Chapter 21
DIY Like Paul

Growing food God's way is all about doing things yourself and relying on God and not on man. Two of Paul's biggest DIY projects are pruning and seed saving.

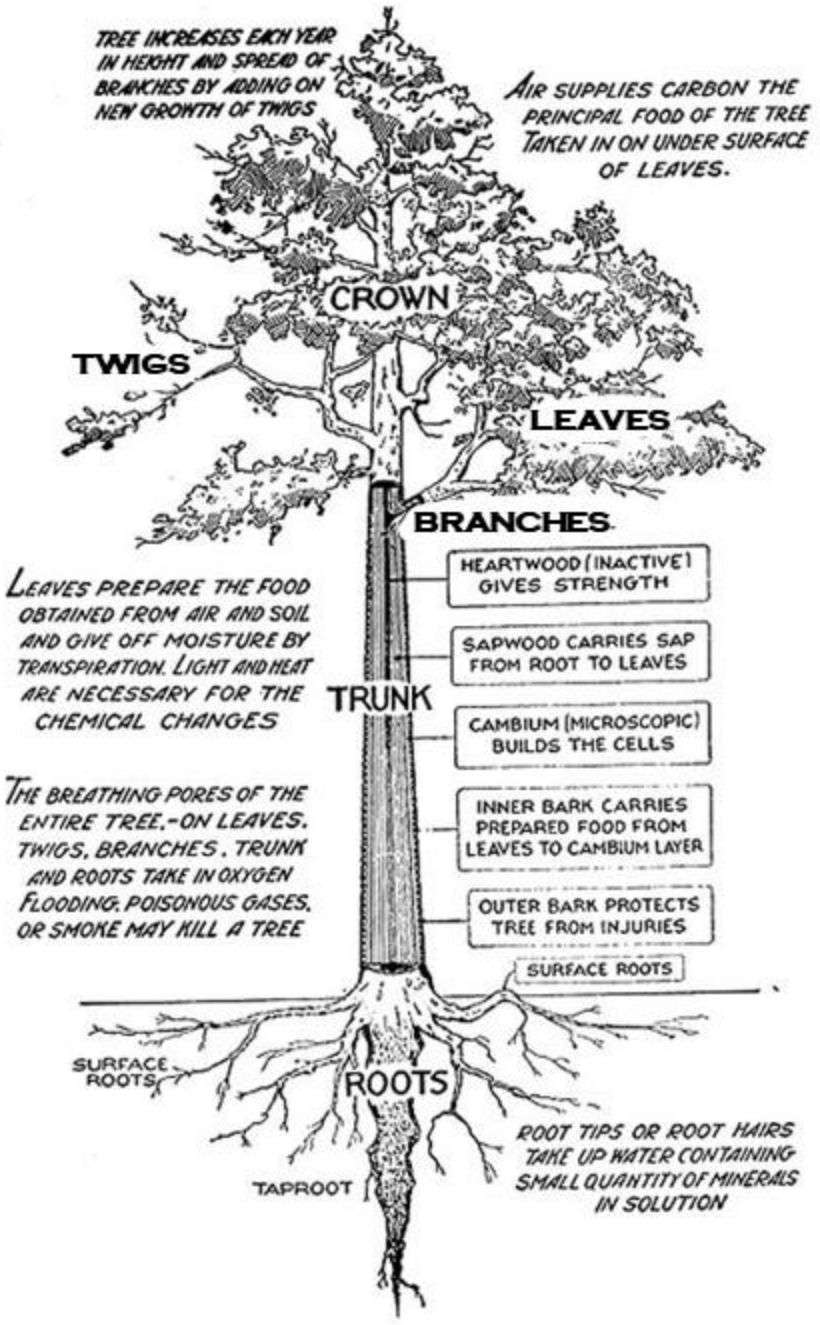
You can watch Paul prune on YouTube videos like https://www.youtube.com/watch?v=Q3Sd2LjdSNU&t=1900s.

Before we look into his most active DIY project, let's make sure we're on the same page about trees.

Trees 101

First, there are two basic kinds of trees: deciduous and evergreen. The former are trees that shed their leaves or needles every year (like oak, maple, fruit and nut trees, European larch), and the latter keep their foliage (like pine, spruce, fir, and cedar trees). Even the palm trees that Paul grew up with would be considered evergreens.

