The Slacker's Guide to Home Orcharding

Two Year Old Fig, From Cutting, Author's House

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You like fruit and home-grown food, but you don't really want to have to work too hard for it? Here's how you do it.

The Principles of Slacker Orcharding

1) Pick varieties that don't need much care.
2) Plant them in a spot where they have enough space and sunshine to be productive.
3) Mulch them excessively
4) Water them through first summer.
5) Enjoy the fruit for decades to come!

There's More to Life than Apples

Some of the most popular fruits -- apples, peaches, plums, cherries -- are also the fruits that have the most disease and insect problems. There are many other fruit trees that produce much more fruit with much less work, or chemicals. Fruits that are easier to grow include pears, rabbiteye and southern highbush blueberries (northern blueberries are little more finicky), figs if you have a good sunny spot, raspberries, blackberries, persimmons, muscadines, mulberries, nanking bush cherries, sour cherries, jujubes, goumis, autumn olives (which are invasive), pomegranates, che, gooseberries, currants, pawpaws, and passionfruit.

The popularity of well-known fruits has been influenced by historic promotional campaigns, not by the intrinsic value or ease of growing of particular fruits. Some New Zealand growers decided a few decades ago to spend a bunch of money marketing Chinese Gooseberries, named them “Kiwis,” and now they are a popular fruit. Apples were familiar in Europe, and grew well in New England, and thus are very popular. Persimmons, muscadines, and a number of other fruits grow well in the Southeast, but are less popular because they haven't had a lobby working their cause. For the home grower, moving beyond tradition is a rewarding experience.

What Works, What Doesn't, and Why

Growing a diversity of fruiting plants, especially if you choose to do so without chemicals, can lead to many failures to produce fruit. There are some identifiable reasons why this is so:
1) Many of our fruiting plants are Asian in origin and have trouble with the wildly oscillating spring temperatures in the spring in various parts of the U.S.
2) Many fruiting plants, particularly those from Asia or Europe, are not adapted to the diseases and insects they find in North America, and may have a high susceptibility to damage from these pests.
3) For an annual plant, a complete failure to produce fruit and seeds in a single year could result in the extinction of the species. For long-lived perennial plants, on the other hand, producing fruit requires a lot of energy. The plant can afford to wait for

a year or many years in between cycles of producing fruit with some benefit to the long term evolutionary survival of the plant. Thus fruit trees can be conservative in their choices about when to make fruit.
4) Nurseries, in order to stay in business, have to sell what people will buy. People think fruit = red apple, so they buy apples or other common fruits. These most common fruits are the fruits that are the most susceptible to disease and insect attack. The average apple or peach gets sprayed 14 times with a brew of insecticides and fungicides. Some of the plants sold by nurseries will not produce with heavy application of chemicals, particularly in the Southeast.
5) Home growing is different than commercial orcharding. The commercial grower wants fruit that; looks good, all ripens (or looks ripe) on the same day so it can be picked all at once, remains hard for shipping, and responds well to uniform treatment (chemicals). The home grower wants the opposite of the commercial orchardist; fruit that tastes good regardless of how it looks, ripens over an extended period, softens when/ if it should, and responds well to the diverse and often trying conditions of the home orchard.

To address these issues, it helps to know where a plant comes from, how well it grows in your area, and what you can do to accommodate the vulnerabilities of particular plants. Some plants thrive without any insecticides or fungicides, and some plants make sweet fruit even it does look like what you see in the grocery store.

What About Fruit Zones?

Just because you live in a USDA zone where a fruit supposed to grow means little about whether or not a fruit will grow well in your area. There are numerous considerations regarding your “zone,” including:

1) Absolute Temperatures

Many fruit trees will be killed if winter temperatures drop below a certain level, especially if temperatures stay low for sustained periods. The USDA zones are the best indicator of various plants absolute temperature tolerance. Be mindful that young trees are much more cold sensitive than mature trees. If you are planting fruits that are on the edge of their region, consider sheltering them for the first year or two. Heaping mulch around the trunk in winter (once it is quite cold and the voles are dormant so they don't eat the bark off your plants) and removing it in EARLY spring can help. Also, one can pinch the tips of growing plants, vines in particular, to slow their growth. This makes thicker branches that are more cold hardy.

2) Winter Wind Dessication

Cold winter winds can dry out, and kill, plant branches – part of the reason the thicker bark of more mature trees is more cold resistant. For plants that are sensitive to winter dessication, planting them on the south side of a barrier that blocks the

northern wind can be helpful. There are also commercial waxy sprays one can buy to coat trees to protect them. Figs can be subject to dessication damage if unprotected, particularly young ones.

3) Spring Temperature Oscillation and Frosts

Temperatures on the East Coast of the U.S. can oscillate wildly in the spring. This is NOT taken into account in the USDA zone system. Some plants, like hardy kiwis and some Asian persimmons, are hardy to very cold absolute temperatures, but are highly susceptible to spring frost damage. Remediation can include site choice. Moderately higher elevations often "drain" cold air, and are thus protected from spring frosts. Another solution is to plant on the northern side of buildings, trees, or on land that slopes to the north, so plants are shaded in the early spring when the sun is still low in the sky, but get full sun in the summer. This will slow the growth of plants in the early spring and thus leave them dormant when the spring frosts hit. Yet another solution is to use artificial shading in the early spring to slow the growth of the plant. Or you can cover plants when the spring frosts come.

