Orchards

As I progress through the writing of Part IV in my series, I am finding that I spend more and more time thinking about how to go about solving various primitive skill problems. As anyone who has read my book series can attest, I tend to do my thinking on a grand community based scale. Don't get me wrong, the folks with the smaller enclaves that incorporate hyper security and steadfast OpSec do serve a purpose in that they remind us all that loose lips sink ships. However, even the most prepared among us will need things in time. The more valuable you can make yourself in a community setting the better off you will be... this includes your ability to barter.

The term 'barter' generally conjures images of people trading for clothing, medicine, bullets, etc. Can you imagine how valuable your presence would be if you had the ability to provide fruits and nuts?

And there you have... it is this question that brings me to the premise of this paper. If there were no electricity, where does one get the necessary nutrients to fend off things like scurvy (vitamin C deficiency) or becoming protein deficient or a whole host of other maladies?

Now, to limit the scope of this post, I've decided to curtail any and all potential answers to my question/research to <u>Cold Hardiness Zone 6a</u>, which is where I am currently located. This Zone stretches almost across the entire country between the south and the northern plains. Unfortunately, my Cold Hardiness Zone does not lend itself to growing any form of citrus without abundant heat, humidity, sun light, and the ability to move plants indoors during the winter to, again, keep them warm. A scenario where there is no electricity automatically leaves me devoid of this option, for the most part. So now what?

Look to your garden that's what...

According to the <u>HealthAliciousNess.com</u> article I found, there are plenty of options that can be grown right in your very own garden to supply Vitamin C. Here are their top ten Vitamin C producers and I've taken the liberty of crossing off the ones that won't grow in my Cold Hardiness Zone:

- 1. Yellow Bell Pepper
- 2. Guavas
- 3. Kale Dark Green Leafy Vegetables
- 4. Kiwifruit (green)
- 5. Broccoli Brassica Vegetables
- 6. Strawberries Berries
- 7. Oranges Citrus Fruits
- 8. Tomatoes (cooked)
- 9. Mange Tout Peas
- 10.-Papaya

Not bad... six of the top ten can be grown here in Zone 6a. Oddly, the six that I can grow are veggies.

There was a lot of alternate fruit and vegetable information on the site I am using for my research as well. I've constructed this handy table in an effort provide a thorough knowledge base. Rows shaded in green produce/provide the most Vitamin C given the fruit/vegetable.

Fruit/Vegetable Category	Variety	Vitamin C in 100g	Per Fruit/Vegetable	% DV
	Yellow	183.5mg	341.3mg	569% (per pepper)
#1 Bell Peppers	Red	-	-	349% (per pepper)
	Green	-	-	220% (per pepper)
#2 Guavas	Guavas	228.3mg	125.6mg	209% (per fruit)
	Kale	120mg	80.4mg (per Cup)	135% (per Cup)
#3 Dark Green Leafy	Turnip Greens	-	-	55% (per Cup)
Vegetables	Swiss Chard	-	-	18% (per Cup)
	Spinach	-	-	14% (per Cup)
#4 Kiwifruit	Kiwifruit (green)	92.7mg	64mg (per Cup)	107% (per fruit)
	Broccoli	89.2mg	81.2mg (per Cup)	135% (per Cup)
	Brussel Sprouts	-	-	125% (per Cup)
#5 Brassica	Green Cauliflower	-	-	94% (per Cup)
Vegetables	Cauliflower	-	-	86% (per Cup)
	Red Cabbage	-	-	85% (per Cup)
	Cabbage	-	-	60% (per Cup)
	Strawberries	58.8mg	97.6mg (per Cup)	163% (per Cup)
#6 Berries	Raspberries	-	-	54% (per Cup)
#0 berries	Blackberries	-	-	50% (per Cup)
	Blueberries	-	-	24% (per Cup)
	Oranges	53.2mg	95.8mg (per Cup)	116% (per fruit)
	Pummelo	-	-	619% (per fruit)
#7 Citrus Fruit	Grapefruit	-	-	114% (per fruit)
	Lemon	-	-	74% (per fruit)
	Clementine	-	-	60% (per fruit)
#8 Tomato	Tomatoes (cooked)	22.8mg	54.7mg (per Cup)	93% (per 2 Tomatoes)
	Mange Tout	60mg	37.8mg (per Cup)	34% (per 10 pods)
#9 Peas	Green Peas	-	-	97% (per Cup)
	Frozen Peas (cooked)	-	-	59% (per Cup)
	Papaya	60.9mg	88.3mg (per Cup)	159% (per fruit)
	Mango	-		100% (per Cup)
#10 Papaya	Pineapple	-	-	131% (per Cup)
	Cantaloupe	-	-	108% (per Cup)
	Honeydew	-	-	53% (per Cup)

