



Peaceful Heritage Nursery
Planting Tips for Success:

CONGRATULATIONS! You've got some very high quality fruit trees and plants arriving soon in a box to your door, *now what?*

Please see SECTION 2 for POTTED PLANT INSTRUCTIONS.

Potted plants require special care, including HARDENING OFF TO FULL SUN or they can and will get severely damaged.

Make sure to open the box(es) carefully and remove the plants with care.

We sometimes use a lot of tape to make sure the fragile plants are super secure on route to you and it takes a moment to unpack them safely.

FIRST, we'll answer a couple of common questions, especially in the early spring/late winter shipping season.

Q) I just received my box of trees and there's snow on the ground here and at my place it's really cold still! Are the trees all doomed? Did I just waste my money? I'm freaking out! What do I do?

A) **BREATHE!** Your trees will arrive dormant (hibernating) and leafless and can handle extreme cold once planted. The best thing to do is wait a little bit and then plant as soon as possible. Let the snow melt and the soil dry for a day or two, then plant. Even if more cold or snow is coming, get the trees in the ground. If the soil is frozen or weather might be severe for a few weeks you have a few safe options. Keep the trees **ROOTS** wrapped up tight in plastic and moist material (they come this way to you). **Check** and make sure the material around the roots is **still moist and is not drying out**, lightly remoisten if necessary and then **re-wrap the root bundle tightly**. You don't want the material sopping wet, just **MOIST**. Keep the trees as cold as possible but **NOT** freezing. Temps of 35-45 F are fine. An unheated garage works well, or a root cellar. Your other option is to "heel" the trees into deep wood mulch or soil. "Heeling in" entails burying the roots in a deep trench completely and thickly covering the roots with soil or mulch, and positioning the trees at a sharp angle, not straight up (this slows budding). The trees can stay like this for some time, but should be planted as soon as soil is unfrozen and it dries out a bit. Heeled in trees must be dug up and planted as soon as possible before they start to grow shoots and leaves (this happens around April in warm weather, earlier down South). Small tight green buds showing are OK, but plant very promptly. Small tiny green buds showing on apple/pear trees are safe to have outside in the cold as long as it's not severe temps (teens or lower).

We **ALWAYS** aim to ship you your trees at the most appropriate time and in decent weather. **HOWEVER**, the reality is that we ship all over the USA and the climate is changing and is somewhat unstable during late winter and spring. So, it's impossible for every single customer of ours to get their order right at the exact time they perceive as being the best and optimal moment. Please be patient and understand that we ship when appropriate, **BUT**, the weather can be erratic and this is out of our realm of responsibility. **We do our very best!**

Q) I am not in a stable situation (moving, relocating, etc.), or my planting site is completely unprepared, and I would like to pot the bare root plants I get from you into containers and hold them for x amount of time. Is this OK?

A) Not really! Especially not with most of our trees. Potting any of our plants or trees nullifies any replacement or Guarantee on the plant. Why? It is damaging and stunting to the trees to do so, unless the trees are very small (1-2 foot tall or so). Also, when planted in pots the plants are undergoing unnatural stress, are prone to drying out, overheating in the sun, and are planted in potting soil, which is not good for young trees past the seedling stage. Remember, most of our trees are field grown in natural soil, and have large healthy root systems from growing in Mother Earth. The last thing they want is to be shoved into a plastic pot in peat moss soil. That's what poor quality nurseries do and what you see for sale at the big box stores that sell shoddy, inferior trees and plants.

If you receive a potted plant, it can be kept in the pot it arrived in for some time, but it must be kept well watered (1x per day max) and in partial shade/ half-day sun. The best thing to do is order trees and plants when you are situated in one place, and have the planting site well prepared and ready to go weeks or months before plants arrive. If you **MUST** put them in pots, then aim to plant in-ground as soon as possible, keep well watered and apply some diluted fertilizer to keep them green. If you only need a few weeks or a month, consider storing the dormant trees and plants in cold storage, a root cellar, or heeling in and planting before bud break (as described earlier). Kept with moist, wrapped up roots in cold storage, they can be kept safely till June if kept strictly below 40 F. Maybe you could rent space in a cold storage unit, or have a friend who has one perhaps. Small plants like berries can be kept stashed in a fridge for some time if the roots are kept humid and moist and wrapped up tight in plastic.

All that being said, our figs, berry plants and small plants (such as passion fruit, mint, comfrey, etc.) can be grown successfully in larger pots indefinitely, and moved around. Perfect for patio growers, apartment dwellers, those who want to grow edible plants but know they'll be moving, etc.

Q) I opened up my box of POTTED, LEAFED OUT plants I received from you and the leaves look a little yellow, or the plants look a little stressed. Is this OK?

A) Yes. Please remember they've been in a hot, dark box for days getting banged around on the way to you (that's why we package them very securely). Once they are watered, **HARDENED OFF** to full sun and planted in mother earth they will root and will recover and turn dark green. A little diluted organic fertilizer this June-July is good for them, as well as mulch, etc.

Q) I noticed yellow (or black) spots on the leaves of my pawpaw trees I received. Is that OK or are the trees doomed?

A) The spots are most likely *Phylosticta* which is a naturally occurring leaf fungus that lives on pawpaw leaves and fruit. All pawpaw trees are susceptible to this naturally occurring fungus. There are no registered fungicides that can be used on pawpaw trees, and even if there were, we are Certified Organic and would not use them anyway. There's nothing that can be done except give the trees the best care you can, plenty of sun and good air drainage. It does not kill or damage the trees, but in a "bad year" on mature trees can lead to fruit loss. We try to rogue out and destroy any Ultra-Select seedlings in our nursery showing strong susceptibility to *Phylosticta* symptoms. Because it is a

natural phenomenon and unpreventable, it is not covered by any Guarantee and does not qualify for any replacement policy. The trees will be fine and grow out of it in time.

Q) I noticed some small holes in the leaves (or an insect or slug actually *in my box* of plants) and I'm extremely [insert adjective synonymous with worried and/or upset, proceeded by expletives is optional]. And, what are the little white pellets?

A) Please remember we are an **organic nursery**. We do **regularly administer effective organic controls** for pests, including slugs and snails, but nothing affords 100% control and sometimes one slips by us or does a little foliage feasting before we get to it. Those little holes in the leaves are harmless and are proof the trees are not covered in toxic chemical pesticides. The little white pellets you may see are an organic iron-based slug bait to control mollusks (slugs, snails) in the greenhouse. Totally harmless (unless you're a hungry slug.)

And with that....