Next, we will look at the anatomy of a tree. As you see on the next page, the ends of the roots on the ground are where the moisture and nutrients are taken up. So often we water a tree at its base where the trunk enters the ground, when we should be watering below the ends of the branches (the drip line) where natural rain nourishes the tree.



varieties and I have room in my orchard.

Grafting

Here is Paul's take on grafting: "There are many benefits to grafting. For those who don't have much space for trees, it provides more varieties of fruit in the same space. It is key to cross-pollination. I was amazed one year that I had a pear tree that was thirty feet away from another pear tree. It was not bearing fruit even though the bees were in the orchard, so it was being pollinated. When I grafted [another variety] into that pear and it bloomed, that next year it was loaded with fruit! I saw the advantages of the pollen being *within the tree*, so grafting really increases pollination. If we pay attention to what's happening to the planet with the overuse of pesticides, [we see] the bee population is declining at a scary rate. What these farmers don't realize is if you don't have bees, you won't have food. What I think is awesome about grafting is that without bees I'm going to have pollination happening just from the wind. [Grafting] is something I am doing more and more of because they keep coming up with new

"Years ago, I asked the Holy Spirit how to do [grafting], and this is what He told me: This method of grafting is very, very simple. Onto a branch of a tree, I bring in what's called scion wood [a young twig from the other tree]. I do it branch to branch. The principle is to join the cambium layer (that's the layer below the bark) between the existing branch and the scion wood. The cambium layer is where all the life force is in the tree. You have to make sure that both cambium layers are in contact. You want to make sure the twig you're putting in and the piece you're grafting into are the same diameter [a half-inch or 1.25cm minimum], so the cambium lines up. What I do is cut the branch I want to graft flat with a saw, and with my pruner, I cut a slit in the middle of it (crack it open). This does not remove any wood from the branch I'm working on. On the piece that I'm grafting, I cut both sides at an angle (like an arrow), and I slide that into the opening (of the receiving branch). The longer the angle, the more cambium you have coming in contact. Make sure you line up both sides before you do any cutting to make sure they are the same size; like holding your two index fingers side by side, you can tell they are the same diameter. Doing that with the scion wood helps to ensure the connection is right.

"Afterwards I apply cheap electrical tape (from Taiwan) because it stretches. As you wrap around that union with black electrical tape, it keeps those cambium layers in alignment. When you wrap it well, it is immovable. I start at the base of the union and wrap beyond the joint and back up again, probably two or three wraps. You wrap a bit tight and take advantage of the tape stretching. That's what keeps the air and disease out. When the sun hits it, it heals quicker. It is an amazing, effective way to graft. Be generous with the tape because it is cheap and you want a secure joint. As the branches bond together, the tape will eventually fall off. You know you were successful when the new branches start to bud out. It is so amazing to see, and I just say, 'Yay, God.'

I asked Paul if there were times when the graft didn't work out right. He said, "It has happened to me when it didn't take, and I have to cut off the deadwood. Next time, I will probably go somewhere else on the tree to do another one. Occasionally it will fail.

"One thing . . . is important, and this is scary. . . . One year I grafted a tree, and the first year four apples grew. I said, 'Look at that—four full apples are growing there!' Then one day I go out there, and it's all lying on the ground because [the joint] broke off. The union was not yet steady enough to support all the weight, and I lost my good graft. So, I'm telling people that if you get apples (or pears) the first year, take them off immediately because the union has not thickened enough to hold the weight. It has to be totally enmeshed in the tree. It takes time; doesn't happen in the first year. If you get fruit, take it off at the earliest stage so bigger fruit doesn't strain the union. I was so sad because it was such a cool variety. Man, I come out and saw the thing was hinged out and dead. What a bummer! I know the temptation to leave, say, one apple to grow out, but I'm telling you from experience, that apple is not worth losing the graft." Pruning that first year means you have an eye for the next season.

Paul continues: "All the stuff you read in books about specialty pins and grafting paste are unnecessary. This is so simple and it makes it easy."

