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When Is the Time to Tree Thin the Avocado Grove?

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There are really three phases to be considered in answering this question. They must be considered by the grower over a time lapse of some fifteen to eighteen years.

Phase 1—Prepare to thin at time of planting.

Phase 2—Thinning the unplanned grove.

Phase 3—Results after thinning the grove.

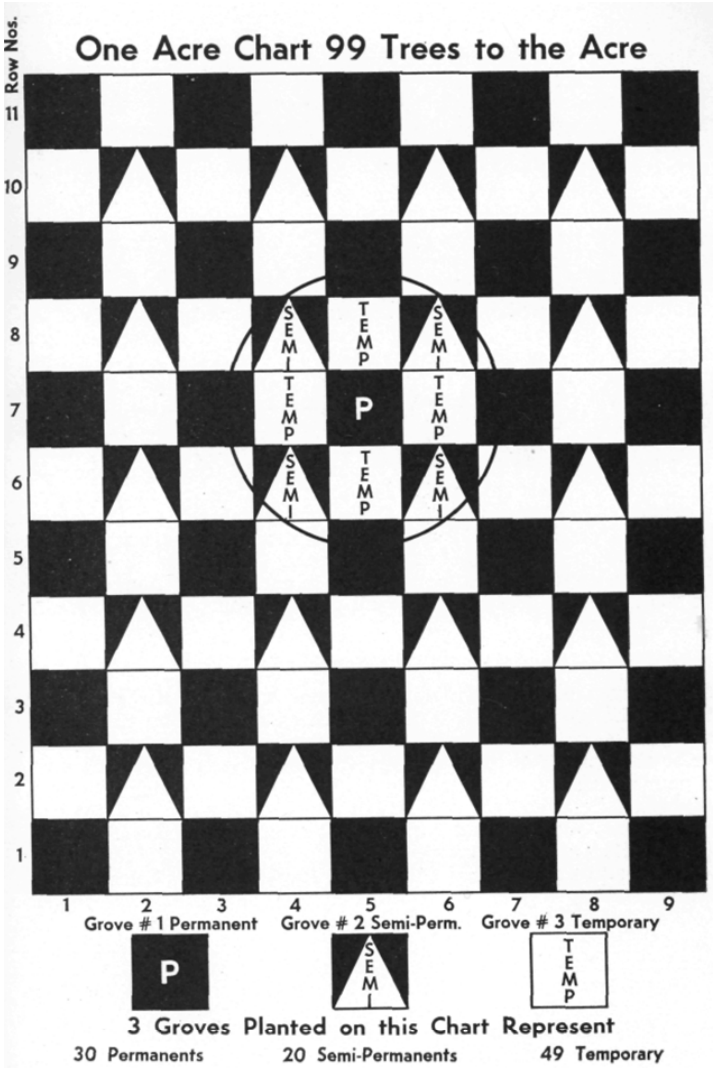
Prepare for Tree Thinning at Planting—Good trees, deep soil, good drainage, good climatic conditions and good care equals a crowded grove at fifteen to eighteen years of age. The better the grove, the quicker the crowding. There is no question, no doubt and no getting away from the combination of facts stated above. The time to prepare for that crowding is when you plant.

Three reasons:

First, should you be a little over-optimistic in the selection of your piece of ground regarding all four of the above-mentioned conditions, you may never have to thin. You might find that a 20 foot planting of 108 trees or thereabouts to the acre is your ideal planting distance with plenty of sunlight and air circulating among your trees for all time to come.

Second, even if all of the four conditions named above are positively 100 per cent true, still from an economic and financial standpoint it is not sound business to plant an avocado grove 35 or 40 feet apart in the beginning. Why take a financial loss on good expensive ground which might be producing you a neat profit over some eight to ten years before the crowding stage is reached?

Third, by a well planned and systematic charted program you can, with no loss in production whatsoever, reconvert your 108 trees per acre into a 40 foot planting with one tree, a temporary tree only, left in the center of each 40 foot square, which will be 28 feet from each 40 foot permanent tree. This will reduce your 108 trees to the acre to 54 trees to the acre, keep perfect continuity for the newcoming 40 foot planting, give plenty of light and sunshine and air around your 40 foot permanents. They can then become mammoth trees and still leave you 27 temporary trees to the acre. These 27 temporary trees represent half of the 54 trees per acre which you now have left, and will slowly but eventually be removed before you come to your final 40 foot planting, or 27 trees to the acre.