How to handle bare-root fruit trees and bushes:

Establishing bare-root fruit trees and bushes is simple and very successful when you understand how to do it properly. In order to have success, follow these easy steps very carefully:

- 1) Bare-root fruit tree **roots** should **never be allowed to freeze** and **never allowed to dry out. This will damage or kill the tree.** So, keep your trees roots tightly wrapped up in the moist packing material they arrived in, and wrapped in plastic until you're ready to plant. Soak the roots for 1-2 hours in water or diluted kelp extract before planting, if possible.
- 2) **Plant immediately, or within 1-2 days.** If you must wait more than 7 days before you can plant, then read and follow the instructions provided on page 1 for full instructions on storing your trees safely until ready to plant. Main thing is keeping them cold but not freezing and keeping the roots moist and wrapped up.
- 3) Bare root trees can be planted **any time during dormancy** (leafless), but Nov-Dec and Feb-early April are the ideal times. In the spring, **bare-root trees must be planted before they start to grow shoots and leaves. A few tiny buds showing green are OK.**
- 4) When planting, observe all the following planting directions very closely, as found below, and water the new trees in well. **Thick mulch and deer protection finish the job. Fruit trees left unprotected in deer populated areas will be destroyed for certain, sooner or later.** It can happen anytime unexpectedly, so protection is a **MUST.**
- 5) That's pretty much it. Keep the trees cool and dark until ready to plant, and keep those roots moist and unfrozen till planting. **Plant YOUR TREES ASAP!**

Planting fruit trees can be quite easy when you understand and follow a few rules and principles. However, **long-term care** is also very crucial. Remember, a fruit tree is similar to a garden: whatever you put into it, is what you get out of it. People sometimes tell us, "I don't get anything off this old apple tree in my yard" and so I ask them, "What are you doing to maintain it?" "Nothing" they say. Well, what did you expect? Amazing yields of perfect grocery store quality fruit? Not gonna happen.

Fruit trees and berries need dedicated care and skilled upkeep in order to bear good fruit, like a garden or anything else worthwhile. **Planting fruit trees and neglecting them will not “bear good fruit”.** Whatever you put into it is usually what you will get out of it. Neglected trees will not bear good crops in most situations. For full details on excellent care and maintenance of fruit trees please purchase the book on our website: *Backyard Fruit Production*. <https://peacefulheritage.com/shop/peach/backyard-fruit-production-book/> *Native trees such as persimmon and Ultra Select pawpaws are very low maintenance and can bear good crops with minimal care and deer protection.*

Site Selection

Site Selection is crucial, so please read.

Select an open site with as much sun as possible. **More sun = more fruit.** Shade and fruit trees DO NOT go together.

- 1) Select a site that **drains off water well** and does not hold puddles of water or has standing water after heavy rains for more than a day or so. A fruit tree and berry plant will not live or thrive on such a site. If the hole starts to fill up with underground water as you dig, choose another, better site with a higher water table.
- 2) **Gentle slopes are very good sites.** Go for the upper areas and not the bottoms where **cold air and frost collect**.
- 3) Choose a site that is as close to your home as possible. That way you see your trees often. Avoid planting your orchard on the “back 40 acres” where deer and neglect reign and fruit trees die.
- 4) Remember trees can get big, so allow 10-15 feet away from a structure and 20-25 ft between bigger trees, like apple and pear, and 10-15 feet between smaller trees like peaches, plums and Asian persimmons. Blackberries need 8 ft between them except Natchez and Arapaho which need only 4-5ft. Raspberries need 1-2 ft between each other. Pawpaws only need 8-10’ and should **not be far apart**. **Avoid planting any trees too close to a driveway or fence or under power lines.**
- 5) Plant the same types of fruit trees in the same grove for good pollination. Make sure taller trees, such as pears and apples, are **not** planted in such a way that they will eventually shade out smaller plants like berries and peach trees. Aligning rows North to South is usually best, if possible.

How to plant:

- 1) **Dig your planting hole 18”-2’ wide and 18” deep.** “Don’t put a \$30.00 tree in a \$3.00 hole”. **This means, do not dig a shallow, overly small hole and try to stuff the roots into it.** Dig a nice large hole. If planting potted plants, make the hole 2x as big as the pot, or 3x as big as the pot in compacted clay soil.

- 2) **DON'T PUT ANYTHING IN THE HOLE** besides the tree and the native soil! No fertilizers, no manure, no potting soil, no peat moss, no miracle gro. **This can kill or damage your tree.** If you want to use good garden soil (or local top soil) out of your garden that is fine and can be useful on very heavy clay soil.
- 3) Break up and score (cut into) the *sides* and *bottom* of the hole with your spade or shovel to allow easier root penetration. Never leave a smooth, glazed-like surface on the sides or bottom.
- 4) Inspect the trees and cleanly **cut off any damaged or broken roots.**
- 5) When you put the tree in, **keep the graft union at least 3-6 inches above the soil line.** **This is very important!** This is the point near the base of the tree where the trunk juts out of the rootstock. It's where the tree was grafted to the rootstock. You'll often see a little stub just above it where the rootstock was pruned off. If you can't find it, simply plant a little higher than the roots. **It's OK if a few roots are exposed in order to get the graft union 3-6 inches above the soil line, because it's totally crucial that the graft union is well above ground!!! Clip off any exposed aboveground roots.** If the tree is planted too low and the graft union comes in contact with soil, either the scion will rot and die or the scion will grow roots and thus will totally nullify the effects of the rootstock, and make your tree grow huge and take many years to fruit. They essentially become a "standard" sized tree. The higher the graft union above the soil, the better. You may notice we tend to graft our trees higher than you may be used to seeing, in order to protect them.
- 6) **When planting, Spread the tree roots out in all directions,** like an asterisk or an open hand. **NEVER bend roots, cut off, or wrap the roots to fit into an undersized hole.** This will damage and possibly kill the tree. Make the hole bigger! If an extra-long root needs extra space, dig a little trench for it and place the root in the trench. As you are spreading the roots, gently fill in the hole gradually, gently compacting with your hands the soil as you go along. Take 10 minutes to do this properly and **don't be lazy with the planting hole.** This is the tree's foundation and doing a great job will help ensure a strong start and best chances at long term success. Rushing it or doing it half-witted will usually yield poor results and long term failure.
- 7) Gently backfill in the hole with soil, putting the topsoil in first and crumbling apart any large clumps and removing rocks or debris. Make sure there are no air gaps or large spaces unfilled. **DO NOT BURY THE GRAFT UNION! Remember, sometimes trees will sink slightly an inch or so once watered in, so watch out for that and compact the soil gently to avoid that happening.**
- 8) **Now that the tree is in the ground, GENTLY** tap in the dirt with your feet. GENTLY. **No stomping!!!** This removes air pockets and helps settle the soil. Stomping will damage and/or kill your tree or berry plant. Let's not.
- 9) **If you live in a dry climate or have a dry site, or will have no ability to water the trees regularly, then consider creating a little "moat" around each tree using the soil. Make a little mounding ring around the tree (3-4 inches tall) that will hold rainwater and allow it to slowly percolate down, thus increasing the water supply for the tree. This can drown trees in super heavy clay soil and wet climates, so be careful.**
- 10) **Water heavily at planting.** 4-5 gallons of water per tree. Adding 1-2 cups of Maxicrop kelp extract per 5 gallon bucket of water helps the tree recover and grow strongly. Water slowly and let it bubble and percolate and deeply penetrate the hole. On very heavy clay soil 2-3 gallons is good.
- 11) Permanent staking is a **MUST** for dwarf apple trees (M7 DWARF). If they're not staked they will develop a lean. Check your local Ag Extension office website for more info.

