



A Garden Compass Re-Publication

...by Dave Wilson Nursery 

Fruit Trees — Problems and Solutions!

by Ed Laivo

What are the most difficult potential problems to consider when planting a fruit tree?

I've learned about a few: poor drainage, late frost, late rain, extreme cold and critters!
These challenges to growing fruit trees contribute to why some people just don't want to plant them.

Problem 1: Poor Drainage or Over-Watering

The **number one reason** people **lose trees** is **too much water** due to **poor drainage** and/or **over-watering**.

Poor drainage is something we do not choose but often inherit when we purchase a home. **Make the effort to understand how your yard drains** — if there is the slightest suspicion that poorly draining soils exist, TEST!

- In each area you intend to plant, dig a hole about the size of a five-pound coffee can. Fill the hole with water and let it drain out. When it does, fill it again.
- If the second draining takes more than 4 to 6 hours, then there will be problems with some plants.
- If it takes longer than 8 hours to drain, or if there's still water standing from the first filling, then you have a substantial problem — one that must be addressed when trying to start a fruit tree and keep it healthy for many years.

One of the best remedies for poor drainage is elevated planting.

My experience is that the most commonly recommended solution, **mounding, usually does not work**. Mounds tend to wash away or settle, and in as little as two months, poof! — no mound. For most soils, a mound three feet high is needed to allow for settling to 12-18 inches above the soil line. That's a lot of effort and the mound must still be maintained for a time to keep it from washing away.

A better strategy is a raised bed planter made out of wood or rocks.

The wood raised bed is three to four feet square and 12 to 18 inches high. I like redwood or cedar but at my father-in-law's ranch in **the worst-draining area of California (Cordelia)**, we used old spare wood from around the ranch.

When making a rock planter, choose rock that is readily available in your area. In my area we have lots of river rock and it has a nice look. The space required is the same as a wood planter: three to four feet square and 12 to 18 inches high.



- **Construct the wall** by simply placing stones in whatever pattern you choose: a square, a circle, a kidney shape (popular with pools, looks cool for tree planting) or other shape adapted to the location.
- **Lay out the first layer of stone**, paying attention to a snug fit.
- When the first layer is down, **fill in the planting area** with a mound of soil higher than the base wall.
- **Fit the next level of stone** snugly on top of the base stone, then bring soil up to the new level to hold the stone in place, all the way around the planter.

- **Continue adding levels** until the planter reaches the desired height.
- **One to four trees** may be planted in raised bed planters of these dimensions.

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Problem 2: Wrong Variety: Adapting The Wrong Variety

With all the wonderful varieties of fruit to choose from, another common problem is choosing varieties that are not quite suited to your area.

One should always choose varieties that suit the region. In many climates, however, even the best-adapted varieties are marginally productive due to conditions such as **late heavy rains, late frost, high winds or pest and disease problems** that affect the trees during the flowering stage, affecting the trees' ability to set fruit. In such climates, the usual attitude has been "either be satisfied with fruit once every five years or don't plant." This does not have to be the case - the **trees can be covered.**

Covering is a barrier technique that has been around for a long time, being used primarily for covering vegetables to **protect from frost.** Less common is its use for fruit trees.

To allow covering, a fruit tree must be kept short.

Preventing a tree from growing taller than eight feet tall is essential - it is very difficult to cover a tree taller than eight feet. I recommend a heavier material than the typical vegetable or row crop cover.

A heavier cover won't tear as easily and can be re-used for several seasons.

There are a number of companies that make a suitable product. I like a material called Typar-T518 made by Remay. There are other companies, like Dewitt Company that makes N-sulate or PGI Non-wovens which makes Ag-70 and Agriforce Reinforced. All are good heavyweight covers. Ask your local nursery...



The idea behind covering is to protect the bloom from direct hits of heavy rain, hail, and high wind. Covers can also offer a little protection from late frost (most of the time, a little is all that is needed.) It is not necessary to cover the whole tree, just to create a bonnet.

- Start by laying out flat next to the tree a piece of material at least 10' x 10.'
- Tie a three to four-foot piece of twine to each corner of the fabric.

Then comes the fun:

- Gather up the fabric in a way that it can be thrown over the top of the tree.
- A long pole is handy to help position the fabric on top of the tree.
- Once the fabric is in position, tie the twine to the inside limbs of the tree.
- Secure the bonnet in all corners and then determine if you need more tie-downs in other parts of the tree.