And now for the plan. As most groves are planted on a basis of a square or a rectangle, and as we wish to work on the basis of approximately 20 foot planting distance—as nearly as possible 108 trees to the acre—let's see what a one-acre plot might look like. It could be a rectangular plot of 9 rows wide and 12 rows long. However, you will notice that on the long dimension of this plot, the last tree ends in an even numbered square. This is not desirable as is shown by the accompanying chart. Let's make these rows either 9 by 11 or 9 by 13. This will mean 99 or 117 trees to the acre—and 99 being preferred. This first figure is the one to use if you are sure of the four conditions mentioned above; the second number if you have reason to believe your trees on this plot will probably never make a very great growth. If you will study the chart carefully, you will notice that by using the odd row numbers we place a permanent tree in each of the four corners of the grove plot. This will always keep all four of your outside grove rows as permanent trees.

Odd Row Planting Best

Should you use an even numbered row on either the sides or top or bottom of the plot, then those trees in those rows at the time of the tree thinning in years to come will fall into semi-permanent locations and can never be changed. You can never get them more than approximately 28 feet from your nearest permanent; and this, in addition to being too close, completely upsets the eventual continuity of the thinned grove in the years ahead. Therefore, this odd row planting, and not even rows, is a must, if the plan is to be carried out as designed.

At this stage of the plan our ground is plotted, our holes are dug, and now we are ready to plant. Naturally, in the delivery of some 100 or more trees, it is impossible for every one of these to be a perfect one. Some will caliper a little small, some a little large, etc. So let's not just grab the closest tree and pop it into the closest hole, but rather go over the en tire lot and grade out the best looking trees and plant them in the permanent tree locations. After this is done, let's go over our remaining trees and plant the next best trees in the semi-permanent holes. This leaves the balance of what we consider the poorer trees for the finishing up holes, or the approximate 20 foot trees. These will be, of course, the first trees to be removed as the tree thinning cycle approaches.

Now your trees are all planted. To the casual passerby it is just another grove, but to you it goes much deeper than that. You have really planted trees separate in distinct rows on the same piece of ground and they must be so considered and so marked. There is no chance of ever getting these trees confused. All permanent trees must be so marked by stake, paint, or otherwise, so it can be noticed at once if anything goes wrong with that tree. All semi-permanent trees must also be marked plainly throughout the years. These two types only need markings; your temporary trees need no markings as they will quickly be recognizable if permanent and semi-permanents are plainly marked.

As the years go by see to it that nothing happens to these two types of trees. If one dies, plant a new one; if it blows over; straighten it up; and so on. Remember these are the trees for the long haul, the eventual permanent grove. Keep them in the best possible condition always. As the actual production period approaches, it is absolutely essential to keep individual tree production records on the permanent and semi-permanent ones. Any permanent or semi-permanent tree showing a poor production record by the 12th, 13th, or 14th year anyway, should be topworked from a good record tree either from your own or some other grove. It will then begin to come back into production in about three years and make a fine producing tree.

You have now done all that is humanly possible to have the perfect grove. And if the other tree conditions mentioned in the opening of this article—deep soil, good drainage, and good climatic conditions—have come up to expectations, your grove should begin to crowd a little by the 15th or 16th year, and the slow process of tree elimination should begin. Don't rush in and get excited because one leaf from one tree happens to touch that of another; just let them mingle so long as your larger, tree-framing limbs are not showing a tendency to die back, and there is not too much dead wood accumulating among the lower limbs.

Method of Cutting Back Temporary Trees

Begin, of course, first on your temporary trees. Cut a limb here, one there, or trim back the end of such limb. In other words, cut back your temporary trees and your semi-permanent trees at about the same growing rate as your permanents are making advancement. The object being to keep some light and air constantly on the lower branches of your permanents and semi-permanents so that they will blossom and fruit on those lower limbs. We don't want those main limbs to shade out and die back.

This advancement of permanents and retreating of temporaries will continue for several years. But in the meantime you are still taking fruit from your retarding temporary trees until such time as these temporaries have only a trunk and top-knot. Then cut the tree completely out. Naturally your semi-permanent trees will remain a little longer than the temporary ones, as it is about eight feet or so farther away from each permanent. There is a possibility these semi-permanents may never come out; it all goes back to the four main conditions. In that case your grove becomes approximately 40 by 40 planting with a tree in the center of the four 40 foot trees. Or if the grove never does reach a crowding condition, you still have your approximate 99 or 117 trees to the acre, and should be very glad that you did not plant 35 or 40 feet apart to begin with.

The plan is very versatile, and is like a life insurance policy—if you need it, it is there; and if you don't, it has cost you nothing; not even the premiums which the policy did. It just takes a little time and planning to begin with. The result can hardly be estimated in dollars and cents.