As to which branches to graft, Paul says: "Where you apply the graft is important. Put it in a place where there's plenty of room to grow. Don't put it in a place where it will grow back into the tree or be shaded by other branches. You want your grafts to be there forever, so place it in a place where it can be forever. If you put it out on an end, you'll be cutting it off next year when you're pruning. So the placement of that graft is very important. You want to place it where it can grow up, then out. The graft becomes an upright leader, and from it will spring

lateral growth that will bear the fruit. When you buy a fruit tree, it's [called] a whip, and branches will spread forth from it. This is basically the same thing. Your grafted whip will produce multiple branches later on."

When do we graft? Paul tells us the textbook way to graft is to cut the scion wood in the fall and store it in a cool place all winter. Next spring, as the sap stops being dormant and the host tree buds start to form, you do your grafting then.

Paul follows a different path: "What I'm doing now is cutting the scion wood and grafting immediately. What's the point of keeping it cool all winter when it's [already] cool outside?

"Again, so many of the things we're being told are stupid and inconvenient methods we got from the enemy to make it hard for us. What's the point of keeping the scion wood unattached? I'm doing this in the fall and I am seeing results. I don't have to wait as long to see if it will take. You get the results quicker by grafting immediately." If you do it the old way, what if you're gone, on vacation or holiday, when the sap starts flowing? Are you going to get a call to come home right away? If the graft is already in place, you can be anywhere when the sap moves and your scion wood is already there to receive it!

Paul says: "As you are out there, your brain is in gear. That's how you can ask questions like: Why keep things separate for months? It's not going to dry out in the orchard. In fact, with rain and snow, much more moisture is available than sitting in a sterile cooler.

"This one year I had an experience that made me start thinking that way. One of my tree clients had paid an insane price for a Gravenstein tree. I couldn't figure out why until I tried one. I said, 'Whoa, that is an amazing Gravenstein." I took cuttings from it and grafted it in my tree. As I was pruning my tree, I'm thinking 'I want to extend this.' So I laid some pieces on the ground, and after I was done pruning, I would come pick them up, but [this time] I never did. I spaced out and forgot about them. Next spring, I'm out there weeding (this is so hilarious), and I find those sticks on the ground. What got my attention is that the sticks on the ground were as leafed-out as the ones on the tree, and these are no longer connected to the tree! That's what got me thinking, 'Wait a minute. The only life force these are getting is from lying on the woodchips, and it's totally drawing enough off of that to create all this growth.' I'm thinking, 'Wow! That would not have happened in a cooler.' It was awesome. I love these things you consider mistakes and God uses to open you up to potential you never realized."

Where does Paul get his scion wood? It can come from another tree in his orchard or from a neighbor or nursery. There are all kinds of sources. He warns: "There are some issues that you've got to be aware of. For instance, the Gravenstein[1] I mentioned is the most vigorous-growing variety I've ever seen. Doesn't matter whether it's dwarf or semi-dwarf, it's so aggressive. The challenge is, if you graft a Gravenstein into another variety, you're going to have one branch that is extended and way developed beyond all the rest. If that's the case, you want to make sure you graft in the center and it has all the room it needs to grow out because it's going to need it. What I'm doing now is only grafting Gravenstein to Gravenstein[2] because I know how huge it gets. If you don't, your Gravenstein graft will imbalance the tree and seem way out of whack, kind of a detriment. Graft vigorous varieties to each other so they maintain the same growth patterns."

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[1] For info on this special variety, see https://www.orangepippintrees.com/trees/apple-trees/gravenstein ,

[2] Paul says there are red and yellow Gravesteins.

As to disease issues with grafting, Paul doesn't have any: "I've never had a problem with disease on any of my grafts because I am grafting into healthy trees." Plus, the electrical tape acts as a bandage to protect the tree.

Grafting Gentiles

Do not miss the spiritual implications of grafting. It is spoken of in the Bible. Remember what it takes to graft: A natural branch serves as the host, and a wild branch (scion wood) is amalgamated with the natural branch. It is a beautiful picture of provision because the wild branch (scion wood) is all by itself. It is not connected to the life source of any tree. Left to itself, it would dry out and die. But when you properly fit it in to the live host, it takes on the life of the natural branch of the living tree.