4) Microclimate

Just because you are in a particular zone does not say much about what local temperatures actually are. A warm microclimate in zone 6 will likely grow figs much more effectively than a cool shady spot in zone 7. Most buildings in America are poorly insulated. The area around them, particularly on the south side, tends to be warmer and can thus protect plants close to the building in winter. For temperature sensitive plants, microclimates can be very important. Figs will grow vigorously when they are warm enough, and grow little if temperature drops only slightly.

5) Disease

The USDA zone system takes no account of diseases. Plants that will grow well in drier areas in the midwest or west may not grow well in the East where humidity is higher even if the temperatures are the same. The sustained high humidity of the Eastern states supports a plethora of plant diseases that are happy to feed on your fruit trees. Just because a nursery catalog says a fruit will grow in your zone does NOT mean it will grow in your zone without heavy chemical intervention. The best solution is to choose the right variety. Again, small and local nurseries, or neighbors who have experience with the local climate, are likely to be sources of the best information. Some sweet cherries, some apple trees, some nut trees, and European grapes are often poorly suited to the southeast because of disease problems.

Shade and Space

One of the most common mistakes I have seen with urban and suburban gardeners is that they have little space, plant things too closely, and plant things under the shade of larger trees. Stand in the spot where you want to plant something, and look up. If you are looking at a tree limb, forget it. A fruit tree will not grow there. Some fruit trees will be moderately productive in *partial* shade. With rare exception, fruit trees will not produce under significant shade or if they

lack space. If you are really pressed for space, consider small plants, like strawberries or bush cherries that can grow in small spaces, or plants that are tolerant of *partial* shading.

Mulch

Mulch of any kind is very helpful in growing healthy trees. All plants are happy cannibals. They love to eat other plants, decaying ones that is. Woodchips, sawdust, leaves, straw, grass clippings – all of these things make wonderful fertilizer for fruit trees.

Mulch can harm young trees if it is wrongly applied. Soil is an ecosystem of living organisms. The oxygen in the soil allows this ecosystem, and tree roots, to thrive. Heavy mulching can lower oxygen level in the soil or cause anaerobic conditions. Heavy mulching can kill small trees because of the changes it causes in the soil. Mulch heavily *when you plant*, and the tree will grow it's roots where it needs to. Do *not* pile heavy mulch around a *small* tree *after* it has been growing for a while. Once the tree grows a little larger, you can mulch more heavily. Also, don't pile mulch up around the trunk of the tree. This can be bad for the tree and exacerbate insect problems. ALWAYS make donut of mulch around the tree, leaving the trunk exposed to the air.

Many mulches are acidic when they are fresh, and may absorb nitrogen in the early stages of decomposition. The growth of some fragile or acid-sensitive garden plants can be impacted by heavy mulching. I have never planted a tree of any kind that gave any appearance of being negatively impacted by heavy mulching, with the exception of very young trees, as previously mentioned. Don't fret about acid or nitrogen. Grab every bag of plant material anyone in your neighborhood throws out and pile it around your trees. Pile it high and thick. As that material breaks down, your trees will grow like mad. Note, the fig on the cover of this pamphlet was planted at a rooted twig as big as a toothpick. The first year, it grew 8 feet tall. The picture is after the second season of growth. It was heavily mulched.

About Dwarfing

Back in the old days, apples and other fruits were all grown on “standard” rootstock. For apples, that meant they grew really tall. Apple pickers had to climb tall ladders to reach the apples that 20 or 30 feet off the ground. Starting some decades ago, somebody figured out that apples could be grafted to rootstock that limited the height of the tree. Trees that stay very small, about 8 feet or less, are called dwarf. Trees that get up to 12-15 feet or so are called semi-dwarf. Nowadays, commercial apples orchards mostly plant semi-dwarf trees, and plant them more closely than the old standard trees. This yields more fruit per acre that is faster to pick because the trees are shorter.

There are a few things you should know. A standard apple tree can live for centuries. A semi-dwarf can live for decades. Dwarf trees usually live less than 20 years. Dwarfs may have other problems as well. They are less vigorous, and may

become stunted and unproductive if they are stressed early in life. With apples in particular, the wise choice is to simply avoid dwarfs. If you have a very limited space, get a semi-dwarf and prune it when it's dormant. (That's basically what commercial orchards do.)

Transplanting

The primary concern when transplanting plants (and also when grafting) is dehydration. Particularly with bare-root (as opposed to potted plants), the tree has had all of its fine roots removed and must rebuild its root system in order to survive and thrive. This is why transplanting is normally done in fall, winter and spring. This is when evaporation rates are lower, and thus the chances of fatal dehydration of your transplants are lower.

