

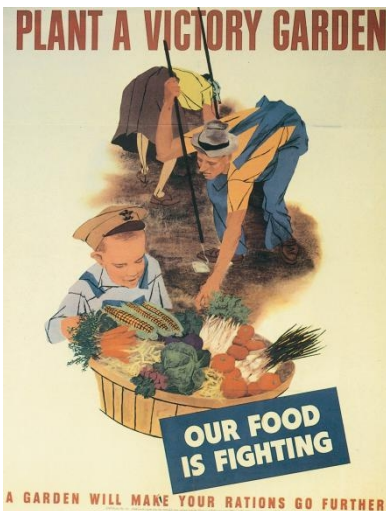
## Chapter X

### From Vegetables to Peaches

There is probably nothing in life more satisfying than to sit down to a meal well prepared from products we have produced ourselves. Imagine succulent, golden brown fried chicken beside mashed potatoes dripping with butter we have churned from our own cream with Brussel's sprouts cooked in cream at the side with sliced tomatoes bracing all of this, then followed with a bowl of fresh sliced, giant, red strawberries smothered in fresh cream from our own Jersey cow! It simply does not get any better than this, nor can it get any fresher or healthier for us.



It was a way of life for our grandparents, great grandparents and beyond. It was how life was lived, even in the era of the Industrial Revolution, people grew their own vegetables. With the stock market crash of '29, a new emphasis through necessity was placed on growing as much of our food as we could... then came 1941 and a world at war. Victory gardens were de riger in our country... everyone was growing all they could to



support the war effort! From this nest, we are sprung... Can we do less?

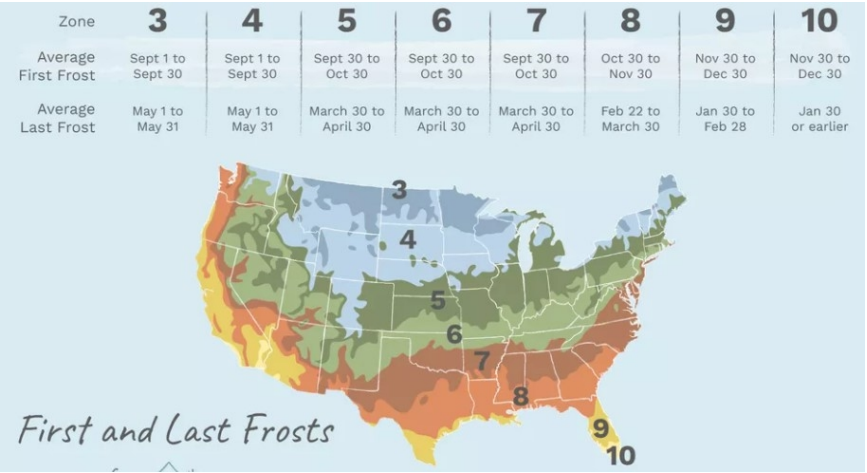
Year one is going to find us feeling our way along. We have much to learn and much to build and arrange before winter arrives. I know it sounds strange to talk about winter before we've even begun our spring planting, but, believe me, winter is always on a homesteader's mind! Yes, planting dates are important and the date we get in our new chicks and other poultry cannot be overlooked. Harvest time is a time of great joy, but all of this pales in importance to what happens when winter hits us. Everything has to be done before then. When the snow is flying is not the time to remember that we have not drained the waterlines from the cistern through the pumps to the sprinklers! All things on the farm revolve around winter and it is the wise farmer who has his chores done, his stock in their winter quarters and all things locked down and on winter terms BEFORE that first snowstorm arrives!

The first question we must ask ourselves is, "What do we wish to plant in our garden? What will taste good in January and what will still be available to us in April?" Remember this, if we don't like it and won't eat it before we grow it, we will not eat it after we grow it!

Following is a list of the ten most important vegetables to grow in our first garden. This is merely a guide... if there are some there you do not like, don't grow them... if there are some you do like that are not listed here... grow them. Remember, this is YOUR garden... make it work for you... raise those things you will eat and enjoy!