I've discussed gardening and vegetables many times over so I won't repeat that information, but I haven't written much regarding orchards... and that's where I really want to take this post.

Now, it is my theory that most travelers in a grid down scenario do not know how to identify trees unless there is visible fruit present on the limbs... and even then they may be skeptical. That's a good thing for you the homesteader/farmer/community provider.

But what fruit trees can I grow in Cold Hardiness Zone 6a?

As it turns out, there are plenty of options.

I am using the <u>Stark Bros</u> website as my reference material for the simple reason that they have produced one of the easiest interfaces for consumers and there's a wealth of information available about all of the topics I am about to cover.

So let's get started.

To begin with, I selected "Fruit Trees" from their handy menu and then entered my zip code. From there, if I'm curious about whether or not something grows in my Cold Hardiness Zone, all I have to do is look for the checkmark denoting it as being 'compatible'. Easy peezy... well, sort of.

Before I get ahead of myself, a note of caution, a lot of things will be checked. You need to read the description to be sure. In a grid down scenario, moving plants in and out of pots as winter and frost approaches isn't going to fly.

Why?

Because the grid is down, silly. You won't know when there will be a frost freeze warning or a blizzard or a nor'easter/polar vortex. Well, that is unless of course you become very adept at reading the weather which, to be fair, is entirely possible... I just wouldn't bank on it.

But keep reading... there's more... a lot more.

Here's another handy table I constructed, complete with <u>nutritional information</u>, for the selection of fruit trees compatible in an orchard for my soon-to-be, hopefully, farm/homestead. I apologize in advance for the small font.

Fruit Tree	Years to Bear Fruit	Pollination	Mature Size	Nutritional Information (Raw)	Comments
Apple - Honeycrisp	2-5 years	Pollinator Needed	8'-10' tall		I chose these three apple
(dwarf)			8'-10' wide	(F C-laries /12F 1 C -h 1)	varieties because these three
				65 Calories (125g or 1 C chopped)	are the varieties most
				17g Carbohydrates	recommended for apple pies. I
Apple - Mutsu	2-5 years	Pollinator Needed	12'-15' tall	3g Fiber	also chose dwarf (when
			12'-15' wide	13g Sugar Og Protein	possible) for easier
Apple - Cripps Pink	2-5 years	Pollinator Needed	8'-10' tall	og Protein	maintenance.
(dwarf)			8'-10' wide		
Apricot - Wilson	2-5 years	Self Pollinating	8'-10' tall	74 Calories (155g or 1 C halves)	I chose dwarf for easier
Delicious (dwarf)			8'-10' wide	17g Carbohydrates	maintenance.
				3g Fiber	
				14g Sugar	
				2g Protein	
Cherry - Blackgold	4-7 years	Self Pollinating	15'-18' tall	87 Calories (per 138g or 1 C w/ pits)	I chose sweet cherries because
Sweet Cherry			15'-18' wide	22g Carbohydrates	they have a higher carb load
				3g Fiber	than tart cherry varieties and
				18g Sugar	that's important.
				1g Protein	
Fig - Chicago Hardy	1-2 years	Self Pollinating	15'-30' tall	47 Calories (64g or 1 large fig)	Figs provide a nice variety plus
			15'-35' wide	12g Carbohydrates	are tasty in cookies and as a
				2g Fiber	spread on crackers.
				10g Sugar	
				Og Protein	
Pawpaw -	5-7 years	Pollinator Needed	15'-25' tall	80 Calories (1 fruit)	Species native to my region.
Pennsylvania Golden			15'-25' wide	18g Carbohydrates	
				2.6g Fiber	
				14g Sugar	
				1.2g Protein	
Peach - Finger Lakes	2-4 years	Self Pollinating	8'-10' tall	68 Calories (176g or 1 large fruit)	I chose dwarf for easier
Super Hardy (dwarf)			8'-10' wide	17g Carbohydrates	maintenance.
				3g Fiber	
				15g Sugar	
				2g Protein	
Pear - Barlett (dwarf)	4-6 years	Pollinator Needed	8'-10' tall	86 Calories (148g or 1 small pear)	I chose dwarf for easier
			6'-7' wide	23g Carbohydrates	maintenance.
				5g Fiber	
				15g Sugar	
				1g Protein	
Plum - Fellenberg	3-6 years	Self Pollinating	8'-10' tall	76 Calories (165g or 1 cup)	I chose this European (Italian)
(dwarf)			8'-10' wide	19g Carbohydrates	variety as opposed to the Asian
				2g Fiber	variety because the European
				16g Sugar	varieties are better for
				1g Protein	preserves and drying for prunes.
					I also chose the dwarf for
					easier maintenance.