- 12) Some authorities recommend staking **all fruit trees at planting for the first year.** Heed this advice. This is crucial if you live in a windy place. Bamboo or wooden stakes work well. Staking the first year is always a good idea. Tie the tree loosely with cloth or twine to the stake.
- 13) **YOU MUST MAKE SURE** the trees do not dry out! This means if there is not a heavy rain for 2 weeks during the summer they need water. After the first year, irrigate only when very hot and dry or to increase fruit yield, or in arid climates, or trees on very sandy soil. Do not overwater, or water everyday, or they will drown. In KY most trees rarely need water after the first growing season. In the intense drought of August- September 2019 we were watering all trees planted that year and the year before. Many would have died or been damaged without that irrigation during drought.
- 14) **MULCH, MULCH, MULCH.** Flattened cardboard, 3-4 ft around each tree (or woven plastic ground cloth material). Top the cardboard with organic matter on top (horse/cow manure, rotted wood chips, leaves, straw, etc.) is excellent. **Do not let the mulch touch the tree trunk.** Mulch is vitally important to reduce grass and weed pressure, which will ruin young trees. **Grass lawns will kill or stunt young fruit trees and plants, don't let grass grow up around them,** mulch heavily, **enough to kill the grass for a couple of feet around the base of the young fruit tree. Mulched trees grow faster, healthier and bear fruit sooner. Maintain a NO GRASS ZONE around each tree. No. Grass. Zone.**
- 15) **Never put a black plastic corrugated pipe around the base of a fruit tree for protection.** Use hardware cloth or chicken wire or tree tubes designed for trees. This is always a good idea. Weed whackers and string trimmers kill more trees than deer. One second of string trimming can kill your fruit tree, so please protect them with a tree tube or hardware cloth, or chicken wire. **This also will prevent voles and mice chewing the bark and killing the tree** during winter time, which happens to unprotected fruit trees regularly, actually.

Aftercare:

- 1) **Tree protection is important.** **Deer will destroy your unprotected trees.** We use 4 ft wide x 12 foot long chicken wire, attached to rebar (steel) posts in the soil, with 3-4 posts per tree. We also recommend making a hardware-cloth tube about 6 inches in diameter and 6 inches tall put firmly **at the base of each tree**, to protect against rabbits, voles and mice (and also string trimmers/weed whackers!). See our [Grow Articles](#) on our website for more info on deer protection.
- 2) 1st year fruit tree **training** and pruning is **essential.** Buy the [Backyard Fruit Production book](#) on our website or check with your local Agricultural Extension office for free materials online and printed. Google search "University of KY growing..." and put your fruit tree or berry into the search field. **Untrained trees grow messy and are unproductive.** Training is easy and fun. **Tip:** Clip wooden clothes pins to the **trunk** of the tree in such a way that they hold down supple young 6 inch shoots to form a 50-60 degree angle from the trunk, and thus are not shooting skyward and vertical, but more horizontal. **This can make trees bear fruit 1-2 years FASTER.**
- 3) **Fertilization is crucial.** Give each tree ORGANIC fertilizer ONLY for best results. The first year you can apply a small amount of diluted fertilizer starting in June to make sure the tree gets off to a solid start. Follow package instructions, or use compost or highly diluted fish emulsion or soy fertilizer (1/2 cup to 4 gallons of water, each tree gets 1 gallon of solution 1 time the first summer). Starting in year 2, apply 1/2 lb of chicken manure from March-June around the drip line (or packaged organic fruit tree fertilizers, or a shovelful of manure or lots of compost). Fertrell makes good packaged fertilizers. Fish emulsion and soy/corn-based fertilizers

(Naturesafe) are great tree fertilizers and can be applied at the rate of 1-2 cups per 5-gallon bucket, and applying about 1 gallon per tree, 1x per month from March-June. This gives great results, but wait until year 2. **Too much nitrogen early on makes large, impressive, tall tops at the expense of good roots, and makes trees very weak and top-heavy, ruining them. High nitrogen fertilizers like 10-10-10 are very BAD for apples and pears and can kill them by making them super susceptible to fireblight.** It's not good for other fruit trees in general. Gradually increase the amount of fertilizer to eventually be giving 3-5 lbs of chicken manure per mature tree, as needed (or use a packaged organic fertilizer). Most mature fruit trees need **only** compost and mulch, and a little top dressing of manure. Cow/horse/barnyard manure is also good, but don't let it touch the trunk! **NO chemical 10-10-10! Only give 10-10-10 if you want your trees to get fireblight, diseases, insect infestations, and die. This fertilizer ratio is all wrong for fruit trees, with far too much nitrogen. Lots of compost, thick mulch and a little manure goes a long way to making your trees very healthy and put on steady strong growth.**

SECTION 2

How to handle POTTED, LEAFED OUT fruit trees and bushes.

Potted plants require some easy, but special care. Why? Because they usually just came out of our **protected greenhouse environment.**

They are not yet acclimated to intense, hot, direct sun, and this can severely damage them if they are exposed to intense sunlight too abruptly. They must be "**hardened off**" which means acclimated to intense sunlight.

HOW TO HARDEN (Acclimate) PLANTS TO FULL SUN

- 1) Unpack your order and deeply water the plants until it drains out the bottom of the pots.
- 2) Place them in direct sun for 10-15 minutes **ONLY**. Bring back inside or put in a shady, safe place. Keep watered.
- 3) Next day, water them and put them in the direct sun for about 30 minutes **ONLY**. Bring back inside or put in a shady place. Keep watered.
- 4) Final day, put in direct sun for about 1-2 hours. Bring back inside or put in a shady place. Keep watered.
- 5) Your plants are now **hardened off** to direct sun and wind and have "buffed up". The next day plant in the ground as per the above instructions. **Never disturb, mash up, cut or in any way mess with the root ball.** Our plants will never arrive to you root bound! Just plant as is, at the same level and depth the plant was in the pot. Gently pack in the soil around it, water and mulch well. **Fertilizer is usually not needed this season, we fertilize them organically before shipping.** Begin fertilizing next season from March-June.
- 6) **These instructions apply to GRAFTED PAWPAW TREES as well. See below for full pawpaw instructions.**

Special instructions By Plant Type:

PAWPAW: Our useful Pawpaw FAQ is here: <https://peacefulheritage.com/pawpaw-frequently-asked-questions/>

Ultra Select seedling pawpaws must have a Blue-X Tube or other temporary heavy shade until about waist high (30"). Supreme Grade trees **may already be over this height** (but still need hardened off to full sun.) Regular size Ultra Select seedlings sometimes outgrow the 30" tall Blue-X tube the first year, growing out the top of the tube, in which case remove it at that point. **Remove all Blue-X tubes before freezing weather arrives.** Put it back on the tree the following spring if the tree is still below 30 inches tall (it will still fit within the tube), and fertilize the tree well, **make sure it's mulched**, etc.

Transplant pawpaws very carefully and don't disturb the roots. Once planted, give lots of compost, water and mulch. **You must have more than 1 genetically different pawpaw tree present for cross-pollination or there will be no fruit set.** **This means:** at least 2 Ultra-select trees or other pawpaw seedlings, or 2 **different** named varieties (example: Sunflower and KSU Atwood).