We will be planting a fall garden as we get into summer and some of our spring plantings have matured and have been harvested and preserved. We will not have a greenhouse to begin with this first spring, but should have by the time we begin planting our fall and winter garden.

The first thing we must know is the date of our last killing frost as this is the date around which our planting schedule will rotate. This date, of course varies as we vary our location around the country with the deep south being frost



danger free by the end of February in most areas and certainly by the end of March. It is important to note that this is not a hard and fast rule and will vary from year to year, but it will give us a guideline to follow. Further, not all of those making these predictions agree as well. For example, the chart below shows my area, Zone 7 to frost free from April through October, but if one goes to the Farmer’s Almnac, it will tell him we expect to be frost free from April 5<sup>th</sup> to October 26<sup>th</sup>. Be careful when using these factors, but by following the guideline for each type of plant, and maybe making subsequent plantings we will normally be okay.

In the chart below, the vegetable will be followed by a time to start seedlings under a grow light and then a time for setting them into the garden for those species that are benefited by this procedure. Those not so benefited will simply have a planting time for that species. All of these times are relative to the last frost date. They will be referred to by a number of weeks before last frost date (B) or the number of weeks after the last frost date (A).



Top 10+1 Vegetables to Grow

	<u>Vegetable</u>	<u>Start Seeds</u>	<u>Set Out</u>
1.	Beans	6-8 B	1-2 A
2.	Beets	4-6 B	2 B
3.	Cabbage	4-6 B	4 B
4.	Carrots		2 B
5.	Corn		1-2 A
6.	Cucumber	3-4 B	1-2 A
7.	Lettuce	4-5 B	3-4 B
8.	Onions	8-10 B	4 B
9.	Peas		6-8 B
10.	Potatoes	As soon as ground is workable	
11.	Tomato	6-8 B	1-2 A

Add to these such herbs and spices as befit our individual family’s taste and we will be able to provide 60% of our vegetable dietary needs for the year. Add this to the 100% of

our protein needs that we are growing and our homestead is up and running. Such spices as Rosemary, Tyme, Mint, Basil, Cilantro and others are easily grown in pots and Dill is easily sown into our garden.

This first year, there are no plans for a major commercial effort. It is possible to earn a sizable income from commercially grown organic produce, but it is too soon for us. In subsequent years, if we have an interest in such, I would recommend starting with such things as corn and tomatoes. Salad Microgreens can be very lucrative too, without much of a commitment in space, but it requires a time commitment and a market. It does us no good to grow a



hundred pounds of microgreens worth \$8-\$12 a pound if we have no place to market it! These crops, while easy to grow and harvest, have a very short shelf life and must go from our farm to the consumer on the day of harvest.

The first question that always comes up is, “How much should I grow? What will I need for our family for a year?”

We shall address this now. The following chart is from Melissa K. Morris of northwestern Washington state. This lady runs an excellent Youtube.com channel and it a valuable resource in all things that pertain to gardening. She also does classes on all phases of gardening and homestead living. I highly recommend her work. I have her book, “The Family Garden Plan”, and it is from this book that the chart was derived.

We will be showing the data for those eleven we suggested in the prior chart, but in addition, we will be showing data for crops we may not necessarily grow out first year. What we will show is the number of plants required per person, the yield per plant in weight and volume.

### How Much to Grow to Last a Year

<u>Crop</u>	<u>Plants /Person</u>	<u>Yield/Plant</u>	<u>Cups/Plant</u>
Snap Beans	10-15	.5 lb	3-4
Dry Pole Beans	15	.25-.5 lb	2
Beets	36-40	.25 lb	.5-.75
Cabbage	3-5	2 lb	8-16
Carrots	25-30	.25 lb	.25
Corn	15	2 ears	1.5
Cucumber	2-4	3-5 lb	8-15
Lettuce	5-10	1.25 lb	4-6
Onions	15	.5 lb	1
Peas	30	.12-.25 lb	.25
Potato	1-2	4-10 lb	16-40
Tomato	5	5-15 lb	7.5-22.5
Turnip	5-10	.5 lb	2
Garlic	15		
Broccoli	3-5	1 lb	5-6
Cauliflower	2-3	2 lb	3-4
Brussels Sprouts	2-3	.75-1 lb	4
Spinach	15	.25 lb	1.5
Asparagus	10-15	2-3 lb	4-6
Eggplant	1-2	8-10 lb	32-40
Kale	5	1 lb	3-6
Peppers	10-15	1-8 lb	3-10
Squash	1-2	5-20 lb	12-20

