardless of size, you'll have to do things that you may not want to do. You'll need to deal with worms in compost; kill destructive insects by hand in the garden; give shots to the animals; help deliver newborns; cull injured livestock; deal with the illness and death of your animals; deal with predators (even with backyard chickens); be covered in mud after working in the garden after a heavy rain; fix equipment and get a nice coat of grease on yourself; work in weather conditions that no one could have paid you to work in before and which you're now doing for free ... it's all part of the job.

Finally, get the kids involved! A homestead, whether it's a small urban backyard or a large rural parcel, is something that runs smoother when the whole family is involved, including the kids. Not only does it get them outdoors; it also teaches them that the food they eat doesn't just come from the grocery store. The best way to get kids to try something new is to make it theirs. In other words, let them select a few new vegetables that they have never tried, let them plant the seeds and tend the plants, and when harvest comes around, not only *will* they try it—they'll be *excited* to try it! Try to let them help to cook it, if possible; chances are that they will like it because they selected it, grew it, harvested it and prepared it.

Community Gardens

Community and neighborhood gardens are popping up everywhere, spearheaded by people wanting fresh foods as well as for economic reasons, not to mention many have already had a passion for gardening.

Community gardens are cared for by the people and families of the neighborhoods that the garden is located in, with all who participate sharing the bounty of the harvest. Due to the fact that a community garden would be much bigger than a backyard city garden, and can offer a larger quantity in harvest than a container garden ever could, this garden type could be a preferable alternative for those gardeners in the city who are looking to grow more than what they themselves may have space for at home.

Along with being a wonderful project that brings people in a neighborhood together, community gardens also seem to renew a sense of pride in a neighborhood, spurring other improvements and cleanups in the area as well.

—From *Backyard Farming: Growing Vegetables and Herbs*

Of course, there are many other basic things you'll need to know or figure out as you begin your journey, which we'll be covering as we go along. And reading won't be the only way you will learn your craft—trial and error will provide you with a wealth of information, and is probably the way you will learn the most about your garden. That, along with workshops, experienced farmers, trade and farm shows, extension offices, 4-H, farm and feed stores and even some of the better seed catalogs should tell you most everything you need to know. Another wonderful resource is family, friends and relatives who grew up on farms, most of whom will be thrilled to share their knowledge, experiences and stories about farm life.

As a side note, don't wait for the day that you start farming to start reading and learning. Read about the garden styles available to you, to determine which best fits your needs. If you are getting livestock, familiarize yourself with the animal, their general behaviors, feeding, housing and any other important facts that you should know beforehand. Learn about what you can do with your extra food, including how to use and preserve them before you're overrun.

Know the **regulations** of the area that you live in *before* you start looking into purchasing livestock, selling your excess vegetables out of the front yard, or trying to make extra money with baked goods from your kitchen.

Finally, make sure that you are getting into this for the right reasons. Don't do it because your friends are doing it, or because you feel it's the politically correct thing to do. If you don't genuinely want to commit yourself to making something grow with your own two hands, it won't be enjoyable. And if you don't enjoy it, you'll quickly get sick of it. Do it because *you* want to.



Simple vegetable stands like this one spring up everywhere during harvest season, and are mainly used for selling off the excess produce that you don't have room to store. *Photo by Joe Mabel under the Creative Commons Attribution License 2.0.*

Ready to dive in and see what's in store for you on your new backyard farm? Then let's go!





CHAPTER 3

HOMESTEADING: A JOB OR LIFESTYLE?

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If you're considering starting a homestead or backyard/urban farm, you may be wondering—is homesteading more like a job, a hobby, or a lifestyle? In truth, it can be all three, although it takes a lot of work and dedication to make homesteading a full time job, where an entire family can be supported on its income. It's not impossible; producing the right types of vegetables and creating a good, local market for them has allowed some farmers to make a living off of less than an acre. But like anything, a venture such as this takes some planning; if you have limited growing space, you'll need to determine whether or not you are ready to use some of that limited space for market sales, instead of your own food.

Although some will say that farming of any kind is not truly a lifestyle, farming, no matter the size of the farm, is a lifestyle by definition. Webster's defines **lifestyle** as “a particular way of living; the way in which a person or group lives.” But is all growing, farming? And is everyone who grows something, a farmer?

According to Webster's, **growing** is defined as something which “undergoes natural development by increasing in size and changing physically.” In other words, when you plant a garden of any kind, or raise livestock from infancy to maturity, you are “growing” something. But does just planting a garden or keeping a few chickens make your property a farm?

Using the example of tending a garden or keeping a couple of chickens, you *could* think of yourself as a farmer. But farming and

being a farmer takes a little more than that.

In the strictest sense of the word, a **farmer** is a person growing food, both for themselves and others, on large tracts of land. But today, those growing food on a smaller scale in their backyard, on rooftops or on a few acres, also consider themselves to be farmers. More and more households have gotten away from the cute little tomato vine on the patio and the cucumber plant by the deck, opting instead for a wide variety of **food plants** (including edible flowers), not only in traditional gardens but in raised beds, vertical gardens and huge containers filled with vegetables and fruits. Some have even branched out further (no pun intended) and have included fruit trees and bushes in their backyard farm. Many choose not to sell their excess produce, growing just enough for their own family and either storing and preserving the extra, or else sharing with family and friends. So, for many homesteaders, the farm *is* a lifestyle. For those people who embrace the small homestead lifestyle in this way, *do* look at themselves as farmers—they're just a different *type* of farmer. They may even consider themselves to be a slightly more modern version of traditional farmers, and have the same respect for food as their traditional counterparts.

Homesteading as a Job

More and more farmers are beginning to venture into the market place, either with their excess produce or with crops planted in a “**market garden**,” specifically earmarked for sale at a farmer's market, front yard vegetable stand or even a local restaurant. Some farmers intend to make their farms and gardens profitable from the start; others split their focus, growing for both their own table and for sale. Depending on the space available for cultivation, farmers may be selling not only things from the garden, but honey, eggs and even cheeses and milk (provided your state allows the sale of raw milk).



Berry picking, especially through some form of U-Pick set-up, lets you sell your excess produce in a way that's fun for the customer and easy for you. *Photo by Seph Swain under the Creative Commons Attribution License 2.0.*

So, what happens when you decide to turn your little farm into a money making venture? Like any other business, there are things that you need to pay attention to. Let's take a look at a few of the more important items that everyone needs to consider before monetizing their backyard farm.

Zoning

Depending on your area, **zoning regulations** can strictly dictate whether or not you can have livestock, where your vegetable garden can be placed, and where your new barn can sit. These regulations even determine whether or not you can sell from your home.

Regulations change from town to town and city to city, so be sure that you are allowed to do what you want and need to do, *before* you actually do it. (And if there is something you don't like, petition to change it!)

Prepared Food Sales

What are you hoping to sell? Are you considering selling things from your kitchen, such as pickles, canned vegetables, breads and pies? Many locations have strict regulations on what and where you can sell, even going so far as to require commercial kitchen use. However, some areas are now allowing some home-prepared foods to be sold without government oversight (with certain restrictions, of course). An example of this is the **Cottage Food law** in Florida: though restrictive in terms of what you can sell (such as breads, dry rubs, herb blends, honey products, pasta, etc.), and it requires direct sales to consumers, it can make it easier and less expensive for you to get your product out. For the small-scale producer, laws such as this are important in the development of one's business.

Chickens

The first and often most popular animal that the new homesteader will obtain is a **chicken**. Relatively independent and easy to care for, chickens provide the farmer with an additional source (or multiple sources) of produce and income. But while many urban areas are beginning to allow chicken keeping, others have sadly not yet seen the light. Those who *do* allow chickens to be kept in an urban yard may also put restrictions on the number of birds you can have (usually 2–4 birds), a ridiculously low number if your goal is to keep your family in eggs, as well as selling fresh eggs. Many urban locations also do not allow **roosters** (due to the disruptive nature of their crowing), and while roosters are not strictly necessary for egg production itself, if you want to raise a few replacement birds (or a couple for the freezer), not having roosters makes that impossible, as the eggs will not be fertile. Check the

regulations for your town or city, as more and more are allowing chickens in the backyard.

Selling Produce

It usually isn't an issue when someone wants to sell their excess fresh fruits and vegetables out of their home. In urban areas, for example, if you are only going to put out a few things every now and then, chances are you won't run into any problems. However, if you plan on putting up an actual fruit or vegetable stand, it may be looked at a bit differently, so make sure to check local zoning laws. Rural regulations likely won't be as strict, especially in cases of on-farm sales in agricultural areas, but it doesn't hurt to check anyway. If you plan to sell at your local farmer's market, then you'll need to check those requirements as well; for example, most markets require vendors carry their own insurances.

Workshops and Other Programs

Are you planning to have **classes** or **workshops** on your farm? If so, it might be considered a home business in an urban area, which carries with it the need for certain licenses and/or permits, as well as extra insurance coverage. In some areas, a home business may not be allowed at all; again, it is important to check everything out beforehand (we'll discuss more on teaching your skills in [Chapter 7](#)).

What to Expect

After all is said and done, the biggest thing that you need to think about when considering turning your backyard farm or homestead into a job (be it full-time or part time) is: **are you ready for it?** Raising and preparing your own food is one thing, but once you take that extra step of turning your backyard farm or homestead into a business, the game entirely changes. Now, the food's **presentation** needs to meet customer standards, not just family standards. While a few blemished apples don't bother your family, your more finicky customers will pass it by as substandard, though

there may be absolutely nothing wrong with the fruit. When making canned goods for your family, an imperfect seal during the canning process means you can immediately refrigerate the jar as soon as it cools, and still use it. But you cannot sell that unsealed jar at a farmer's market.

Your **display** at the farmer's market will need to be a bit more refined than when you just throw a few extra vegetables on a table by the driveway. At a farmer's market, sight sells: a good display that showcases your offerings can make all the difference. It doesn't have to be expensive, fancy or prize-winning, but it should be attractive and eye-catching. It's also more important than ever to know what you sell; be prepared to teach customers how to use a product if it is an unusual fruit, vegetable or herb. Have a couple recipes available for it, as well; customers are more likely to try something new if they know what to do with it.

Finally, whether you choose to view your farming as a lifestyle or as a job, think about whether or not a small homestead, backyard farm, or urban farm is right for you. Do you have the time and dedication necessary to make your farm a success? If you're only doing container gardening in the backyard or on a balcony, you will most likely only be growing enough for your own use, and containers are not as difficult to maintain. However, the soil and its nutrients may need to be replaced each year in a container; larger plants, such as fruit trees, will need occasional transplanting into larger containers, and containers, especially plastic ones, will need to be replaced from time to time. But though this sounds like a lot, those with little time or space to spend on a garden will find that container gardening can be the way to go. It may limit you somewhat in the types of plants you can raise, but you will still have a wide range of fruits and vegetables to choose from (with some now being developed specifically for use in containers). In other words, container gardening provides an attractive, low-impact option for people just looking to see whether they have a green thumb or not.

If a container garden isn't right for you, a raised bed garden provides another low-stress option. There are now so many types of

raised beds to choose from, some of which will be discussed in [Chapter 6](#). You can create an attractive garden which is easy to combine with traditional gardening methods and even container gardens. If you have a medical or physical problem which makes it difficult for you to use a traditional gardening style, raised beds can be built specifically to meet your comfort needs and accommodate almost any physical limitations that you may have.



Container gardening provides an option for those with limited time, space and resources—perfect for those working in an urban or suburban setting. *Photo by LollyKnit under the Creative Commons Attribution License 2.0.*

And then there's the question of **livestock**. If you are considering livestock of any kind, will you have the time and money to keep them? Pens need cleaning, animals need grooming, daily and twice-daily feedings, and all of it rain or shine (or snowstorm). If you are keeping a goat or cow for dairy use, add twice-daily milking to your routine. Even when you're ill, they still need care.

In short, both you and your family need to determine for yourselves whether you're ready for the commitment. If the extent of your urban farm will be half a dozen containers on your balcony, the time commitment will be relatively low.

However, the larger you decide to go with your homestead, the more time you will need each day. Whether your homestead is a job or a lifestyle, it *will* be a part of your life, albeit a fulfilling and personally rewarding one. Whatever you decide, make sure you've done your homework first!



Even a few plants by the window sill can enhance your table and let you experience the joy of growing something with your own two hands. *Photo by Sophie under the Creative Commons Attribution License 2.0.*







CHAPTER 4

URBAN FARM, RURAL HOMESTEAD OR SOMEWHERE IN BETWEEN

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Backyard farms and small homesteads are popping up all over the country. From rural farmsteads to city rooftops, people are returning to the land, growing their own foods once again (some having never attempted to do so before). For those looking to join this growing movement, the question is one of determining what type of set-up will be best for your needs. Determined largely by choice and by site restrictions, choosing the proper location is something we'll be discussing in more detail in [Chapter 5](#). In the meantime, let's go over the key things to look for when selecting lands to cultivate, as well as ways to best utilize the land you have.

To begin, let's briefly discuss the farming options that are available to the new backyard farmer or homesteader:

Rural Homestead

The small, **traditional homestead** is typically comprised of a house, outbuildings and associated acreage. Although normally situated in a **rural area**, homesteads can also be seen grandfathered into a residential area, especially in cases where urban sprawl has crept up around it. Regardless, if an individual or family wants to be totally self-sufficient, a homestead is the way to go. In addition, due to the need for at least a decent amount of land, if you are looking to keep larger animals, such as cattle, the traditional style of rural

homesteading is a must. (The acreage required for this can vary, as we'll see in [Chapter 5](#).)



You can even repurpose older buildings on the property to serve as outbuildings or shelter for your animals, provided they have sturdy walls and a roof. Photo by Alan Murray Rust under the Creative Commons Attribution License 2.0.

The traditional small homestead of today will usually have **multiple acres** available, with most having between 5–25 acres (though some may have 100 acres or more). There will be outbuildings (such as one or more barns and possibly some small sheds), the main house, fenced-in pasture/grazing areas (if there is livestock) and, if enough land and equipment is available, possibly limited crops (such as hay for livestock).



Keeping any sort of larger livestock, like horses or cattle, requires sufficient room for them to roam, graze and grow without restriction—in other words, a rural property. *Photo by Micolo J. under the Creative Commons Attribution License 2.0.*

Urban/Suburban Farm

The **urban farm** is typically seen in denser suburbs and within cities. Due to the location and the increased restrictions from zoning or home owner's associations' regulations, urban farmers are much more limited in what they can grow or raise in comparison to the rural homestead. Because you may be working with only a fraction of an acre, you will need to know how to best utilize space efficiently, working your garden into a much smaller, pre-existing space. Although livestock are usually not allowed, more and more urban areas are now allowing chickens, goats and bees within city limits.



Always make sure to check all applicable regulations regarding livestock ownership in your area—there may be rules regarding how many animals you can keep, what types, and what sizes. *Photo by Rachel Tayse under the Creative Commons Attribution License 2.0.*

The urban farm may also have more hoops to jump through when getting started, depending on zoning/HOA regulations and your intentions. At present, many backyard farmers are working to get regulations in their area softened, hoping to make it easier to have small livestock, and even gardens (some urban areas and developments look upon a vegetable garden in the front yard as an eyesore).

When looking to start up a backyard farm in the suburbs, it's important to determine the zoning regulations for your area. Depending on how dense your suburban area is, urban zoning may apply. However, if it is a small development in a rural area, rural zoning may still apply. Above all else, common sense should be used to determine whether or not a site is appropriate for use as a homestead.

Rooftop Farms

While **rooftop farms** could be considered a type of urban farm, they deserve special mention for the sheer variety of possibilities that these sites can hold. If the surface is large enough (and the roof is strong enough) you will be amazed at what you can accomplish. We'll be discussing the potential of rooftop farms more in [Chapter 5](#).

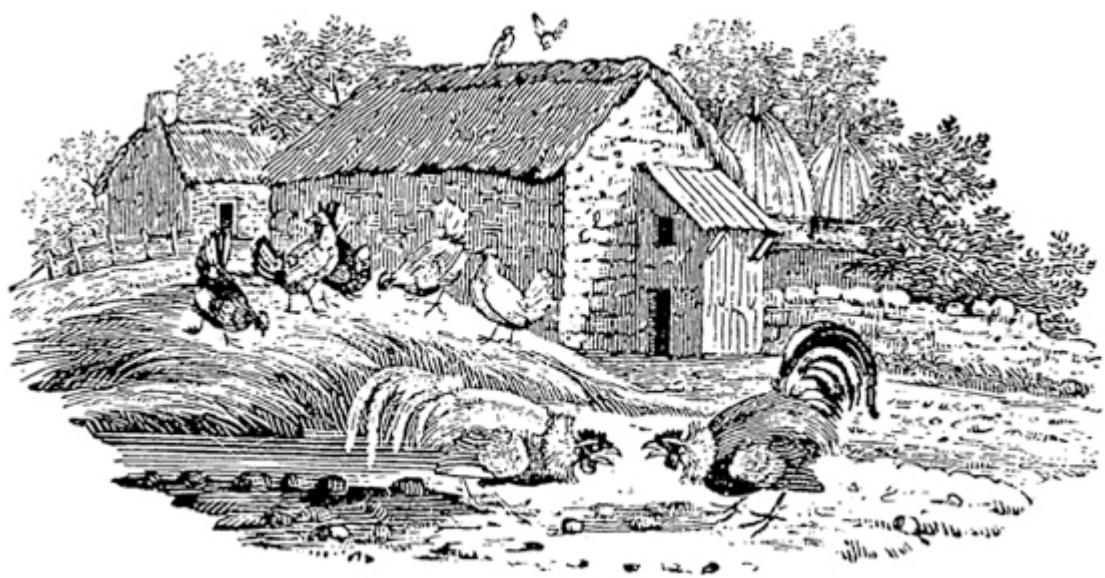
The rooftop garden can be a very large space, with some the size of a small lot. Rooftop gardens and farms can have a wide assortment of fruits and vegetables, as well as offer the possibility of keeping small chicken coops and beehives. Beds in a rooftop garden will most likely be raised and/or in containers. Care must be taken to plan around what the roof can support, meaning lighter soils may also be necessary.

Container Garden

Although not really considered a backyard farm, **container gardens** are common elements of homesteads, backyard and urban farms, and rooftop gardens. Those with very limited space, especially those who only have a balcony or deck available to them for use as their garden space, may use container gardens exclusively. Container gardens, raised beds and other methods for making use of space

effectively will be covered in [Chapter 6](#). You can grow almost anything in containers, including dwarf fruit trees. However, if your space is limited, you will obviously want to plant the fruits, vegetables or herbs that are most important to your needs.

Your **location** and your **environment** are determined by any number of things: where your job is, what you can afford, the size of your family, and the type of area you want to live in. But whether you choose to live in the city, the suburbs or the countryside, there is a way for you to experience farming and the joy of growing your own food. Just remember that, wherever you choose to live, you can learn to make the most of your space using a few tried-and-true growing techniques.





