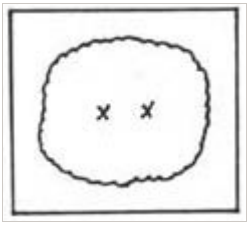
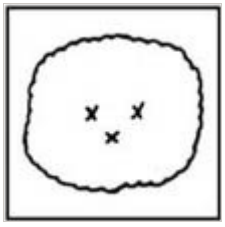
FT4C

Planting and Care Guide

We want you to experience great success when planting your FT4C bare root trees in your orchard. There are a few important techniques that should be practiced to help insure this.

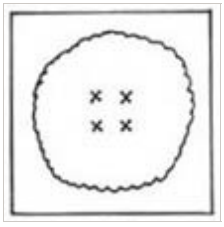


8' x 9' Area
Two Trees in One Hole
18" apart



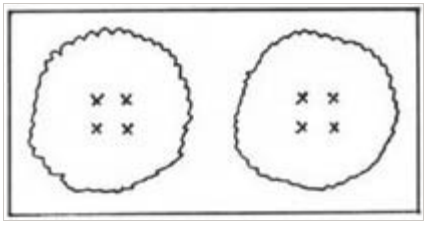
9' x 10' Area

Three Trees in One Hole
18" apart



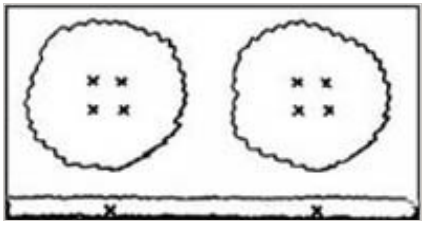
10' x 10' Area

Four Trees in One Hole
18" apart



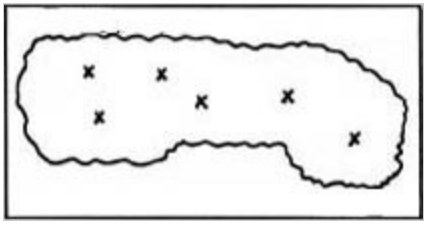
10' x 20' Area

Two sets of Four trees in One Hole
In each group, trees are 18" apart



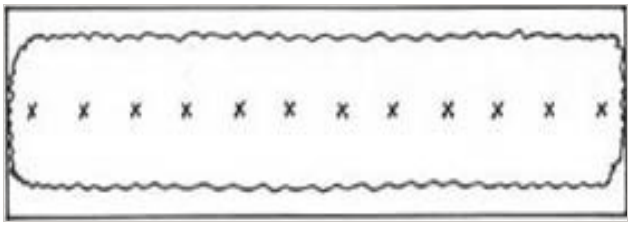
15' x 20' Area

Two sets of Four trees in One Hole
Two trees Espaliered along one edge



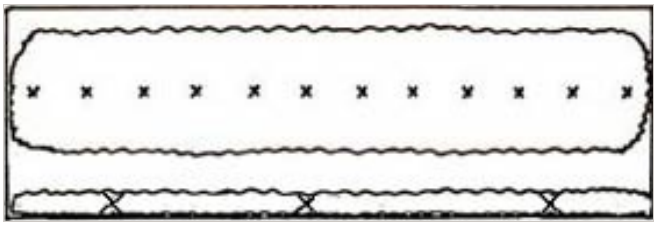
10' x 15' - Informal

Six trees in One Hole.
Use your Imagination!



18' x 36' Area

12 trees in a Hedgerow — spaced 36" apart
Or plant 3 sets of 4 trees in One hole



15' x 36' Area

12 trees in a Hedgerow — spaced 36" apart
Three trees are Espaliered along one edge

Field Preparation/Site selection: Trees require a growing site with good drainage and careful watering practices. Arizona has very high solar radiation which can result in high temperature stress to fruit trees. Common problems related to this phenomenon are southwest injury, trunk, limb, and fruit sunburn. Even though trees grow best in full sun, precautions to prevent these maladies should be utilized. Partial shade would be best considering Arizona's climate. Although homeowners are somewhat limited in their choice of a site, it is important to choose as good a site as possible. Avoid low lying areas and plant trees where they will have good sunlight exposure. To obtain maximum growth and yield a tree must be planted in good soil. This is the number one requirement once the correct
variety has been selected. A good soil should supersede other considerations such as sunlight exposure or proximity to house. Without a good root environment the tree will not respond to care in an optimal way.

