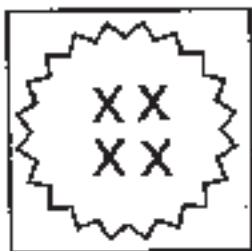


Backyard Orchard Culture

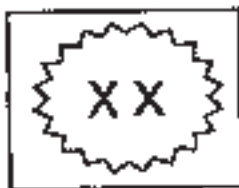
Backyard orchard culture is NOT the same as commercial orchard culture. Commercially, the goal is to maximize volume of harvest per tree and harvest a single variety over a short amount of time. **Homeowners, on the other hand, prefer to have as long a harvest time as possible, with the most varieties possible in their limited space.** Commercial orchards also are spaced to accommodate tractors and require the use of 12' picking ladders. **Homeowners can plant much more densely and through summer pruning, keep trees to heights harvestable without the use of ladders.**

Backyard orchard culture is the practice of high density planting of successively ripening varieties using summer pruning to control size of trees. High density can mean planting more than one tree (2, 3 or 4) per planting hole, planting several trees in a hedgerow, planting multiple grafted trees, planting espaliers or any combination of these techniques. Planting four varieties in one hole will give you 10-12 weeks of harvest (instead of 2-3 weeks) in the space of a single tree. Look what you can do in a 12' by 20 ft space!

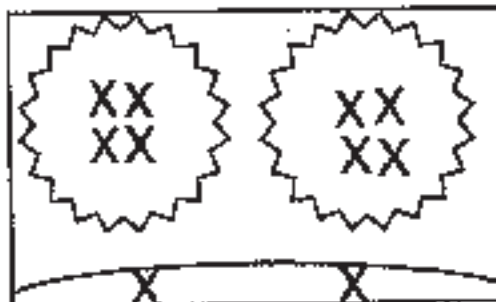
Examples of High Density Plantings with more than one tree per hole-



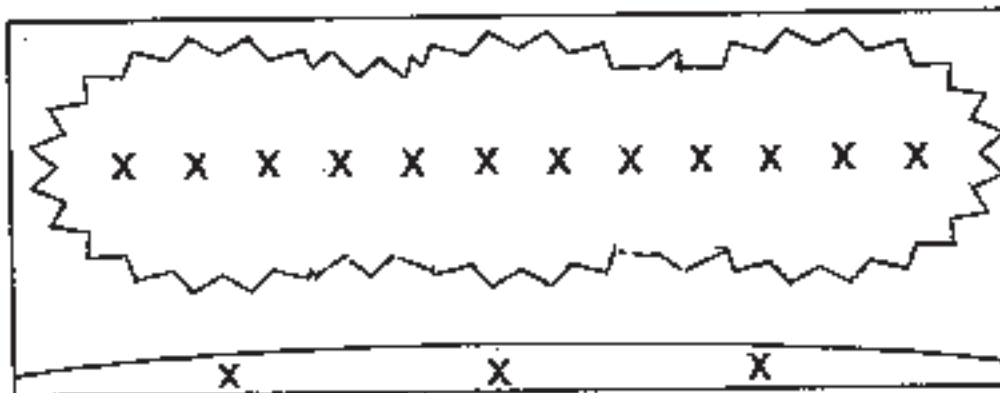
10' X 10' area-
with 4 trees in
one hole planted
18" apart



8' X 9' area with
2 trees planted
in one hole 18"
apart



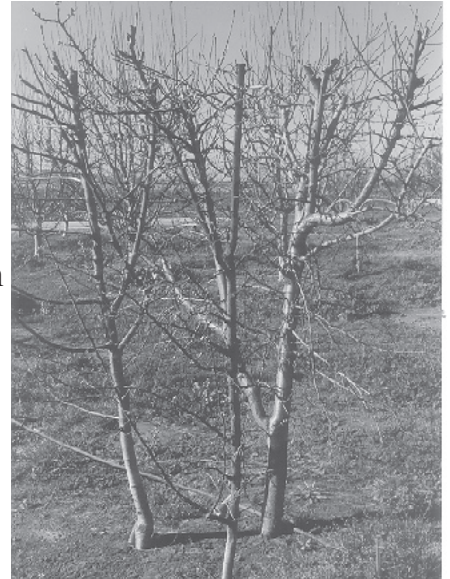
12' x 20' area with 2 sets of 4 trees
in one hole 18" apart, plus 2 espaliered
trees for a total of 10 trees!



11' X 30' area 12 trees in a hedgerow planting 30" apart plus 3 espaliered trees

Backyard Orchard Culture, continued.

Close (high density) planting also has the benefit of restricting trees' vigor, which also helps keep their size under control. Another benefit is better cross pollination which means better fruit production of apples, pears, cherries and plums. Close planting works best when rootstocks of similar vigor are planted together. For example, for a four-in-one hole planting, four trees on Citation would be easier to maintain than a combination of one on Mazzard, on Lovell, one on Citation and one on M-27.



Summer-pruned trees yield crops of manageable size and are easier to spray, thin, net and harvest than large trees. Plus, small trees can be planted more closely together affording the opportunity for more trees and longer harvests. **Do not depend on rootstocks to control size.** Rootstocks are chosen for their soil or climate adaptation, their disease or pest resistance, or their tendency to induce early fruit bearing.

DO NOT LET PRUNING INTIMIDATE YOU! The best way to keep your fruit trees under 10' is by pruning, especially summer pruning.