CHAPTER 5

LOCATION SELECTION

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When it comes to selecting a **location** for your backyard farm or homestead, there are essentially two paths to choose from: either you select the location, or the location selects *you*. To be honest, it usually ends up being somewhere in between; the location you end up choosing will be determined by constraints such as distance to one's job, your budget, etc. Perhaps one of the most restrictive variables to consider is finding a location suitable for the project you have in mind. Some people may be lucky enough to be able to choose any location they want, but unfortunately not everyone has this luxury. Even those who *can* pick and choose whatever location they want will usually not find a property that already has everything they want. Even a so-called “dream property” will not always be perfect; there is almost always some little thing that isn't quite right, some compromise or room for improvement.

But before you go property shopping, there is still some planning to do to ensure that you have all your facts in line, and your wish list finalized.

A Wish List Questionnaire

An example of some things to consider when putting together your wish list:

- How large do you want your homestead to be? Remember: if you are limited in space, your options may be limited in this aspect.
- What do you want to grow, and how much? (This can always be adjusted year to year.)

- Are you just growing for yourself, or do you hope to sell your produce as well? (Again, this may depend on space available.)
- Do you want to grow organic? If so, do you have all the resources you will need (organic seeds, fertilizers, etc.)?
- If you have the space, will you have one large garden or a number of smaller ones? Sometimes making a few smaller gardens instead of one big one can have a positive impact on the look of the landscape, without affecting what you can grow.
- Do you want a simple garden or a more elaborate one? Just remember: the more elaborate, the more time (and money) it may take. A simple garden can produce just as well (and as much) as an elaborate, highly decorative one, and may even be a bit easier on the wallet and schedule. However, if you decide later on that you do want something a bit fancier you can still make the necessary changes at any time.
- Will you be doing companion planting? If so, then you will need to keep in mind which plants will do better together and which plants will need to stay clear of each other. You will need to take this information into consideration when planning your garden, even if using the container method.
- What shape do you want your garden to be? If you are building a traditional or raised bed garden, you can make it in almost any shape you want. The usual shapes are square and rectangular, but some are round or oval, while some raised beds may even be tiered (if you have the time to spend).

—From *Backyard Farming: Growing Vegetables and Herbs*

Your Dream Location

We'll start with the dream scenario of being able to select the exact location that you want, one that has everything that you will need to create your homestead or backyard farm, and work backwards from there. Specifically, we'll be looking at the rural homestead and backyard farm.

To be clear, just because you choose to set-up your farm or homestead in a rural area doesn't mean that you have to pull out all the stops, with herds of livestock, huge gardens and an orchard all

sharing space on a large acreage property. On the contrary: you can just as easily decide to have only a few gardens and a few apple trees on a small acreage farm. Similarly, you can choose to purchase a large piece of property, consisting of many acres, but choose to dedicate only a small spot for your personal food use.

With rural acreage comes a lot of flexibility, as well as a lot of hard work, depending on the size of your operation, the number of buildings, whether or not you choose to have animals, and so on. Please keep in mind that in the end, the actual acreage that you will need will depend on what your plans are. The best bet is to figure out the acreage that you need and, if possible, add a few extra acres to allow for future expansion. It never fails: no matter how well you plan, you will always find something later on that you want to add to your farm.

Planning Your Wish List

But before you start house shopping, it helps to have a good idea of just what you want to do, as far as farming. Do you want huge gardens of food *and* flowers, or just food? Are you thinking about keeping animals? If so, what type? You'll need much less space to keep 20 chickens, for example, than you would to keep two or three head of cattle. How about fruit trees? A small number (depending on what trees you get and their size at maturity) are manageable in a small space, but if you are planning a small orchard (see [Chapter 7](#)), and particularly if you're thinking of marketing yourself, you will definitely need more open space (you may even want to consider looking at existing orchards that are for sale).

Adding Trees to Your Wish List

If you are planning on adding **trees** to your backyard farm, the first thing to do is decide what size tree you have room for, and determine which variety is best suited to your wants and needs. Trees come in three general size categories: standard, semi-dwarf and dwarf.

Growing 18–20 feet tall, the **standard tree** is the large tree that we are all familiar with. Although it may be a number of years before some fruit/nut trees produce, this concern can be alleviated by planting dual purpose trees, using them for shade, firewood and/or lumber. Space-wise, you will need about 22–26 feet between rows for multiple trees.

Semi-dwarf trees can be both commercial and backyard producers; however, many still grow too large for the average backyard farm. At 12–15 feet tall, they are about 50–75 percent of the size of a standard tree, and need about 18–20 feet between rows for multiple trees.

Dwarf trees are the smallest of the trees, and excellent for small spaces. However due to their shallow root system, some dwarf trees may need additional support, especially if they bear heavy fruit—some trees may not be able to totally support themselves during heavy bearing periods. Dwarf trees can run 8–10 feet in height, needing only 14–16 feet between rows. (As a side note, there are six stages of growth on fruit trees.)



This potted pineapple tree is already beginning to resemble its larger counterparts. For best results, container gardening should be used with dwarf and semi-dwarf varieties. *Photo by Carly Shell under the Creative Commons Attribution License 2.0.*

The best time to plant is during **complete dormancy**, those times when the plant is very much alive, but is not actively growing. This period is usually early spring or later fall, but it is best to check with your local nursery or extension office for your area, if you are unsure.

Another important point is to check as to whether or not the selected variety of fruit is self-pollinating; if not, remember that you will need a second variety to serve as a pollinator.

Livestock

In terms of livestock, your land selection should depend on what type of animals you plan on keeping. For example, chickens do well in open areas, slightly wooded areas and even wooded areas (although heavily wooded areas present the additional problem of predators, so housing will need to be especially tight and secure). The main consideration when selecting a rural location (while planning on keeping birds) is the **number of birds** you're planning to keep (covered in more detail in [Chapter 7](#)). If you plan on free-ranging your birds during the day, letting them roam your property, you will probably want to make sure that you have no close neighbors, and avoid being too close to any road that the birds can wander into. Remember, most or even all of your acreage could run behind your home, plotted in a long, narrow lot, leaving you with lots of land, while still having close neighbors and houses only a few yards away.

If you decide to keep ducks or geese, keep in mind that both animals have unique needs that require advance consideration. Geese are large birds—one adult goose requires roughly the same amount of space as two large, adult chickens. (This is just an average estimate, but it should give you some idea of a guideline for necessary space.) And, although they do need access to water, you don't necessarily need a piece of property with a pond or other water feature (although it can make your life a bit easier). Even just a hard plastic child's pool will do (depending on the number of birds), though it will need daily cleaning.

If you want to keep larger animals, like cattle, goats, pigs or horses, you'll need as much room as you can get. Although we will cover this in more detail in [Chapter 6](#), the main reason for needing more space is that you'll want at least a little grazing area for your animals. Not only is natural grazing better for them, it's better for your pocketbook, saving you an appreciable amount in feed costs each year. It's fine if some of the pasture area is wooded, but keep in mind that goats will nibble on trees or bushes (they especially love pine trees), so you may need to figure out some kind of fencing

for any trees or shrubs that you want to keep. However, fencing can be expensive, and its installation can be a big job if you do it yourself (especially with no help), while professional installation can cost a pretty penny in its own right. In short, it will be to your benefit if you can find a place that is already properly fenced for the livestock that you plan to keep.

Finally, if you plan to keep larger animals, make sure that there are appropriate **outbuildings** (such as barns or some other type of shelter) already on the property, as you *really* don't want to have to build for yourself, especially if you have animals waiting. You'll also want to make sure that the property has easy and consistent access to water; you don't want to have to haul water to the barn or pasture multiple times per day (even a hose hooked up to a faucet in the barn will be a great help). On that note, if there are faucets in any of the outbuildings, make sure that they don't freeze in the winter. Your real estate agent should be able to answer these questions for you, along with what the current owner does to prevent freezing.

Rural Food Gardens

The one thing all backyard farmers and homesteaders in rural areas will want is a good-sized **food garden**. With that in mind, you'll want to make sure your soil will work for your needs. Sand and clay can make projects difficult, as you will usually need to blend in other soil before it becomes suitable for growing. If you need assistance in adjusting your soil, your local extension office or a good nursery can usually help. You could also consider installing **raised beds** (covered more extensively in [Chapter 6](#)). Although raised beds do carry an initial expense, they can be a great solution when the soil or drainage is bad, as well as help with water conservation in areas of little rain.

In selecting a property for gardens, make sure that it is not overly shaded, with at least part of the day's sun shining on the area you want your garden to be in. Partial sun is fine, as many plants will do well in partial sunlight/partial shade conditions. However, few food

plants will thrive in 100 percent shade, and some do require full sun, so unless you are ready and able to do a lot of tree clearing for your garden, choose your spot appropriately. On the other hand, if you are planning on keeping livestock, a few trees (protected from animal nibbles when necessary) in the pasture will provide much needed shade for animals grazing in summer. Some trees around the house are good as well, as the shade can help to keep things cool in the summer (and keep your air conditioning bill low!)

Choosing a Rural Property

Finally, look at the property itself. Say you're looking at a property with 20 acres; **is all that acreage usable?** If not, is enough of it usable for your needs? For example, half of that acreage may be wooded, and thus not suitable for a pasture or garden. If you want a woodlot or woods, this may work for you, but not if you're looking for all open land. On the other hand, if all the open land you need seems to be there, is part of it swampy? Are there wetlands, or is it prone to floods? Swampy areas are not good for livestock and areas that flood will be of no use once they're underwater. Some wetlands have government regulations attached, even on private property. In short, it's important to pay close attention to the land.

If you are looking to be fully self-sufficient, including heating and cooling, then you will want to look for properties with a large, preferably hardwood woodlot which, when harvested and used properly, will heat your home for many years to come (see [Chapter 6](#) for more information.)

Architecture and Facilities

Selecting a property by its **architecture** is more common than you may think. Even when looking for the perfect farm, the first thing that will usually catch your eye is the house and any outbuildings (especially large barns) on the property.

You'll want a beautiful big farmhouse, of course, but it also needs to be functional and suit for your needs. For example, if you plan to do a lot of canning, freezing and cooking, you don't want a kitchen

that looks like an afterthought. That cute little farmhouse on the hill with the two tiny bedrooms will do you no good if you have three kids. While either of these situations may be remedied through a remodel or an addition, this adds to your bottom line cost-wise, to say nothing of the stress and hassle of living alongside extensive renovations. In the end, you should hope to find a location that addresses all of your specific needs, letting you move into a home that is exactly what you want.

Historic Homesteads

In your house hunting, you may come across an old historic house or farm just begging for restoration. You may also find old, abandoned farms (in varying condition) that, should you have the time and money (and the place is worthy of restoration), can be very rewarding purchases. An old, restored and working farm can be a beautiful place, as well as an attractive backdrop and marketing draw if you plan on having a business there. Make sure to have the location professionally checked out *before* you put in your offer, to make sure that it can be restored. Just about any place can be restored, but there is a difference between a “fixer-upper” and a “money pit.” It all comes down to what kind of money and time you are willing to spend, and if you can find the right people to do it.

Check to see if there is any assistance available in your area when restoring a historic home.

When considering any outbuildings on the property, similar considerations apply as when looking at a home. Will the buildings fit your needs? Are they in good condition, or will they need some work? If so, do you want to be responsible for it? No matter what your plans, you can always use a nice big barn, even if you're not raising animals. A good barn is great for storage, drying, hosting a farm market, etc. But **upkeep** can be expensive, especially when it comes time for a new roof. Small, carriage house-sized buildings can also work, depending on your needs. A decent-sized carriage house can hold a few goats, a horse, or even a milk cow or two (depending on the size of the building). If you're not keeping animals, it also

serves as great storage for garden tools, tractors and such. If the building is located next to the house, some carriage houses can make for good garages, if they are wide enough. If the property has some structures you can't find an immediate use for, don't worry; there are plenty of great ways to repurpose unused structures. For example, an old corn crib can be turned into chicken coops or storage sheds.

Miniature Barns

What if you find that perfect country property, with the perfect garden sites, the perfect house in the perfect location, but it only has a garage and a small outbuilding with just enough space for cars and tools? If it is a property that you really like and want, you can build a barn, but if you are only planning on keeping a few goats, a couple of horses or a dairy cow, many people purchase the **miniature barns** that the Amish and Mennonites build, instead of building a big barn they may not really need. These come in many sizes and styles that blend with almost any existing architecture. Usually built off-site, they are trucked in already completed (including exterior paint or stain) to your prepared spot, ready to use. They're well built, less expensive than full-scale construction and easier to care for than their huge counterparts. They can even be moved to another spot later on, if necessary. They're an excellent alternative for any number of uses.

Self-Sufficiency

There are a final few considerations to keep in mind when purchasing a rural homestead or backyard farm (for those who are planning to be totally self-sufficient, or as self-sufficient as possible). For self-sufficiency, the property will require some basic amenities, including a septic tank, a well and a wood stove (with on-site fuel, such as a hardwood stand). If your property has these features, you are well on your way to being self-sufficient (or at least free from the power company). If you are quite fortunate, you may even find a home with solar power. A property with all of these elements

doesn't necessarily mean that the home is off the grid, but it *does* mean that it could be, if the homeowner chooses.

Wells

A **well** provides the house and farm with water. Many older farms (as well as some newer farms) have wells located at both the house and barn. When purchasing a home, some potential buyers will opt to have the water tested to make sure all is okay. This is certainly important, but another item to check (which many buyers neglect) is whether there have been any problems with the well, such as running low or even going dry. Your realtor should be able to find this out from the owner, especially if they have lived at the site for many years. A well going dry doesn't necessarily mean that it has run out of water; there could be any number of problems, including issues with the **pump**, which could be causing it. However, if there *have* been problems, it would be a good idea to have the well checked by a professional. Many times, it is something that can be remedied without the expense of having to dig a new well. If it is a problem with the well itself, you'll need to decide whether or not you want to purchase the property and spend the money to have a new well put in (which could be a big expense).

Drawing your water from a well is not like having town or city water. You need to use more caution when on a well, such as not letting faucets run continually. No more 20 minute showers; you'll need to use caution in times of low rainfall, when the amount of water in your well can go down. That being said, there really is nothing like good, cold well water. If your farm house has a working hand pump outside over the well, it can come in handy, especially at times when your pump goes down due to a mechanical problem or power failure. It will allow you keep drawing water from the well by hand.

Septic Tanks

Most rural homes will also have **septic tanks**. A septic tank is basically an underground tank where waste water from the home—

sink, shower, toilet, and bathtub—is stored until the homeowner has it pumped out by a professional and removed. How often the tank is pumped depends on how many people live in the home, overall water usage and waste generation. Septic tanks *should* be checked before a purchase is made; however, as many do not want to have to go through the trouble and expense of digging the tank up in order to make sure everything is in working order, the check is often skipped. Thankfully, some areas require the owner to have septic tanks checked before the home goes on the market.

With a septic tank, you will not have the expense of town or city sewers to deal with; however, when something goes wrong, it can be an expensive job. Regardless, for the self-sufficient homestead, the septic system is important.

Self-Sufficiency Heating

A **working fireplace** or **wood stove**, though not necessary in the home, can come in handy. For the self-sufficient homestead or farm (which also has a good hardwood wood lot) a wood stove (interior or exterior type) can mean heat for the home all winter long. While you *will* have to chop and split enough wood to last you through the winter (which can be a lot of work) you save yourself a lot of money heating your home this way. Do not—I repeat, do *not*—attempt to fell trees in your wood lot unless you know what to do and how to do it. If you are still learning how to topple a tree, always have an experienced person with you. Even after you have become experienced in felling a tree, there should still be a second person with you at all times; every year, around 200 individuals, professionals included, are killed by a tree they were trying to take down.

A fireplace is good for supplemental heating when you are home, but won't work as well as a wood stove if you plan to heat the entire home. Plus, it isn't safe to leave a fire in the fireplace unattended. For those who are living on the grid, a fireplace presents a great cooking alternative during a power failure (if you don't have a gas stove). It also makes a great alternate cooking area for general

purposes, and a number of retailers now sell the equipment and tools needed for open hearth cooking. It is possible to make full meals in a fireplace, or just keep a pot of water boiling or some coffee percolating.

Note that continual cooking in a fireplace means having to keep a closer eye on your **chimney**, as it may need more frequent cleaning as a result. Chimneys should be checked yearly for creosote, animal nests, animals who have taken up residence in the chimney (raccoons love to do this) and soot; if you do a lot of cooking in your fireplace, you are adding grease to the buildup on the sides of the chimney, which can contribute to a chimney fire, and which should be checked for as well. This should not prevent you from having a fireplace, or a wood stove for that matter; it really is no different than having your furnace checked and cleaned for safety.

Although fireplaces and wood stoves are primarily seen by most of the population as just a useful decoration, the backyard farmer and homesteader can find useful purposes for both. If given the opportunity, make sure you have at least one in your home.

Urban and Suburban Locations

While having a homestead or backyard farm in a rural area is the ultimate goal for many—they see food freedom, space for the family and the ability to raise exactly what they want as being the key benefits—some choose (or need to) live in urban areas. While urban and suburban farmers are somewhat more limited in what they can do, compared to their rural counterparts, there are still a lot of options available.

When looking at urban or suburban areas with the intent of creating a small urban farm, you'll start by considering many of the same points as you would for the rural farm. You still want good soil, if you can get it; a house in good order, with a few outbuildings if possible (although chances are they will be small, even tiny); and as much space as you can get, yard-wise (although you won't have quite as much as on a rural farm).

Making the Best Use of Urban and Suburban Spaces

For **space**, if the size of the yard matters more to you than the size of the house, you can ask your realtor to show you homes on extra-large lots, even homes that have an adjacent empty lot for sale. Keep in mind that, if you are searching for a property **within the city itself**, you may need to consider using vertical and/or container gardening, along with traditional or raised beds, in order to maximize your growing space. As you search, look around each yard to see what you can do with what is already there, and whether or not you will be able to add in whatever else you may need to accomplish what you want.

If you are planning to take full advantage of the property's existing space, front and backyard both, be sure that there will be no problem with growing vegetables in the front yard. As mentioned earlier, some cities, towns and homeowners associations frown on vegetable gardens in the front yard. While unfortunate, until there is more education available on the fact that a vegetable garden in the front yard, when managed properly, can look as attractive as any other garden, backyard farmers will continue to run into these sorts of obstacles.

One more thing: don't discount a property if there is already an existing, non-food garden in the yard. It is more than possible to plant vegetables within existing gardens and flowers—in fact, many food gardens utilize flowers as a form of companion planting.

Companion Planting

Companion planting is the age-old method of planting plants together that will “get along” and can be beneficial to each other during their time in the garden. It also takes into consideration those plants that would not get along due to, for example, competition for the same nutrients. That being said, companion planting isn't necessary in the garden unless there are plants that are truly incompatible. However, you will find the extra time and effort put into this arrangement to be worthwhile.

Some examples of plant companions that work well together include:

- Tomatoes and onions: Onions help keep slugs off tomato plants.
- Beans and corn: When given a head start in growing, corn will become the support system for the beans, with the bean plant growing up the corn stalk. These are not only good companions, but also a great space saver in a small garden.
- Cabbage (and cabbage family): Plant aromatics such as sage, thyme, or lavender to keep cabbage worms away.
- Garlic and roses: Garlic keeps the Japanese beetle away from the rose bushes.
- Peas and squash: Trellis well together in vertical gardens.
- “The Three Sisters”: Corn, beans, and squash with beans using corn as a support and squash planted around the bottom.
- Basil and tomato: When planted together, basil is said to improve the flavor of the tomato.