I worked on a job as a teenager that taught me a lot about transplanting. I was working for a small company that moved full grown trees in Florida year-round. They had a large "tree spade," a machine on a big truck that could dig up a sizable tree. For those of you not familiar with Florida soil, it is basically sand. Summertime temperatures are relentlessly hot. How did they keep the trees alive? With large trees, they would put a sprinkler in the top of the transplanted tree and run that sprinkler 24 hours a day, 7 days a week, for months. Preferably, one would choose to avoid such extremes of intervention (and water use), but it taught me that water is the secret to moving trees under hot conditions. On the other hand, I have knows many nervous gardeners and orchardists who plant in spring or fall, and then water every day in the summer. That is unnecessary, and not good for the plant. Its better for the plant to experience drying cycles to keep the soil from getting water-logged and let the plant seek out water.

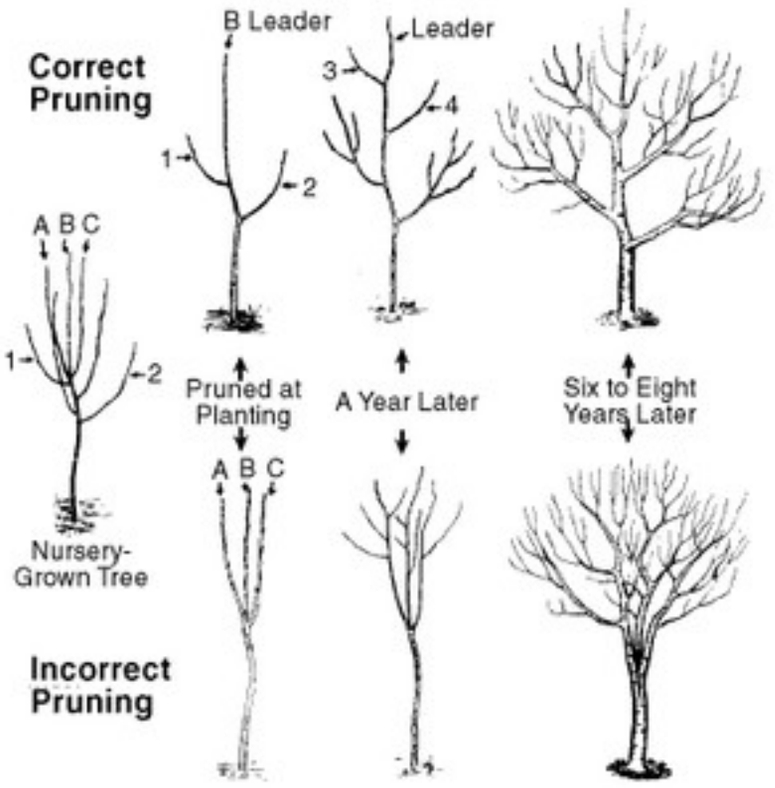
The rules of transplanting are:
1) Transplant in fall, winter or spring if possible.
2) Beware that transplanting in the coldest months of winter can be detrimental to the plants, especially if they come from a nursery with a greenhouse, or a more southern location. If a plant is fully dormant, if you are moving it from one equally cold spot to another equally cold spot, then transplanting in winter is fine. If the plant comes from a greenhouse or is otherwise not fully cold-hardened, keep it sheltered until temperatures moderate.
3) Do not let the small roots of a plant in transit dry out, even for a few minutes. Do not lay the plant with its bare roots in the sun while you work on the hole.
4) Soil amendments are often helpful. Avoid chemical fertilizers as they can burn the roots and kill the trees. Any organic material -- compost, peat, rotted leaves -- can help lighten heavy clay soils and improve drainage. This organic material will also feed the plant in months and years to come. Mulching around plants can also be helpful.
5) Water in plants heavily when first planted to settle the soil and remove air pockets. With the exception of very small plants or extreme conditions, watering

about once a week is plenty.
6) If you have no choice but to use chlorinated city water, that will keep your plants alive. Non-chlorinated water is much better.
7) Potted plants are often more expensive, but they get off to a better start because they have their fine roots. If the plant has been in a pot for a long time, it might be "pot bound," meaning the roots have become intertwined and matted in the pot. Break up and spread the roots, or even trim them if necessary, to break up the matted roots.

Pruning

Some trees benefit from heavy pruning, some trees are fine if they are left alone. Apples will not produce much at all over time if they are not pruned. With peaches, some need to be pruned heavily, others need to be pruned very little. Grapes need heavy pruning. Many people plant kiwis and then do not prune them. They will not produce fruit for many years, if at all, if they are never pruned. Some pears need considerable pruning. With most other fruits like plums, you simply need to watch the tree. If it gets very bushy, dense and unproductive, then it probably needs to be pruned.

Pruning helps trees (some trees, at least) concentrate their energy. That helps them produce fruit. Always prune when trees are dormant. (Kiwis are lightly pruned during the growing season. See kiwis below. Other trees may be lightly pruned, as to remove sprouts that come from below the graft, during the growing season.) In general, you are simply trying to open the tree up, to reduce excessive density of foliage. It is also sometimes beneficial to spread the branches on young trees, either by tying them down or using pruned branches as props to push young limbs away from the main trunk. By reducing the number of buds, pruning may allow some buds enough energy to become flowering/ fruiting buds, instead of just making more leaves. Pay attention to how plants respond to pruning. If you watch carefully, they will teach you what they need. The image below is “central leader” pruning, often used for apples. Peaches are often pruned with an open center, into more of a bowl shape.



