

The Oil Drum: Campfire

Discussions about Energy and Our Future

Edible Landscaping: One Transition Step from Peak Oil

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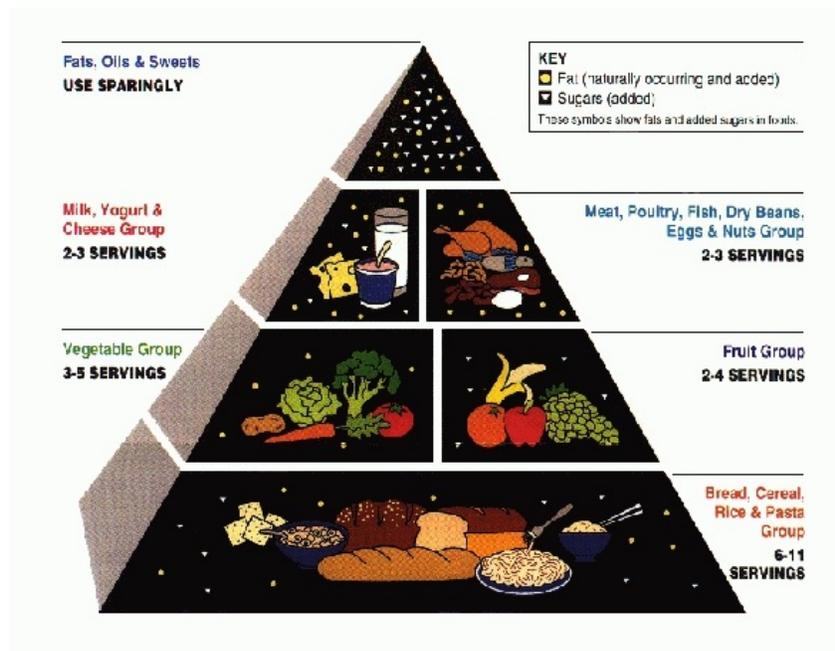
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This is a guest post by Will Stewart, who has written a number of articles previously at The Oil Drum.

We are told that in the US, the food on our table has traveled an average of **1500 miles** and consumed **9 calories of energy** for each food calorie on our plate. In a time when "oil prices are likely to be both higher and more volatile and where oil prices have the potential to destabilize economic, political and social activity"[1], we need a way to mitigate the near certain risks of much higher impending food costs.

There are a number of answers, one of which is to support local agriculture. Additionally, one can grow their own food in a pleasing, sylvan landscape. 5 years ago, I decided I was going to shift from a native plantings landscaping theme to one that turned my yard into a source of sustenance. I had read about "Edible Landscaping" and "Permaculture", and decided that approaching tough economic times could be mitigated by growing more of my own food in a manner that did not require a large degree of manual labor. After all, we are supposed to have 2-5 helpings of fruit each day, and nuts have been shown to be very healthy sources of **protein and essential fatty acids** (and **even lowering cholesterol**). My family likes to "pick your own" at local orchards and shop at farmer's markets, and felt that augmenting those purchases with our own fruits and nuts meant that we would reduce the need to ship food across country. So in addition to our gardening and backyard chickens, we could effectively cover 3 out of 5 of the basic food groups in the food pyramid right in our yard.



[Food Pyramid](#)

Where to start?

So how does someone go about determining what is appropriate and manageable to grow in their yard? The following factors are the most important;