—From *Backyard Farming: Growing Vegetables and Herbs*

Urban and Suburban Water

In terms of **water sources**, most urban gardens will need to rely on city water. For those unhappy with their water provider, it is possible that some areas will allow either a well or cistern to be installed, which can be quite helpful with watering, as well as helping you avoid running up your water bill. This is also a solution for those who do not want to use chlorinated or fluoride-spiked water on their plants.

In areas where wells and cisterns are not permitted, a **rain barrel** can also work. However, if you plan to collect rainwater, be careful and check your area’s regulations. Although rare, in some areas it is against the law to collect rainwater from your roof; this water is not considered to be your water to use, and actually carries penalties for its use. As far as sewage goes, unlike rural areas you will most likely be hooked into the city or town’s sewer system. That being said, newer suburban developments that are far enough outside of the town or city limits may have septic systems, along with wells.

Urban and Suburban Heating

Your house in the city or suburbs may have a fireplace or wood burning stove; but, unlike living on a rural farm, you will need to purchase your wood or pellets for burning, unless you happen to own a woodlot somewhere else. However, keeping modern heating costs in mind, I would say it is well worth working out the cost comparisons between heating with a wood burning stove or gas heat. Even if you are not supplying your own fuel, you could still save money depending on what you pay for oil, gas or electric heat.

Urban and Suburban Livestock

Even in the city or the suburbs, it is possible to have some **livestock** (although not to the extent that you can in a rural area). A number of cities and suburbs are now allowing chickens, and some are beginning to allow goats and honey bees. In most cases, the number of animals you can own will be limited (sometimes *strictly* limited), but it's a start. We can only hope that as more people begin to raise their own food and understand more about smaller livestock, and how they can easily live in a backyard, the easier it will become to keep these animals in urban locations. If you are set on keeping livestock, check your local zoning laws first to avoid disappointment and any situation where you might need to sell your animals, or your property. And, if zoning laws prohibit your keeping animals, there is nothing that says you can't fight to make changes!

Although many urban and suburban farmers are beginning to **keep bees**, be prepared for some big questions from your neighbors, many of whom may not understand your bees. Some might even fear them, afraid that they will be attacked by swarms, or stung as the bees wander into their yard during pollen and nectar gathering. Although bees *can* be aggressive at times, honeybees are usually quite docile; unless the neighbor disturbs the hive, they have no more of a risk of being stung by your bees than by honeybees in the wild.

Should you choose to keep urban bees (and are allowed by your city to do so) it will be up to you to educate your neighbors. It may also help if you can keep your hive out of view, in a fenced

backyard or similar. When the neighbors begin to come around and understand, try sharing a bit of honey with them to make them appreciate your bees even more. Who knows; they may even start looking forward to their visits!

Urban and Suburban Gardens

For those who live in an urban or suburban area, know that there are plenty of opportunities to raise (at least some of) your own food. Although you may not be able to reach self-sufficiency, many people have found ways to do a lot on just a small plot; all it takes is a little planning.

Many of the scenarios we've discussed in this book have assumed unlimited funds and a wide range of available properties. In reality, most cannot purchase or even *find* a property that has everything they're looking for. So, what do you do when you can't buy your fantasy property? The best thing is to prioritize. What do you want or need the most from your property? What is most important to you? Can you purchase a property with the space that you need land-wise, and add the buildings, fencing or garden space that you need slowly, over time?



Proper planning and smart layouts can turn even a small backyard space into an efficient, productive backyard farm. *Photo by Woodley Wonderworks.*

Are there things on your wish list that you can actually do without? In other words, are there things that you would like to have, but which are not necessary to accomplish your food and farm goals? (These items would be considered more of a “**luxury**” rather than a necessity.) Do you really need to live where you are looking? Sometimes, it can be cheaper to live outside of the city than in it. Look to get as much bang for your buck as possible in terms of property; you might find that you can meet, or even surpass your goals, especially if you are willing to drive a bit farther to work. Zoning regulations will also likely be more farm-friendly outside of the city.

Working Your Existing Property

What if you want to, or even *have* to work with the property that you already own? This can be a challenge, but likely not as bad as you might think—especially if you have lived on the property for quite a while. You know the property well; over the years, you may have been thinking about where you would put certain things on the property, gaining an idea of what will and will not work, what can be changed easily, what can be changed with some effort, and what can’t be changed at all.

The easiest first step is to **sketch out the footprint of the lot**, complete with where each outbuilding is, and any trees, bushes, etc. This does not have to be to scale, so long as it gives you an idea of the shape of the grounds, the locations of buildings and existing flora, so that you can plan out where you can put your gardens (you can also do this once you purchase your new property). If you have a septic tank on the property, you’ll also want to mark the leach field on your map (the septic drain field area where the liquid will flow to from the septic). This is where the liquid is cleansed before it has a chance to meet up with the ground water. It is not recommended to put food plants on the leach beds—not even raised beds. Though the job of the leach field or septic drain is to filter and remove the harmful contaminants from the liquid that comes out of

the septic tank, you can never be sure that the liquid is absolutely clean of harmful bacteria and contaminants. Adding soil for planting can also have an effect on the efficiency of the field, and turning the soil can be damaging to the leach field. If you can't locate your leach field, try to find someone who can. Otherwise, you risk contaminated food and damage to your leach field that can be expensive to repair.

Once you have the area roughly sketched out, you can work to start laying out your gardens. Photos can also help, especially when going to a nursery to select plants. These can help you remember any unusual spaces—those little corners where you can tuck something in, and all the little obstacles that you'll need to work around.

Obstacles

Speaking of **obstacles**, when you have things in the yard you need to work around, regulations to deal with, and plans that don't quite pan out, it is important that you do not allow yourself to become discouraged. Plans can change in mid-stream; this is your chance to learn how best to quickly revamp your homestead layout. Worst case scenario, this is the point when you start over and redesign.

Anything can become an obstacle. A tree in the wrong spot that you don't want to remove, a leach field straight down the center of your property, permits, plantings that don't work the way you thought they would ... any number of problems can pop up during development. While some of these are obstacles that can cause major problems, many are simply a nuisance that can easily be corrected. For example, if you find that you don't have a good spot in the ground for that blueberry bush you wanted, see if it will work in a container on the deck or by the door. If that particular blueberry bush won't work in a container, find one that will. If you want some flowers in the garden but you don't want to spare the space, select edible flowers. Is a tree that you want to keep shading the garden area? See if it can be trimmed. If that won't work, watch

to see how much sun and shade the area gets; it could be a good spot for the more shade-tolerant plants that you want to use.

Problems that you can't figure out can quite possibly be solved through the help of a **nursery professional** or **extension agent**. They can explain to you why something isn't working, and whether the glitch can be fixed. Or, they could tell you that something won't work at all, and suggest a good substitute, if one exists. Extension offices usually have a master gardener program, where highly experienced gardeners may even be able to come out to your home, at no cost to you, to assist in assessing your situation and make appropriate suggestions.

The **internet** can be a good resource as well when trying to get through (or around) the problems that you have run into. There are dozens of gardening and farming forums with members who may have had the same situations as you, and who might have some idea as to how to help. In addition, there are a number of informative websites created by individuals describing their experiences on their own farms, homesteads or urban farms.

Last, but not least, create a good **physical library** for yourself. While the internet does have wonderful resources, you can never go wrong having your own library of gardening and homesteading books and related periodicals. That way, the information is always at your fingertips, even when the Wi-Fi is out. When you find good information online, print it out and create notebooks with what you've found.

So, now that you have found your property (or you've decided to use the one you're on), you've got the gardens figured out, and you know where your animals are going, it is time to decide exactly what you will be raising and growing on your fledgling homestead.







CHAPTER 6

DECIDING WHAT TO RAISE

You have some idea of what you want to do, as far as growing and raising your food is concerned. You've selected a property (or have decided to use the land that you're on); now is the time to start making the big decisions. This doesn't need to be a source of stress; rather, it can become a fun family project. Just keep in mind that your plans will not only change during this time, they may also change throughout the development stages and during the life of your farm or gardens.

Farms and/or gardens are always evolving and changing as you find elements that don't work, elements that work better than expected (and which you want to expand on), and elements that *did* work, but are no longer efficient or important. Things will change as you continue adding new things to the farm or garden, things that you perhaps thought you couldn't do during the initial planning stages. Even in the smallest spaces, such as containers on an apartment balcony, things will change.

Whittling Down the Wish List

When first trying to decide what you want to raise and/or grow on your homestead or backyard farm, start with a **wish list** of everything that you would like to do (within reason, of course; you might really want to add a milk cow to the family farm for fresh milk and cheese, but if you are in an urban area with a tiny backyard, common sense dictates you reconsider). So, make your

wish list, and have fun making it, but keep it sensible and realistic, bearing in mind the space that you actually have.

Throughout this chapter, we will be discussing the most popular and common things raised and/or grown on a typical homestead or backyard farm. Keep in mind that, just because these are often seen on backyard farms and homesteads does not mean that it needs to be grown or raised on yours; neither does it guarantee that it will even work with your needs and situation. These are just examples of what you could try on your site. If you are considering livestock, but aren't quite sure whether to take that first step, talk to others who have experience with the animals you're considering. Ask if you can handle them a bit, to get to know the animal. If you have appropriate housing and fencing, the owner (especially if they are a friend of yours) might even let you keep them at your home for a weekend or even a week, just so you can see what some of the daily care is like. If that setup isn't practical, see if you can help out at their farm for a while. This won't give you a total picture of what goes into the care of all livestock, of course; nor will it grant insight into medical emergencies, or other unexpected things that go along with owning and caring for animals. What it *will* do is give you an idea of the daily care, a sense for how simple or tricky it can be to milk a goat, for example. While this all might sound like a bit of a pain in the neck, it is much better than bringing an animal onto your farm, and then realizing soon after that it just isn't for you.

One final thought: don't be afraid to make your gardens, or your farm as a whole, outside of the norm. Don't be afraid to try unusual things in the garden, even in a market garden—especially if the market you will be selling to has an appreciation for ethnic or unusual items. If you want to try something in your garden, but aren't confident about it, try one or two. If you like it, you can add to it in full next time. If you don't, then you can keep what you have or else give it away to someone who does like it.



Selling produce that you can't use or store is an option, provided the quality of your produce is high enough. Otherwise, it makes a great gift to a neighbor or family member.

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Types of Gardening Layouts

You have your land, and have been considering the layout you want to use. Now you're trying to make the final decision as to what garden type or method you want to use. You may use one, or a combination of several. A garden, whether you are using it for

flowers or food, can be as complex or as simple as you want. But what *are* these garden methods? Let's take a quick look.

The Traditional Garden

A method in which plants or seeds are planted into flat, tilled or untilled ground, the **traditional garden** is the most inexpensive garden form, and what most people picture when they think of a garden. The garden is ground-level, with the seeds or plants put directly into the ground.

This method is more susceptible to health problems in the plants, uses more water, and needs more weeding time; in general, it is a bit more **time consuming** than the other methods. However, given that this is **the least expensive method**, and still the most widely used, it's not uncommon for a homesteader's first garden to be a traditional setup.

There are a few things that you can do to try to help counteract some of the problems of a traditional garden. For example, after turning the soil (if you are doing so), a **garden cloth** may be laid on rows that are to be planted. This will allow the water to get through, while helping to keep weeds at bay. It won't eliminate the problem entirely, but it will make weeding easier. Some people will also use **black plastic**, but it is important to use caution when doing so, as black plastic holds heat (tomatoes work well with this), and water can only soak through the spots where the plants are coming through the plastic. Depending on the garden, however, using garden cloth or plastic can be expensive. A less expensive (and more environmentally friendly) alternative is to use **newspapers**. The single drawback to using papers is that replacement will need to be done on a yearly basis. However, for the gardener who is on a low budget or is looking to recycle, this is a great resource.

Once the garden area has been selected and sod, any rocks and stones have been removed and the soil has been turned, lay out any soil covering(s) that you've decided to use and lightly cover with soil. This will prevent them from blowing away in a wind. Before planting, you will need to cut holes into the cloth or plastic where

the seeds or plants will go. If using newspaper, you can either lay it out beforehand, like with cloth or plastic; otherwise, as long as you are putting in plants and not seeds, pieces of newspapers may be put around the plants after they've been planted.

Some drawbacks to the traditional garden include the **time investment**, particularly in terms of their care; they can also be difficult for the handicapped or elderly who have physical difficulties—especially those with problems bending and kneeling. Finally, traditional gardens do not hold moisture as well as raised beds do. However, it is still a good choice for the novice gardener.

The Raised Bed

Exactly as it sounds, **raised bed gardens** are raised off the ground in beds usually created from wooden frames, which can sit at least 11 inches in height. Raised beds may also be in a table or manger style frame that is up on legs, two or more feet off the ground (these are great for wheelchair-bound gardeners.) In a sense, they are a traditional garden within a **frame**, allowing for plantings to not be done at ground level.

Materials for the frames may vary; pavers, concrete blocks, wood, brick and stone are all viable materials for building raised beds. In fact, anything that would be safe for use in the garden will work. It should be noted, however, that if a wooden frame is being used, the wood should be either **untreated**; or, if treated, make sure that a **non-toxic method** is used. This is so that the toxins from the wood do not contaminate the soil, the plant's root systems or your food. If you can find wood that has been given a non-toxic treatment, this is preferable over non-treated wood. Otherwise, you may find it necessary to replace at least the sunken foot of the frame, due to rot. This does not mean that treated boards will not rot; however, they will decompose much slower than those that are not. Prefab kits can also be purchased at garden stores, nurseries, online retailers and even department stores and catalogs.

Some gardeners will build the frames right on top of the ground, which works fine, and is typically an easier build. However, if you

have problems with burrowing animals, raised beds that sit on the ground should have the first foot or so of the frame sunk down into the soil. This will help to prevent animals from burrowing into your garden bed. Keep in mind that, if you want the walls of your raised bed to be 3 feet in height, you will need to build a 4 foot high frame, keeping in mind that the first foot will be underground.

Once the frame (or frames) of choice have been constructed, the proper soil mix is added to the frame, whether the raised bed is on or off of the ground. The **soil mix** will depend on what you want to grow in the beds; your local nursery or extension can direct you in creating the proper mix for your particular garden needs. Otherwise, you can purchase pre-mixed soil at nurseries and garden centers.

A common mix is:

- Half organic matter (such as compost)
- Half soil
- Some sand for drainage

Raised beds do represent an initial investment, which includes not only the purchase of the materials for the raised beds, but the soil to go in it as well. They are also a bit more time consuming in the beginning, due to the fact that they need to be built. (Raised beds that are raised up on legs can now be purchased as a kit, although some assembly may still be required.) Finally, the soil will need to be rejuvenated every few years (as the nutrients are removed from the soil by the plants), whether through the addition of fertilizer (common to any garden type) or replacement of the soil. However, because the soil is added to the frame after it is built, a raised bed will allow you to grow in areas that have bad soil (except for leach fields).

Raised beds may also be any height, size or shape that the gardener wants them to be. They can hold water somewhat better than a traditional garden, and weeding is much easier, as the weeds can be better kept under control than in a traditional garden.

The Container Garden

Simply put, a **container garden** is one in which the plants are all kept in pots and other containers, including flower pots, wooden boxes, bags, old decorative cans and any other type of container that your creativity can suggest. Although some plants may have a few special needs when grown in a container, such as needing a bit more watering or a transplant, it is a great way to go if you have very limited space (such as a deck or balcony), or have plants that will need to be brought indoors before the first frost. In fact, container gardening has become quite popular for those who have little to no space for an actual garden bed.

Creating a container garden for food plants is just like creating a container for flowers; you need good soil and good drainage within the pot so that the excess water from rain or maintenance watering can drain out. Otherwise, you run the risk of your plants rotting or drowning. The containers may be anything that would be safe to use with food plants; just make sure that you have some type of drainage in the vessel, such as holes on the bottom or on the bottom edge. If the container has no **drainage holes** built in, and you do not for whatever reason want to drill holes (it can be tricky to do so in pottery), fill the container about a quarter of the way with stone, pottery shard or packing peanuts before adding the soil. Keep in mind, however, that container gardens can dry out quickly in summer heat, and also quickly become over-watered as well, so it is very important to find the “happy medium” for successful growth.

You'll need to bear in mind the **size** of your container, as well. If you are using a large container that will need to be moved at some point, keep it light enough for easy movement (unless it is on wheels). Don't fill it with rocks and heavy soil; rather, use the packing peanuts or a combination of a few stones or pottery shards on the bottom, with the rest covered with packing peanuts, and a lighter weight soil or soil blend.

If you choose to go with the container growing method, don't think that your choices are limited, as far as vegetables and fruits are concerned. That couldn't be further from the truth. With the

popularity of container gardening surging, plants are even being bred especially for container use. Many of those plants (and seeds) that are not specifically created for containers will work just as well.

Fruits and vegetables conducive to being grown in containers include tomatoes, peppers, berries, herbs, dwarf fruit trees, lettuce, and edible flowers, to name just a few. Any plants that are **climbers**, or which need some sort of support as they grow, can make use of cages, small trellises and stakes placed in the pots, just like you would with traditional and raised bed gardens.

In a container garden, there may be one or more plants per container, depending on the container's size and what you are planting. Plants such as strawberries, herbs and edible flowers may be planted together, if the container is large enough, and multiple vegetables may be kept in a single container, as well.

When choosing what container will hold what plant, it is important to make sure that the depth of the pot will be adequate for the plant's root system. For example, a pepper plant should be in a container with a depth of 8–12 inches, carrots 9–18 inches, and beans 16–18 inches in depth.

Container gardening can be fun, and is definitely functional, especially if your space is limited. However, it is highly unlikely that you will be able to completely supply for your family from what you grow. In reality, this method can only present you with a nice addition to your meal or dish. But don't let that prevent you from container gardening, as the addition of anything that you have grown yourself is worthwhile.

Espalier Gardening

Although container gardening is most popular among those with little garden space, if you *do* have a little patch of ground against a wall or fence, or want something a little more out of the ordinary in your container garden and have the time to learn, you may want to try espalier.

An ancient practice of controlling the growth of a tree for fruit production, the word **espalier** is French, coming from the Italian *spalliera*, which basically means “something

to rest the shoulder against.” In basic terms, espalier is pruning and tying branches up to a frame or wires set flat up against a wall, fence or trellis. A common example is the grapevines in a vineyard. Beginning with the Romans and refined to an art during the Middle Ages by the Europeans, espalier is making itself known once again, as part of the resurgence of the backyard urban farmer or city dweller with limited space.

Although there are many sites online and books available to help you learn about espalier, the pruning techniques required and how to maintain the trees, you may also want to check with any local garden clubs, nurseries and extension offices in your area about any classes that may be offered, to give you a firsthand look at this useful and decorative art.