### Berries/Fruits

Strawberries	20-25	1 lb
Raspberries	10-25	1-2 lb
Blackberries	2-4	10-20 lb
Rhubarb	2-3	2 lb
Grapes	1	5-15 lb
Blueberries	2-4	5-15 lb

### Fruit Trees Yield

Plum Semi Dwarf	5-6 Bushel
Pears Dwarf	6-8 Bu
Peach Dwarf	3-4 Bu
Cherry Semi Dwarf	10-15 Gal
Apricot Dwarf	1-2 Bu
Apple Semi Dwarf	10-15 Bu

It must be noted that our fruit trees are going to require three to seven years to produce, but once started, if maintained well, they will produce for decades!

Of the berries listed, only the raspberries and strawberries would be expected to bear the first year. The others will require at least two years and the grapes, perhaps three or four. Rhubarb should not be harvested first year either.

Of the vegetable, the Asparagus is a perennial that will require a few years to establish itself well.

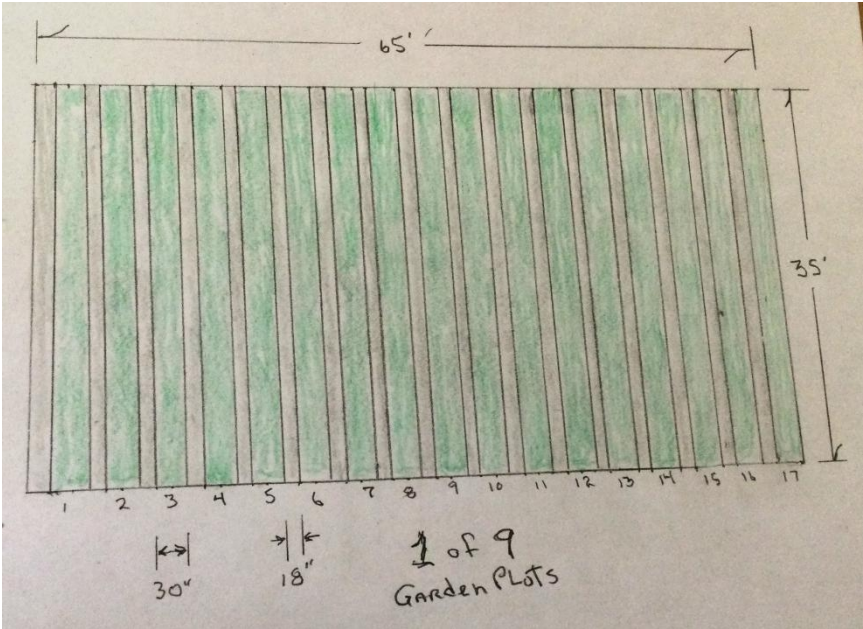
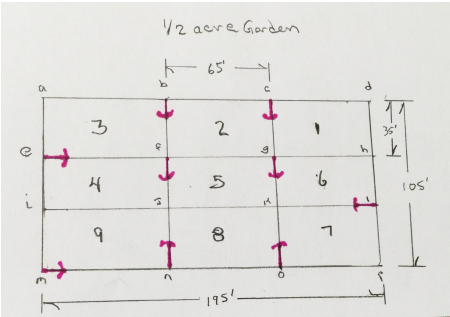
To meet the minimum needs for a family of four with our 11 “must have” vegetables alone, we will be planting a minimum of 710 plants!!! Now, not all of these should be planted at once. Some, like tomatoes and cucumbers require



a long growing season and should be planted indoors in accordance with the first chart in this chapter but others, like lettuce, beets, carrots and peas should be planted in succession every few weeks through the summer to provide us with a fall crop and for some, even into winter.