Usually about six tie-downs are needed. **The fabric should reach only about halfway to the ground, to allow the bees into the canopy.**

It's an umbrella.

And even if the bees don't show up (bees aren't dumb - they don't come out in bad weather), self-fruitful varieties and varieties with close-planted pollenizers will likely produce fruit anyway, because when the wind blows, the flapping and shaking of the bonnet helps disseminate pollen - another beauty of the technique.



Tree-covering has also shown promise in cutting down brown-rot (in combination with dormant spray.)

In areas where blossom end thrips are a problem, covering the whole tree to the ground during bloom **can cut down the damage done to nectarines**. There is also interest in testing this technique for **controlling peach-leaf curl**. I think it is premature to start waving banners, but if you are troubled by these problems, covering techniques are definitely worth a try.

One last thought: when planting fruit trees which might need covering, always **choose self-fruitful varieties** or plant pollinating varieties in the same hole. **I recommend**, of course, that you **plant a season of fruit in that one hole to maximize use of the space**.

Problem 3: Animals And Other Pests

Birds, squirrels, raccoons and deer can be severe problems in areas where fruit trees are grown.

In dealing with most critters, I find that there is only one approach that works: barriers.

With birds, you can often get away with using bird tape (glitter tape). Tie it onto stakes two feet taller than the canopy of the tree. I recommend four or five stakes per tree. Make the strips of tape about three feet long and place the stakes with the tape at different spots around the tree, running the stake through the canopy. **This works for most birds.** I find that simply **tying the tape to the tree does not work at all.**

An important tool in the critter kit is **bird netting**, a product that does not come with instructions on the bag, because if it did, you would know that **putting this on a tree taller than eight feet is almost impossible**. Working with this material is a real challenge; **imagine trying to put a fishnet stocking over a porcupine.**

If the tree is under eight feet tall, it becomes a little more do-able. For most six- to eight-foot trees, a 12x12-foot piece is sufficient. A piece of PVC pipe a little **longer than the tree is wide** will also be needed.

- **Spread the bird netting out on the ground** and lay the pipe on one edge of the material.
- **Roll the bird net onto the pipe** like a paper towel on a roll.
- With a helper holding the other side of the pipe, starting at the base of the trunk of the tree, **unroll the netting over the top of the tree.**

Easy! well, sort of..

Remember to **tie the netting together at the bottom** and leave no way for the birds to get in or your tree will turn into a dead bird aviary.

Now for the mammal critters...

Like us, they are crafty and clever and if they want your fruit badly enough, they will probably get it. Here is an idea that works very well for deer and can be modified to dissuade squirrels and raccoons.

First, let me say that all of the non-barrier products that are made to dissuade critters work for a period of time. Most require frequent renewal, or are effective only as long as the critters don't catch on.

The one technique that works time and time again is (again) a barrier.
Deer fencing is both effective and easy to construct.

Here is one such barrier that I find both easy to construct and effective.

The materials needed are four eight-foot T-posts, 25 feet of six-foot deer fencing, and one roll of baling wire - that's it.

To justify this technique I believe it is necessary to plant more than one tree inside the fencing.

Plant three or four trees in the same hole or a multi-budded tree. Get the most out of the space and materials.



Place the stakes five feet out from the center of the area in a square. Sink the stakes two feet in the ground. Unroll the deer fencing around the outside of the stakes and tie the fence at the top, middle and bottom of each stake. Tie the end with three ties of baling wire to be used for an opening: done!



It takes about an hour!

The deer cannot get to the trees by leaning on the fence, because pressure on one side draws in all sides, maintaining the barrier and frustrating the deer.

But as the trees grow beyond the fencing the deer can come and help prune the trees. To go inside to work or harvest, all one does is remove the baling wire at the opening and pull back the fence. Because maintaining the height of the tree is important, use the [Backyard Orchard Culture](#) recommendations for size control.



This system can be modified to keep squirrels and raccoons out by throwing bird netting over the entire planting when the fruit is close to ripening. Some squirrels and raccoons will still figure out how to get in, but I only promised to dissuade, and this *will* make it a hassle for them to get in.

Photos provided by Dave Wilson Nursery