—From *Backyard Farming: Growing Vegetables and Herbs*

The Vertical Garden

Vertical gardens may be part of a raised bed, traditional or container garden, or they may be their own structure. In the vertical garden, everything grows trained and braced in an upward position. Of course, supports will be needed to allow vine plants to grow upwards instead of following their natural tendency to grow across the ground. These supports can be, in short, anything that works, including lattice and fencing. Some vertical gardens are also built self-contained into old pallets, which are then leaned against walls. Much lighter box versions are made to hang on the sides of buildings.

This method not only works with plants that naturally grow upwards, such as tomatoes and eggplant, but can also be used for vine plants that usually grow along the ground, such as cucumbers and squash. Using the vertical gardening method will not only give you more room in a garden, but it can prevent you from stepping on vegetables that would normally be lying on the ground. It can also increase the **yield** of the plants. Vertical gardening is a good method to use for those who may have a difficult time harvesting from a traditional garden.

The main thing to remember is that, whatever you use for your plant brace, you make sure it is firmly secured, whether to the ground or the side of a building. You do not want the weight of your plants to bring your bracing system down, as damaged or broken plants can result, which in turn may lead to a loss of fruits or vegetables.

Growing Organic

You will find each of these garden styles in backyards, city lots, rooftops, rural farms and homesteads throughout the world. Of course, your selection of garden style will automatically be narrowed down by what space is available to you for your garden. But no matter what space you have available, even if it is only indoors, at least one of these methods will work for you.

Along with deciding your garden's style, you will want to decide whether or not you want to **grow purely organic, partially organic** or as **natural** as possible. If you plan to have a certified organic garden, this will need to be decided beforehand, as certification demands that soil be pesticide-free for a certain period of time before it can be certified organic (usually a period of years; check your local certification for the time period).

An organic garden can be any type of garden—traditional, vertical, raised bed or container. But for a *true* organic garden, seeds, soil and pest control choices do matter. When you choose to go organic, it means that you are committing to keeping your garden chemical-free, using organic seeds and organic gardening practices. And, although organic doesn't mean that no fertilizers or pesticides have been used, should you choose to use them, they must be approved for organic use. This is particularly important if you plan to become *certified* organic.

Organic certification is not that important if you are raising plants only for yourself; certification is expensive, and you must strictly adhere to the rules to retain that certification. There is also a lot of record keeping involved. However, if you want to sell your

product with an organic label, you must be certified. (There *may* be exceptions, depending on if sales are below a certain amount.)

For further information on going organic, check the United States Department of Agriculture website at www.usda.gov. Most states also have their own organic certification office where you can get information more applicable to your area.

Growing totally organic is a matter of personal choice, with many gardeners deciding to grow as organically as possible, without certification; that is, using non-organic pesticides and fertilizers only when absolutely necessary. Whether you decide to go organic or not, know that with proper care your garden will grow enough vegetables or fruit to make the time and effort worthwhile.

What to Grow

Now that you have decided which method (or methods) you will be using for your garden, and have made the decision of going organic (or not), it is time to determine what will be in your garden. Of course, you probably already have your wish list, but this is the time for realistic decisions. Keep in mind how much space you really have, and how much time you have to dedicate to your garden at this time. If you are a new gardener, you may be more comfortable starting with some **easier vegetables and herbs**. Tomatoes, cucumbers, leaf lettuce and most basic herbs are examples of plants that are great for the first time gardener, as are strawberries, blueberries and the ever prolific zucchini. Although it is just as easy to begin from seed with most of these plants, the beginning gardener may be more comfortable starting with seedlings or young plants.

When selecting your plants, remember that there are four types:

Annuals: Plants that come up for one year or season only, and must be replaced the following year (although, if allowed to go to seed, you could get new plants the following year). Most annuals will die off completely at the first hard or killing frost. Most vegetables fall

under this category, especially for those who live in areas with four seasons.

Biennials: Plants that will go to seed the second year. Onions, carrots and beets, left in their natural state, fall under this category.

Perennials: Plants that will come back year to year. Many edible flowers and herbs fall under this category, as well as vegetables such as asparagus. Many berries and all fruit trees are perennials.

Tender Perennials: Plants that are grown as perennials in mild climates but as annuals in colder climates, due to the fact that they cannot survive the extreme cold and snow. Some good examples include rosemary and French tarragon.

Seeds, Plugs or Plants?

After you have decided what you will be growing, the next step is to decide whether to start with seeds, plugs, or plants. And it really isn't as complicated or intimidating as it sounds. First, what do each of these terms mean?

Seed is pretty much self-explanatory. Most people, gardeners or not, are familiar with seeds. They are the base on which all plants start. Seeds are an inexpensive way to start, and you can have quite a variety of produce in your garden starting this way.

Plugs are very young plants, also called seedlings, due to the fact that they have just sprouted from the seed. Plugs will be small and more expensive than seeds but cheaper than plants. Plugs may need a bit more babying than plants in the garden to start, but will usually fare quite well and will give you a slight head start over starting with seeds. Plugs are sometimes sold as singles, but may also be found in four- and six-pack containers. Flower plugs may already be in some bloom at this stage.

Plants are larger than plugs, and usually sold singularly in small pots. Some may even be large enough to already have a number of blossoms growing, and may even have little vegetables or fruits developing. Plants are the most expensive way to go as the grower has had to take more care and time with them, not moving them to market as quickly as plugs.

If you're looking for as much variety as possible, **seeds** are definitely the way to go. Seed catalogs have an enormous selection of all different types of vegetable and herb seed. For the experienced gardener or the new gardener who isn't afraid to jump right in, using seeds is the best way to get the most variety in your garden for the least money. Seeds may be started indoors early in the season in seed trays (in fact, depending on climate, this is a must for some) or may be planted directly in the ground. Either way, the package will indicate the best time and method for starting the seeds, usually having some type of growth chart on the back.

—From *Backyard Farming: Growing Vegetables and Herbs*

Hybrid and Heirloom Plants

If you want to go a bit further, there are a few other selections to make as well, regarding heirloom and hybrid classifications.

An **heirloom fruit or vegetable plant** is basically a pure plant, meaning that there has been no crossbreeding with other plants. It is open pollinated (pollination by the wind, bees, butterflies, etc.). Heirloom types can be traced back decades and even centuries, and may have unusual names, colors and markings, with interesting origins. They can be heartier in various weather conditions and tastier than their hybrid counterparts, but can also be a little longer in growing time, with the fruits and vegetables tending to be a bit smaller. However, heirloom seeds can be saved from year to year, with the assurance that you will end up the following year with offspring that will be just like the parent plant.

Hybrids, on the other hand, are crossbreeds between two types of the same species. They usually go back decades in development, with some newer, some older. Many hybrids have been bred to withstand weather extremes, a positive trait; however, many who have raised heirlooms say that the flavors can't compare, with the hybrids tasting not as good. Finally, although you can save the seeds of a hybrid, there is no guarantee what you will get when you plant the following year. And, if you do get something, those results will be unpredictable. In fact, chances are good that if you do get results, they will be *nothing* like the parent plant.

If you have the extra space, it can be fun to try a few of the hybrid seeds that you have saved. This year, I experimented with cabbage seeds that I had saved from a previous harvest. Planting five seeds, four actually produced a plant, and one did nothing. Out of the four plants, two produced heads of cabbage. While they were not big, they were still edible and quite good. But with less than half the seeds bearing results—minimal results, at that—it doesn't seem prudent to save hybrid cabbage seeds!

As a result, whether hybrids or heirlooms are used comes down to being a personal preference. Some growers will opt for either one or the other, while others will grow a combination.

This is only a brief introduction to starting a garden on the homestead. Further hints, tips and more in-depth information can be found in *Backyard Farming: Growing Vegetables and Herbs*.

Adding Chickens to Your Farm

Perhaps the most popular animal on the farm, the chicken is one of the first animals that you think of when picturing a barnyard, and one of the first animals that a homesteader decides to add to their growing farm. Chickens come in all shapes, sizes and colors, as do their eggs; as a result, there is a chicken for every farm situation, and it is up to you to pick the right one.



Chickens come in a variety of breeds. From left to right: Partridge Rock hen, Wyandotte hen, Cochin Cross rooster, Dominique hen, Rhode Island Red. *Photo courtesy of Amy Kolzow.*

Chickens are usually kept for **meat**, **eggs** or **both**. In the case of the urban farm, the few hens kept for eggs will usually become family pets as well, referred to as “the girls” or “the ladies.” If you end up on this path, don’t be surprised if you end up turning into the chicken version of the “crazy cat lady.” Certain breeds of chicken are preferred for meat, while others are preferred for their eggs. However, any breed can be used for their eggs and meat. It is up to you which you prefer and which will work the best for you and your family.

Chickens raised for meat are usually larger, meatier birds, ready for slaughter at 10–16 weeks old. Considered fryers at this age, they are ideal for frying and barbecue, while older birds (such as retired layers), while larger, will also be a tougher bird, best for roasting, soups and stews. Some popular examples of meat birds are Delaware, Plymouth Rock, Orpington, Dorking and Sussex.

Chickens that are favored for egg production include the non-industrial type Rhode Island Reds and Leghorns, and the Ameraucana (also known as the Easter Egg Chicken, due to their naturally colored eggs).

Depending on the breed selected, it can take anywhere from 17–26 weeks after hatching for the hen to be mature enough to begin her **egg laying cycle**. Keep in mind that if you want fertile eggs for any reason, including replenishing your own stock, you will need a rooster. However, if you live in an urban area that does not allow roosters due to noise restrictions, never fear: your hen will still lay her eggs without the rooster; you just won't get fertile eggs from her.

Some backyard farmers may want both egg and meat birds, but only have room for one or the other. Thankfully, there are some breeds that are specifically **dual-purpose**. These birds are excellent layers that can later become excellent meat birds as well. Some of these dual breeds include Jersey Giant, Barred Rock, Dominique and Silver Laced Wyandotte.

Another popular chicken is the Bantam. Due to their small size, you can keep more in a smaller space. They are great for kids to handle, and they're good layers; an excellent bird for those in an urban setting with a very tiny backyard.

Finally, when deciding on chickens, consider a **heritage bird**. Also known as heirloom or antique breeds, heritage birds are defined as meeting the following qualifications, set by The American Livestock Breeds Conservancy:

- They must be from stock recognized by the American Poultry Associations Standard Breed, prior to the mid-twentieth century.
- They must be able to reproduce naturally, being genetically maintained only through natural mating.
- They must have the genetic ability to live and thrive outdoors and pasture.
- Hens must have at least 5–7 years of productivity and roosters 3–5 years.

- They must have a slow or moderate rate of growth, not reaching the market weight for that particular breed until at least 16 weeks of age.

Sadly, many heritage breeds are also endangered, although both small homesteaders and backyard farmers are working to bring many breeds back from the brink of extinction, with some success. The American Livestock Breeds Conservancy provides a list of endangered poultry and livestock, along with their status.

Housing Your Birds

Once you've decided on your birds, you will need to build or purchase a **chicken coop** to house them. The size of coop you will need depends on how many birds you will be keeping; however, the rule of thumb is 4 square feet per bird of indoor space, and 10 square feet per bird for outdoor space. This is the minimal space that is recommended. If you have the room to build something larger, your birds will love the extra space to run around and spread their wings.

So exactly what options do you have when it comes to housing your flock? There are basically three options available to the new chicken owner. They are:

- Containment
- Free-choice
- Free-range/Pasturing

The first (and probably least favorable) way to keep chickens is using the **containment method**. Used primarily by commercial growers, containment housing is just as it sounds: the birds are kept contained indoors throughout their entire life. Layers are usually kept in small cages, with multiple birds per cage (many times in cages too small to house them), while meat breeds are allowed to run around only within the house. The outdoors and oftentimes natural daylight are off-limits to these birds.



Chickens are productive, well-behaved and (in general) easy to care for. Containment housing, as shown here, is not really necessary except in cases of large numbers of birds.

Photo by Amy Kolzow under the Creative Commons Attribution License 2.0.

An **electric fence** running along the outside of your regular fencing may help in keeping predators out, but there are things to consider when using one. First, you *must* remember that an electric fence has live current running through it. Absentmindedly leaning against it or touching it, although not deadly, will be a memorable experience. Next, the fences must stay clean and clear. Things such as high grasses and deep snow can short out the fence, rendering it useless against a predator. Finally, you must continually check for broken connections. Again, this can render the fence useless against predators.

The next option you have for your birds is what I call **free-choice**. Free-choice is basically keeping your birds in the typical chicken coop configuration: a chicken coop/house of whatever size needed, either inside a large fenced area or attached to a large outdoor pen. In either scenario, the coop will have a small door that can open and close, allowing the birds to go in and out at will, and which can

be securely closed at night. It can also be raised off the ground with ramps used to enter and exit.

Most small backyard and urban farms will use a **combination** of containment and free choice, meaning that at times the birds will be inside the coop (or a fenced area attached to the coop), and at other times will be given the opportunity to stay inside, or venture out into the yard.

Those on a homestead may opt to allow their birds to free range or pasture, containing them only at night or in very bad weather. The birds will love **foraging** around the yard or pasture for insects and grubs (just don't let them get into the road or a neighbor's yard). This is healthy for them, so long as the grasses are not treated with pesticides. If you're handy with a hammer and nails, you can build your own chicken coop using any number of plans available in books, magazines and online. If you are carpentry-challenged, there are many places which now sell pre-built chicken coops and chicken coop kits.

If you live in the city, it won't be as easy for you to let your birds run freely in the yard. This is where a chicken tractor comes in handy. A **chicken tractor** is a movable coop and covered pen, or a freestanding movable covered pen that the birds go into during the day, and which allows the birds to be moved from spot to spot, letting them pick at the grass and weeds (essentially pasturing without running loose). An excellent choice for the urban chicken who wants to get out and run around, but risks getting into trouble in the neighborhood, chicken tractors are also great for the homestead chicken living in an area with predator problems during the day, as it allows them to get out and forage in a relatively safe manner.

Feeding Your Chickens

Chickens love to pasture, catching insects and digging up grubs to eat; but what about when you have little or no area for them to pasture in? Or, what if you have pasture space, but still need to

supplement their diet, as the majority of backyard farmers do? The answer is deceptively simple: the purchase of commercial, supplemental feed.

Commercial feed can be pre-mixed or, if you are lucky enough to have a granary nearby or a feed store that bags its own feed, you can have a custom mix put together for you. Feed can be purchased either medicated or non-medicated, in blends made for specific stages of life.

Chick Starter: More finely ground than adult feed (although you can also get finely ground adult food as well), chick starter can be medicated or non-medicated, with medicated feed used for coccidiosis (a commonly found protozoan parasite found in most chicken pens/yards). Some hatcheries now vaccinate for coccidiosis as well, so you may want to check to see whether the medicated feed is in fact necessary.

Chicks should receive starter feed for the first six weeks of life; at 18–20 percent protein, it gives chicks the extra boost they need.

Grower: A 14–17 percent protein feed, grower feed is given to chickens from seven weeks on. Higher percentage protein is usually given up to 14 weeks of age, before changing over to the lower percentage from 14 weeks on. This food may also be labeled as grower/finisher, due to the fact that meat birds will stay on this food until slaughter.

Layer: Layer feed is for hens that are approaching laying age, or are already laying eggs. A 16–17 percent protein food, hens should be given additional calcium (for stronger egg shells) along with this feed. Calcium, which is usually nothing more than crushed oyster shells, may be purchased at feed stores. Eggshells may also be crushed and given to the hens; however, make sure that the shells are crushed very fine. Calcium should be given freely, and may be put in bowls, scattered on the ground (to give them something to do) and even mixed with food.

Grit: Grit needs to be given to all birds, as it aids in the digestion process of the gizzard. Like calcium for hens, grit should be given

freely. If your birds are free range, they will get a lot of the grit they need naturally. Your birds should also always have access to clean water.

Keeping chickens can be a fun and educational activity for the entire family. Whether you are raising them for eggs, meat or both, the chicken is probably one of the easiest homestead animals to keep. You'll find that, given the chance, chickens are not the brainless birds most believe them to be—in fact, chickens are very attentive parents when allowed to raise their own chicks. When chickens get to express their individual personalities, they can be quite the clowns, and will become your best buddies at feeding time.

For more in-depth information on keeping chickens, including hatching and raising chicks, refer to *Backyard Farming: Raising Chickens*.

Raising Cattle

While rare to see on a smaller backyard farm, many rural farms and homesteads will opt to have at least one or two head of **cattle**. Because our focus is primarily on smaller scale backyard farms and homesteads in this book, we'll only briefly discuss raising cattle. For more information, see *Backyard Farming: Raising Cattle* in this series.

When selecting a cattle breed that's right for your wants and needs, bear in mind that there are a wide variety to choose from, which can be **dual or triple purpose**—meaning animals suited for **dairy, draft work, or beef**.



The archetypical “cow,” the Holstein’s black and white coloring makes it one of the most well-known cattle breeds. *Photo by Ganaderia Goizalde under the Creative Commons Attribution License 2.0.*

The term **dairy cattle** refers to those types and breeds of bovine that are bred specifically for milk production. Although it is only the cow that is the milk producer, both sexes of this type are considered to be dairy; males are used for meat, breeding or work. In truth, any cow, whether dairy or beef, will produce milk after giving birth. Historically, many cattle breeds were dual or triple purpose, depending on need and available resources. Many cows remain dual/triple purpose today. However, cows that are bred specifically for milking *are* built for the task, and excel at providing milk. They tend to be thinner, with a much larger udder than those found on beef cattle. And, while a beef cow will usually produce only enough milk for her calf, a dairy cow produces more than what the calf needs, allowing her to provide much of the milk for human use as well. For this reason, dairy cows are also known as the “foster mothers of the human race.” Examples of dairy cattle breeds include the Ayshire, Jersey, and Holstein-Friesian varieties.

Although often classified as dual or triple purpose, beef cattle have been primarily bred and raised for meat production. **Beef** actually refers to the meat of the adult animal. As with dairy breeds, selective breeding has been used in the production of beef cattle to develop specific traits for the various breed types. Examples of cattle grown primarily for their meat include the Black Angus, Herefordshire and Piedmontese breeds.

Concerns When Raising Cattle

When determining whether cows are right for you and your farm, other concerns to keep in mind include:

Time: Do you have the time to spend with cattle? Although beef cattle don't require the same amount of time that dairy cattle do, they still do need some time and attention. Although they may graze in good weather, if you're in an area that sees snow, you will need to go out and feed the animals. If you have dairy cows, you will need to set aside milking time, usually twice per day, at the same time each day.

Barns: Barns, or whatever structure you choose to house your animals, will need cleaning. Even if you have only one dairy cow, odds are you will most likely keep her in the barn at night or in inclement weather. And although beef cattle *can* stay out in harsher conditions, if you only have a few animals you may want to bring them in at night and/or during very inclement weather or hunting seasons.

Costs: Will you be able to afford a cow? Unless you are looking at a mini breed (which itself carries a steeper up-front cost) cattle—whether for dairy or beef—will need much more than a dairy or meat goat. If you are breeding, you will need to purchase and support a bull, or else pay for artificial insemination (AI). And if you are breeding, do you have the means and space for the calves? If not, do you have a ready market for them?