Plant pawpaws no further than 8-12 ft apart. When the trees are blooming, hanging banana peels on the twigs or placing fresh manure near the tree will draw flies for strong pollination. Strange but it works! **Bees do NOT pollinate pawpaw trees.**

Pawpaws need heavy nitrogen and potassium fertilization every spring and early summer and can benefit from a spoonful of Epsom salts 1x a year for magnesium. We use chicken manure, kelp and corn-based organic fertilizers with excellent results.

Never let pawpaw trees dry out. Water heavily at planting and water heavily during hot, dry spells. Do not water everyday, or after rains. They are drought resistant once large, but when they are still establishing a hot, dry spell can damage or kill them.

Grafted pawpaw trees (NAMED VARIETIES) benefit from some sun protection the first couple of months. We use a chicken wire tube approximately 2 ft x 2 ft or taller, staked around the young tree and covered in shade cloth or cheesecloth attached with clothespins.

Pawpaws do not like hot, dry winds, exposed sites, ridge tops or very dry sites. Pawpaws cannot handle very wet, waterlogged conditions. Pawpaws are not acclimated to arid regions or harsh, windy prairie conditions. DO NOT PLANT IN LOW FROST POCKET AREAS OR SITES THAT FLOOD (unless flood waters recede very rapidly, within 24-36 hours).

Mulch, mulch mulch. Pawpaws especially **cannot handle grass competition when young.** Maintain a GRASS-FREE ZONE around each pawpaw tree for best results and fastest growth, for at least 4-5 years after planting. Grass. Free. Zone.

GRAFTED PAWPAWS:

When planting, **VERY carefully slide them out of the pot and try to retain the rootball intact.** Grafted pawpaws need **hardening off.** Follow the previous instructions

above for **hardening off plants**. They also benefit from some **artificial shade** for the first season, or at least the first month or two. We use chicken wire tubes with cheesecloth or shade cloth, as described above for seedlings. Other than that, simply care for them the same as for seedling pawpaw trees: lots of yearly mulch and complete weed control, lots of organic fertilizer and compost on top, and plenty of water. Plant the trees 8-12 ft apart only.

Be very careful at the site of the graft union, it is fragile for the first season or two.

DO NOT UNWRAP OR MESS WITH THE GRAFT WRAPPINGS! It will come off on its own. If by August a green or red rubber band is still visible on the trunk, very gently remove it with a very sharp knife. A sharp knife or razor blade gently rubbed on the band till it snaps off (don't cut into the trunk!) works well. We usually remove these ourselves unless it seemed best to keep it on. Be observant.

Stake it. You will find putting a bamboo or similar stake near the tree and gently tying it to the stake a good investment in protecting the tree and helping it grow nice and straight, as well as protecting it.

Your grafted tree may only grow small leaves and a few more inches taller its first season in the ground, but this is quite normal. Next year under good conditions it should put on 1-3 ft of growth (combined branch growth not necessarily height). Expect first flowers in 3-4 seasons under good care, when the tree is about 5-6 ft tall. Mediocre care or neglect might delay fruiting for 5-8 years.

Make sure to remove any and ALL growth and shoots from BELOW the graft union (the bottom 2-6 inches of the tree). This is growth from the **seedling rootstock and will outgrow and ruin the grafted portion within a few years time**. Also do not let suckers grow off the root system (these look like little pawpaw trees coming up around the tree). A lawnmower will eliminate them easily, or snip them down.

We cannot replace pawpaw trees that do not survive the winter. Pawpaws are not covered by our Replacement Guarantee because they are **so fragile** and many of you will be planting them in completely inappropriate climate zones, regions or settings where they have no hope of surviving or thriving. Good luck!

Other Special Growing Instructions:

ELDERBERRY: Elderberries have fleshy, brittle roots, so handle carefully. If any have gotten snapped off partially or completely in shipment, plant them shallowly next to the elderberry plant, and they will likely survive and make a shoot and grow into another elderberry plant. Your plants may not look amazing to start, but they will usually establish easily and will make a very solid plant within a season or two. They can handle a moist site, but not a swamp. They like a lot of moisture. Plant $\frac{1}{4}$ inch deeper than they were in the pot. On a good site with good care, they can make incredibly rapid growth, faster than anything we've ever seen. We've seen them go from 6 inches to 6 ft+ in one season. They usually bear fruit the 2nd year in the ground.

Elderberry ROOTS: If you ordered elderberry roots, plant these shallowly, about 3-4 inches under the soil and keep moist. You can mulch heavily. Don't let them dry out. Plant them **horizontally** (like a fallen log) **not** vertically (like a carrot). They will sprout numerous shoots

in March-April. They can be cleanly cut into 4-5" pieces and each piece should regrow new shoots. These will fruit in about 1-2 seasons from planting. Keep weeded until well established.

Elderberry CUTTINGS: You will notice on the cuttings 2-3 "nodes" or growth points which contain 1-3 buds. Bury the cutting so that at minimum **one node is buried**, and at least one node is above the soil. They root at the nodes only. If no nodes are buried, no roots will form. Best mediums for planting the cuttings are moist, soft potting soil or loamy garden soil (planted directly in the ground). Remember, they have no roots for the first 4-6 weeks, so will need daily moisture. They can be rooted indoors also. Once they start growing actual shoots and leaves, and not merely showing green buds, they are typically rooted. Do not pull the cuttings or you will snap off the roots and set them back. Rooting hormones can be used but are not at all necessary with elderberry. Just keep them warm, or plant outside when danger of most frosts is over, although frost does not harm them. Keep humid and sealed in a plastic bag in the fridge till you're ready to plant. **Don't let them dry out.** Occasionally the top shoot may die but often new shoots will come from underground. This can take a few months, so be patient. **Cuttings are not covered by any guarantee or replacement policy but are shipped fresh and viable. Success will vary based on skill of the grower and how/where they are planted.**

HAZELNUT: Hazelnuts need careful transplanting. Be careful not to plant too deeply- **no deeper than the top of the roots or they can be stunted or die.** Dig a nice deep and wide hole or trench (18" x 18") but plant shallowly. Lightly fertilize the first year. Prune all the lower branches and suckers off to make a single trunk (tree-form) or let them sucker and bush. Yields are higher with the bush form. Mulch and fertilize every spring.

FIGS: Be careful with transplanting leafed-out figs so as not to shock the roots. Shocked plants will grow very little the first year, but will recover after that. Figs need winter protection in zones 5-7 (all of KY, OH, IN, TN, etc). This is easily accomplished by making a 2-ft wide by 4ft tall chicken wire cage to go over each fig bush. Around November, after frosts have removed all the leaves, first prune the bush to 3 ½ - 4 FT tall and tie the branches tightly together. Put the cage over top of the bush and stuff very tightly with fresh straw. Cover with a tarp or plastic and tie tight to the chicken wire. Leave on until mid March or early April, and then promptly remove. New growth with resume and fruiting will be heavy. Use the insulation straw for mulch. OR, what we now do which is much easier and possibly more effective- after frosts remove the leaves in autumn, bend the flexible branches down to the ground and bury under six inches of mulch. Use blocks, bricks, or stones to hold them down. Deeply mulch the base of the figs and bottom six inches of the trunk. Brush the mulch aside in spring, off the trunk, and release the branches from the cover. Figs can make it through moderately cold winters (zone 6 and sometimes even zone 5) using this method.

