Vegetables:

To come soon since I'm a lazy fuck.

Tree crops, and tree management: Version 0.1

Not the PDF Strelok's guide to mostly tree crops (With some vines/shrubberies), orientated to the North American region

Why tree crops?

Because Long term projects which have consistent yield and you don't have to plant them yearly! Also if planted in a dense manner may double as concealment or cover.

Are there drawbacks?

Of course, everything has a drawback you dummy. It takes usually 3-10 years to be actually decently productive. Some require pollination, others do not. A late freeze might permanently fuck over your entire orchard too (Hello, Texas and Great Plains States). Disease is an issue at times.

>Why is the fruit portion so damn short?

I fucking suck at growing fruit trees (they keep freezing to death since I'm up "north"). In addition, they generally don't grow well unless you live in South California, Texas or Florida. As read earlier, the first is a fucking warzone the second Solcal runs even low on food. The latter two may or may not be stable areas - Flordia due to Miami-Dade and Texas being so close to wetback cartel land.

Things you should know before attempting this:

How to take a pH of soil, identify types of soil, generalized identification of plant deficiencies and excessive nutrients, USDA hardiness zones, how to predict the weather (roughly), how to use a gun because pests (Why are you on /k/?).

Viable and/or common tree nuts crops that can be cultivated in the US:

Chestnuts, Pecan, Hazelnuts, Walnuts, Ginko(?), Butternut (?).

Why is X crop not listed?

Usually not viable, I'll hit up the major crops below:

- Almonds take up too much water usage. Also disease ridden if not outside CA.
- Several major nuts are tropical and aren't useful to most assholes since there is not much tropical space in the USA. Check your local extension office for info if you're a tropical faggot.

Chestnuts (Genus *Castanea*)

!!!WARNING: IF YOU LIVE EAST OF ROCKIES, THE CHANCE OF CHESNUT BLIGHT IS HIGH. ESPECIALLY IF YOU ARE A FAGGOT FROM THE ATLANTIC COAST!! - Wyoming, Monanta, and Colorado may be an exception, more info is needed.

Chestnuts are decent crops, but generally not cultivated in the US due to Americans bringing Chinese Chesnuts which absolutely massacred the native Chestnut population in the early 20th century.

American Species, *C. denata* (American), *C. pumila* (Allegheny chinquapin)

Eurasia Species of note: *C. Mollissma* (Chinese), *C. crenata* (Korean/Jap), *C. sativa* ("European")

Nut growth requirements:

Tree age: 3+, ideal age 15+, at least >1 tree since self-incompatible

Tree canopy needs to reach 65-75 ft in diameter for maximal yield

100+ frost free days to grow

C. pumila is an interesting dwarfing rootstock .... if we ever figure out graft issues.

General climate requirements:

For most in genus, hardiness zones 4-9, Japanese Chestnut may have higher temperature tolerance range due to being in SE Asia. American Chestnuts grow all the way to 4a, although even lower zones may be possible, they do not bear nuts well.

Likes well drain non-clay soils, pH ideal 5.5-6.5

Note:

American and Eurasian species are generally not graft compatible, but ARE able to pollinate each other (Chinese chestnuts receive reduced yield when bred with non Chinese ones) we either are not grafting correctly OR there is a genetic reason. Either way, this causes what is termed as "Delayed graft incompatibility" and kills even successful unions.

Harvesting:

Either wait to fall from tree, or use tree shaker or a god damn pole to knock it off.

Pest and disease:

Anything that eats nuts. Seriously.

Asian Chestnut Gall Wasp

As the name implies, also introduced to North America, yay!

Recommended control action: Biological control

Japanese Beatle (*Popillia japonica*)

Generalist forager (eats everything) fucking piece of shit. Once again, introduced and not native. Not really an issue for older trees.

>Recommended control action: On mornings ~70F, knock down into soapy water bucket, pestcides

Cicadas (*Magicicada* species)

Annoyance when it fucking emerges.

>Recommended control action: Netting, not planting trees in doom cicada year

Fun fact these shits are edible (careful of heavy metal poisoning though)

Ambrosia Beetles: (Subfamilies Scolytinae and Platypodinae, granulate ambrosia beetle *Xylosandrus crassiusculus,* black stem borer (*X. germanus*), and fruit-tree pinhole borer *Xyleborinus saxeseni*

Tunnels inside tree, cultivates fungus, kills tree. Bullet shaped, 1/16 inch long, dark or brown. Once again, some are introduced species (noticing a trend here with Chesnut pests?)

>Recommended control action: Ethnol phenome traps. Useless if they got in the bark.

Weevils, (lesser chestnut weevil *Curculio sayi*, et al.)

Shits worm into your nuts before they ripen and chew their way out

Recommended control action: Harvesting before nuts hit the ground. Keeping your orchard floor clean of nuts, making sure they don't get to infect next year's crop by burning, spraying. Nuts can still be eaten if you boil in 120F water for 20+ minutes.

Sucking Insects

Shit that sucks on the tree vascular system

Generally not an issue, depends on locale so not listed. Suggest spraying or biological control with predators.