Fencing: Fencing is a necessity in order to contain your cows, be they dairy or beef, but it can be expensive—especially if you are fencing in areas and acres. In addition, your fencing will need maintenance and occasional repair, which again costs time and money.

Veterinary needs: Along the way, you will eventually have veterinary needs, which can be expensive. Although you will likely begin to pick up many of the basics of healthcare for your animal, there will still be times when a vet will need to be called. And, as you will soon find out, it will usually end up needing a weekend visit, or during a holiday/after hours, which may add on to the vet's fee.

Purchase costs: Can you afford the initial purchase price of the animals? The initial purchase price of your cattle will depend on the breed, age, gender, whether or not the animal is a proven milker (in the case of dairy animals) and even whether the individual animals are pedigreed. If you decide to purchase calves, you will need to either raise the animal until it reaches slaughtering age and weight (in the case of beef), or it becomes old enough to breed (in the case of dairy). When purchasing a young dairy calf, it could be up to two years before you will see her first milking. Of course, if you're lucky you may find someone looking for a good home for a milk cow, in which case you may end up getting a milker for a nominal fee, but this is the exception, not the rule.

Handling: Finally, who will handle the cattle? If you are a first timer or you plan on having kids handling the animals, you will probably want to look at the more docile breeds. And if this is the case, make certain not to purchase your cattle sight unseen, as you will want to make sure of their temperament beforehand, and confirm that you can handle them.

Raising Goats

Of course, there is another animal that is very popular for the homesteader and backyard farmer—the clown of the barnyard, the **goat**.

It's easy to see how goats got their “barnyard clown” nickname; the time that you spend with your goats will be some of the most fun you will have on your backyard farm. Goats are available in many colors, sizes, varieties and personalities, and are used for everything from milk to meat; pets and companions; lawn mowing; even as pack animals for short day hikes. They are great for those who want to raise dairy or meat animals, but don't have the space for cattle. Goats are animals that the entire family can handle, and many urban city areas are now becoming more accepting of goats, giving urban farmers the go-ahead to raise them in the backyard.

Although there are technically two types of goat—**meat** and **dairy**—any breed of goat may be used for its meat. Depending on the type and breed of goat, they may stand anywhere from 16–35 inches tall, and weigh between 22–300 pounds for does (females) and 27–350 pounds for bucks (males), with a life expectancy of between 8–12 years, on average.

Does and bucks can have horns, beards (hair growth under the chin that looks just like a beard) and wattles (growths of hair covered skin, hanging to either side of the goat's neck, usually behind the beard). Their horns are actually live bone, and it is common practice for many owners to have the horns removed, a process known as **polling** the animal. Does will have udders just like a dairy cow; however, unlike the dairy cow (who has four teats on the udder) the goat will only have two teats. And (although these traits will be true for all does, dairy or meat), the udder on meat-type breeds will be a bit different, as these animals are bred for their meat and not their milk production. Let's take a brief look at both types of goat, starting with dairy goats.

Dairy Goats

Dairy goats are built and bred for **milk production**. Any dairy breed will provide you with enough milk for your dairy needs;

therefore, when selecting your animal, select not only for what you need, but also what you like. As you will be interacting with these goats daily, it is important that you enjoy them. You also need to keep in mind that you will need to breed your goat(s) in order for them to produce milk. This is usually done on a yearly basis; however, some have had success keeping their goats milking at a rate sufficient for their needs for a longer time. Along with breeding comes kids (baby goats), so you will need a plan for what to do with them as well, when they are old enough to leave.

Some farmers will select by breed, some will select by the butterfat content of the milk. **Butterfat**, also known as milk fat, is the fatty part of the milk that gives goat's milk its sweet flavor. Butterfat also affects the texture of the milk, and is the chief component in goat's milk butter. Goats may also be selected by the number of pounds or weight of milk she gives (approximately 8.2–8.5 pounds of milk is equal to one gallon of milk.)

Some of the most common dairy breeds in the United States include Toggenburg, Nubian, LaMancha, Saanen, Sable, Oberhasli (a heritage breed), Alpine and Nigerian Dwarf (a heritage breed).

Meat Goats

Meat breeds will most likely be kept in more of a homestead or rural-type situation, as opposed to an urban farm where dairy breeds are more likely to be kept. Breeds that are meat specific will be larger built, and bred for muscle and carcass development. Some of the most popular meat type breeds are Boer (South African), Spanish Meat Goat, Tennessee Meat Goat and African Pigmy.

Unlike the other meat breeds, the African Pigmy can be milked (although they will not produce as much as dairy breeds) and are popular as pets. They also enjoy companionship, although their companion doesn't have to be another goat. However, due to their size, the African Pigmy is a prey animal, so they should be locked up at night (although even the larger breeds are vulnerable to predator attack).

When determining which goat is right for you, read as much as you can about the various breeds. Talk with other goat owners; if you can, visit some farms. If it is fair time, visit the fair and hit the goat barn. Ask questions, and remember to choose the goat that you like and will enjoy.

Housing for Goats

Before you bring your goats home, you need to have their **housing** ready for them. Any type of building that will stay clean, dry and draft-free will work for your animals. An old shed could work well, but the minimum space per goat should be 15–25 square feet per animal. Make sure that it is easy for you to keep clean, with a dirt floor being the best choice; once packed with straw bedding, dirt will stay warmer than concrete, will not rot out like a wood floor, and any urine will be absorbed by the dirt.

If you are only going to have one or two goats, **stalls in the shed** are not overly necessary, but will be helpful to have during kidding time or if a goat needs to be isolated. If you plan on having more than two goats, however, you should have some type of stall available, so that the goats can have their own space during kidding, and it is easier to isolate for illness or injury when necessary.

The shed needs to give your goat access to the outdoors as well, and should have a fenced-in area either connected to it, or should itself be inside of a fenced area. Goat yards should have a minimum of **200 square feet per goat**. However, you will find that keeping your goats inside the fence may be a challenge all its own. If the fence is too low, they will go right over the top; if the openings are too big, they will stick their heads through, usually getting stuck if they still have their horns, or else pulling themselves out and breaking the fence in the process. If the spaces are too large, the goats will also be able to climb the fence. The best fencing is a heavy-gauge wire weave with small openings at the bottom of the fence, making it difficult for the goats to climb. Usually called goat

fencing, it is more expensive, but it will save you many headaches along the way.



Goats love to get into mischief when they can, so a strong, dependable fence will save you a lot of headaches going forward.

Feeding Your Goats

When it comes to feeding your goats, it is of the utmost importance that you keep feed stored **out of their reach**. If allowed, goats will gorge themselves on grains to the point of eating themselves to death. Never store feed where your animals can get to it. In terms of hay, always check for mold and discard any and all moldy hay, as this can also sicken and even kill your goat. Now, with that important bit said, let's take a closer look at feeding goats.

Unlike what you might have seen in cartoons, goats won't eat tin cans (although they will eat paper). They do like **grains, hay and alfalfa** (use alfalfa in moderation, as it can cause bloat). Unlike other animals, goats prefer shrubs, brush, leaves, and suckers to a lush green pasture. They also like pine trees, tree bark and saplings, so caution needs to be used when fencing goats in areas with trees that you want to keep. It would actually be a good idea to put individual fencing around the trees and saplings inside of the goat yard, if you don't want the goats nibbling at it.

As for the subject of hay (and alfalfa), you will quickly find that your goats seem to waste more hay than they eat. Although they will go back and eat what they dropped on the ground, during that time it will have been walked on, urinated on and even wetted (if the ground is wet). There are a few ways to try to counteract this. Inside, you can use **hay bags** (bags that hang on the wall and hold the hay off the ground for the goats to eat) and **wall hanging hay racks**. Although you will still see some waste even with these, it will greatly help in reducing the amount of hay the goat will pull out at once. Outside, you can use mangers (which are basically food troughs, except they hold hay instead of grain), hay rings (rings of various sizes that the hay is contained in) and covered feeders, which will help to keep the rain and snow off of the hay and/or alfalfa.



Providing a hay rack or hay manger for your goats will help you to prevent your goats from wasting more than they eat.

Your goats also need their grains. These can be in either a **mash** or **pellet** form, and will fill in any nutrient deficiencies the animals could have. It is important that this balance be kept; if it isn't, your goat will be affected by the lack of important nutrients, just like a human.

Sweet feed is a treat that your goats will absolutely love. A simple pellet/green mix with molasses added, to goats it is like

candy. Because of that, you have to be extra careful that they don't get into a bag and gorge themselves.

Last but not least, you need to make sure that your goats get their **salt and minerals**. This can be through salt/mineral blocks, or in loose form; which you use is up to you. Some goat owners feel that their animals get more of what they need through loose forms, while others feel the block works just as well. From experience, I have had good luck with the block form; there was less wasted and the goats seemed to like them better.

As you get to know your goats, you will see that they are a very useful and versatile animal, despite their occasional mischief. Goats can contribute a lot to the farm—milk, meat, fiber, fertilizer, cheese, cream, hair and more. You can even use them to clear shrubbery in areas where you don't want to use pesticides or other methods that could be destructive to the surroundings. As ten goats can be kept in the same area that would otherwise hold two steers, they make sense for smaller space homesteads or backyard farms.

Once you've made the final decision to purchase your goats, there are thousands of resources out there to help answer questions, including other goat owners, most of whom will gladly answer questions to the best of their ability. For further information on keeping your goats, as well as their kids, refer to *Backyard Farming: Raising Goats*.

Backyard Beekeeping

Many urban and backyard farmers are beginning to consider **bees** as a part of their homestead's livestock. One of the first things you may need to think about when considering beekeeping is, how easy are bees to keep? Do they need constant care? What are the disease risks for the bees? Will I have predator problems? What about weather and seasonal changes? Housing is another issue the potential beekeeper will have to consider.

The truth is that honeybees are really no more complicated to keep than most other livestock. Feeding, disease and disease

prevention, protection from predators, and general upkeep through the seasons and all types of weather are all concerns that apply to honeybees as much as cattle or fowl.

Honeybees eat nectar and pollen, and, of course, they drink water. In the wintertime, in regions where hives are unable to forage for themselves, they will survive on their stored honey and pollen. In addition to their own natural stockpiling, keepers may also provide supplemental nourishment both inside and outside of the hive. Depending on the climate you live in and are keeping your bees in, they may hunt seasonally, remaining bundled up in the hive in the winter, or they may hunt for most of the year.



Bees are one of the primary pollinators of trees and flowers, and as such can be an enormous benefit to your garden or orchard. *Photo courtesy of Wikimedia Commons.*

However, there are only a few situations in which supplemental feeding would be *necessary*. As stated, the colony's own honey is what is best for the survival of the hive, including during the winter. A single hive/colony should have 1,680 pounds of honey available to them and their hives in the fall to carry them through the winter.

Furthermore, if and when it becomes necessary to provide your hive (or hives) with supplemental food, there are three options available that will provide the necessary nutrients that your bees will need: dry mix, moist cake, and sugar syrup.

Dry mix compositions include brewer's yeast or soy flour. The dry mix can be fed inside the hive into the brood nest (where the larvae are) or outside of the hive in an open container such as a tub or

tray. However, if placed outside of the hive in an open container, the dry mix must be sheltered from becoming damp due to rain and dew. This can be accomplished simply by the addition of some sort of little roof structure set up over the container. One drawback with feeding dry mix outside is that other bees besides your own may find and feed on it, so keep in mind the environment that your hives exist in.

Another feeding option is moist cake. **Moist cake** is made up of pollen pellets, sugar, and soy flour. Moist cake may be fed to the bees inside the hive. The cakes should be placed close to the larvae so the nurse bees (worker bees that care for the larvae) can feed their charges. If more moist cakes are made or obtained than can be used at any one time, they can be frozen for several weeks without losing any nutritional value.

Sugar syrup is made from cane sugar, beet sugar, or isomerized corn syrup mixed with water. A carbohydrate substitute, sugar syrup may be fed outside the hive in any open container. However, there must be something for the bee to stand on in the container if using a tray or dish for the syrup. Some keepers will install their own jar feeders as well.

Setting Up a Hive

At its most basic level, the hive is a home and workplace for the honeybees, where they will live and raise their young. There are two types of hives: natural and artificial (or manmade).

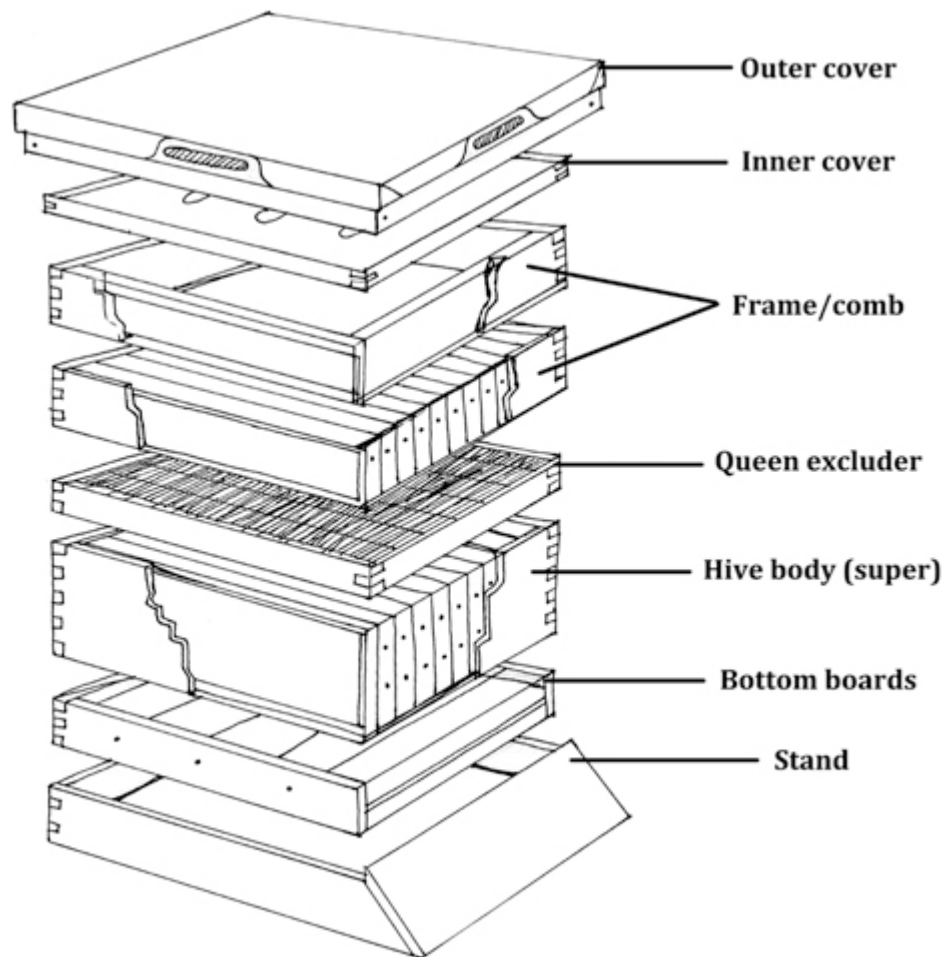
Natural hives are those that occur naturally in structures where wild honeybees may live. Natural hives may be found in rock cavities and hollow trees. They may also be found in the walls of buildings, usually abandoned buildings. You might also find combs in abandoned cars or even on branches. However, those that are exposed to the elements will not survive in areas of harsh winters and cold temperatures.

Artificial hives are man-made structures, usually wooden-box type, which are designed and built to house honeybees, their young, and their stores of food and honey. At one time, man-made hives

were simply round, tall structures made out of coils of straw called “**skepts**.” Today, the artificial or man-made hive will most likely be made of wood and have several parts to it.

These parts include:

- Stand
- Bottom boards
- Hive bodies or supers
- Frame/comb
- Queen excluder
- Inner cover
- Outer cover



While the hive is composed of many parts, modern-design hives are easy to use, and provide efficient space for your bees. *Illustration by Ariel Delacroix Dax.*

Besides the standard hive type, which as its name suggests is the most common type of hive that you will probably see both in use and for sale, there are a few other styles/types of beehives. They are not overly common (at least in the United States), so I am just touching on them so you are aware of other hive options. Some beekeepers believe that these are a more natural and bee friendly way to keep their bees.

There are a few alternative hive styles that backyard farmers can consider, including Warré, Delon and Top Bar hives, but we will not discuss these here. For more information, check out *Backyard Farming: Keeping Honey Bees*.

Finally, when the hive is done, you need to find the right spot for it. It should be away from roads or pathways when possible. This will help to prevent your bees from being bothered by too much human and pet foot traffic, which would result in them becoming grumpy and on the defensive.

The ideal placement should also feature limited exposure to wind, have a water source nearby for the bees, and be in an area of good drainage. It should be level, have some sort of wind block (especially if you are in an area of cold and snowy winters), and have a good balance of sun and shade. More sun is preferable than more shade if you cannot find the “perfect” spot, as your bees will slow down if it is too cool and shady.

Do not worry if you cannot account for all of these conditions when placing your hive. Yet do remember one thing: be sure to allow easy access for yourself. For the other steps, do what you can, but things like sun and a dry area are important to your hive, as is the water source (which you may have to create yourself if there are no natural sources nearby).

There is more to keeping bees than what has been shown here, of course, but this is a basic introduction to help you get a feel for whether you’d want to consider keeping bees on your farm. For more information, see *Backyard Farming: Keeping Honey Bees*.

In this chapter, we have discussed the basics of deciding what to raise, focusing on the most popular elements the new homesteader has available—the garden, chickens, bees, cattle and goats. Regardless of what you choose to raise, make sure it's something that you'll be happy with. It's *your* backyard farm—fill it with all the things that excite you!





CHAPTER 7

PRESERVING AND SELLING YOUR PRODUCE

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Now you have your farm, whether it is on some rural acreage, in a suburban backyard or on a city rooftop. Your gardens are prolific, your fresh milk is in the freezer, and you have more eggs than you know what to do with. You've given some things away to family and friends, but you still have more than you can use at the moment. So, what do you do? You essentially have two choices: you can either **preserve your excess for the winter months**, when you'd otherwise lament the loss of your garden and its harvest, or you can **market the excess**.

Cleaning Your Garden Harvest

When you have harvested whatever was ready in your garden that day, **the foods should first be cleaned**. The way foods are cleaned depends on the food itself; foods that have had pesticides sprayed on them will need a more thorough cleaning than an organic food. Some foods will need a much gentler cleaning than others. For example, hard root vegetables will usually need a good scrubbing after harvesting simply due to the soil that will be clinging to them. You can take a little scrubber brush and clean under running water; however, to conserve water and prevent it from going down the sink drain, it is advisable to scrub the root vegetables first in a basin of water, and then quickly rinse in the sink of clean water.

With onions, you may just be able to be gently wiped off of with a rag, as you need, at this point anyways, to be careful that you do not remove the paper skin; although, if one layer with all of the dirt comes off easily, that will clean the bulb up for you nicely. Garlic is the same way: just a light cleaning, so as to preserve the paper skin. Tomatillos may have the skin or husk totally removed, as you would not normally preserve the husk anyway.

