

Vegetables:

To come soon since I'm a lazy fuck.

Tree crops, and tree management: Version 0.2

Not the PDF Strelak'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 relatively 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 California, Arizona, or Dixie land. As read earlier, the first fucking warzone is when the second coast Cali runs even low on food. The latter two may or may not be stable areas - Florida due to Miami-Dade and Texas being so close to wetback cartel land and the formation of the "Tri Cities" (DFW, Austin/San Antonio, Houston).

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 (?), American Hazelnut, Hickories, Colorado Pinon (?).

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 FROM THE ATLANTIC COAST!! - From west Texas (Where it's dry and not humid westward) is okay, tree won't do well outside of the west/east coast though I think. It might work for mountain states if you place them at altitude windward since the pathogen doesn't transmit easily that way.

Chestnuts are decent crops, but generally not cultivated in the US due to Americans bringing Chinese Chestnuts 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. Mollissima* (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

Cicadas (*Magicicada* species) Annoyance when it fucking emerges.

>Recommended control action: Netting, not planting trees in doom cicada year Fun fact these insects 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: Ethanol 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.

Chestnut blight (*Cryphonectria parasitica*)

Causes cankers, girdles (strangles) tree. The big bad of American Chestnut species. Recommended control action: Depends on species.

American Chestnuts:

There is a new transgenic edit of the 'Darling' cultivar with a wheat oxidase gene that appears to be blight immune. Stay tuned due to testing issues and public backlash, search " Enhanced Blight Resistance in Transgenic American Chestnut" for more info

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

Don't plant trees and remove from family Fagaceae (Oaks, Breech). Get soil, make it wet, pack on canker.

Only extends longevity doesn't cure. Sanitize your 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. Prayto /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 illinoensis*)

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.

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 *Carya* 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.

Lack of Zinc causes Pecan Rossette and yield issues. Solution is to NOT buy nurseries plant and grow from seed.

Be careful of limb break, so don't plant a Pecan over your house.

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 same type cultivars 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):

Recommended scab resistant combinations (northern):

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

Pests:

Pecan Scab (*Venturia effusa*)

Recommended 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)

Hickories
Soon (tm)

Walnuts (*Juglans spp.* excluding *J. cinera*)

General Information:

Walnuts are relatively hardy, and fruit at 10-13 years of age. Recommend grafting since a strong taproot is required for this species. Specific disease issues, but not debilitating. Thousand Crankers disease (TCD) (*Geosmithia morbida*) is an issue and is native to AZ/CA/NM.

USDA Zones 5a-9. Roughly 144 frost free days and 25 inches of water.

Cultivars:

Northern US:

Black Walnut (*J. nigra*) take Mintle (Long shelf life of 3+ years), Sparrow (Disease resistance), Vandersloot.

If there are any crosses with *J. major*, take those for TCD resistance.

Western US/ Arid states:

Arizona Walnut (*J. Major*),

Southern States:

Black Walnut (*J. nigra*), preferably with cross with *J. major* if possible, otherwise: Reda, Geoagiu 86, Orastie, Germisara, and Geoagiu 3 X 4 X 453. Graft with Texas Little Walnut (*J. microcarpa*) if soil pH is high.

Pest issues:

Thousand Crankers disease (*G. morbida*)

Not much known, possible vector of Walnut twig beetle, don't take walnut wood that has been dried with bark still on. NO KNOWN CURE.

Walnut Blight (*Xanthomonas arboricola pv juglandis*)

Caused by high humidity, common in E. Texas and gulf coast. Check for lack of flower death, failure to fruit set, failure to ripen. Copper spray a cure but highly toxic to walnuts. Use with Caution. Plant resistant cultivars when possible.

More Soon

Walnuts (*J. cinera*)

General Information:

Butternuts are extremely hardy, and fruit at 10-13 years of age. Recommend grafting or seedling grown since a strong taproot is required for this species.

USDA Zones 2-7. Roughly 105-210 frost free days and 25 inches of water.

Short life span but good, oily nut.

High degree of hybridization with Japanese Walnut, so be careful to not bring them close to each other if you do not want hybrids.

You will have to order from USDA GRIN database (<https://npgsweb.ars-grin.gov/gringlobal/search>) :

Cultivars:

Information subject to change as it appears that the old cultivars have not been tested.

Northern States: Herrick (Resistant?), Kinneyglen (Easy to crack), Weschcke (Good overall), Van der Poppen (Good nut quality).

Southern States: Chamberlin (Southernmost collected - from Missouri)

Find a local one, not a lot of germplasm because they are mostly dead.

Pest issues:

Butternut curculio (*Conotrachelus juglandis*)

Brown weevil, feeds off Juglans genus. Keep area clear of dead foliage as that is where larvae is. No known control.

Butternut canker (*Sirococcus clavigignenti-juglandacearum*)

Causes cankers which kills trees, will infect hickories on occasion. Prune small cankers with sterilized tools, but no proper chemical cure, so plant away from other Juglandaceae

Ginko

When I go dig up ye old books. Soon (tm)

Viable and/or common tree fruit crops in the US:

Persimmons, Grapes, Kiwifruit, Kiwiberry, Apples, Prunus (Peaches, Nectarines, Apricots, et al.), Figs, Papaw, Quince, Chokeberry, Blackberry, Blueberry, Mulberry.

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 murdered by citrus greening (*Candidatus Liberibacter*), native to China like the fruit and spread by an introduced aphyllid. I blame people clonally propagating. There is an experimental cure ongoing as of 2021 (**2022 SPRING EDIT: DELAYED DUE TO COVID-19 AGAIN**) 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.
- Genus *Prunus* is listed but has issues with Fireblight (*Erwinia amylovora*) native to North America, but will absolutely devastate most crops since they are from the old world. You also need to sterilize after every pruning cut, simply not possible during SHTF. Also, peaches have short life span (~15-25 years) and the entire genus has gummosis (Sap like cysts) issues. Ask local extension agent and **plant with caution!**

General pests:

Japanese Beetle (*Popillia japonica*)

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

>Recommended control action: On mornings ~70F, knock down into soapy water bucket, pesticides, using Kalonite (Clay) as a spray to cover the entire ground before they emerge. High pH soils also work.