Moths and Butterflies (Of note particularly Gypsy Moth *Lymantria dispar*, also Orangestriped oakworm *Anisota senatoria* and yellownecked caterpillar *Datana ministra*)

Larvae eat all your leaves and tree dies

Recommended control action: for L. dispar, wrap burlap bag around trunk. Otherwise pray, biological control.

Chesnut blight (Cryphonectria parasitica)

Causes crankers, girdles (strangles) tree.The big bad of American Chesnut species.

Recommended control action: Depends on species. See below:

American Chesnuts:

You're out of luck unless its a hybrid. Even then, tough luck

Don't plant in low elevation and areas with humid, hot summers

Don't fucking plant trees and remove from family Fagaceae (Oaks, Breech).

Get soil, make it wet, pack on cranker. Only extends longevity doesn't cure.

Sanatize your fucking tools.

Pray to the /k/ube and cleanse it with napalm?

Eurasian

Usually not an issue

Phytophthora Spp. (Ink Disease or Root Rot)

Kills trees by assraping roots. Generalist disease that affects most trees.

Recommended control action: Use cultivar with resistance. Choose sites without water logging and pH <7. Don't choose infected soils since this shit can last up to 20 years and isn't easily removed from soils, see misc appendix at end....

!!!Experimental!!! Ridomil (Metalaxyl-mancozeb mixture), as well as urea or potassium phosphite. Pray to /k/ube since napalm cannot kill it.

Rodents

Remove ground cover (They like hiding), traps, biological control.

Deer/hogs

Use a fence, use a gun and genocide the pest species so hard you make Karadžić proud.

Pecans (*Carya illinoinensis*)

Native to US/Mexico, from Texas to Indiana, can be planted as far as Virginia and Arizona (not viable in latter because haha mass irrigation in a desert in SHTF?). I'd like to say that Pecans are much simpler than Chestnuts but that's like saying the F-35 is a less complicated Zumwait.

Climate requirements:

US pecans are hardiness zone 5-9, Mexican ones are 7-11, but I doubt you want to go to cartel land. Also note: Mexican gene pool is relatively untapped because nobody wants to be hung in the middle of the street beheaded, or raped and dismembered in a dumpster.

Soil is preferably clay, pH is 6.5-7.5.

Tree nut production requirements:

150-170 frost free days

Chilling hour requirements vary widely (400-1500+)

Shit ton of water in the summer (Go figure this shit lives in Texas).

Age 3+ years, >1 tree cultivar (Self incompatibility issues of different genetics).

Lots of Zinc. Lack of the material causes Pecan Rossette and yield issues.

General notes:

Pecans exhibit what is called the Xenia effect, another word for being an inbred bitch. In addition, they also exhibit incomplete dichogamy where the male and female parts of the flower are receptive at different times !!Check your cultivars!! Finally, they also exhibit what is called alternate bearing. Cause is unknown but there will be a "big" and a "small" harvest alternating years.

Pecan scab is the biggest disease of Pecans if you grown East of I-35. Scab resistant cultivars are either smaller in edible portions, or have issues that make them visually unappealing. The latter is only an issue if you have choices on what to eat.

You can graft pecans to other pecans and other *Caya* species. Most notably water hickory (*C. aquatica*) if your area floods a lot or is water logged. Woe to be with you if you decide to do the latter because Pecan Scab.

Cultivars:

The most important cultivars commercially are: Western, Desirable, Witcha, Pawnee. They all have poor Scab resistance. So unless you live in a dry climate or fucking CA....

For dichogamy issues, Pecans have TYPE I, and TYPE II. Choose the different type or you will not get pollination. Also, check flowering times since these fuckers flower at different times and may not pollinate each other on top of this shit.

Split the US geographically on two axis N/S and E/W.

I-35W is the E/W dividing line due to scab issues further EAST.

Red river in DFW area is N/S dividing line due to chilling hour requirements.

Recommended scab resistant combinations (southern):

Recommenced scab resistant combinations (northern):

(Unfinished because I need to fucking go to a "local" university library for literature).

Pests:

Pecan Scab (*Venturia effusa*)

Recommened control action: Scab resistant cultivars, spray with pesticide after continuous rain for 2 days in hot weather. Don't fucking live somewhere humid. Get rid of still water around pecans. Cry because you planted a fucking high yield, low res cultivar. Cry again when you plant scab evolves to evade resistance because everyone is planting the same pecans.

More diseases to come soon.

Note:

I highly suggest you read up on the local extension if you live in the hardiness zone for pecans. Pecans are studied extensively vs Chestnuts and some asshole with a PhD studying this is better than random strelok.

Hazelnuts

Soon (tm)

Walnuts

Soon (tm)

Ginko

Soon (tm)

Viable and/or common tree nuts crops plantable in the US:

Persimmons, Grapes, Kiwifruit, Kiwiberry, Apples, Prunus (Peaches, Nectarines, Apricots), Figs, Papaw, Quince, Chokeberry

Why is X crop not listed?