Where are we going to find the space for this large of a planting? Do we have an area that might work for this? Do we remember the area where we started out pigs?

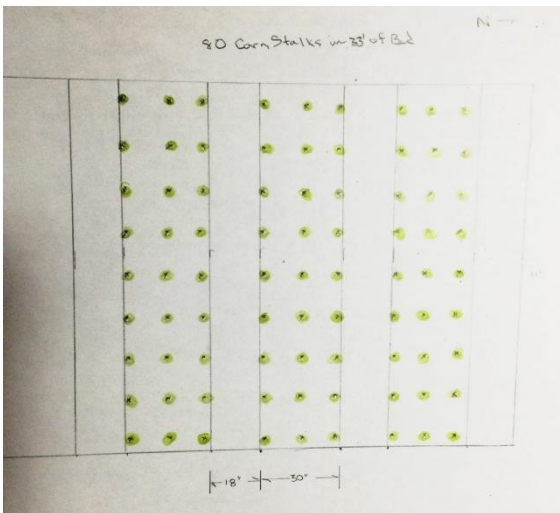
If we recall, we made nine beds that would be perfect for this. Each bed measures 35 feet by 65 feet or 2,275 square feet each. In each of these beds, we shall lay out our planting beds at 30 inches wide by 35 feet long. There will be an 18 inch walkway between the beds so they can be accessed from either side. Below is an illustration of the layout for one of





our paddocks showing how much room we really have here.

Let's take our corn, for instance. Our chart calls for 60 plants for a family of four. I really like corn, so I would add to that a bit and do, perhaps 80 plants. Corn is a plant that requires pollination between plants, so they should be planted in a closed block. In this case, if we plant a foot to fifteen inches apart and use three beds width, we can get our 80 plants in a 9 plant by 9 plant matrix while using only about 1/3 of the length of a bed. The below illustration describes this.



Corn is very light intensive so should be planted in direct sunlight hence, I would plant it at the northwest corner of my bed unit away from where any nearby trees may shade it. Corn should also be planted at two week intervals, so

that it will ripen successionally thereby extending the period we can enjoy fresh corn. Further, I would choose my corn carefully and not be lured by "what's popular now" concept. The old, tried and true, Golden Jubilee or Golden Bantam corn are difficult to beat. One can grow the super sweet Sugar Corn, but to me, it palls quickly and I find myself much better pleased by the end of the season with the standards.

In addition, those varieties will freeze well and are superior as canned corn! Since we are developing our garden to make us self sustaining, these are major considerations. If we decide we want some for sale, then we should consider other varieties as well, including some of the decorative Indian corns. Popcorn should be included as well, for our own use as well as for potential sale. Remember, if we are planning on selling our products, we will have to work on developing out markets BEFORE the product is ready!



The next crop to consider is our tomatoes. Again, this is something I prefer well above average so I would plan on more of this than the average. While our chart calls for about 18 or so plants for a family of four, I would plan on utilizing the remainder of the full 35 foot length planting bed left over from my corn for my tomatoes alone. With my plants spaced at a nominal 18 inches, I can place 34 additional tomato plants in that bed which will be ample for a family of four with an abundance left to sell, barter or give away to cement



relationships.

Again, as with our corn, we need to have a variety of tomatoes growing. We need slicing tomatoes like the wonderful beefsteaks as well as paste tomatoes like the Romas. There are many very good cherry tomatoes available to us as well as other salad type tomatoes. I love some of the Golden tomatoes as well, like the Golden Jubilee.



Just a note here... if we wish to monetize our garden to make it physically pay for itself, would it not make sense to market such crops as tomatoes which sell for \$5-\$6 per pound for organically grown, heirloom varieties and are from a half pound to

two pounds each? Believe me, I would much rather deal in a tomato that would sell for \$12 EACH that comes from a vine that will provide me many such than I would corn that sells for \$1 per plant!