Beware the Bugs

In the Southeastern U.S., the most destructive fruit pest is the plum curculio. The curculio can live in the wild feeding on wild cherries, wild plums and what not. When you plant your own fruit, if you do not spray, then you provide more food which can support an escalating number of curculios. Personally, I do not use or support the use of chemical sprays. If you do use sprays, then the labeling should tell you what you need to do to protect your own health. To protect the health of the bees, never spray when the flowers are still open. Wait until "petal fall," when the flowers are gone and the bees have moved along. Beware of spray drift onto other flowering plants. The most common "Fruit Tree Spray" is produced by Bonide company. Independent reports say it is not effective for curculios. If you are willing to spend the extra money, the organically based Pyganic is effective, but is not long-lasting.

Chickens and ducks offer some protection from curculios and other pests. The curculios go through several life-cycles in the course of each season. Usually, the first generation comes into the orchard from the surrounding forest. They lay their eggs on the fruit. The eggs hatch and the curculio worms bore into the fruit, then release a hormone that causes the fruit to drop, or they simply crawl out of the fruit and fall to the ground. Underground they pupate into another curculio beetle. Chickens and ducks can interrupt this cycle. The official research that I have read states that fowl are an incomplete control for curculios, but I have known some people to use them with good success.

Kaolin can also be used. (Common brand name Surround, kaolin is white clay, sometimes used medicinally. It is utterly non-toxic. It forms a physical barrier that discourages many insects.) I haven't had much luck with Kaolin, but others report

good results. Mark Whalon is the leading researcher looking into organic curculio control. (See http://whalonlab.msu.edu/) He uses a complex method including parasitic nematodes, fungi, and kaolin. Picking up fruit as it drops in the summer is important. Tillage under the plants can also help to disturb the pupa under the tree. Maintaining overall orchard hygiene is enormously important or the curuclio populations can grow to devastating levels. Organic methods can effectively control curculios, but one must understand that there is no one spray that serves as a silver bullet. Organic curculio control involves bringing together numerous control techniques so these methods support each other. Organic methods are most effective if curculio populations are relatively low. If you already have bad curculio problem, your apples will be small and gnarled and your peaches will be wormy. One option is to spray one or two years to bring the curculio population down, then revert to organic methods once the curuclio population is reduced.

Tips, Tricks and Choices

What follows is NOT intended to be an exhaustive list of what fruits to grow or how to grow them. It is intended to fill the gap of information that is most often left out of nursery catalogs – the problems, limitations of particular trees, as well as the virtues of less well-known fruits.

Peaches

The nectar of the deities. They are very easy to grow, though pests can be an issue. They love full sun and warmth, and are generally tolerant of diverse range of soil conditions other than extremely soggy circumstances. I have peaches that get ripe from mid July until November. Very nice.

Brown rot is a fungus that attacks the fruit. The varieties Elberta, Glohaven, and Babygold No. 5, Harrow Diamond, and Sentry listed as brown rot resistant varieties. I have a Contender that appears to be resistant. Most of my trees are seed grown and are brown rot resistant, but they are not named varieties as such. Some commercial varieties are HIGHLY susceptible and may loose all of their fruit to brown rot. Removing diseased fruit can be helpful. Remove mummies – old dried fruits – in winter when pruning. They carry the disease through to the next year's crop. Sulfur spray is also used and is considered “organic.” Read the label – sulfur is applied in the growing season in lower concentrations than in dormant season. Controlling curculios will also help enormously in the control of brown rot.

Borers are worms that dig into the branches and trunk of peach trees, as well as plum and cherry trees to a lesser extent. There are few different kinds of borers, and they prefer some varieties of peaches over others. With young peach trees in particular, they can kill the tree. Ashes can be put around the trunk of young peach trees in mid June to discourage the borers. There are numerous other organic remedies recommended, such as trying to kill individual borer worms, but I have never found them to be effective. Confusion lures that smell like the pheromones of male/ female borers are effective.

Numerous animals also like peaches – deer, groundhogs, squirrels. Either plant the trees close enough to your house that the animals will be deterred, put your dog to work, or learn how to curse and throw rocks well.

Apples

The dominance of apples in the market results from the fact that they can be so easily shipped, and they grow well in a wide diversity of cooler climates. They are actually one of the harder fruits to grow in the Southeast without heavy chemical intervention as they are attacked by everything. Some of the old heirloom varieties of apples are the tastiest, though these same varieties are not necessarily the most disease resistant.

There are two kinds of pests that impact apples trees – diseases that attack the tree, and pests that attack the fruit. Fire blight, scab and cedar apple rust are the most prominent diseases that attach apple trees. Using these newer varieties is the best line of defense against these diseases. Fire blight in particular can be devastating. Both fire blight and cedar apple rust thrive in wet conditions. A very wet spring can make a mess of things. The standard remedy for fire blight is to cut it off when you see it, but that becomes futile if the disease is well-established. On very young trees, one can pick the blossoms off (and thus forgo any fruit production until the tree gets larger) as the blossoms are a point of entry for the disease. The best remedy cedar apple rust and scab is simply to keep the trees healthy enough that they stay ahead of these diseases. Curculios also attack apples. Control methods are listed above.