The main factor in selecting a soil is its ability to drain water throughout the root system area. This is known as the internal drainage factor. We want to select well drained soils or create a well drained soil for fruit trees. To determine the internal drainage factor of a soil, dig a hole 32 and fill it with 5 gallons of water. Let the soil absorb the water for an hour then fill again. If the hole is empty in 24 hours, the soil has good internal drainage. If it requires 48 hours to drain, the internal drainage is poor but adequate. If any water remains after 48 hours do not plant your tree in that area. Create a special raised bed or plant in a container if a tree is to be planted in the selected site. In Arizona it is not uncommon to confront a soil condition known as caliche. Caliche is a chalky type soil, white in color and chemically composed of calcium carbonate. It can be found in many forms throughout the soil such as solid layers or crumbled pieces. The solid layers will restrict drainage and need to be cracked or drilled to allow water drainage. Another problem with caliche is its high pH which restricts the uptake of micronutrients such as iron and zinc. Be prepared to add these nutrients if trees are planted in caliche based soil. Avoid poorly drained soils at all cost, they invite failure. Fast draining soils are equally challenging to a tree as they dry out very quickly between waterings in the summer and can
cause stress to your tree if not watered more frequently.

Planting: Dig holes no deeper than necessary to plant trees without bending or crowding roots. Trees should be planted with the graft/bud union above the soil and at the same soil line as when grown. If the soil is heavy and drains poorly, the tree should be mounded 6-10 inches above surrounding soil. Use a mix of 50 percent mulch and 50 percent native soil to backfill.

Watering: A bare root tree is dormant and does not have the ability to handle excess water. In fact with no leaves there is no photosynthesis and thus little water transpiration. The best practice is to water the newly planted tree thoroughly to settle soil and fill in any cavities. This should take one, maybe two waterings. *Do not water again until tree breaks dormancy* and leaves open fully. This is when the tree will begin to use water and by then the feeder roots should have started to grow and will be requiring ‘normal’ watering. Normal is a subjective term depending upon soil types, wind and sun exposure, etc. and a physical check a few inches below the surface is the best method of determining moisture

needs.
Feeder roots will not develop in overly wet soil. Excessive watering deprives roots of vital atmospheric gases, principally oxygen. Symptoms of overwatering include: root decomposition, complete tree failure, die back with excessive suckering, roots growing toward surface, root swelling (nodules), lack of root hairs, leafing out with no stem growth and small undersized leaves. Almonds, Cherries, Figs, Nectarines, Peaches, Pomegranates, and Persimmons are example of trees with higher sensitivity to excessive water.

Pruning: Pruning provides a very important part in the success of a newly planted bare root tree. First, it removes the amount of tissue that the newly dug roots are required to maintain. Second, removing the terminal bud releases growth hormone to the lateral buds, stimulating bud break. Third, it provides the foundation on which the tree will be developing new growth for years to come.

First year
At planting time, bareroot trees may be topped as low as 15 inches up from the ground to force very low scaffold limbs or trees may be topped higher than 15 inches (up to four feet) depending on the presence of well-spaced existing side limbs or desired tree form. After the spring flush of growth cut the new growth back by half (late April/early May). In late summer (late August to mid-September) cut the subsequent growth back by half. Size control and development of low-fruiting wood begins now.
To conserve water:
for single trees, apply at least a 4-inch layer of mulch up to 4 feet from the tree.

Second year
Pruning is the same as the first year: cut back new growth by half in spring and late summer.
Pruning three times may be the easiest way to manage some vigorous varieties:
Prune in the spring, early summer and late summer.
Thin to an open center beginning in the second season.
Prune single-tree plantings to vase shape.

Third year
Choose a height and don't let the tree get any taller.
Tree height is the decision of the pruner. When there are vigorous shoots above the chosen height, cut back or remove them. Again, in late spring/early summer, cut back all new growth by at least half.
The smaller one, two, and three-year-old branches that bear the fruit should have at least six inches of free space all around. This means that where two branches begin close together and grow in the same direction, one should be removed.
When limbs cross one another, one or both should be cut back or removed.
When removing large limbs, first saw part way through the limb on the under side ahead of your intended cut. Do this so it won't tear the trunk as it comes off. Also, don't make the final cut flush with the trunk or parent limb and be

sure to leave a collar (a short stub).
Apricots will require more pruning in the summer to control height. Prune as needed (2 to 3 times in the summer) to keep the tree from getting too much growth. Be careful not to cut too much at one time, this will cause excess sun exposure of unprotected limbs, which can cause sunburn to the interior limbs.
To develop an espalier, fan, or other two-dimensional form, simply remove everything that doesn't grow flat. Selectively thin and train what's left to space the fruiting wood.
Don't let pruning decisions inhibit you or slow you down. There are always multiple acceptable decisions - no two people will prune a tree in the same way. You learn to prune by pruning!

Smaller trees are easier to spray, prune, thin, net and harvest! With small trees, it's possible to have more varieties that ripen at different times. The easiest way to keep trees small is by summer pruning. There are lots of styles, methods and techniques of summer pruning; most of them are valid. The important thing is to prune!

There is a definite sense of accomplishment and satisfaction, a special pleasure in growing your own fruit, growing new varieties of fruit, producing fruit that is unusually sweet and tasty, having fruit over a long season, and in sharing tree-ripe fruit with others. These are the rewards of learning and experimenting with new cultural practices and techniques as you become an accomplished backyard fruit grower.

Thank you for your purchase and we hope you have great success and enjoyment with your FT4C tree for years to come.

Sincerely,

Garden Pool