Chicago Hardy figs will fruit on new growth, most other figs will **only fruit** on one-year old or older wood and so thus need protection. Chicago Hardy figs benefit from protection as well. Alternatively, some people just bend the very flexible branches down to the ground and cover in leaves, thick mulch/soil, straw and a burlap sheet or blanket, and then thick plastic. Rodent poison is a good idea to add in the straw/mulch layer when doing this. The earth keeps it warm and safe at ground level. In spring, uncover and pop it back up.

If you received POTTED figs of small size, it is advisable to plant the entire pot in the ground. Just slit the sides of the pot with a sharp knife (don't cut the roots). Plant as is, and it will take off.

Figs like lots of water and gentle spring fertilization (but not too much nitrogen, which will lower fruit yields). They benefit from some crushed limestone around the base and lots of mulch and water. They like growing in a sunny location next to a south facing wall near a gutter.

The wall will additionally provide radiated heat to ripen fruit, and some winter protection, the gutter lots of moisture. They need full sun, 10+ hours a day of direct sun in order to thrive. Dab a tiny bit of olive or vegetable oil on the ends of the figs in October to rapidly finish ripening any remaining fruit (an effective Old World technique).

Some customers express concern when they see at the base of the fig tree stem a **small hole or hollow area**. This is commonly present on young fig trees grown from cuttings, which sometimes hollow out. It presents **no danger to the tree** and the tree will very rapidly grow and the hole will disappear in no time.

BLACKBERRIES: **If you are planting dormant and bare-root plants, prune any canes (stems) down to the ground at planting.** This invigorates them and helps them establish much better. Don't worry about trying to get 3-4 berries the first year by not cutting the vines down to the ground, this is not good logic; it harms the plants. Cut them down, be patient and wait till next summer. An easy method of trellising a few backyard bushes is to use a large 4-5 FT tall tomato cage around each bush. Prune as recommended by the University of KY blackberry information (easily found on google), and position the bushes into the tomato cage. This works best with semi-erect and erect varieties. Blackberries sprout new canes from underground each April or May. Thin these to the 3 best, thickest shoots by May or early June, whenever they reach about 18-24 inches tall (it will be obvious which ones are the thickest and most vigorous by then). These will fruit next year.

After your berry harvest is complete, completely remove the fruiting cane after harvesting all the berries from **that** cane, **lopping it to ground level**. Burn or compost it. **Leave the other canes (this year's new shoots)** to mature and fruit next year. Tip the canes at 5 ft by pinching or cutting off the very tip top 3 inches. This will induce a strong lateral branching response. Prune the lateral branches to 18". Remove any low growing lateral branches below 18". Fertilize heavily every March or April and mulch. Google search for "University of Kentucky growing blackberries and raspberries" for a PDF file that explains everything you need to know about trellising and caring for them. Primocane varieties like "Freedom" fruit on that season's new shoots (primocanes), as well as last years (floricane) shoots. Primocane fruits come on around August, floricane fruits around June, on that variety. Watch out for Japanese and June beetles, which can become a nuisance.

RED RASPBERRY: **If you are planting dormant and bare-root plants, prune any canes (stems) down to the ground at planting.** Raspberries need a very well-drained site. A site that holds water, even for a day or two, will spell certain doom for red raspberries. Prepare a bed as you would for potatoes, like a long, slightly raised mound, or plant in raised beds. They like lots of compost, mulch and a little limestone. Water-logged, soggy sites that even only stay underwater 1-2 days will quickly kill them off. Trellis with T-posts (5-ft apart) and tomato twine, or construct a simple T trellis with two wires on each arm. They can handle light shade part of the day. They don't do well in very hot, overly exposed, or dry sites. Down south they absolutely need lots of shade, and only a few hours of sun. You can't grow red raspberries in the Gulf areas. Google search for "University of Kentucky growing blackberries and raspberries" for a PDF file that explains everything you need to know about trellising and caring for them.

BLACK RASPBERRY: These grow just like blackberries and not at all like red raspberries. Prune and grow just like blackberries. **Remove any above ground growth at planting, clipping down any canes to the ground.** Any shoots which sprout from underground in spring fruit the following year (except on primocane black raspberries such as Niwot). Once your berries ripen and are harvested, remove the entire cane to ground level and burn or compost it. Black raspberries do great on a trellis but it is not required. Keeping them pruned and keeping dead canes removed, as well as some spring fertilizer, keeps the patch healthy and productive. If

your plants arrived as PLUGS and not bare-root plants, don't worry, they all grow and establish the same and will be successful.

BLUEBERRIES: Must be planted in a 75% mix of moistened peat moss/coco coir/rotted black decomposed sawdust mixed with native soil unless your soil is predominately sand.

Remove the soil from the large planting hole, place in a wheelbarrow and mix with 75% volume of moist peat moss (or others mentioned), thoroughly mix with 35% native soil, add a shovelful of compost and refill the hole, planting the blueberry in the center. Use any leftover material for mulch. Mulch heavily and keep watered and very well weeded. They like rotted pine needle compost. They may require bird netting in some areas. If your pH is very alkaline you may need to adjust with sulfur. Contact your local extension office about that. If you want your blueberries to be successful and succeed long term, you **MUST REMOVE ALL FLOWERS AND FRUIT THE FIRST 2 YEARS OF ESTABLISHMENT. 3 YEARS IS EVEN BETTER. IF YOU DON'T, THE PLANTS WILL BECOME SEVERELY STUNTED PERMANENTLY.**

COMFREY ROOT CUTTINGS: Keep moist and bagged until ready to plant. Plant your roots within 1 week of receiving your roots. Roots may be stored bagged in the fridge temporarily. Roots may be cut into 2 inch pieces and planted either in pots in potting soil or directly in the ground in gardens or around fruit trees. Keep moist until their green shoots appear above the soil. This usually takes between 2-4 weeks. Only plant the roots **about 1 inch deep** and keep moist. Plants will bloom after growing about 3 months. Our comfrey does not produce seed or spread, it clumps.

PERSIMMON: Persimmons are easy to grow and relatively trouble-free. Occasionally the first year in the ground, a persimmon will not break dormancy until June, July or even August. No one is sure why this happens. So do be patient and do not pull the tree out or call us (or panic!) if the tree does not leaf out in May or June. Please give it some time. If it does not leaf out at all we will send you a free replacement when available the following season. Persimmons like a lot of compost, mulch and organic fertilizer and grow quickly once established, usually bearing fruit in 2-4 years from planting. Do not attempt to eat the fruit until extremely ripe or they will be astringent tasting and very unpleasant. Dehydrated persimmons are tasty and the drying process removes any and all astringency.