Foods with either thin skin or no skin at all (like tomatoes, berries, apples, and plums) should be lightly washed and either gently dried or left to air dry. There is, however, one food that should not be washed, just gently wiped off, and that is mushrooms. If dropped into water or held under with running water, mushrooms will absorb the water like a sponge. So instead of washing a mushroom, just take a clean towel or napkin and gently wipe to remove any dirt. If the bottom of the stem is a little dirty after picking, it may be trimmed off.

At this point, you will have your foods washed and cleaned. Next you will need to get whatever equipment you'll need out and ready to use. From here, the food is prepared as per the recipe being used and the method of preservation being employed. For example, tomatoes would need to be peeled and seeded no matter what method is used. Vegetables or meats intended for dehydration need to be sliced according to the specifications of the dehydrator or the recipe. Fruits may need to be sliced, chunked, and so on. Again, at this stage your preparation depends on what you are doing.

After all the preparations are done, you can get started with the actual food preservation.

Food Preservation

There are a variety of ways to **preserve food**, with the most commonly used being canning, freezing, drying, pickling and smoking. Unlike during ancient times, we are no longer limited in our choices of preservation methods by the climate that we live in. Instead, we are able to choose the method that best fits our needs,

tastes, time, and storage capabilities. Even drying can easily be done almost anywhere. If it can't be done by the sun, there are a number of ways available to us today; where once we needed to depend on the sun, now we can use generated heat instead to dry our foods.

Since almost any method of preservation you choose is available for use today how exactly do you narrow things down and select the correct method? The first thing that should be mentioned is that you do not have to restrict yourself to just one method. You also do not need to process your foods into just plain fruits, vegetables, or meats. For example, you may have many tomatoes from your harvest, but you really don't want 40 jars of preserved tomatoes on your pantry shelf. What do you do? Think about what you use those tomatoes for throughout the year, and plan your preservation accordingly. Do you use pasta sauce? If so, then take some of your tomatoes, make up a batch or two of sauce, and can or freeze it. Do you prefer salsa? Then take some of your tomatoes and make up a batch of salsa. If you use sun-dried tomatoes then you can dry some of your tomatoes, either in the sun, the oven, or dehydrator. Don't forget to save and can/freeze some whole tomatoes as well, to use for cooking.

Of course, if you are tight on time and just need to get your preserving done so you don't lose anything, you may end up with those 40 jars of tomatoes sitting on your shelf for a while, until you can put them into direct use. The point is that you have options, in both how you preserve foods and the method or methods you decide to use.

In this section, we'll look at each of these methods individually.

Canning

Developed in France in the 1790s, **canning** is one of the "newer" methods of preserving food. Despite this, most think of this revolutionary method of food preservation as being practiced in their grandmother's kitchen! For all that, canning may actually be one of the most labor intensive methods of preserving; however, once done and done properly you will have a shelf full of product

that needs absolutely no refrigeration (at least until you open the jar). Canning is the perfect method of preservation for those who live in storm and power outage prone areas, as well as for those who choose to live off the grid, with limited power.



Despite the investment required in equipment and time, canning is one of the most versatile and effective means of preserving and storing your harvest. *Photo by thebittenword.com under the Creative Commons Attribution License 2.0.*

There are some things you will need when canning. While these initial purchases can be expensive, know that most of the equipment will be reused, saving later expense. The list is as follows:

Canning Jars: The glass jars that will hold the preserved food; they can be purchased in grocery stores, farm stores and other outlets. Make sure that there are no cracks or chips in the jar, as these will render the jars unusable.

Lids and Rings: The two-piece lids for the canning jars.

Canner: The pot used for canning. Filled with hot water, the jars are placed in for a set amount of time, allowing them to seal (this is called the hot water bath method).

Canning Basket: The jars sit in this basket, making it easier and safer to insert and remove the jars in the hot water.

Canning Funnel: A funnel with a large open end which fits in the mouth of the jar, making it much easier to fill the jars.

Magnetic Lid Wand: A plastic wand with a magnet on the end. This tool makes it easy and safe to pull the lids and rings from the boiling water during sterilization.

Clean Towels: Lint-free terrycloth towels to safely dry off the cans.

Clean Knife, Chopstick or Wooden Skewer: These implements are used to help release the air from the filled jars before putting on the lid and placing it in the canner.

Permanent Marker and Labels: To mark the jars with the contents and date of canning.

Jar Lifter: These are basically tongs created especially to remove jars from a hot water bath (if you are not using a canning basket).

When you start a session of canning, the lids and jars first need to be **sterilized**. This is very easy: fill the canner with water and bring it to a boil. After you have carefully inspected the jars for chips and cracks, carefully place the jars and lids in the hot water and let go for at least five minutes. Using the jar tongs, *very carefully* remove the jars from the hot water; not only will the jars be hot, but most will likely be filled with scalding hot water. Remove the lids and rings using the magnetic lid wand, and set the lids, rings and jars on clean towels until they're ready to be filled.

Once you have the contents of the jar prepared and ready to can, use the canning funnel to fill each jar up to one inch from the top. The jars should be cool enough to handle before you begin this part of the process. If you are preparing something in a brine or juice, remember that the food needs to be covered by the liquid. If you are doing whole pickles or whole tomatoes, do *not* use the canning funnel.

When the jars are full, using the knife, skewer or chopstick, poke down the sides of the filled jar. You will begin to see little bubbles coming up the sides. This is releasing the unwanted air in the jar. Continue until the bubbles cease. Wipe the rim of the jar with a

clean, damp, lint-free terrycloth towel to remove any brine, juice or food that may be stuck on the edge. Once cleaned, place the lid rubber-side against the glass and then screw on the ring. Make sure that the lid is on firm, but not tight. Place covered jars in the canning basket, and then lower them back into the water in the canner. The water should be at least one inch over the top of the jars. Bring the water to a boil and leave the jars in the canner for the proper amount of time for whatever you are preserving. As a side note, remember that altitude can have an effect on canning time.

When ready, remove the jars from the water bath and set them to dry on towels, covering with additional towels and allowing them to cool. During this period you should begin to hear some popping sounds; you may hear it while the jars are in the hot bath, as well. This is normal and proper, as it is telling you that the lids are sealing. Once cooled, check the lids to make sure they are properly sealed. This is done by putting your finger on the middle of the lid. If it is solid, the jar is sealed; if the lid pops up and down, the seal is not good and cannot be stored on the shelf. Should this happen, you can either try the hot water bath one more time and see if it seals, or place the jar in the refrigerator and use immediately.

Storing canned food is easy; just keep the jars on a shelf (out of direct sunlight) in a cool cabinet or shelf area in a pantry or cellar (or even in a crate in the closet).

Pressure Canning

You may also choose to use the **pressure canning method**. This involves using a pressure canner (which is similar to a pressure cooker) instead of a hot water bath. Although the initial preparation of the jars and food is similar to that of the hot water bath method, the actual process of using the pressure canner is different; so, should you choose this method for your canning needs carefully read and follow all the directions that came with your particular canner. Although the new canners are said to be much safer than the old pressure canners and cookers, they can still blow if something in the process is done incorrectly, creating a potentially dangerous situation. The point is,

while it may not necessarily be the best starting place for a preserver just starting out, pressure canning is an excellent tool for the careful canner.

Freezing

Freezing is a preservation method that almost everyone uses, but which few really think of as being a food preservation technique. One of the easiest methods to use, the biggest drawback to freezing is that a long-lasting power outage or a simple freezer malfunction can ruin your entire stock.

The materials needed for freezing include plastic bags (or containers made specifically for freezing) and plastic wrap. Using bags or containers made specifically for the freezer will allow your food to keep longer without suffering freezer burn. They won't last forever, and frozen foods will sometimes have a shorter life than foods preserved using other methods (unless used in combination with vacuum packaging), but it is a quick way to preserve foods when time is short (or if you have no other method at your immediate disposal).

Although there are many, many things that you can freeze, some things simply do not freeze well. Lettuce is an example; most varieties, when frozen, will be nothing but a useless, mushy mess when thawed. Fresh herbs also tend to come out mushy when frozen. If you plan on using the herbs in soups or stews, this isn't really a problem; in short, freezing is a viable method for herbs so long as you don't need a pretty herbal presentation. Cheese, on the other hand, can be frozen with little difficulty, save that freezing cheese in block form will make it crumbly when you bring it out and try to cut it. Grated cheeses and already crumbled cheeses seem to do well.

Many fruits and vegetables will freeze well, but some may require a little prep work. Some things, such as broccoli and beans, should be blanched before packing for freezing. **Blanching** is basically a quick 1-minute swim in boiling water before dropping them in ice water to stop the cooking immediately. This holds the color and flavor of the vegetable, while keeping them firm. Other foods, such

as tomatoes, most fruits, peppers, broccoli, and cauliflower, should not be frozen whole. If there are pits or seeds, they should be removed. The items may then be sliced, quartered, cut into pieces, or whatever is best for your use.



A freezer full of preserved food gives you another way to save your excess, as well as more options in the kitchen throughout the season. *Photo by Serene Vannoy under the Creative Commons Attribution License 2.0.*

There is a lot that can be done using freezing as a preservation method. It's a quick way to preserve your foods while saving you some time, but it *can* have some drawbacks. However, if you have a lot that needs to be done in a short time, and don't have time to spend on other preserving techniques, freezing is definitely the way to go.

Drying and Dehydrating

Drying or **dehydrating** is one of the oldest techniques of food preservation, and is a surprisingly simple process. However, if foods are not thoroughly dried, spoilage and mold are a certainty with this method. That said, drying and dehydrating is not difficult to learn and can be done using an oven, microwave, dehydrator—even the sun, if you are fortunate enough to live in an area with lots of sunshine.

Dehydrating/drying involves removing all the moisture from food, thus drying it out. The items that you can dry are endless: herbs, meats, most vegetables and fruits, even liquids (when using a dehydrator). Drying and dehydrating can take a little prep time, but when a food is dried properly, it will have a long shelf life with little worry of spoiling and no need for refrigeration.

One of the most fun ways to dry fruit is by turning it into **fruit leather**. Fruit leathers store for a long time, provides opportunity for a wide variety of flavors, and makes for a popular treat for kids. You do need to remember that, when you make fruit leather, there will be little else that you will be able to do with the leather besides eat it as is (or create cake and cupcake decorations with them). So, unless your family eats a lot of fruit leather (and you do not need to preserve fruit for anything else) you might want to limit the percentage of your harvest that you devote to this tasty, albeit limited treat.

Sliced fruits may also be dried and later reconstituted with water (or juice) as needed, or else eaten dried as a delicious (but sometimes overly sweet) snack. Fruits that make for excellent dried snacks are pineapples, mangos, apples (especially if you sprinkle cinnamon before drying), figs, tomatoes, bananas and strawberries. Citrus, although it will dry, is not something that you will want to eat later on. However, you may want to save citrus *skins* to dry, as their powdered skins are often used in cooking and baking. Once dried, fruits will need to be *kept* dry, as any moisture will introduce mold, forcing you to throw the fruit away.

Dried vegetables have many uses: you can add them to soups and stews where they will rehydrate on their own; rehydrate in a little water or broth and use in casseroles; or, make a seasoning mixture by combining an assortment of dried vegetables, ground or crushed into a powder.



Dehydrated fruit slices not only make for a great snack, but provide plenty of delicious options in a number of recipes. *Photo by Kelly Cree under the Creative Commons Attribution License 2.0.*

Grinding and Crushing Dried Vegetables

To **grind** or **crush** dried vegetables, use either a mortar and pestle or an electric coffee grinder. If you plan to use a coffee grinder (which works great for herbs and spices, too) try to keep a separate grinder for just this purpose: the oils from the herbs and spices you grind will leave a residue on the plastic lids of the grinders, and although they can be washed, you will not get all of the oils out. As a result, if you use the same grinder for your coffee, the ground coffee may pick up the oils from the spices and herbs, adversely affecting the coffee's flavor.

Pickling

Another way of preserving is through the use of **pickling**. When you first think of pickling, you no doubt think of pickles—dill, sweet, sour, hot, whichever way you like it, the word pickling is almost synonymous with pickling a cucumber. But there is so much more

that can be pickled! Fruit, eggs, cauliflower, okra, meats, relishes; all of these can be pickled, with alcohol as well as vinegar.

Pickling came about as a result of the need for another way to preserve foods without needing refrigeration. The process basically swaps out the water in a food for the pickling agent (usually **vinegar**). By soaking food in a salt water solution you can remove the water, such that the pickling liquid can penetrate and soak into the food. This way, the vinegar slows any bacteria growth, thus preserving the food.



Contrary to popular belief, vinegar pickling provides a preservation method for far more than just pickles; you can pickle virtually your entire vegetable garden. *Photo by Eunice under the Creative Commons Attribution License 2.0.*

The materials necessary for pickling are basic and easy to find. They are:

- Crock, bowl or any other non-reactive vessel (to hold the vegetables as they are brining)
- Strainer and cheesecloth
- Non-reactive pot for cooking the vegetables in the pickling solution (not all recipes will call for the vegetables to be cooked)

in the solution)

- Canning jars, lids and rings

You will also need various herbs, spices, salt and sugar, depending on the particular recipe that you are following. When ready for pickling, follow the same directions as with any canning project.

As much as we like pickles (and as much as you will enjoy pickling), there is one drawback. Pickling can increase the salt content of food, while at the same time reducing the vitamin content. So, if you or a family member has a problem with sodium, this is definitely something to keep in mind when deciding which preservation method to use.

However, you can also pickle using **alcohol**. A good example is the “boozy fruit,” which you may remember from your grandmother’s cupboard. This is an example of using alcohol to preserve fruit. Basically, the fruit is preserved in a mixture of alcohol and sugar. The type of alcohol and the alcohol/sugar ratio will vary by recipe; however, it is a simple and almost foolproof method of preserving—so much so, in fact, that this makes a great project for a beginner. And, as the alcohol also kills bacteria, the fruit will (normally) need no refrigeration.

Pickling is a fun preservation technique, and there are thousands of recipes for pickling everything from cucumbers to pig’s feet. Once you have become comfortable with the basics, you can begin to create your own recipes and combinations.

Curing

Another preserving technique that has become popular once again is curing. **Curing** is a method of preservation using salt, sugar and/or nitrates, with salt being the main component and sugar and nitrates an option. The salt removes the water from the meat, slowing oxidation and preventing the meat from becoming rancid. When curing, the bacteria in the meat are *not* killed, just slowed. The sugar counteracts the strong salt flavor and feeds the beneficial bacteria. The sugars may be in the form of white or brown sugar,

maple syrup, honey or corn syrup. Curing may be used on its own, or done as a step before the smoking process.

Nitrates kill harmful bacteria, enhance flavor and provide the reddish pink color that is a characteristic of smoked meats (without nitrates, the meat can be a gray color). However, even though nitrates are necessary in curing sausage and other dry meats (to prevent botulinum toxin), using nitrates is now in question, due to the fact that when there is a high concentration of nitrates present and the cured food is cooked at high temperature, nitrosamines may be produced, which have been shown to be carcinogenic in animals. There have been some possible substitutes produced for nitrates; however, all of this remains under debate. It is basically up to you to do your due diligence before you begin the process.

There are four methods of curing:

Dry: A salt cure with nitrates. A rub is made and applied generously to the meat by hand. The meat is tightly packed into a large container with drainage. Curing time fluctuates, but the rule of thumb is two days per pound for small cuts, and three days per pound for large cuts. Dry cured meats will lose 15–20 percent water weight.

Wet: Curing using a salt brine. A sweet pickling brine will occur with the addition of sugar. The wet cure is commonly used with hams and butts, and is usually used in conjunction with smoking. Wet curing is a slow process, with the meat remaining submerged in brine at a 40°F for up to two weeks.

The wet cure process does have some drawbacks: the meat will need turning for even distribution of the brine, and the brine will need to be skimmed periodically to prevent the possibility of contamination. And, if the process is not done correctly, there is a risk of spoilage of the meat, especially close to the bone. So, if you use this technique, you will need to be vigilant.

Combination: Just as it says, this method uses a combination of the dry and wet methods, usually with a dry cure being applied first,

with the wet brine added a few days later. Curing time runs from four days on up, depending on the cut. The meat is then usually smoked.

Salt Curing: Another form of dry curing which is still used with some meats. Salt curing eliminates the need for nitrates. This is the cure used for prosciutto.

For safety, the salt concentration needs to be at least 10 percent, but as this method works to quickly pull and remove the water from meats, it is the fastest method of curing. When you are salt curing a ham, for example, a 10 pound piece of ham could take up to seven months to cure. This is due to salt curing also involving air drying of the meat, instead of smoking.



A sea salt solution provides an effective (and tasty) option when curing meats, and is the method used to prepare prosciutto. *Photo courtesy of Wikimedia Commons.*

Smoking

Smoking is a preservation technique that often goes hand in hand with curing. Smoking is done slowly, over a low heat. Along with meats, cheese, fish and peppers are the foods that are commonly smoked.

Smokers can be electric, charcoal, propane, or water and steam. Although you can find many of these smokers in backyards today, if you can't have a smoker, a regular charcoal grill will work as well. Simply keep your heat on one side of the grill, and then place the meat on the cold side. This will give you the same indirect heat that a smoker will.

There are two methods of smoking:

Hot Smoking: This method fully cooks the meat and kills most common bacteria. You can usually consume hot smoked meats without further cooking. It is through hot smoking that you get the coveted pink smoke rings under the bark or crust or under the skin. Hot smoking temperature is at least 150°F.

Cold Smoking: This technique is for flavor enhancement only. Normal temperature is around 100°F or less, so it does *not* cook the meat.



Smoked meat, in combination with or separate from curing, produces flavorful meats that will last longer than prepared meat. *Photo by Cookipediachef under the Creative Commons Attribution License 2.0.*

When using a smoker, it is the wood chunks or chips used to create the smoke that both add to and preserve the flavor of the meat. Hardwoods are commonly used due to their lack of sap or

resin, with the most popular being oak, maple, cherry, pecan, mesquite, apple and hickory. You can find all types of hardwood chips and chunks in home improvement, hardware and outdoor stores across the country.

The process of producing the smoke involves soaking the wood chips and then placing the wet chips directly on hot coals, or placed in a packet (with holes), which is then placed on top of the hot coals (smoke boxes are also available; however, these can be expensive.)

Oil

When preserving with **oil**, you are basically preserving the flavor of the food that you have packaged in the oil, not in the food itself. This method is also known as **infusing oils**. Olive oil is the best oil to use, however canola oil will also work well. It should be noted that olive oil will tend to go rancid.

You should only use good quality herb leaves, garlic, spices, or peppers. The herbs may be fresh or dry, and spices may be whole or ground, but the ground spices (or herbs) need to be wrapped in cheesecloth before submerging into the oil. This will make it easier to pull the little pieces of herbs or spices out of the oil.

Although there are a wide range of recipes available for oil infusions, there are basically two ways to prepare them: cold infusions and hot infusions.

Cold infusions involve simply taking your flavoring ingredients, dropping them into a bottle or jar of warm oil, and then sealing and letting it sit for at least two weeks, to allow the flavor to infuse into the oil.