It's not that corn is more difficult to grow or to market, but it requires so much of our soil to grow enough to make a difference. For instance, the planting we planned for our family's use over the next year would provide us with \$160 in gross income! It would require a 22X23 matrix to generate \$1000 in gross sales! This is not undoable, and if I have the ground to do it, I would certainly consider it, but if my ground is in short supply, there are other things I would

consider first. Head lettuces, some leaf lettuces and kale would certainly fit this criteria.

In our situation, with our nine separate planting paddocks, if we have the time and resources, we could well devote one paddock to this effort. We could easily plant 35 plants per row with 3 rows per bed. Since we have 17 beds in our paddock, that would give us a 35X51 matrix or 1785 plants in a paddock. This would generate us between \$1500 and \$2000 in gross sales for our efforts. Of course we would need to generate a market for this level of production. Do we know enough people to market over 3500 ears of corn? Is there one or more Farmer's Markets we can attend at the time our produce is ripening?

Our corn plantings should be planted about a week apart over a month or so to assure a succession in our harvest time spreading it out a bit. How many plantings, of course, will be determined by the length of our growing season where we are located. Here in zone 7, we would start planting the 3<sup>rd</sup> week of April then successive two weeks for the next three. This will have our sweet corn off the stem and disposed of before the first of October. Flint corn, grown for milling into meal will remain on the stem until fully dried.



Also, if we are using a heritage breed and wish to save seed for next year, that needs to be fully dried as well. If weather threatens, these two latter corns may be hung to dry in a clean,

dry spot.

Lettuce is another vegetable that is essential to start in succession. When our weather gets hot, it will turn bitter and will bolt. At this point it is good for chicken feed and pig feed but little else. Again, there are a wide variety of lettuces from which we can choose and I recommend we plant a range of them to see what works best for us. If I were going to contemplate selling some commercially, I would, for sure, plant some head lettuce as well as the loose leaf varieties. Experiment and see what works best for us in our garden. Follow the guidelines for the size of our family and we will find our garden fitting very nicely into one of our paddocks or, perhaps, two at the most.

Plan on a summer planting of those crops that will do well going into fall and winter. Root crops are common to be planted at this time as well as things like Brussels Sprouts as they will last well into winter... especially if we cover them when the weather begins to turn to winter.



When planting our vegetables, don't hesitate to plant unusual cultivars if for no other reason than that they are different and are a conversation starter. Any time we can attract



a person's attention, we have met a new potential customer and the wise vendor at least gives them his business card, a warm smile and an invitation to visit their website and see what is happening there. It does not hurt to invite them out to the homestead as well to see where their food comes from. From such a small beginning as a purple carrot or purple cauliflower, a life-long customer relationship may well develop. I would have enough of these on display that I could offer one for free for them to sample. It's a wise investment that could result in many, many future sales. Everyone likes the unusual... cultivate that and work on it.

A garden space with a portable chicken run in close proximity is the ultimate in serendipity and mutual growth. The excess growth and trimmings from the garden go directly to the chicken run to feed them, whereupon the chickens generate waste that goes back to the garden to feed it.



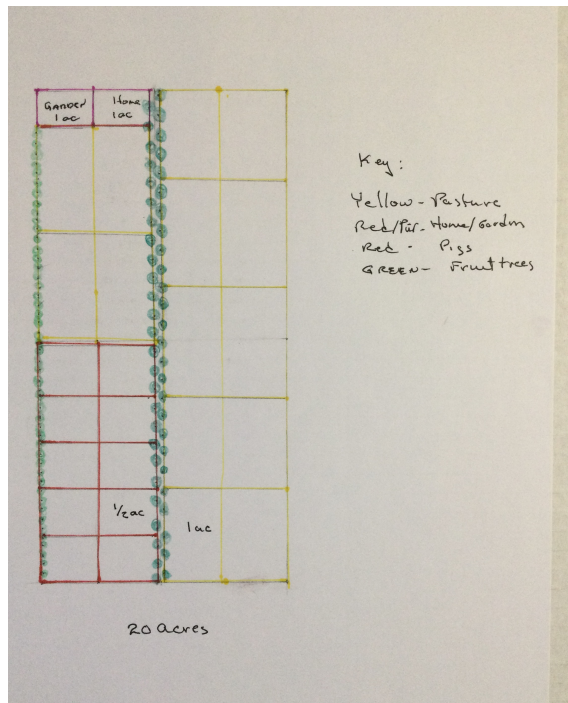
A very nice arrangement here is to have a permanent chicken pen in one of our paddocks (perhaps the center paddock, #5) where we can put down mulch or shavings to provide the carbon for our carbon-nitrogen diaper the pen will need to keep it clean and odor free from the chicken's waste. This combination is removed regularly and stacked and allowed to compost. This compost will then go back into the garden, creating the finest in soil for our crops.