- "Bananas" are shit and don't reproduce sexually, also getting raped by a disease harder than AIDS ridden Africa
- Citrus is getting assraped by citrius greening (*Candidatus Liberibacter*), native to China like the fruit and spread by an introduced aphylid. I blame people clonally propagating this shit. There is an experimental cure ongoing as of 2021 and I will update if this shit is actually viable. Also restricted to South TX and Florida coast mainly.
- Tropical fruit excluded because there's not much tropical space in the USA.
- Lychee isn't listed because its tropical. Is useful for lowering blood sugar if you are a boomer though.

Difference in SHTF timekeeping and the inaccuracies of mechanical horology

In the modern world, we are aware of the importance of time. However, once a collapse happens, the value of time drastically changes. Time as we know now is easily gauged with modern phones synced to atomic clocks, electronic watches, read aloud on the radio, etc. Within a collapse, these are not feasible for extended periods of time. This portion is written to understand the drawbacks of mechanical timepieces for combat operations.

Understanding modern mechanical timekeeping - The movement and it's intricacies

In modern horological timepieces, there is a general split between automatic, or "self winding" pieces, and manual pieces. The mechanical timekeeping function of these pieces are called a watch *movement*. As you can imagine, automatic movements are more complex to manufacture and maintain.

The movement is comprised of many pieces, of which the following are critical:

Jewels - Usually synthetic ruby, these are put in the center of gears to reduce friction and heat, and to prevent wear. A cracked jewel should be replaced as it is severely detrimental to precision.

Dial train - Transfers energy from balance wheel to the hands

Balance Wheel - Circular wheel that gives rhythm and creates harmonic resonance with the hairspring/balance spring, thus allowing for regulation of the dial train

Balance spring - Spring attached to the balance wheel, usually a regulator lever is attached to allow for manual adjustments for the rate. This piece is susceptible to heat changes and will affect the precision of timekeeping.

Escapement - Regulates the excess energy from the balance wheel to dial train, there are several types, most common in watches which are the duplex, lever and co-axial escapements

Gear train - Moves the moving parts of the watch face

Mainspring - A piece of (usually) metal that stores energy by being wound. Releases energy to the balance wheel/spring, there are several types: spiral coiled, semi-reverse, reverse. The latter two are better at keeping time even when they are almost unwound.

Crown - That knob you turn to wind/ adjust the date

A note on maintaince:

What parts should you watch out for breaking? Excluding the casing/ (since it is a relatively easy repair), it depends on the construction, the most likely failures will be in either cracked rubies (jewels) from too much or too little lubrication, failed mainspring, or a faulty winding mechanism. Older (read 21st century) mainsprings can last anywhere from 5-30 years since they varied in quality, but the more mass produced ones suffered problems after 10 due to the steel used having deformities and not being as resistant to permanent warping as the new springs made. damage via the crown (how you change the time) can also

happened but you need a lot of force to the crown dial in order to do so. Glass that has cracked should NOT be replaced unless you can manufacture hand dials, since many companies like Elgin, Waltham designed such dial hands to break if removed since they were a "one time use" component

When to oil an watch? What to oil with? No WD-40 isn't a solution. You should oil a watch around 2-5 years depending on how the last job was done and what oil was applied.

First, you must understand that watches do not require excessive oil, a common mistake is to add too much oil so that it is "everywhere". This causes cavitation upon the jewels are and will wear them down rapidly. Second, you should not use oil that gunks up easily (like WD-40 and motor oil), find one that tends to evaporate over time (generally synthetic) . Third, watch parts can be bent or damaged when cleaning very easily cleaning, so it is recommended to oil in an air with as little dust and as much light as possible. A lot of the earlier movements made before 1970 require multiple types of oil due to different friction levels between parts. Watches made after 1970 are not designed to be oiled repeatedly, since the SWATCH group just replaces entire watches when you send them to be "oiled" nowadays.

Back to the applied horology:

The lever escapement is the most commonly seen in watches. These usually will vary to +/- 10 seconds per a day (+/- 5 minutes a month) The accuracy is decreased if the watch undergoes sudden force (drop, vibration, etc) , insufficient lubrication, magnetization, or worn out parts (most usually the mainspring, balance wheel, or escapement). In comparison, a quartz watches vary to +/- 0.5 seconds a day (+/- 15 seconds a month). Co-axial escapement watches are extremely expensive and rare, but the late George Daniels (Master British Watchmaker who invented the escarpment type) could get the variation to about +/-0.3 seconds a day (+/- 9 seconds a month).

Given the nature of a post collapse combat engagement, there are two likely possibilities

A continuous, "running" engagement with lightly armored, highly mobile vehicles

A "decisive battle" as envisioned by Clausewitz lasting a few hours to a day.

If we do the math of the lever escapement, then 10 seconds a day means it takes at most 6 days in order to be less than a minute behind. A force comprising of separate flanks and a center pursing an enemy traveling at 70mph with a delay of 1 minutes is a *minimum* of 1.16 miles of separation and 53 seconds to arrive. A difference of 5 minutes results in around 6 miles of separation.

The average person can spot (with some difficulty) an object at 3 miles away. Traveling at 70mph results in a minimum response time of 2.58 minutes. Use this as the basis for how often the watches should be synced.