Hot infusions, by contrast, involve heating the oil and ingredients together in a sauce pan (a heavy bottom pan is best) until you can actually smell the flavor in the oil. Bottle or jar it, allowing it to cool. Refrigerate, and use within a few weeks. Heat infused oil allows for immediate use, as cold infused requires waiting for the flavors to meld with the oil.

Infused oil is fun to make, and if doing a cold infusion, the kids can even help. When you are ready there are hundreds of recipes

online, in books and magazines available to start you off. Once you become proficient and comfortable with the process you can create your own recipes as well!

Other Methods of Preservation

Although we have just covered the main methods of preserving food, there are also a few more that you can consider as part of your homesteading.

Jams and Jellies: Jellying is actually its own form of food preservation. Although the process dates back to the early Middle East, it is best known as the way fruits were preserved during early American colonial times. Although the terms are used interchangeably, **jelly** is a fruit juice cooked with sugar and pectin, while **jam** is crushed fruit or pulp, cooked with sugar and pectin.



Somewhat less versatile than other preservation methods, jams and jellies nonetheless provide another attractive way of creatively using your garden's harvest. *Photo by Paul Alberta under the Creative Commons Attribution License 2.0.*

Vinegar: The flavored vinegars that you have either purchased or made actually preserve the flavor of the herb or pepper (which

works the best, but other things may be used) by letting the herb or pepper sit in vinegar (usually white) for at least a few weeks.

Root Cellar: An underground chamber used to store food at a low temperature and an even humidity, root cellars prevent foods from freezing. The best foods for a root cellar include (but are not limited to) potatoes, pumpkins, apples, onions and squash.

These are just a few ways to preserve your excess food. For more in depth information, refer to *Backyard Farming: Home Harvesting* and *Backyard Farming: Canning & Preserving* in this series.

Selling Your Produce

After you have given away, eaten and preserved all of the fruits and vegetables that you want, if you still have more leftovers than you need, what can be done? Farm markets, farm stands and farmer's markets provide an opportunity to offload your excess product, and make a little profit while you're at it. But what's the difference?

Farm Stand

A **farm stand** is when you set up a little stand in front of your house, which can be a little free-standing one, or something as simple as a picnic table, set up with your display of vegetables and fruits for sale. This is a great way to get rid of the odds and ends from your garden.

Farm Market

A **farm market** is an actual market, set up on the farm, usually in a building of some sort (though it may sometimes be enclosed, it oftentimes is at least partially open air). A farm market is typically considered a business, and so business regulations for your area may apply, as well as any state regulations that may exist. You may also be required to carry insurance.

Farmer's Market

The **farmer's market** is a market that you will see set up in various places, such as parks and parking areas, where farmers and growers come to sell their produce. At many modern markets, you may be asked to explain what you are selling. This is usually in an attempt to keep the products home grown, as opposed to produce purchased at auction to sell at market, as well as keeping out imported “junk” gifts. Most farmers' markets will also require insurance, as well as proof of insurance.



A farmer's market not only provides an opportunity to sell your produce and get your name out there; it also gives you a chance to dialogue with other local farmers and share each other's experiences. *Photo by John Loo under the Creative Commons Attribution License 2.0.*

If you have excess vegetables and fruits to sell, or any other on-farm food products that you make, but you don't want to sell them yourself, farmer's markets will sometimes take area produce from other farms/producers to sell at their market, especially if it is

something they don't already have. They may purchase the produce outright, or more likely will negotiate on a commission basis. Still, it can be a good way to make use of all your extra food.

Value-Added Products

There is also something called a **value-added product**, which can bring in some extra money for your homestead or backyard farm. A value-added product takes something you already have and changes it to become an even more valuable product; for example, turning fruit into jelly to sell, or turning branches trimmed from your fruit trees into saleable wreaths.

A few more ideas include:

- Turning dried tomatoes into tomato powder
- Bunching together dried stems from herbs stripped of their leaves for grilling with charcoal grills
- Dried vegetable flakes
- Beef jerky
- Fruit leather
- Cheese, butter, or ice cream
- Salad/green mixes
- Dried fruits
- Baking, soup, and dip dry mixes
- Rubs and sauces
- Herbal and hot pepper vinegars
- Dry, strung chiles and chile wreaths
- Cut flowers and dried flowers
- Fresh and dried herbal wreaths
- Wood (if you have a woodlot)

These are just a few examples of what you can create from items off your farm or already in your cupboards. For some of these projects (specifically food related projects) certain permits or stipulations may need to be considered. For others, you could get started today. Use your imagination, keep your eyes open for new ideas, and if you have

an idea of your own ... go for it! Who knows—your little home farm product could turn into big business!

Teaching and Workshops

Another way to earn extra income for your farm is to become a teacher. When you feel that you are comfortable enough with something that you feel you could teach it to others, start a **workshop**.

Workshops are not difficult to do if you are well-prepared (and public speaking doesn't bother you), and they can be lots of fun. You can either have them on the farm/on-site, or else look for schools and community colleges that offer adult continuing education programs, as they are usually looking for new ideas and new instructors. You don't have to be a certified teacher to conduct these workshops; just have a good handle on your topics, good presentation skills, and the ability to make your class enjoyable.

Your workshops can run as long as you need them to. Some do well as a single, 2-hour program, while others do better with half or full day sessions (with breaks). If you don't want to do a full-day workshop, you can split it up over several weekly sessions, teaching for two hours each session for a few weeks. If you are working with an adult education program, they may have specific needs regarding scheduling, and may ask you to work around it. Others will just accommodate your preferences.

In terms of payment and fees, if you are teaching on-farm workshops on your own site, *you* decide what you will charge for your classes. Keep in mind any materials you plan on including with the fee; when you supply the materials, your fees will be higher. If you want to keep them lower, issue a supply list of necessary materials when a student signs up and sends in their payment. If the materials are difficult to find, make sure to include places where the materials can be purchased. You can also decide whether or not to offer refunds for cancellations. If you are not supplying any materials, you may decide to offer a full refund if someone cancels within a certain time period (set by you). If you *are* supplying

materials, it's fine to offer only a 50 percent refund; that way, you are not stuck eating the cost of the materials if someone doesn't show.

If you are teaching through an adult education program, there will usually be a set price that they pay their instructors. Going this route, you probably won't make as much as you would conducting the workshops at your own site; however, it does eliminate your having to do advertising and provide the space. If you're uncomfortable having strangers at your homestead, teaching through a continuing education program is a good way to avoid that stress. It's also a good way to get started, learn the ropes, get comfortable teaching and become known for what you do through a reliable source. You can go out on your own afterwards, if you wish (when you feel ready).

Agritourism

If teaching workshops isn't your thing, or if you're looking for a few more ways to make extra money on the farm, you can take a look at agritourism.

Agritourism, or agricultural tourism, can include any of the following:

- Farm tours
- One-time, on-farm events
- A farm petting zoo
- Seasonal and holiday events such as corn mazes (on a larger homestead or farm)
- U-Pick pumpkin patches (where the customers pick their own pumpkins) with hayrides
- Sugaring events during maple syrup/sugaring time
- On-farm bed and breakfasts
- Other U-Pick events, such as u-pick tomatoes, apples, strawberries and other berries
- Farm-made cheese tasting

These are just a few of the events and programs that you can feature. You may need to check the regulations in your area before you begin, and insurance coverage will likely be necessary, but there usually aren't any major problems when first starting out.

Agritourism can be conducted in a multitude of ways; sometimes there are fees, sometimes there aren't. For example, you may charge fees for a cheese tasting event, but when your farm is open for U-Pick, the money typically comes from the sales of the vegetables or fruit (unless you decide to have something else going on at the same time, such as a picnic or strawberry shortcake social).



Even a simple petting zoo with a few (well-behaved) animals can serve as a draw, bringing more people to your farm. *Photo by David McSpadden under the Creative Commons Attribution License 2.0.*



U-Pick Orchards

One thing to mention regarding **U-Pick orchards**: if you have decided on pursuing this set-up, it is best to plant dwarf trees, instead of full-sized trees. Dwarf trees will still bear a lot of fruit, but their smaller size means they will be easier for your customers to pick from (as ladders can be a liability) and safer for your customers to deal with.



Opening your orchard to the public allows you to save time and energy harvesting your ripe fruit, while letting you sell off your excess at the same time. *Photo by Jeff Kubina under the Creative Commons Attribution License 2.0.*

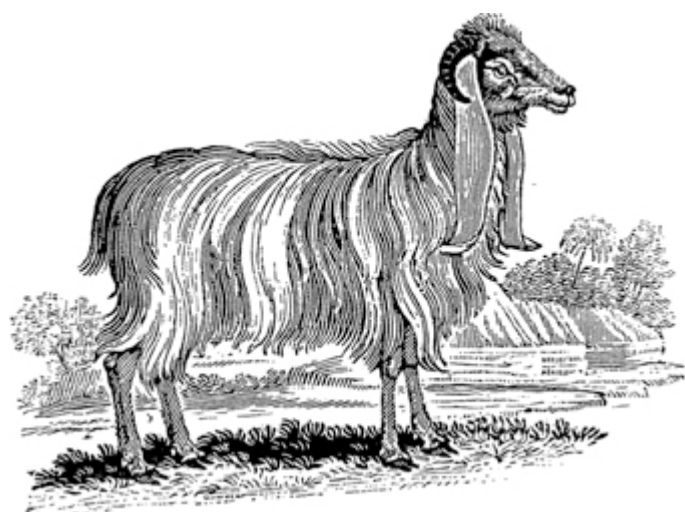
How much you charge will be up to you, but will usually depend on the fruit. Berries are usually priced by the pint or quart basket, while apples, tomatoes, and other fruits and vegetables are usually priced by the pound. However, some locations will price their produce on a per-item basis. No matter how much you decide to charge, you can usually charge less than pre-picked fruits and vegetables; after all, your customers are the ones supplying the labor to pick the food, not you. Customers enjoy U-Pick; many will make a family outing of it, especially during the fall. Whether selecting the Halloween pumpkin, enjoying apple harvest time or just going strawberry picking, U-Pick orchards can provide a reliable way to make use of larger harvests. Some farms will even have special events during weekends of a U-Pick harvest.

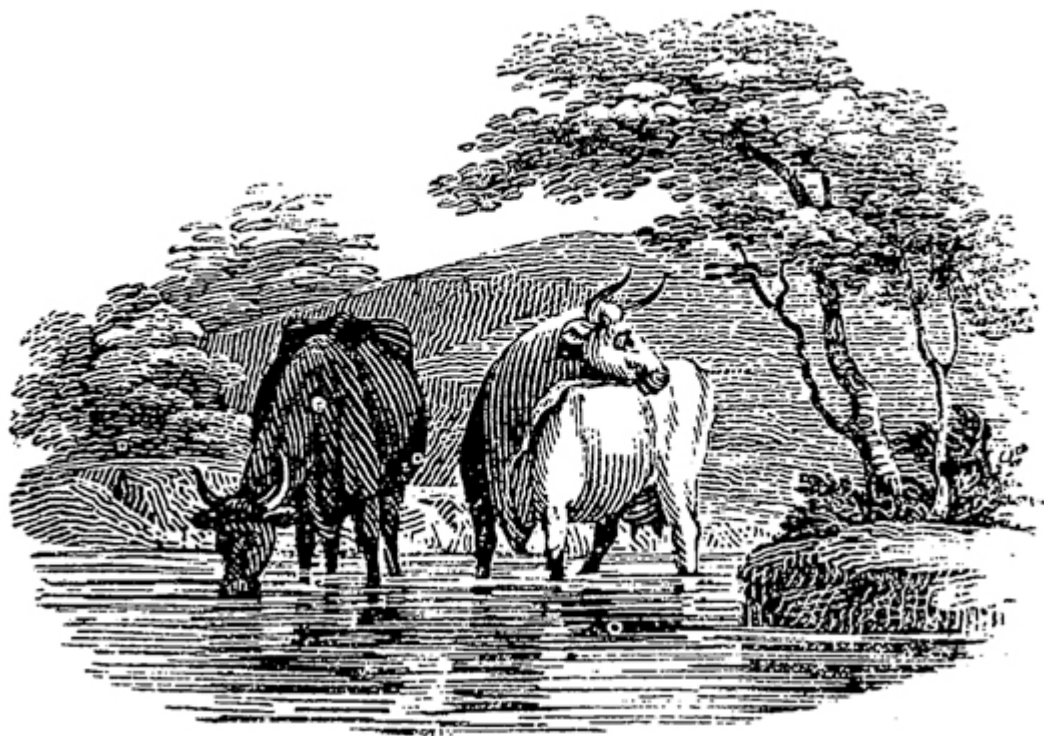
If you decide to pursue agritourism at your location, first figure out what you can realistically offer to your potential customers. You're not going to be able to offer a maze at an urban farm, or a U-Pick operation in a backyard. But as you are designing your farm, you can design it with U-Pick or corn maze in mind. Make sure it is something you will enjoy, and that you don't mind dealing with people or strangers on your farm.

A few final notes: As you will be opening your doors to complete strangers, use common sense and take precautions:

- Don't allow people into your home to use a restroom. Either have one in your market, or rent a portable toilet for market and/or U-Pick season.
- Don't have equipment or tool rooms open to where people can see what you have on your bench.
- Don't give customers free run of your farm. Make sure that you have a "public area" clearly marked.
- If you have a petting zoo, which some markets and U-Picks do, try to make sure that someone is keeping an eye on things at the pen. People are usually pretty good with behaving themselves, but you can sometimes get rambunctious kids or even adults that can spook your animals.
- On the subject of petting zoos, have animal feed already portioned out and available so that people can feed the animals (if you want them to feed your animals). It will save you the grief of a little kid trying to feed a calf his lollipop, or adults who want to see if goats really do eat "anything." When you portion the feed, it also helps to prevent over-feeding.
- If you have a farm market, make sure that you have adequate parking. You don't want to start getting complaints from customers and neighbors about having no parking or having cars backed up down the street. You can't always have parking for everybody, but you do need to be able to service your average number of customers with accessible parking.

There are a number of ways to make extra money with your homestead, no matter the size and location. Although you do need to be careful, you'll find that most people who visit your farm are great, with many who become repeat customers, and even friends. This chapter represents only a small percentage of what you can do. Use your imagination and stand out from the crowd. Believe it or not, there's a lot of competition out there, so you will need to stand out!







CHAPTER 8

HOMESTEADING WITH ABSOLUTELY NO EXPERIENCE

So, you've decided that you want to start growing your own food, but you have absolutely no experience doing so: you've never planted a seed; that potted plant you got as a gift died after only a few weeks because you forgot to water it; you've never even seen a chicken in person, let alone cared for one. But you're determined—you've made a vow to plants everywhere that your house will no longer be the place where they go to die; you've decided chickens really are kind of cute; and you want to get started ... right now!

But where should you begin?

Slow and Steady

If you really don't have experience with anything having to do with growing crops or keeping farm animals, the best thing to do is to **start out slow**, especially if you are unsure or nervous about your first attempt. Begin with a small garden.

In terms of structuring your garden to make things as easy as possible, purchasing actual plants for the garden (instead of planting seeds yourself) is more expensive, but virtually guarantees a better start for someone brand new to growing things. If you really want to try seed, start with something that will almost always sprout and grow, like leaf lettuce, basil, spinach, Italian parsley, sunflower, collards, etc. You don't want to start with something too hard to

plant from seed, only to become frustrated when nothing sprouts and grows. Once you get your first sprouts and make it through your first harvest, you can try some of the trickier seeds next year with a new sense of confidence. If something happens and the sprouts don't come up, you won't feel quite so defeated; on the contrary, you'll probably find that you want to try again, as you become determined to see them grow. If you live in an area where the weather is always mild, you can begin a new planting right away. However, if you live in an area with 3–4 seasons, you will need to wait until warmer weather comes for planting time to roll around again (unless you want to try growing indoors in a container).

If you want chickens, try keeping just a few for eggs at first, but build your coop large enough that you can add more birds at a later date (when you feel more comfortable handling them). You'll soon find that chickens are not as difficult to keep as you may have thought, and will be eager to add more to your family. When starting with chickens (or any livestock, for that matter), read up on their care and maintenance before you bring them home. If at all possible, spend time with either breeders or other owners. These people can help not only to answer your questions, but to get a little hands-on experience as well. Take advantage of this while there is someone right there to guide you. Whenever possible, have housing for the animals set up and ready for them before you bring your animals home. You will find it a lot easier having the coop or barn built to or modified for their needs and ready to go beforehand, rather than having to rush to build something after the fact.

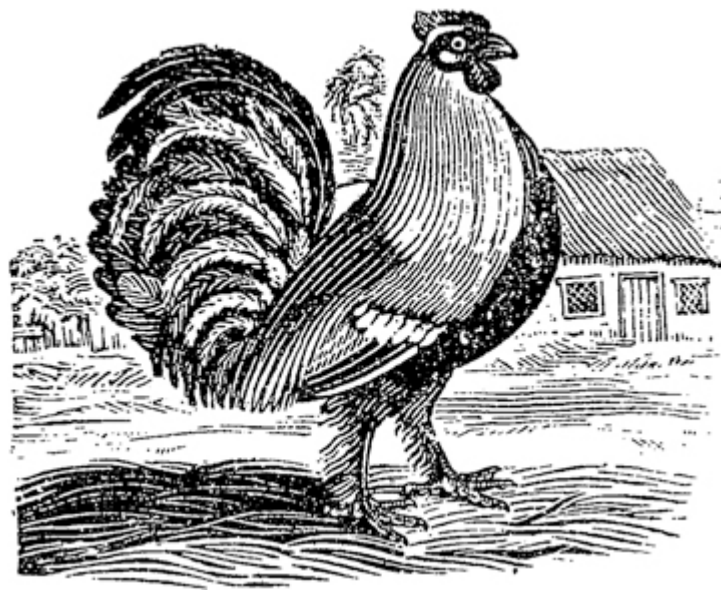
If you have never dealt with livestock before (especially very large animals, such as cattle), it may be a good idea to **get in a little practice handling them** before you bring them home. If you are purchasing directly from a farm, ask if the farmer will work with you and your animals for a few days before you take them home. Keep in mind that dealing with an unhappy adult cow or steer is much different than dealing with a disgruntled dog or goat in the same situation.

When harvest time comes around and you find yourself with lots to preserve, most extension offices offer workshops on preserving.

You can also watch for classes being taught through adult education programs, and even at other area farms. If you would like to see how to can, or the proper way to prepare something for freezing rather than simply read about it, there are always options available. If you *do* prefer to read about the various preservation methods, there are a number of books (including *Backyard Farming: Home Harvesting* and *Backyard Farming: Canning & Preserving* from this series), as well as periodicals and websites on canning, smoking, dehydrating, freezing and pickling. You might also ask experienced family members or friends for advice, as they will usually be very happy to pass along and share their knowledge with you. This can also be a great time to learn those little hints and tricks that are the product of many years of real life experience.