In this pen, keep about 15-20 laying hens and one goose. The goose will serve as a guard against aerial predators for

the chickens. Now, in addition to the mounds and mounds of compost being generated, this group will yield about a dozen eggs a day as well! This is what I really call a win-win situation. And alternative would be to rotate my chickens from paddock to paddock each year, thereby building the soil in them all, one by one!

If we return to our layout of our homestead as shown below,

we see the layout of the ideal homestead of 20 acres. The layout of the entire farm is beyond our scope for this chapter, but the green double line of circles in the middle is what we are interested in at this point. This is where our fruit trees will go. There is room for 80 trees in this area, bordering each side



of the driveway that runs the entire length of the property from the very rear to the very front.

Along the left property line will be our berry bushes and grape vines. Again, there is far more room here than we need, but we have ample space to expand to our heart's content. Along the property line at the bottom of the drawing we will place our bee hives. At least two more hives will be placed at the left side, half way on the line as



well as one more near the garden. This will insure we have adequate pollinators for whatever we wish to grow and wherever we wish to grow it. Our pasture will be rife with both red and white clover, providing the finest in honey-making raw materials.

Our berries, except strawberries and some raspberries will not fruit the first year and our fruit trees will take from 3 to 7 years to yield us a crop, so it is necessary to get them into the ground and growing this first year.



Some fruits, like cherries, will require a second pollinator species to make fruit. A single cherry tree will simply not do it as there is no source for pollination. Personally, with cherries, I like to plant a sour cherry as the pollinator with sweet cherries as my crop. By doing this, I get a yield of pie type cherries, the sour variety, and whatever sweet cherry I like. Bing and Rainier are the two favorites for my area.

Some apples require pollinators and some do not. Check with your nursery at the time of purchase and they will tell you. Again, I like to use a variety that has value, like a crabapple, as a pollinator because the fruit from this tree is very high in a natural pectin and will serve to not need a commercial pectin source.

There is a trend toward the latest and brightest varieties for apples, but for our homestead, while it would be good to

have one tree of this type, it is better to remain with those that we know work best in our area. For canning, an apple like Gravenstein or Golden Delicious is very hard to beat. If we like an apple that remains hard, even after cooking, then the Granny Smith is a choice. Personally, I have no use for this apple as I like my cooked apples to be soft and edible.

For an apple to enjoy fresh, my recommendation is the Red Delicious. There are many others that may do better in the area where your farm is, but it is difficult to go wrong with this variety. It has the advantage of keeping very well, the only weak point of the Gravenstein. It is a wonderful apple for eating fresh or for canning or baking, but it simply does not keep and must be used soon after picking.



Plums are interesting in that it is possible, and, often desirable to graft several varieties to the same root stock, thereby yielding a single tree that will have blossoms coming and going at various times and having fruit ripen in succession on the same tree! This is probably not something that we, as a commercial grower would want to do, but it is entirely possible and makes an interesting conversation piece, and as mentioned prior, any conversation opener is a path to a potential customer.

We must be careful with our berries, but they are very prolific and are a good source of gifts to potential customers

and, as they mature, a source of sets for new plants that are quite valuable. For instance, strawberries send out a mass of runners each year to develop new plants. If we husband these new starts, they can be worth \$3-\$4 EACH on the market! It is quite easy to harvest these new runner created plants to expand our own bed free of charge, or to use to enhance our income on the homestead.