Pears

European and Asian pears can both be grown in our area. They are easy to grow. Pears can be devastated by pear-apple blight (fire blight). The only real solution for that problem is heavy chemical intervention or choosing varieties that are blight resistant. Luckily, there are numerous very tasty varieties that are blight resistant. It is my understanding that Asian pears are more blight susceptible, though I cannot speak authoritatively on the subject.

Sour Cherries

Sour cherries are easy to grow in our area (much easier than sweet cherries). They may be mobbed by birds. One can use netting, or devices that frighten the birds. I have not had any much luck with plastic owls or other stationary devices that are supposed to frighten birds.

Sweet Cherries

Sweet cherries are a complicated subject in the mid-Atlantic area. Some people can grow them, many people fail. They seem to grow better in well drained, sloping, mountainous areas with slightly reduced humidity. They do not seem to grow as well in flat, muddy, clay soils and areas with unrelenting high humidity.

They are attacked by numerous diseases and pests. Brown rot can also be a problem. Birds are also very smart about which cherries are the tastiest. (See note above under sour cherries.) The largest of the commercial cherries (ie Bing) are poorly suited to this area. They thrive in low humidity, not here. There are smaller, non-commercial cherries that seem to be easier to grow.

Mulberries

The nativized (aka wild) mulberries in this area vary from really tasty to not. Illinois Everbearing and Collier are favored cultivars, and with good reason. They are very tasty. Birds may eat them – see notes under sour cherries. Other than birds, they are generally pest-free. They can be impacted by a disease called popcorn disease that makes the individual cells of the mulberry swell to look like un-poped popcorn kernels. The disease overwinters in fallen fruit. The remedy is to collect the fallen fruit and burn it.

Figs

Provided you have a warm spot, figs very easy to grow. They are not attacked by any pest or animals (except for ants, occasionally). They are also really easy to root. They are susceptible to freeze damage in the winter. Chicago Hardy is a variety that seems to grow and ripen at slightly lower temperatures. Celeste is also a cold-hardy variety. Plant them where they have a southern exposure, and are protected from winter winds. They will also benefit from being next to parking lots or other heat-retaining structures.

PawPaws

There are lots of wild pawpaws in this area. They are also becoming increasingly popular as a cultivated tree. They are not attacked by any pests, although many wild animals like them. The wild ones vary a lot in their flavor and time of ripening. Wild pawpaws, like wild persimmons, get ripe over the entire fall. The cultivated pawpaws are generally similar in flavor to the wild ones, but larger. Although pawpaws grow as an understory tree in the wild (in the shade), they are much more productive in full sun. They grow near creeks and rivers in the wild. However, they do not like muddy soil. They prefer well drained soil with good access to water (which is the conditions in which they thrive in sandy river silt.) They can be a little finicky about pollination under some circumstances. (They are pollinated by flies, not bees.) One can consider manual pollination, or let nature take its course.

Persimmons

Do you know what tree fruit is the the most heavily consumed tree fruit in the world? It's not apples. It's Oriental (Asian) persimmons. There are two kinds of persimmons, Oriental and American. Oriental persimmons are larger, and American persimmons are more cold hardy. In the eastern U.S., Oriental persimmons are

often grafted onto American persimmon rootstock. This makes them a little more cold-hardy. There are numerous improved American persimmons available as cultivars. Persimmons are not bothered by any pest. Sometimes wild animals will eat the fruit. They are a very easy fruit to grow. The Rosseyanka persimmon is an American – Oriental cross which gets some of the flavor and size of the Oriental persimmon and some of the cold hardiness of the American. Nikita's Gift is a Rosseyanka crossed back to an oriental persimmon, also being more cold hardy than Oriental persimmons. All American persimmons are astringent – they make your mouth puckery and dry if you try to eat them before they are ripe. Make sure they are soft before you eat them, or only eat ground-fall fruit. Some Oriental persimmons are astringent and must soften, others can be eaten firm. There are also a plethora of wild persimmons in our area. They occur in many varieties and sub-strains. Some are soft, juicy and ripe in September. Other wild varieties are smaller, drier, and don't get ripe until late in the winter, hanging on the tree until January or February. Eating fruit from the tree in February is quite a treat.

Blueberries

Northern blueberries are sweeter and ripen earlier. Southern (rabbiteye) blueberries are more tart, ripen later, and are easier to grow. If you want maintenance-free plants, and are happy with picking them in July or August, plant rabbiteyes. Blueberries like a reliable water supply and acid soil. Sulfur amendments can be used to acidify the soil. (Commonly available as blueberry fertilizer.) Drip irrigation can also be used to keep them happily watered. The best success with northern blueberries is achieved with soil amendments and watering in dry weather. Blueberries may be eaten by birds. They can be netted, or bird deterrents employed.