PASSIONFRUIT: Easy to grow. **Make sure to harden it off to full sun slowly if your plants arrive with actively growing vines and green leaves. Plant where they can climb up a support, strings or fence.** Without support to climb they will not grow properly. They are perennial in zones 6-11, maybe in zone 5. That means they will resprout from the base for many years if protected with mulch in the winter. In zones 8-11 they may form a permanent woody vine. Other places they die back to the ground after a few frosts, but then resprout come the next April. Fruits appear late, around August, and ripen in late September-October. Fruits fall when ripe and are often yellowish or wrinkly looking when ripe. Let sit at room temperature for 2-4 days, or use immediately or refrigerate. Will keep at room temperature about 4-7 days. They can reseed themselves vigorously as well. Sometimes Japanese beetles or caterpillars take interest in them, so keep an eye on them if concerned. They like lots of water and springtime organic fertilizer and mulch. They make great frosting additions on cakes and nice drinks.

Fragrant Spring Tree/Arugula Tree:

These have delicate roots, so please transplant carefully. Plant them no deeper than the roots are, mulch well and water. Don't harvest many leaves the first year, they need to establish first.

Planting Strawberry Starts: Starts for strawberries are small and don't always look like much, but will grow very vigorously if planted correctly. They need a fertile, well-drained garden site free of weeds and weed pressure, in full sun. They like the soil to be slightly acidic if possible. Plant strawberries only in spring in most locations. Dig a fist-sized hole for each start. You'll notice there are 3 parts to each start: the roots, the stem (crown) and the leaves. The stem is often very short. **It's very important that the stem NOT be buried, and equally important that the roots be completely buried and not bulging out of the soil.**

Plant them 1 foot apart in the bed. In each hole you make, make a small mound in the middle, about 3-4 inches high. Spread the roots in all directions over that mound, as if the roots were holding the mound like fingers around a baseball. Refill the hole and gently tamp in. Make sure the little stem is not buried. Water well. If roots become uncovered during watering, gently cover them again and tamp down. Applying light mulch is always good, straw works great and is ideal (straw-berry, remember?)

During the 1st growing season, **pinch off any flowers** that form the first year. You'll get strawberries **NEXT** season (1 year from planting). **It's very stressful for the plants to produce a crop the first summer in the ground, and any fruit will be lower quality.** Keep the bed well weeded and fertilize in May and June with a balanced organic fertilizer, or compost and/or manure. They like a straw mulch very much, or rotted wood chips work well. Don't forget to keep the bed weeded or it will die off. Keep the bed thinned to only 1 plant per square foot. Leaving many suckers and plants will weaken the patch and lower yields, not increase them.

Planting Your Pawpaw Seeds:

PLEASE READ THESE DIRECTIONS CAREFULLY AND FOLLOW CLOSELY OR FAILURE MAY RESULT.

Pawpaws are easy to grow but take special care the first few years, and when starting the seed.

Pawpaw seeds must never dry out, freeze or dehydrate. This kills the seed. Remove your fresh seeds from their bag and plant immediately, or leave in the bag with moist material, in the fridge until ready. Once removed from the bag, plant seeds immediately under 1 inch of potting soil in containers and keep consistently moist (but not soaking wet), keep warm (around 70-82 F) and dark, out of direct light. Potting mix should be very light and fluffy with perlite or similar material.

Seeds first grow roots, then the tops show later. Roots emerge in about 2-4 weeks from planting, expect tops to show in about 6-10 weeks from planting. PLEASE BE PATIENT! Do not attempt to dig them up and "check in" on them! This can kill them. If you want to check, sometimes you will see the white root at the bottom of the pots peeking through a bottom drainage hole. The tops will show eventually, **but it can take a few months.**

Remember to keep them constantly moist and out of freezing temperatures, and out of full sun and in the shade the whole time. If the seeds or potting mix dries out, it will kill the plant. Seeds can also be direct-sown in the ground *after all danger of frost*, in May-June outside in prepared seed beds or very shallow holes. Plant shallowly about 2 inches deep and keep moist, cover lightly with fluffy mulch.

Seedling pawpaws must be shaded until about 3 years old or will get sunburned and rapidly die. 3-foot tall chicken wire tubes covered in shade cloth or cheesecloth work well. Make sure the cloth is securely fastened. We use clothespins to fasten the shade cloth to 2-foot wide x 30" chicken wire tubes.

Annually fertilize from April-July with a balanced organic fertilizer high in potash and nitrogen and keep roots mulched, moist but not wet. Pawpaws should start fruiting from seed in about 4-6 years depending on care given and rate of growth. If you do not mulch, fertilize, and care for the trees it can take up to 8-10 years to get fruit.

More than 1 seedling is needed to get fruit set. Plant pawpaws closely together (8-15 FT apart.) This is necessary for good cross-pollination. Make sure your trees do not get direct sunlight until they are about 3 feet tall. This can be done with commercial tree tubes or any improvised way of keeping the trees in shade. Three-foot tall chicken wire baskets covered with several layers of cheesecloth or greenhouse shade cloth attached with clothespins works very well. Full sun kills young saplings, as does hot, dry weather with no irrigation or drought. Pawpaws in pots cannot freeze solid or the tree may die. Protect them during winter by burying the pots in your garden, or keep in a cold root cellar once leaves drop.

PLANTING YOUR PASSIONFRUIT SEEDS:

Passionfruit seeds are easy to start. If you are aiming for fruit production the year of planting, start the seeds before May 1st. In Kentucky they usually fruit the year of planting, but in more northern areas possibly not. The seedlings are frost sensitive, so should be kept warm and in very bright light, either in greenhouse or under lights. They do well planted in airy, light potting soil in small pots or cells. Fill the pots all the way with potting soil, gently tamp it in, and then plant the seeds shallowly, about ¼" deep and covered. Keep moist and in a shady place and check daily. They should be growing within 7-14 days and have circular seed leaves. Seeds can also be planted in a well-prepared garden bed with loose soil, where they can stay permanently. If starting in pots, keep the potting soil very moist (but not soggy) and transplant to a permanent location about 1 month from the seed sprouting. They grow very rapidly and will produce fruit the first year if started in the spring and if they have room to expand rapidly (either in ground or a very large pot).

These are **not** tropical plants, but cold hardy USA natives down to zone 5-6. Therefore, they can survive extreme cold (about -10 or -20 F), maybe colder with thick mulch in winter. So when frosts arrive, they usually are unaffected and will continue fruiting through a number of frosts, but ultimately die back around November. The roots are perennial and they will send up new shoots around April or early May. The young vines are delicate so be careful not to cut them down or step on them in the garden. The roots will expand and create multiple vines from the roots. Fruits are ready to eat when they fall off the vine, or can be picked up off the ground and allowed to sit at room temperature for 2-4 days wherein they will wrinkle and continue to sweeten. Do not pick the fruits off the vine, allow them to fall off naturally or into your hand with a light touch at most. The seeds are edible and crunchy, or you can suck the pulp and spit the seeds out, (perhaps where you want more vines to grow) or process juice through a sieve.