That is what YHWH (God) did for Gentiles. The Messiah is as the Tree of Life, and the Jews became the natural branches. If you were not a Jew, you were almost certain to have no life in Him. But the Jews rebelled against the Tree, so God cut off their (natural) branches and grafted in the (wild) branches of the Gentiles. Now God, the Son, would be their life source and supply them with that which was never available to Gentiles before. But they are not to be high-minded about it. The Jews were entrusted with the oracles of God. Paul Gautschi reminds us that God gave that nation a life purpose in Genesis 22:18: "in thy seed shall all the nations of the earth be blessed; because thou hast obeyed my voice."

In Romans 11:11-24, the Apostle Paul analogizes Jews as part of an olive tree (related and devoted to God). Since God is holy and serves as the root of the tree, then the branches are holy. He speaks of the Jews falling from grace and their branches being cut off. Remember that the book of Romans was (largely) written to Gentiles. The Apostle makes this point in verse 17: "And if **some** of the branches [Jews] be broken off, and thou [Gentiles], being a wild olive tree, wer[e] grafted in among them, and with them partakest of the root and fatness of the olive tree." (Emphasis added.) He goes on to tell the Gentiles to not boast against the Jews because God has not written them off forever, but that the grafting in of Gentiles was to provoke Jews to (righteous) jealousy.

Finally, the Apostle validates God's love for Jews and issues a warning in verses 23 and 24*: "*And they [Jews] also, if they abide not still in unbelief, shall be grafted in: for **God is able to graft them in again**. For if you [Gentiles] were cut out of the olive tree which is wild by nature, and wert grafted (contrary to nature) into a good olive tree: how much more shall these, which be the natural branches, be grafted into their own olive tree?" (Emphasis added.)

To summarize, we (like Paul Gautschi) were likely born Gentiles that go through life abiding in a wild olive tree. Wild refers to our freewill, which allows for wild imaginations and evil living apart from God. We can't graft ourselves from the evil, wild tree to the good, natural tree. We have to be willing—actually, not just willing but passionate—to cut ourselves off from the evil tree and die to it with the assurance that Jesus will graft us into His tree and cause us to bear fruit for His kingdom.

Saving Seeds, Not Private Ryan

In April of 2020, Paul says, "I get a call from a lady in Vermont who is stressed out because all the big-box garden centers are shut down because the governor declared they were

non-essential during this COVID-19 pandemic.[3] For years, I have been saying, 'There will come a time when saving seeds will be non-optional. We are approaching that really quick.'" This worldwide plague has been a wake-up call that we need to use what God gives us now to provide for the future. Paul has been saving seeds from the very beginning of his gardening experience. His mom saved seeds. He admits it involves effort and intentionality, but the benefits far outweigh the hassles.

Paul says, "I called Fedco to order some seeds over the phone. The recording says. 'We are totally overwhelmed with orders and are not taking any new orders.' It is amazing the volume of calls coming here [Paul's house] now. People are waking up and saying, '*We've got to grow [our own] food*.' My neighbor went to a local farm to buy compost and was told they were sold out. The owner said it was the first time in their history that they had run out of compost. This is definitely a wake-up call for those who are paying attention.

"I was watching a man from Victoria, BC, doing a presentation in front of about one hundred people. He was saying how it was essential to grow our own food and not rely on corporate supply chains. If prophesy in the Word says there's going to be a lack, then it's obvious we need to be prepared. He shows a picture of a house with a garden and says, 'Now you all know about the Back to Eden gardening method. It is the most amazing way.' Carol said to me, 'Paul, did you hear that? All those folks act [as if] they know what he's talking about.'

"I sort my dried seeds in the winter. I don't have that much to do then anyway, so it is good for me to attend to it. When you save your own seeds, you know the quality of the plant you got the seeds from. You don't know that when you buy seeds in a package."

Even if they claim the seeds are organic, you still can't be sure of the integrity. There is also the matter of cost that should motivate us to supply our own. How many of us have bought an envelope of seeds to find out there are only five seeds in the packet? Paul advises we pay attention to the weight of the package as our only indicator of volume. Seeds are very light, so it is not unusual to buy a quarter-ounce packet. He likes that Fedco shows the weight of their seed packages.

Paul does have a warning about which plants we should save seeds from. "You need to isolate the seed plants from the rest of the garden, in a place that is out of the way. Also, you want to grow healthy plants for seed." Before Paul planted everything in the orchard, it was his out-of-the-way place. He grew kale for seed out there. He warns: "Keep it separate from your production plants." Later, he shared: "When I plant my seeds next to the stuff I buy, there's no comparison. There's a major difference on how vigorous my seed is compared to the seeds I buy because my plants are good here, so the seed is very potent. You should be improving every year. This is not a static thing with proper soil care."