With all of the fresh food you'll soon have available, don't be afraid to try new recipes or even make up your own concoctions. There are so many dishes, desserts and soups that you can try that meal time can always be something different. Even if you don't have any cookbooks, there are recipes galore to be found online. You could even raid your mother's or grandmother's files. For quick meals, you can make extra (or freeze leftovers), creating your own frozen dinners.

Even when you feel like you have no clue as to what you are doing, you can still become an urban farmer or homesteader. It may take a little longer as you take it slow, but with all the information out there, and all the people willing to teach (if you are willing to learn), almost everyone can find their niche and grow to become part of the homesteading movement!







IN CLOSING

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There are all kinds of reasons why someone might choose to become a farmer, even more so now that location is no longer quite as large an issue. Nowadays, almost anyone who *wants* to grow something can. While your location and available space may limit *what* you can keep, it should have no impact on your enthusiasm and passion for starting your very own homestead. It is amazing what you can fit into a small space. If you live in an area with all four seasons, a small space can supplement your food supply; those fortunate enough to live in conditions conducive to year-round growing can raise their fruits and vegetables, right in the comfort of their home (along with a few eggs and even some honey).

Just don't forget that there is work attached to farming, whether you're looking to establish a large homestead or a small backyard farm, especially when animals are included. Think about it: while a garden may be dormant in the dead of winter, livestock will still require constant care, even during a blizzard. You can make your gardens easier to care for, but there will still be effort involved in properly caring for your projects. You might even find yourself needing to get a "garden sitter" to help water and weed! You will definitely need someone to watch over the livestock, whether you're away for a day or a week, so keep that in mind when trying to put your farm together.

In the end, if growing something with your own two hands is something you enjoy, then all the work in the world won't matter to you. Look forward to the end result—fresh food for the family!

Enjoy!





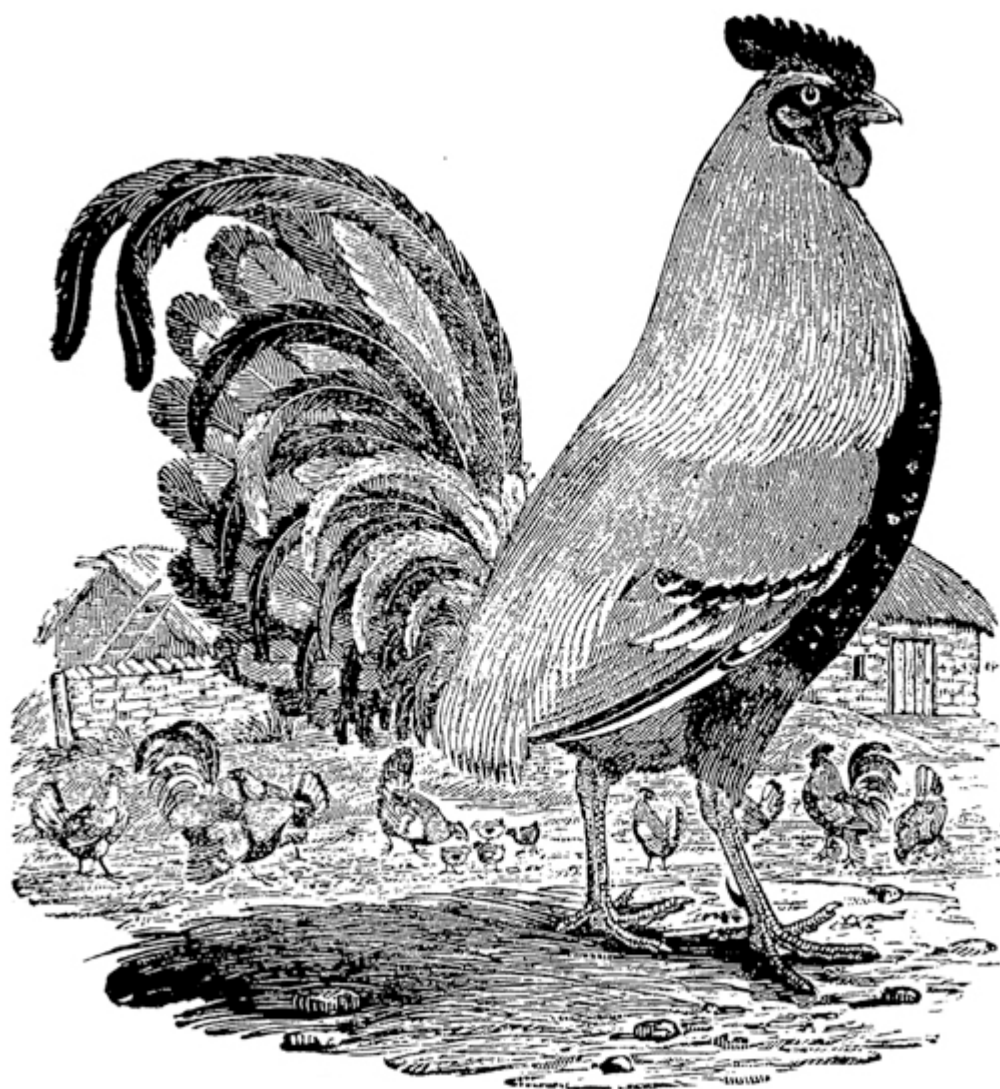
HISTORIC HOMESTEADING FACTS

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- Livestock are no strangers to the **White House**; on the contrary, there have been many farm animals amongst the pets that have graced the building:
 - John Adams had horses, as did Andrew Jackson, Ulysses S. Grant, James Polk, Zachary Taylor, James Garfield and John Kennedy (who also had three ponies). William Henry Harrison's pet Sukey was a Durham cow. Ulysses S. Grant's tenure at the White House saw horses, ponies and even pigs.
 - The Lincoln household included two much-beloved goats named Nanny and Nanko, as well as ponies, pigs and Jack the turkey. Originally supposed to be Thanksgiving dinner, Jack was spared his fate and made a member of the Lincoln family after Lincoln's son Tad grew very attached to him.
- Andrew Jackson built the White House's first **greenhouse** in 1835. It was leveled in 1857 to construct a wing of the Treasury, after which a new greenhouse was built on the west side of the compound.
- When John Adams moved into the White House in 1800 (the first president to do so), his first addition to the building was a **vegetable garden**.

- The Philadelphia Society for the Promotion of Agriculture was organized in 1785. *Agricultural Museum*, the first agriculture related periodical, was introduced in 1810.
- The Agriculture Committee for the United States House of Representatives was formed in 1820, followed by the Senate's equivalent in 1825.
- 1874 saw the end of open-range grazing in the Great Plains.
- Roosevelt formed the Country Life Commission in 1908, which was intended to focus on rural problems.
- A national extension service came into existence through the Smith-Lever Extension Act in 1914.
- Rural areas began seeing electricity in 1936, thanks to the Rural Electrification Act.







RECIPES

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Enjoy these recipes using ingredients from your farm or garden.

Egg Casserole

8 slices bread

1 stick butter

2 cups milk

7–8 eggs

½ teaspoon salt

1 tablespoon prepared mustard

2 cups ham, diced

2 cups Velveeta cheese, grated

A dash of red pepper, paprika, and garlic powder

Put bread in a greased 9 × 13 inch pan. Melt butter, and mix together with milk, seasonings, and beaten eggs. Pour over bread, sprinkle with diced ham and top with grated cheese. Refrigerate overnight and then bake for 1 hour at 350°F.

Crock Pot Potato Soup

5 medium potatoes, diced
3 medium onions, diced
5 cups water
1 tablespoon parsley
1 stalk celery, diced
1 teaspoon salt
4 cups chicken broth
4–5 tablespoons butter
1 (13-ounce) can evaporated milk
Black pepper, to taste

In a slow cooker, combine potatoes, onions, water, parsley, celery, salt, pepper, chicken broth and butter. Cook on low heat until done, 10–12 hours, or on high heat for 3–4 hours. When done, add milk and reheat. Serve plain or put mixture in blender for a smoother soup. Reheat if necessary.

Garnish each serving with a dollop of sour cream and chives, if desired.

Fruit of the Day Smoothie

- 1 can of Mandarin oranges, including syrup (or swap out for homegrown tangerines)
- 2 frozen bananas, peeled and sliced
- 2 cups frozen strawberries
- 1½ cups milk

Add all ingredients in the order listed above to the blender. Blend on low speed for 30 seconds, making sure to hold down the lid. Blend on high speed for 1 minute. Pour into a glass and enjoy!

Succotash

A different take on the traditional recipe (you can leave out the pork for a vegetarian version).

1 pound pickled pork (optional)
2 quarts shelled Lima beans
24 ears of corn, cut off the cob
2 tablespoons sugar (optional)
2 tablespoons butter
Pepper, to taste

If using pork, cover pork with water and parboil it. Add beans, and then add corn, sugar, butter, and pepper, to taste. After corn is added, watch carefully to keep from scorching. Serve. (In some recipes, a chopped red bell pepper is added.)

Basic Jam Recipe

A good quantity of soft, fleshy fruit (like strawberries, peaches, cherries, plums, blueberries, brambles)

1 cup sugar (or sugar with added pectin) for every 2 cups fruit (3 cups for bitter or sour fruits)

$\frac{1}{4}$ cup lemon juice, or less

$\frac{1}{2}$ teaspoon butter

Clean the fruit, removing any stones (pits), leaves and such, then wash. If the fruit is not a small berry, cut it up into small pieces and crush.

Sprinkle fruit with lemon juice and butter and stir well. Pour the mixture into a large cooking pot (traditionally a copper pot is used, but any other cooking pot will do). Bring the mixture slowly to a full rolling boil, stirring regularly. Add sugar; depending on the fruit, you will need to boil the mixture for about an hour.

The jam is ready when it is thick. Check this by pouring a drop of the jam onto a cold plate. It should turn sticky, and not be too runny.

To preserve the jam, pour it into glass jars that have been sterilized by boiling them in water. You can also pasteurize the containers, rings and lids by washing them with boiling water. The jam should be poured rapidly into the still-hot containers. Release any air bubbles (as discussed briefly in [Chapter 7](#)) and then cover with lid and ring. Proceed with remainder of canning process.

Rosemary Garlic Baked Potatoes

4 baking potatoes

4 tablespoons olive oil

2–4 cloves garlic, chopped

1 teaspoon dried, crushed rosemary (or 1 tablespoon fresh, chopped rosemary)

¼ teaspoon salt (sea salt or crystal salt can be used instead)

⅛ teaspoon fresh ground pepper

Heat oven to 400°F. Wash potatoes and pierce all over with fork. Lay each potato on an individual piece of aluminum foil, large enough to wrap up the potato.

Pour 1 tablespoon of olive oil on each potato, making sure the entire potato skin is coated in oil.

Sprinkle a quarter of the chopped garlic, rosemary, salt and pepper over the entire potato.

Wrap each potato in aluminum foil and place the foil-wrapped potatoes on a cookie or baking sheet (to catch any leaking olive oil).

Bake for 1 hour. These potatoes may also be done on a grill, but cooking times will vary. Makes 4 servings.

Dill Cucumber Salad

½ cup sour cream (can use reduced-fat)

2 tablespoons cider vinegar

1 teaspoon sugar

¾ teaspoon garlic powder

¾ teaspoon dill weed

½ teaspoon salt

3 medium cucumbers, sliced

½ cup sliced onion

Combine the first six ingredients. Add cucumbers and onion, and toss to coat. Cover and refrigerate for at least 1 hour. Serve with a slotted spoon.

Grilled Radicchio with Bacon Dressing

4 slices cooked bacon, crumbled
½ cup extra-virgin olive oil, divided
2 tablespoons rendered bacon fat
2 tablespoons red wine vinegar
1 teaspoon Dijon mustard
1 large radicchio, quartered
Salt and freshly ground black pepper, to taste

Toss radicchio with ¼ cup olive oil. Sprinkle liberally with kosher salt and freshly ground black pepper. Place on a medium grill and cook until marked on all sides and heated through.

Meanwhile, whisk together vinegar and mustard. In another bowl, combine oil and fat. Combine the oil mixture into the vinegar mixture slowly, while whisking continuously. Drizzle dressing over radicchio and sprinkle with bacon. Serve warm.

Tomato and Onion Salad

Salad

6 tomatoes, chopped and diced

1 red onion, diced

1 white onion, diced

Spring onion, chopped finely

Sliced black olives

Lebanese cucumber, peeled and diced (or substitute another seedless variety)

Dressing

1 teaspoon vinegar

Squirt lemon juice

Ground black pepper, to taste

Sea salt, to taste

Mix all salad ingredients together. In a separate bowl, mix together dressing ingredients and stir into salad. Serve with flat bread and feta cheese.

Tuscan Soup

- 1 small onion, chopped
- 1 small carrot, sliced
- 1 tablespoon olive oil
- 2 (14.5-ounce) cans chicken broth (may also use vegetable broth)
- 1 cup water
- $\frac{1}{4}$ teaspoon salt
- $\frac{1}{4}$ teaspoon pepper
- 1 (15- to 16-ounce) can kidney beans or great northern beans, rinsed and drained
- $\frac{2}{3}$ cup uncooked small spiral pasta
- 3 cups fresh escarole or spinach, thinly sliced

In a 2-quart saucepan, sauté onion and carrot in oil until onion is tender. Add broth, water, salt and pepper; bring to a boil. Stir in beans and pasta; return to a boil.

Reduce heat. Cover and simmer for 15 minutes or until pasta and vegetables are tender, stirring occasionally. Add escarole or spinach and heat through.

Note that this is a meatless variety. To make this recipe totally vegetarian, substitute vegetable broth for the chicken broth.

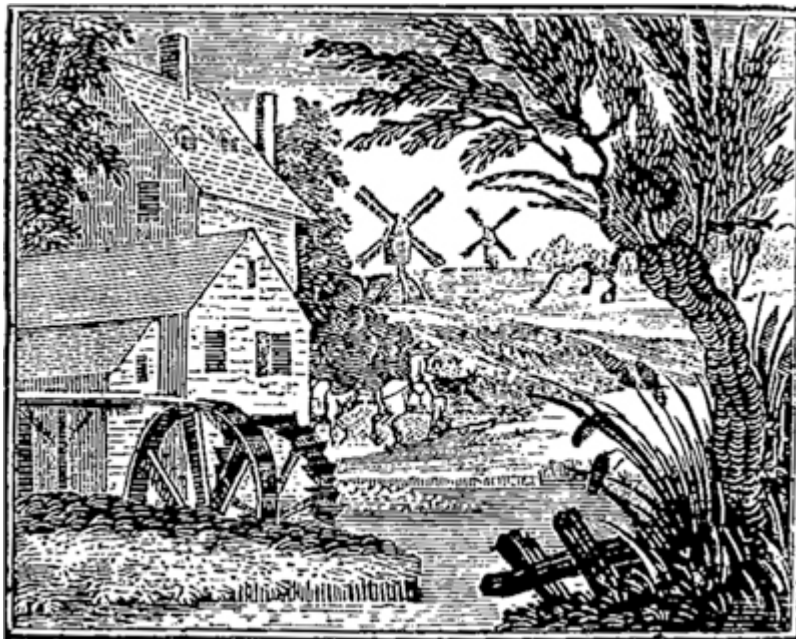
Tomatoes with Cheese Stuffing

Instead of throwing away stale bread, use your food processor or blender to turn them into bread crumbs!

6 tomatoes
1 cup bread crumbs
1 cup grated cheese
 $\frac{1}{2}$ teaspoon salt
 $\frac{1}{8}$ teaspoon black pepper
2 tablespoons butter
 $\frac{1}{4}$ cup hot water

Select medium-sized tomatoes and hollow out the centers, reserving the pulp. Mix the crumbs, cheese, salt, pepper, butter, and hot water with the pulp from the centers of the tomatoes.

Fill the tomatoes with this stuffing. Place in a pan and bake in a moderate oven until the tomato can be pierced easily with a fork.





RESOURCES

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USDA.gov

A helpful resource on a wide array of topics, as well as a great source for the most up-to-date information put out by the Department of Agriculture. It also contains information necessary to those looking to become certified as organic growers. Containing both general information for those who are looking to start and specific information for states and counties, any gardener interested in a chemical-free garden, either now or in the future, should take the time to read this site.

USDA Extension Offices

www.csrees.usda.gov/Extension

This convenient website will allow you to quickly and easily locate the extension offices in your area.

Extension offices serve as an invaluable resource to new gardeners, as they keep track of local weather, soil composition, gardening regulations and restrictions, and so much more.

John Scheepers Kitchen Seeds

www.kitchenseeds.com

In business since 1908, this beautifully laid-out and illustrated catalog is a joy to look through, even for the non-gardener. For the novice gardener, the catalog contains simple, easy-to-care-for plants, as well as new varieties and hybrids for the more adventurous types.

The Cook's Garden

www.cooksgarden.com

A newer company, this catalog's niche is seeds for the gourmet gardener. Containing tried-and-tested new varieties of old breeds, these seeds produce some of the most flavorful produce around. For slightly more experienced gardeners looking to expand their variety and their palate, this catalog is an excellent choice.

Burpee

www.burpee.com

A great resource for both old favorites and brand-new experimental hybrids, the curiously named Burpee provides a great resource for a third- or fourth-year gardener who is looking to increase the breadth of his garden's variety or who is starting to think about trying to make their own hybrids.

Baker Creek

www.rareseeds.com

A must for anyone interested in growing heirlooms in their gardens. Chock-full of familiar and unusual vegetables (and fruits) to grow, as well as excellent photographs of the vegetables (or fruits), this is one of the best resources out there.

Seeds of Change

www.seedsofchange.com

This is a purveyor of certified organic seeds. Although they may now be found in various brick-and-mortar market venues, in order to really see the depth of their offerings, those serious in organics need to take a look at the entire catalog.

Seed Savers Exchange

www.seedsavers.org

Dedicated to saving and sharing heirloom seeds, this is another excellent resource for the usual and the unusual for the food garden. Customers may also become members of this organization and become stewards in the movement to save and spread heirlooms.

Garden.org

An excellent resource for any gardener, the website of the National Gardening Association provides up-to-date information on gardening, including tips and tricks for beginners, as well as a variety of other resources, including an easy-to-navigate “Gardening Dictionary” to aid in your planning and planting.

Several resources are available for the home canner to gather helpful tips:

Ball Canning Products

www.freshpreserving.com

HomeCanning.com

www.homecanning.com

Home Canner’s Help Line

(800) 240-3340

Mrs. Wages Home Canning

www.mrswages.com

New York States Department of Agriculture (NYSDA)

www.agriculture.ny.gov

United States Department of Agriculture (USDA)

www.usda.gov



ALSO IN THE BACKYARD FARMING SERIES ...

Backyard Farming: Canning & Preserving

Backyard Farming: Growing Garlic

Backyard Farming: Growing Vegetables & Herbs

Backyard Farming: Home Harvesting

Backyard Farming: Keeping Honey Bees

Backyard Farming: Raising Cattle for Dairy and Beef

Backyard Farming: Raising Chickens

Backyard Farming: Raising Goats

Backyard Farming: Fruit Trees, Berries & Nuts

Backyard Farming: Composting

Backyard Farming: Raising Pigs



NOTES

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