Planting Your Tomato Seeds

Tomato growing varies a lot from region to region. Check with your local agricultural extension office guidelines. Generally seeds are started 4-8 weeks before your last seasonal frost. Frost kills or severely damages the plants. Here in KY we don't plant the seed until mid-February or

early March. We have found it's better to start them a little later rather than too early, wherein they get leggy and stretched out.

Start seeds in a suitable potting mix, and keep warm (around 75-80 F) until sprouted. They need very strong light (we use LED shop lights) positioned just a few inches above the seedlings. Keep moist and they should all be up with 1-2 weeks. Plant extra and thin out any weak ones. Don't let the seedlings dry out.

Plant when all danger of frost is over in garden soil that is worked and fertile but not too enriched with nitrogen, or tomato yields will be low. Plant a little deeper than they were in their pots. Make sure to trellis for best results.

To store your seeds, keep sealed tightly in a ziplock bag in a dark, cool, dry place. We like to double bag our seeds for extra security against moisture. Keep in the fridge or the freezer to keep seeds viable the longest. Heat and light will degrade the seeds and make them spoil rapidly.

Planting Your Okra and Butternut

These need warm days and frost free conditions. Plant after all danger of frost has passed. These need fertile soil in order to thrive. South Anna butternut can grow in partial shade (full sun is still best). To speed germination, soak seeds in water for 6-12 hours before planting.

FIG CUTTINGS

Greenwood fig cuttings will rapidly root if cared for properly. First, if you cannot plant immediately, keep in the bag, making sure it is very humid and place in the fridge. Best to plant them the day they arrive. Have ready some plastic plant pots that are at least 6-8' deep. Fill with moist (not soaking wet), fresh, sterile potting soil that has plenty of perlite. Most typical potting mixes will do fine but it should be without fertilizer. Dip the bottom half of the cutting in rooting hormone (Hormodin, Clonex, etc.) Now push it into the soil, burying it at least halfway, or best up to the top node or two. Now cover with a plastic bag and secure with a rubber band. Allow it to get indirect light, NO DIRECT SUN. Grow lights work fine too. A window sill is fine. Make sure it stays moist and humid in the bag. You can support the bag with a bamboo stick or something similar. You can also use clear tubs with lids, or an intermittent mist system (best). It should have roots forming within 1-2 weeks. Do not typically transplant until next year. Once it begins growing, keep in partial shade so it has some sun, but no direct sun. Overwinter somewhere cold (35 F-40F) but not freezing, or in mild winter climates (zone 8-10) you could bury the pot in the ground, or perhaps plant out in Autumn. Cuttings are perishable and fragile and not Guaranteed, besides being in good shape when you get them, true-to-type and alive. We find them very easy to root with high rates of success. Good luck!

Lemongrass

Easy to grow. Just plant as deep as the roots are on the starts (shallowly, don't bury the stem). Water in well. Frost and freeze kills the plants, so protect from both. Best planted in spring, or in a greenhouse.

Please note: We provide these instructions as part of our Guarantee. Not following these instructions closely may nullify any plant replacement from our nursery. We hope you success and happy growing!

Thanks for trusting our nursery and buying with us!

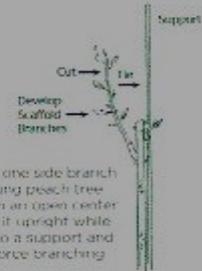
Further instructions are on the next page below:

CARING FOR YOUR FRUIT TREE

Guidelines for Success

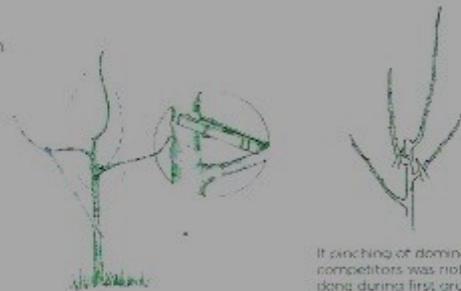
1 **First Year** | *Main focus: Avoid transplant shock. Establish root system.*

- Prune at planting (see planting guidelines)
- Water during hot, dry weather.
- Eliminate all grass or weeds around trunk.
- Apply mulch to retain moisture and keep soil cool. Use composted materials such as old hay, bark chips, dry grass clippings, or gravel.
- Top-dress with 1/2 lb. of 10-10-10 garden fertilizer per tree, or 1/2 lb. 6-3-2 dry organic fertilizer, 3-6 weeks after planting.
- Do late season training on peaches. (see illustration at right)
- Observe tree for insects or diseases that hinder growth and treat accordingly. Spraying to protect fruit is not needed in the first year.



2 **Second Year** | *Main focus: Develop tree form by training limbs and pruning.*

- Train the limbs to develop the ideal tree form for each type of fruit tree. Use tree training rubbers, limb spreaders sticks or homemade innovations with twine, clothespins or weights to accomplish this.
- Maintain mulch and keep area clear around trunk.
- Top-dress with 1 lb. fertilizer per tree in spring as growth starts.
- Prune unwanted branches when dormant. (Dec. -late Mar.) Perform summer pruning. (June-July)
- Remove most blossoms or fruits. Leave a few to taste the future.
- Observe tree for insects or diseases that hinder growth and treat accordingly. Generally, no spray routine to protect fruit is needed in second year.



If pinching of dominant competitors was not done during first growing season, then the pruning of the second and third branches must be done at the beginning of the second growing year.

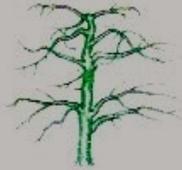
3 **Third Year** | *Main focus: Maintain tree form. Prepare for crop.*

- Maintain mulch and keep area clear around trunk.
- Top-dress with 1 1/2 lb. fertilizer per tree just before or during bloom.
- Prune when dormant (Dec.-late Mar.).
- Perform summer pruning (June-July).
- Decide on a spray program to follow and have products on hand early in year.
- Spray at the critical stages (especially right after bloom) to protect both the tree and the fruit.
- Thin fruit load to avoid tree stress and poor flavor due to overcropping. Leave approximately 15-20 apples or 15-30 peaches per tree. Apples and pears should have only 1 or 2 fruits per cluster or 2 fruits per each foot of limb. Peaches and nectarines, 1 fruit per 6-9 inches of limb.

Pruning Your Fruit Tree

Various pruning techniques are used for **each** type of tree.
With well-managed fruit trees, your home orchard will be productive and enjoyable.
Aim to have a balanced ratio of 1-, 2-, and 3-year wood on a producing tree.
Fruit production declines on 4-5-year wood. Pruning makes the fruit tree!

FORM 1



Central Leader Form
for apples and pears

Apples and Pears need dormant pruning (Dec.-Mar.) to maintain the form of the tree.

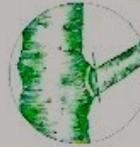
- Remove branches that are 1/2 or 2/3 the size of the main trunk. For a new shoot to emerge, leave a stub or bevel cut. Otherwise, make a flush cut.
- Cut Ys to a single branch
- Remove weak, thin, and nonproductive wood.
- Remove excessive upright growth and cater to horizontal branches for the best fruiting wood.

Prune in June to limit the size of your tree.