- **Location:** First, one needs to know what hardiness zone they are in, to eliminate candidate plants that would die from the low temperatures in their area. For the US, refer to the [Hardiness Zone Map update](#) provided by the Arbor Day Foundation (hit "Play"). Other hardiness maps are available for [Canada](#), [Europe](#), [Australia](#), [South America](#), [FSU](#), [China](#), [Japan](#), and a [global map](#) . Any plant that does not grow well in the zone you are in should be removed from further consideration, unless you are prepared to go to extra measures (such as create a greenhouse, move the plant indoors seasonally, etc).
- **Disease-resistance:** Many popular fruit varieties (that often show up in local nurseries or hardware stores) require extensive spraying to control a wide array of diseases, many of which have been imported from other countries and attack local species that have no inherent immunity. Considerable effort has gone into creating hybrids of species with numerous immunities to produce species that are resistant to a wide variety of disease. Once you decide on the types of fruit you would like to grow, learn about the diseases that are endemic in your area. Then select varieties that are resistant to those diseases. (More on this in future articles)
- **Pollination:** Some species are self-pollinators and do not require a second specimen or variety to produce fruit. Many species, however, require a second specimen or even another variety to produce fruit. In this case, you must consider the other varieties that are needed, the timing of the spring bloom (which must overlap sufficiently), and an extra specimen so that the loss of one tree does not eliminate the ability to pollinate. Note how close pollinators should be to each other (e.g., "no further than 20 feet for some dwarf apple trees"). Learn how to attract and keep natural pollinating insects (e.g., [Mason bees](#), more on this in future articles)
- **Fruiting schedule:** Be cognizant of the timeframes in which your [fruits will ripen](#); the best approach is to try to cover as much of the calendar year with as diverse a harvest as possible. For example, I've chosen 4 varieties of apples that will provide fruit from July through November, with the later apples able to be stored through the winter ("winter-keepers"). Other choices include strawberries (May) and June berries for early fruit and Lingonberries for late fruit (December). This way, one can enjoy fresh fruits almost year around and dehydrated/canned fruit any time of year.

- **Pests:** The luscious pictures of fruit on the tree tags at the local nursery often turns into a nightmare of worm-eaten sickly fruit after the first couple of bearing years. Find out from your local horticulture agent which pests are likely to attack the types of fruits or nuts you've chosen. Often, some varieties also have some resistance to common pests. Many pheromone traps and natural pesticide products exist to keep insects from damaging your trees or fruit crop, and there are natural insect predators that can be encouraged (with their favorite habits) to take up residence in your yard (e.g., [Ladybugs](#), who eat aphids, scale, and mites). Learn about Integrated Pest Management (IPM) in order to more efficiently target specific lifecycle vulnerabilities of the pests, either with [organic](#) or non-organic controls. (More on this in future articles)
- **Size:** Standard sizes of common fruits such as apples and pears are often too large for homeowners to maintain and harvest effectively. Dwarf and Semi-dwarf varieties are very popular now with home gardeners, and they also bear fruit much sooner. The size (and other attributes such as disease resistance) depends greatly upon the rootstock used. Nut trees can generally be large without much issue. (More on this in future articles)
- **Harvest/Storage:** When will each plant bear their crop? How long can it be stored? What are the preferred storage conditions (temperature, humidity)? Can they be dehydrated/canned/etc? (More on this in future articles)

Initial List

After performing the above analyses, I came up with the following candidate plant list based on my location in the Mid Atlantic US (the list for your specific area may differ);

Fruit Trees:

- Apple
- Asian Pear
- Plum
- Pawpaw
- Jujube (Chinese Date)
- Persimmon (American)
- Persimmon (Asian)
- Pomegranate
- Watermelonball Tree (Chinese Mulberry)

Berries:

- Blueberry

- Raspberry
- Grapes
- Ligonberry
- Juneberry
- Elderberry
- Gooseberry
- Goumi
- Aroniaberry
- Black Huckleberry
- Figs
- Kiwi

Nuts:

- English Walnut
- Heartnut (Japanese Walnut)
- Northern Pecan
- Filbert
- Chestnut

The above list is a fair number of plants, though one's yard can be artfully planned out to yield a large amount of fruits and nuts with a thoughtful design approach. For example, Gene Yale in Chicago has a planting of 97 apple trees (and other fruits) in a [1/4 acre yard!](#)



Gene's backyard

Sept. 8, 1997

Our own yard is approximate 1/3 acre, though we have many acres in sheep pasture. Coincidentally, the sheep also need some relief from the summer sun, so plantings just inside the electric fence (protected by circular fence cages) serve dual purposes.

In coming articles, we'll talk about laying out plans, the types of fruits and nuts that are doing well here, and how to put it all together to begin executing your plan early this fall. While this series will be about hardiness zone 7, most of the plants involved are suitable in at least two other zones.



References:

1. Quote from [Wall Street Journal](#) by Philip Dilley, the chairman of Arup, the consulting engineers to the [UK Industry Task Force on Peak Oil and Energy Security](#)



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