Raspberries

Raspberries are easy to grow. Once they are established, they will proliferate like mad and you can give plants to your friends. Raspberries are not a southern plant, and can suffer from diseases that thrive in warm, humid climates. The productivity of the plants declines as diseases take their toll. My approach has been to replant a new crop every couple of years from the sprouts sent up from existing patches. This keeps the plants vibrant and productive.

Saskatoons/ Serviceberries/ Sarvisberries/ Juneberries ....

The little berry with many names. They are often grown as ornamentals, but they make the most lovely, sweet, peachy flavored berries. (I prefer them to blueberries, and they are easier to grow than northern blueberries.) They grow rather slowly, so it takes them a while to get established. The Juneberry is a shorter cultivar of the wilder, taller plant of many names. The wild plant can turn into a full-sized tree, though they are not numerous in the wild in this area. They are attacked by some diseases, including a fungus that attacks the fruit. Regardless of

such attacks, they remain productive without intervention. In some cases the birds may come after them.

Nanking Bush Cherries

Nanking bush cherries are a compact little tree that produces a small cherry-like fruit. They are similar to sour cherries, though a bit sweeter than most sour cherries, and the fruit is very small. They are useful for planting in small spaces because they don't grow very large. They are extremely cold hardy, and are rated to zone 2 or 3 (central Canada). They are tastier for fresh eating than most sour cherries, but not much good for processing as the seed-to-fruit ratio is not spectacular. The fall-fruiting bush cherries I have tasted are of poor quality. Nanking bush cherries are not bothered by pests. The birds may eat a few, but usually will not ravage them.

Muscadines And Scuppernongs

Muscadines are a southern favorite; a wonderful, sweet, indestructible grape. The wild ones grow throughout the coastal southeastern U.S., and are quite tasty. Domesticated cultivars are even sweeter. They are extremely tough plants. Short of digging them out of the ground, they cannot be stopped. No animals, insects, or diseases attack them. The domesticated cultivars are rated to zone 6. I do not have much experience with pushing them northward, but some varieties are more cold hardy than others. Some varieties may not ripen well in zone 6. Isons are a premiere muscadine breeder, and they have charts on their websites that indicate the cold hardiness, and other characteristics, of different varieties. Scuppernongs are, technically, a white/ beige muscadine. They are bred from a plant originally found near an area called Scuppernong. Some nurseries label any light colored muscadine a scuppernong. All grapes and muscadines must be pruned heavily to produce fruit. Grow them on a trellis or a wire. Establish main leaders after the first year's growth. From the main leader leave branches about 6 inches long or so. Each year thereafter, cut back to the main branches, adding one node on branches each year you prune. You will be removing most of the wood from the plant when you prune.

Grapes

In all honesty, I do not have enough experience with grapes to give a lot of advice. Many grapes will not produce in the southeast without chemical intervention. Concord grapes are hardier and more disease resistant than most, and will produce reliably without heavy chemical intervention. They may be subject to attack by Japanese beetles, if they are a problem in your area. There are numerous remedies for Japanese beetles on the market. I have no experience with the efficacy of the various remedies employed. (They are not a problem in my area.) I am confident that there are other grapes that will grow well in the mid-Atlantic area without heavy chemical intervention, but I do not know which varieties are best. There are also innumerable varieties of wild grapes in this area, some of which are

excellent for eating. Grapes are pruned in the same manner as muscadines.

Blackberries

Blackberries are easy to grow. Apart from a couple of new cultivars, they always fruit on second year canes. In my experience, the wild ones are generally sweeter than the cultivars. The cultivated thornless varieties are highly productive, though tart, and are thus excellent for growing berries for jam, juice, etc. All of the thornless blackberries are of west-coast parentage, and thus may have some problems with diseases in the southeast. Blackberry wilting disease can be a problem. Keeping the plants pruned back to bush-size, rather than letting them vine out to full length, can help prevent them from getting too bushy. This helps with air circulation and reduces problems with wilting disease.

Gooseberries

Gooseberries are easy to grow. They are not attacked by any pest.

Currants

Currants – ditto Gooseberries. Easy to grow and pest-free.

Che

Che fruit, sometimes called melon fruit, is an uncommon fruit in the mulberrry family. Whereas mulberries get ripe in the spring/ early summer, che fruit ripen in late summer/ fall. I find their flavor to be similar to mulberries – sweet, pleasant, but somewhat flat (not tart). If you like mulberries, you will like che. There is some confusion among nurseries regarding whether che need male and female plants. The plants sold by Edible Landscaping are self-fertile and seedless. Other nurseries sell male plants, and female plants that make seeds. Che fruit are pest free.

Plums

The are many kind of plum cultivars available. They are American, European, and Japanese/ Oriental in origin. The large purple plums you see in the grocery store are likely to be Japanese plums. There are also at least a few varieties that grow wild in the southeast/ mid Atlantic area, some of which are quite tasty. There are zillions of varieties of plums out there. They are subject to attack by numerous diseases, but, like peaches, are vigorous trees that tend to stay ahead of the diseases. Similar strategies for disease control apply as for peaches. It may also be wise to plant varieties that are known to do well in your area. Some varieties may not be productive because of spring frost or disease problems. Some of the larger Japanese plums are also attacked by brown rot, like peaches.