Summer pruning is most effective in controlling size. Reducing the tree's canopy in summer reduces its photosynthesis, which reduces the tree's capacity for re-growth. Summer pruning also reduces the amount of energy stored in the roots in the fall, which in turn reduces excessive top growth in the spring. Winter pruning is effective in maintaining the shape of the tree, but stimulates vigorous re-growth. Summer pruning preserves and stimulates development of fruiting wood. **Summer pruning is actually best done when thinning fruit.** You can see where the fruit is setting which helps you make better pruning decisions.

Summer Pruning is most important in the first three years because this is when the size and shape of tree is established. When planting a bareroot or dormant tree, cut side limbs back by at least two thirds to promote vigorous new growth. Then two or three times per year, cut back or remove limbs or branches to accomplish the following:

1. First year:

- a. At planting time, bareroot or dormant trees may be topped at fifteen inches to force very low scaffold limbs, or higher (up to four feet) depending on existing side limbs and 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/mid September) cut the subsequent growth back by half.
- b. When selecting containerized trees in spring or summer, look for well-placed low scaffold limbs. Cut back new growth by half and then again in late summer.
- c. For 2/3/4 trees in one hole: At planting time, cut back all trees to the same height. Cut back new growth by half in spring, and again in late summer as above. In the first two years, especially, cut back vigorous varieties as often as necessary. Do not allow any variety to dominate and shade out others. Harder pruning may be necessary for the more vigorous limbs.

Summer Pruning continued

- 2. Second year:** Pruning is same as first year – cut back new growth by half in spring and late summer. **For some vigorous varieties, pruning three times a year may be the easiest way to manage size – spring, early summer and late summer.**
- 3. Third year:** Choose a height and don't let the tree get any taller. Tree height is at the discretion of the pruner. When there are vigorous shoots above the chosen height, cut them back or remove them.
- 4. When pruning,** remove any broken limbs and cut back diseased limbs well below any signs of the disease.
- 5. The smaller** one, two and three year old branches that bear fruit should have at least 6 inches of free space all around. This means where two branches begin close together then grow in the same direction, one should be removed. When limbs cross one another, one or both should be cut back or removed.
- 6. When removing** large limbs, first saw part way through the limb on the under side, so it won't tear as it comes off. Don't make the cut flush with the trunk. Be sure to leave a collar (or short stub).
- 7. 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.
- 8. Don't let pruning decisions inhibit you.** There are always multiple acceptable decisions – no two people would prune a tree exactly the same. You learn to prune by pruning!



Two other important influences on tree size are irrigation and fertilization practices.

Fruit trees should not be grown with lots of nitrogen and lots of water. Some people grow their fruit trees the same way they do their lawn, then wonder why their tree are so big and don't have any fruit!

High density planting and summer pruning enable you to plant more trees, setting the stage for a longer harvest season. **Choose early, mid and late ripening varieties to maximize your harvest.** Consult the ripening chart at on the next page and at our *Info Center* for harvest dates. Also posted at the *Info Center* are the results of the taste tests conducted at Dave Wilson Nursery. Let us help you plan your own Backyard Orchard.

Go to davewilson.com for additional information.

Fruit Tree Ripening Time

<i>Almond</i>	<i>Ripening Time</i>	<i>Peach</i>	<i>Ripening Time</i>
All In One	Late September	Arctic Supreme	Late July
<i>Apple</i>	<i>Ripening Time</i>	Babcock	Mid July
Cox Orange Pippin	Late August	Baby Crawford	Early August
Fuji	Early October	Donut	Early July
Gala	Mid August	Flory	Late July
Golden Delicious	Mid September	Honey Babe	Mid July
Granny Smith	Late October	Indian Free	Early Sept.
Jonagold	Mid September	July Alberta	Late July
Matsu	Late September	Loring	Late July
<i>Apricot</i>	<i>Ripening Time</i>	O'Henry	Late July
Autumn Royal	September	Rio Oso Gem	Mid August
Blenheim	Early July	Strawberry Free	Early July
Harcot	Mid June	<i>Asian Pear</i>	<i>Ripening Time</i>
Moorpark	Early July	Hosui	Early August
Tomcot	Early June	Kikusui	Mid August
<i>Cherry</i>	<i>Ripening Time</i>	Shinko	Mid September
Bing	Early June	Shinseiki	Early August
Black Tartarian	Late May	20 th Century	Mid August
Craig Crimson	Late May	Yu Li/Tsu Li	Mid September
Lapins	Early June	<i>Pear</i>	<i>Ripening Time</i>
Montmorency	Mid June	Bartlett	Mid August
Rainier	Early June	Moonglow	Id August
Van	Early June	Warren	Early August
<i>Jujube</i>	<i>Ripening</i>	<i>Persimmon</i>	<i>Ripening Time</i>
Lang	September	Fuyu	Early Nov.
Li	September	Giant Fuyu	Late October
<i>Mulberry</i>	<i>Ripening Time</i>	Hachiya	Late November
Persian Fruiting	June	<i>Plum</i>	<i>Ripening Time</i>
<i>Nectarine</i>	<i>Ripening Time</i>	Beauty	Late June
Arctic Glo	Early July	Emerald Beaut	September
Arctic Jay	Mid July	Santa Rosa	Late June
Arctic Queen	Mid August	Weeping Santa Rosa	Early July
Double Delight	Mid July	<i>Pluot</i>	<i>Ripening Time</i>
Fantasia	Early August	Dapple Dandy	Mid August
Heavenly White	Late July	Flavor King	Late August
Independence	Early July	Flavor Queen	Early August
Liz's Late	Early September	Flavor Supreme	Late June
Necta Zee	Late June	<i>Prune</i>	<i>Ripening Time</i>
<i>Pomegranate</i>	<i>Ripening Time</i>	French	Late August
Wonderful	September	Italian	Early Sept.