Illustrated below is a very unique growing system for our strawberries... This system utilizes a length of 4" PVC pipe



with a 3" diameter hole drilled every 6" along it's length with a small drain hole drilled here and there along the bottom of the pipe. The pipe is filled with soil and a soaker hose is run inside the pipe as well. The berries are planted in the holes and nourished there as if they were in soil. Special care is taken with runners to train them to spots of soil where they can be husbanded... and limited to two runners per plant annually.

We can make as many of these hanging gardens as we need to fulfill our goal. The rule of thumb here is one 10 foot pipe length per family member, hence our family of four will need 4 pipes to fill their needs. If we wish more for sale or gifting, figure on about 20 lbs of berries per pipe. In my garden, I would have approximately one-third of them with

an ever-bearing variety and the remaining two-thirds with a single crop variety. This way, I would get the bulk of my canning, freezing and jams done at once and the remainder of the summer, I would be enjoying fresh berries regularly.

In summation, below is our first year planting for our family of four. This will fit easily in one of our paddocks and will supply our needs for the year. If we desire more to sell, and we have a market for them or feel confident we can develop that market, develop more ground and plant that which we feel we can market.

### What We are Growing First Year

<u>Crop</u>	<u>Plants</u>	<u>Yield/Plant</u>	<u>Total Yield</u>
Snap Beans	60	.5 lb	30 lb
Dry Pole Beans	60	.25-.5 lb	25 lb
Beets	160	.25 lb	40 lb
Cabbage	20	2 lb	40 lb
Carrots	120	.25 lb	40 lb
Corn	80	2 ears	180 ears
Cucumber	16	3-5 lb	80 lb
Lettuce	40	1.25 lb	50 lb
Onions	60	.5 lb	30 lb
Peas	120	.12-.25 lb	30 lb
Potato	10	4-10 lb	80 lb
Tomato	25	5-15 lb	300 lb
Turnip	40	.5 lb	20 lb
Garlic	60	none 1 <sup>st</sup> year	
Broccoli	20	1 lb	20 lb
Cauliflower	12	2 lb	24 lb
Brussels Sprouts	12	.75-1 lb	12 lb
Spinach	60	.25 lb	15 lb

Asparagus	60	no yield first year	
Eggplant	8	8-10 lb	70 lb
Kale	20	1 lb	20 lb
Peppers	40	1-8 lb	160 lb
Squash	8	5-20 lb	120 lb

### Berries/Fruits

Strawberries	100	1 lb	100 lb
Raspberries	100	1-2 lb	150 lb
Blackberries	16	10-20 lb	
Rhubarb	12	2 lb	
Grapes	4	5-15 lb	
Blueberries	16	5-15 lb	

### Fruit Trees Yield

Plum S, Dwarf	3	5-6 Bushel
Pears Dwarf	2	6-8 Bu
Peach Dwarf	3	3-4 Bu
Cherry S. Dwarf	3	10-15 Gal
Apricot Dwarf	2	1-2 Bu
Apple S. Dwarf	4	10-15 Bu
Walnut	1	3 Bu

As can be seen from the yield, making our produce ready to last through winter is not a small job as well. Canning and preserving are skills that will be needed early on and should be cultivated as soon as possible in our journey. These charts, except for the fruit trees, are for our family of four alone. Since there is such a wait time for the trees to mature, it is meet that they be planted in our first year. Eighteen are listed and some of those with multiples should be of different varieties as well. Personally, I would plant as large

an orchard as I could handle and could afford this first year so as to have plenty to market in the fall.

In conclusion, to address the bane of all gardeners everywhere, what do we do about insects and other pests in our garden? There are two very good solutions that will cost you very little in produce and are quite effective... the first is to let ducks run through your garden. You will lose a bit of produce, but any workman worth his hire is due to cost us in one way or another. The other is Guinea Fowl. These African transplants will not bother our crops and will keep them totally insect free. Plus, they are not nearly as messy as ducks. With the ducks,



one must always be aware of where he is stepping when they are about. This is much less so with the Guineas... and they are so unique and beautiful. In addition, they are tremendous watchdogs and will sound the alarm immediately on any snake in their range! Plus.. they are very tasty on the table!