- Tip off extra long shoots and remove young watersprouts.
- Prune as needed to expose fruits to sunlight.



Stub or Bevel Cut for renewal growth



Flush Cut

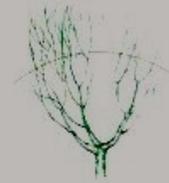
FORM 2



Open Center Form
for peaches, nectarines, apricots and Japanese plums

Stone fruits (peaches, nectarines, Japanese plums) are pruned differently than apples because they produce on previous year's growth.

- The best time to prune is late spring (April).
- Remove 1/3 to 1/2 of the previous year's growth. This still leaves ample wood for fruiting.
- Watch for small shoots that grow from the sides of main branches. Use those to eventually replace older limbs and to keep tree young.
- Keep center open.



Remove 1/3 to 1/2 of previous year's growth

FORM 3



Modified Central Leader
for European plums, sweet and tart cherries

Plum trees need dormant pruning (Dec.-Mar.) to maintain the form of the tree

- Remove branches that are 1/2 or 2/3 the size of the main trunk. For a new shoot to emerge, leave a stub or bevel cut. Otherwise, make a flush cut.
- Cut Ys to a single branch
- Remove weak, thin, and nonproductive wood.
- Remove excessive upright growth and cater to horizontal branches for the best fruiting wood.

Cherry trees need a special pruning sequence.

- Reduce length of shoots by 1/3 in late dormant spring pruning.
- WAIT to remove large limbs until right after cherry harvest. A dry, sunny day in July is best.
- Remove 1-2 large limbs annually on mature trees
- Stub back several more older limbs to promote new growth. Stubs can be from 3"-6" to 2'-3" in length, depending on position on branch.
- Always leave a small stub to prevent canker infections. Keep center open to sunlight so inside limbs remain actively growing.

FRUIT TREE PLANTING

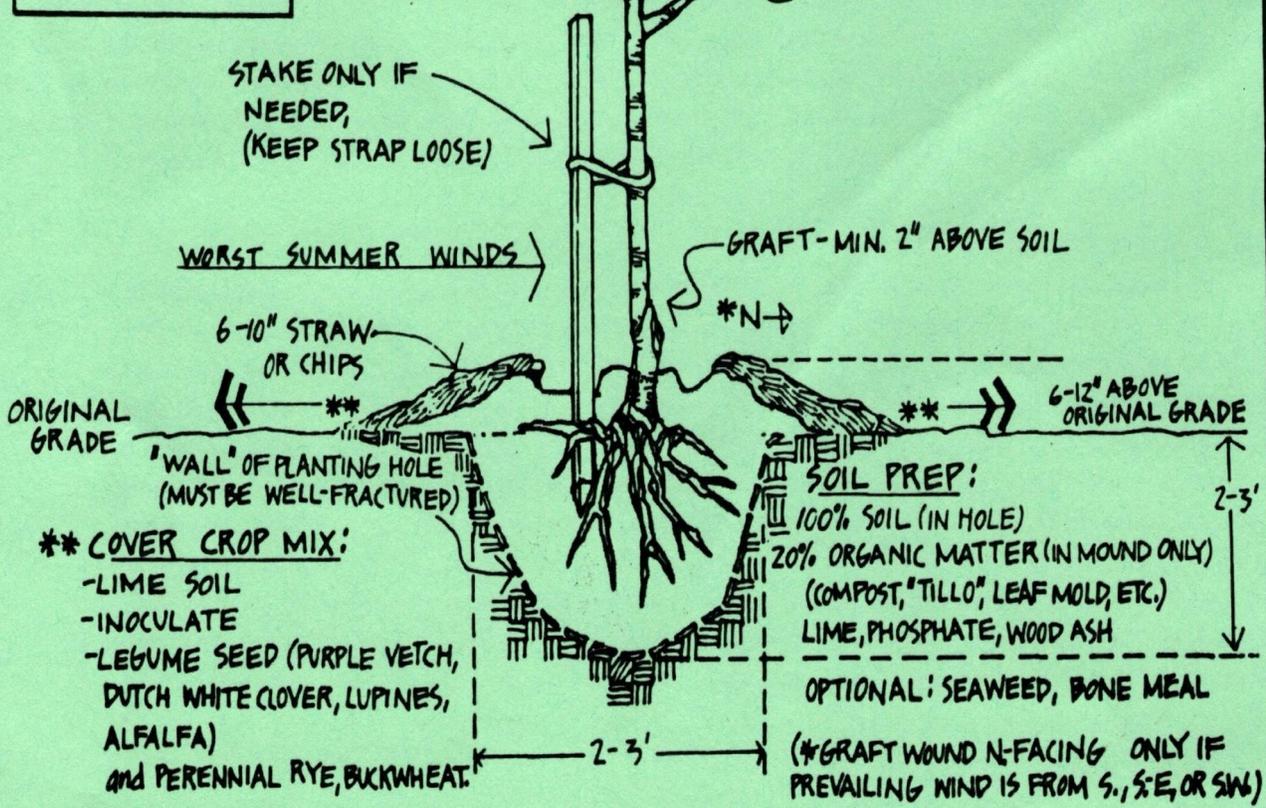


Illustration: From "Your Edible Landscape- Naturally" by Robert Kouric

When Trees Arrive...

- Open package and check to confirm good condition. Notify us of any problems.
- Plant as soon as possible.

If not suitable to plant immediately:

- Check moisture of roots and moisten them if they appear dry.
- Reseal package.
- Keep in a cool, shaded basement or garage. Avoid drafty or windy areas outside.
- Recheck roots every couple of days. Be sure to reseal the package each time.
- Wait for the right time to plant. Plants will keep for 2 weeks or more.

Hole Preparation

It is very important to prepare your site before planting. Work the soil by spading or plowing. Remove sod and weeds that will compete with your tree. Planting a tree into vigorous grass is preparing for failure.

Dig your hole large enough to accommodate the spreading feeder roots of your tree.

Water the newly planted tree and support it with a stake. Staking will greatly increase your first season's growth. Water the tree with 3-4 gallons of water twice weekly during a drought or dry period. A good soaking rain will quickly relieve a rigid watering schedule.

Soil Condition

Much of your planting success depends on your soil condition. If your soil is fertile and well drained, it can support almost any kind of a fruit planting.

Problem Soil

Clay and soggy soil can be a major problem.

If planting in heavy soil is your only choice, you may want to use the following method.

Dig only a shallow hole and put some loose, sandy topsoil into it, approximately 4"-5" thick. Set the roots on this topsoil layer, and cover the roots with more topsoil. When you are finished covering the roots, you will have a nice, low mound that sheds excess water which could potentially drown your tree.

Where natural slopes do not exist in orchard areas, ridging the tree planting area slightly higher than between the rows is very beneficial. This is especially important for stone fruits.



Mound soil around newly planted tree. This is important, as there is always some settling.

The graft union on dwarfing apple trees should be at least 2 or more inches above the soil level when planted.

When planting do NOT put fertilizer or manure in the hole. Mulch or fertilizer can be added on top after planting.



Berming or mounding is desirable in heavy soil.