Note the species of trees that state 'Pollinator Needed' under the 'Pollination' column. This means that you will need to plant more than one of these trees in order for the blossoms to become fruit. Here's what the Stark Bros website has to say regarding <u>apple tree pollination</u>. Similar advice can be applied to the Pawpaw and the Pear varieties.

Did you happen to notice the vast difference in carbs vs protein for the fruit?

Well, that's because fruits are high in sugar!

As a result, more carbs and very little fiber and protein is produce/consumed. The good news is fruit trees attract wildlife. If you are looking for more protein, pick off a couple of the critters when they

come to get a snack. The other option for greater amounts of protein in your grid down diet would be the inclusion of nuts.

Planting nut trees in my Cold Hardiness Zone, like planting fruit trees, automatically creates a limiting factor due to temperature. Plus, nut trees add an additional component given their sheer size as they are generally much larger than their fruit bearing brethren. However, there are still plenty of options to choose from. Here are the ones the Stark Bros website carries that work in my Zone:

Nut Tree	Years to Bear Fruit	Pollination	Mature Size	Nutritional Information
Almond - All-In-One	3-4 years	Self Pollinating	12'-15' tall	824 Calories (138g or 1 Cup)
			12'-15' wide	27g Carbohydrates
				16g Fiber
				7g Sugar
				30g Protein
Chestnut - Auburn	3-4 years	Pollinator Needed	30'-40' tall	350 Calories (143g or 1 Cup)
Homestead			30'-40' wide	76g Carbohydrates
				7g Fiber
				15g Sugar
				5g Protein
Hazelnut -	6-8 years	Pollinator Needed	18'-25' tall	722 Calories (115g or 1 Cup)
Fingerlanks Super-			15' wide	19g Carbohydrates
Hardy Filbert				11g Fiber
				5g Sugar
				17g Protein
Pecan - Missouri	10-20 years	Pollinator Needed	75'-100' tall	753 Calories (109g or 1 Cup)
Hardy			75'-100' wide	15g Carbohydrates
				10g Fiber
				4g Sugar
				10g Protein
Walnut - Lake	4-5 years	Self Pollinating	30'-40' tall	765 Calories (117g or 1 Cup)
English			30'-40' wide	16g Carbohydrates
				8g Fiber
				3g Sugar
				18g Protein

Can you imagine what you'd be able to barter for if you happen to be sitting on a well thought out orchard at your disposal?

Can you imagine the different things you'd be able to make?

The possibilities are seemingly endless if you are creative enough and have given any of it a modicum of thought.