Pomegranates

Pomegranates are a wonderful, pest-free fruit that can be grown in our area. (Edible Landscaping has cold-hardy varieties.) They are fast growing, easy plants.

Apricots

I have limited experience with apricots. They are grown in our area, but are highly vulnerable to spring frost damage.

Plumcot

Plumcots are a plum-apricot cross. The variety Spring Satin is recommended for the Southeast. Other varieties may not hold up to Southeastern humid conditions. They are a very sweet, flavorful fruit. They are, in my experience, vigorous and trouble-free. They ripen very early. Perhaps because of this, they are mostly pest-free. Under some conditions, they may be subject to similar diseases and pests as peaches and plums, in which case similar remediation would be called for.

Fuzzy Kiwis

Fuzzy kiwis are not a “plant it and forget it” fruit. Under good conditions, they are fast-growing, pest free, very vigorous plants that make an abundance of sweet fruit. But they do require some management. In transplanting, they are highly sensitive to moisture, too much or too little. They have fleshy (not woody) roots. Therefore, if the roots are submerged in water-logged soil for even short periods of time, they can develop root-rot and die. They also dehydrate easily when they are young. They like rich, well drained soil. They will also grow into large plants if allowed. Kiwis need male and female plants. A female kiwi will produce fruit without a male, but the fruit will be very small, The plant fills out flesh around fertile seeds. Fuzzy kiwi males can pollinate any variety of fuzzy kiwis, and hardy kiwi males can pollinate any variety of hardy kiwis, but fuzzy and hardy kiwis cannot pollinate each other.

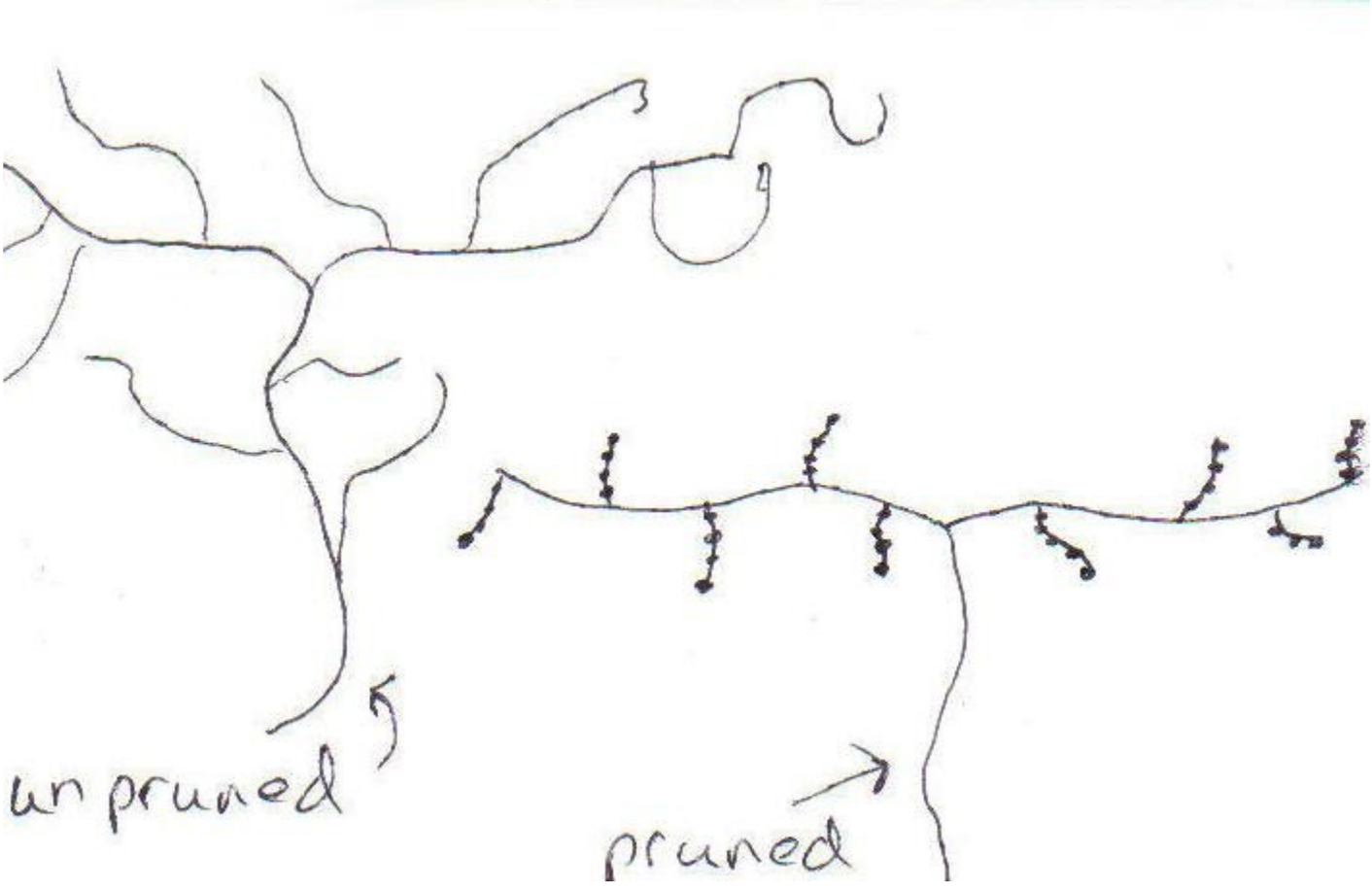
Plant them in well drained soil, and water them well for the first year. If you are transplanting plants that already have leaves, I recommend removing ½ to 2/3 of the lower leaves to prevent dehydration. Once they establish a good root system, they will be much tougher. Kiwis have to be pruned in a similar manner to grapes. Grow them on a trellis or a wire. Establish main leaders after the first year's growth. Prune them when they are dormant. Fruit is produced on branches, 2nd and 3rd year growth. Pick branches that have a lot of nodes, and prune some of these branches to about 8 inches in length. These will produce blooms and fruit. When you prune, you will be removing most of the wood from the vine. Kiwis and hardy kiwis can be summer pruned to keep the plant smaller and allow better light into the fruiting areas. One can pinch the tips off of the runner vines (vines that have few nodes) that the plant sends out to try to expand its size and range. You are simply encouraging the plant to focus its energy in a limited area rather than spreading too far. Saanichton is a good variety for this area.