Timing is critical. Paul says, "If you harvest too early, they're not fully developed. If you wait too long, the pods open up and the seeds fall on the ground, so I like to get to them right before they're fully dry. Then I bring them into my shed to finish drying." Again, pray about your timing. The reason to have some distance between your dedicated plants for seed is the reality of cross-pollination. Paul shares: "I once grew some wonderful cucumbers from seed Carol got from Israel. They were so extraordinary that I wanted to save seeds, but the plant was next to a different kind of cucumber, and it wasn't till I planted my saved seeds that I got the shock that my seeds had been compromised. It was not good; a total disappointment!"

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[3] To be fair, the governor's Addendum 6 to Executive Order 01-20, item 6 k. adds "the production and delivery of seed" as essential. However, they closed Lowe's and The Home Depot, which forced Vermont residents to buy from smaller local garden centers.

In the winter, Paul gathers the seeds he had placed on paper towels and laid on a cookie sheet. He puts the trays in his shed and keeps them there to dry out naturally. When he has the time, he gathers the seeds and places them in a regular paper envelope. "Be sure you label it with the plant the seeds came from *and* the date you got them. One thing people need to know is not all seeds have the same shelf life. You look at the pyramids in Egypt and find corn that has been there for thousands of years that can still sprout when you plant them. With onion seeds (I don't care how healthy they are), the second year, they're dead. They only last one year, so that tells me that I need to save seeds each year if I want to grow my own onions. Each plant's seeds have their own shelf life, and you need to start knowing that." I asked if he had a list of things like that, and he said no; he is still determining seed shelf-life by trial and error. "If I plant older saved seeds one year and they don't do as good as the year before, I look at the date and can tell myself that I need to plant these seeds by year three (for example).

"A woman that I rented my place to in 1999 moved to Canada. Recently, she got on Nick's website[4] and sent him some Russian kale seeds I had given her back then. He planted them, and they grew! Those seeds are as old as he is—we're talking over twenty years! It depends on the cultivars [as to] how long the seeds last."

Paul doesn't recommend any particular environment to store your seeds in. He does not think they need to be refrigerated, but you do need to keep them dry.

"I come back to God's storage method for seeds. He lays them on top of the ground in the fall, then they spend a harsh winter with rains, snow, ice, floods, whatever, and the seeds come up in the early spring (long before the last frost date) and they come out just fine. Are you hearing what I just said? It's doing everything *the opposite* of what we do . . . and it works! [He chuckles.] Seeds are pretty resilient."

Another benefit of seed saving is seed sharing. Like trading baseball, football, or soccer cards, gardeners can share seeds among one another. Early on, Paul would mail seeds to anyone he thought could use them for free, but that became untenable. Now there is a small circle of family and friends he shares with. That is how we would get started—with a core group of seed sharers. It may take a few years to build your seeds up to that. Meanwhile, nothing stops you from gifting some seeds to your kids or neighbors if you have more seeds than you can realistically use. Additionally, Paul says, "When people come on tours and want seeds, I say to take a part of the (cucumber or zucchini) home, eat what you want, and save the seeds. You want the biggest, mature plant. Remove the seeds and place them on a paper towel in a tray and let them dry out with ambient air. There's no reason to put them in a warmer or dehydrator; that's just extra work."

A few years ago, a local friend asked Paul for any seed potatoes he could spare. Every year she would get seed potatoes from the local feed store in Sequim, but that year she found out they were affected by GMOs. That reminds us that the vast majority of seeds out there have been corrupted in one way or another. Saving your own gains you peace of mind, and Paul is all about living the peaceful, stressless life.

To recap:

- Be intentional about saving seeds.
- Grow healthy plants for seeds away from your production plants.
- Beware of variety cross-pollination.

[4] https://www.instagram.com/growingbacktoeden/?hl=en.

- Don’t harvest too soon or too late.
- Store the seeds in a dry area in envelopes with variety name and date.
- Be attentive to different shelf lives of your seeds.
- Share some seeds with others and maybe get a few to try.