Hardy Kiwis

Hardy kiwis, like fuzzy kiwis, are not a “plant it and forget it” fruit. Many people plant hardy kiwis and never get fruit from them because they do not prune them and do not protect them from spring frosts. All of the comments under kiwis for planting and pruning apply to hardy kiwis. Hardy kiwis are hardy to very low temperatures, but they are very sensitive to spring frosts in some areas. If this is a problem, then efforts to slow their growth in the spring or protect them from frost may be necessary. (Check out http://www.kiwiberry.com/ if you get a chance. That's a commercial producer in PA.) One variety of hardy kiwi, called an Issai, is self-fertile. It is not quite as vigorous as some of the other varieties, which grow very fast under good conditions.

Kiwi Pruning

(trellis not shown)



Passionfruit

There are numerous varieties of passionfruit/ passionflower, one of which grows wild in our area. That variety is also known as Maypop. They are easy to grow, they make a beautiful flower, and the fruit is tasty. They like warmth and sun. They will produce on the first year, freeze back to the ground, and come back every year after that. Beware, they are an aggressive plant. Do not plant them in close proximity to your herbs or other plants unless you are willing to pull up the runners, which will come up profusely in the spring.

Jujube

Also known as jujube dates, they are small apple-like fruits that are very popular in China. They are relatively pest-free. Some varieties are eaten fresh. Many are stored, whereby they dry up like raisins/ dates and can be stored for winter consumption. Roger Meyer in California has collected dozens of jujube varieties, and sells them. (They are also available at Edible Landscaping.)

Citrus

The only citrus that grows in central Virginia is trifoliate orange (bitter orange) and trifoliate lemon (flying dragon). The fruits from these plants are not really edible in any practical sense. They are very bitter. (I have had some flying dragons that were edible, but most of the trifoliate oranges are too bitter to be of much use.) They are often grown as ornamentals. In a garden where you can keep an eye on them, they are interesting and unique plants. Do not plant them where they will be unattended for years to come. Under those circumstances, they can become invasive. Triofoliate is also used as a rootstock for other citrus, which is easily T-budded. Stan McKenzie of Mckenzie Farms has collected a wide variety of cold-hardy and unique citrus plants. Citrange and citrumelo are trifoliate cross-breeds. They are more cold hardy than other citruses. The citrange is reputed to be not very tasty, the citrumelo is supposed to be better.

Good Nurseries:

Edible Landscaping – http://ediblelandscaping.com/
High-quality trees, excellent support and information, will tell you honestly what grows where and what doesn't, which is golden. The owner is great. They are not the cheapest.
Hidden Springs Nursery – http://www.hiddenspringsnursery.com/
Good prices, quality varies a bit, but overall is quite acceptable. Selection somewhat narrow. Great folks, small business.
Willis Orchards – http://willisorchards.com/
Large mail-order company from Georgia. Very cheap. Acceptable quality. Reasonable customer responsiveness. Mainstream varieties, nothing exotic.
McKenzie Farms – http://mckenzie-farms.com/
Run by Stan McKenzie, very helpful guy. Does cold hardy citrus, has collected many varieties.
Roger Meyer – xotcfruit@yahoo.com (no known website)
The jujube man, has a lot of different varieties.
Cummins Nursery – http://www.cumminsnursery.com/catalog.htm
These guys are not cheap, but they do have numerous varieties of disease resistant apples that are otherwise hard to find, as well as other fruits.
Finsch Blueberry Nursery -- http://www.danfinch.com/berrys.htm
A great source for blueberries, inexpensive and lots of varieties. Order extra, not all will make it.
Nolin River Nut Tree Nursery -- http://www.nolinnursery.com/
A good source for Peterson pawpaws and northern pecans.
There are many others, these are the mains ones I use.

Bad Nurseries
Tyty and its affiliates, Aarons nursery and others. Notice graphic style of the website http://tytyga.com/ Affiliates use same graphic style. Notoriously bad company.

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