

Thursday Afternoon, December 7, 1989

The Thursday afternoon session convened at 1:20 p.m. with David H. Bakker serving as Moderator.

DO WE NEED STOCK BLOCKS?

DALE G. DEPPE

*Spring Meadow Nursery, Inc.
Grand Haven, Michigan 49417*

First of all, we need to define what a stock block is. A stock block is a group of plants set aside for the propagation department's use. Generally these are plants from which cutting wood or scion wood is gathered, but also stock blocks can be used as a seed orchard. This discussion will deal primarily with stock blocks used for the production of cutting wood.

“To supply the propagation department with cutting wood”, that's an easy statement to make, but not so easy to do. How many of you have been able to collect the cutting wood you needed this year? How many of you attained a high percentage of rooting and rooted those big cuttings that transplant so well? Did you take only the wood that was the proper size or did you take some cuttings that were thin or short? How many times did you go back to the same plants and try to get a few more cuttings? Did you find out later that the sales department was blaming propagation for reducing the size of salable plant material. Did the container crew just finish pruning the only plants available of that cultivar on the nursery? Does it seem like the only plants that are sold out are the plants that you need for cutting wood? Is this starting to sound like your nursery? If so, then it's easy to say that your nursery has not invested in the future with stock blocks. If you are concerned about the future production capacity of your propagation department, if you are concerned about sales versus production in your nursery, then you'd better start investing in stock blocks.

When we talk about supplying cutting wood for the propagation department, we are talking about supplying the best cutting wood we can get. Many of you stick cuttings that should be thrown away. If the propagation department is taking cuttings from production plants, they are also taking what sales and marketing will let them have and probably when sales and marketing will let them have it. And let's remember that sales and marketing are probably right

when they put limits on propagation. Many of you agree that plant size and quality have been reduced by the removal of cutting wood. Yes, we try to justify the removal of cutting wood as making a better plant, more branching, tighter growth, bushier, etc., but when we see taking cuttings as plant pruning we are making a big mistake. When we take cuttings, we will always take a few too many, or cut the plants back a little too hard, or take the cuttings when the plants are growing at a maximum growth rate, thereby reducing the size of the overall plant. We have all seen plants that were damaged by the cutting crew, plants that only had a few cuttings removed but are now misshapened. These kinds of problems cost us all money. Nursery managers that tell you that taking cuttings from production plants is okay and does no harm are not taking a realistic look at what's happening. When we accept reduced growth and the loss of plant size we are accepting big money losses even to small nurseries. Taking cuttings from production plants is more expensive than having a stock block. Here are some examples of what's happening in your nurseries.

The cutting crew goes out into the container area of your nursery to take cuttings from *Juniperus horizontalis* 'Blue Chip'. If they cut from the smaller plants they remove a high percentage of the current season's growth. This reduction in plant size will cost the nursery one additional season of regrowth or at the very least the loss of one plant size the following year. The difference of one plant size in the sales price is about \$3.00. For this \$3.00, you receive 4 to 8 pieces of cutting wood; when these root at 75% you will have a cost of between 50 cents and \$1.00 just for the cutting wood.

In the field production area of the nursery, the cutting crew takes cuttings from *Viburnum lantana* 'Mohican'. These plants are 18 to 24 in. and appear to be fine when the crew has gone on, but a month later when doing inventory these plants do not make a 2 to 3 ft size because only the uncut branches continued to grow while the cut branches had to wait for a new bud to set and then break. The difference in price is over \$5.00 and the resulting cost of the cutting wood for each rooted cutting is more than 75 cents each. In some cases the money lost is not the worst of the problem. Bigger problems come later when our inventory is a mess and our customers do not receive the plants we sold them.

The answer is simple—plant a stock block. The start up costs of a stock block can be recovered the first year. As the plants grow, your costs are zero for maintaining these plants in relationship to the benefit. Taking cuttings from a stock block is much cheaper than from production plants. When all the available cuttings are taken from each plant the crew will do less moving around the field. They are easier to supervise and able to work in one area of the nursery instead of moving around to different fields. As your stock

plants grow larger, the crew will have to do less bending over to take cuttings from small plants and will work faster. Plant your stock block close to the propagation area; this will save your crew travel time and result in more cuttings taken per day. Are you starting to see that stock blocks will actually save you money, not cost you money? If saving money isn't enough reason to start planting, how about some more reasons for stock blocks?

The stock block area should act as a test garden for new plant material. Many of you have bought new plants or old plants that are not presently grown by your nursery and then planted them in the production area. Maybe you weren't sure if they would sell or didn't know if they were hardy for your area. By the time you found out what you had they were sold. Then you had to start over and try to find the plants again. When buying new plants, buy three times as many as you want; plant twice as many as you want in the stock block and the rest in the production area. Then when the plants begin to sell, your propagation department will be ready to supply you with the new cultivar.

The stock block area should act as a test garden for all the plant material you currently grow. Because many of us grow most of the plants we sell in containers stored under poly in the winter, we never really get to view our own plants in a natural environment. When asked if the plant material is hardy we will always say they grow fine for us. Because of the way we grow most of our plants, we also fail to ever see the plants at maturity. Many plant cultivars differ only in the mature height or spread of the plant. Many differ only in flower color. By propagating from immature or young plants we can continue to sell plants by the wrong name, thereby compounding the problem. I personally know of a nursery that sold over 200,000 plants of a particular cultivar before the stock block came into flower and showed that the plant was misnamed.

Spring Meadow Nursery, Inc. has bought stock plants from many large, reputable, well-established, "good as gold" nurseries and had to throw them out after the true characteristics became apparent.

The stock block area should act as a reserve for unanticipated production goals. When sales of a particular plant exceed the production and all the containers have already been pruned, where will you get cuttings from? When the stock block plants are available for late season cutting, your annual sales might be heading up.

The stock block area can be maintained free from herbicide use which may increase rooting of many plants, or free from heavy nitrogen use which causes weak growth and poor rooting. Stock plants can also be cut back extra hard each year in order to maintain juvenile growth. This would increase the rooting percentage of many plants.

By propagating from the stock block, the propagator will be able to take cuttings at the proper time. Timing is one of the key factors in propagation success. With all of your stock plants in one place the propagator can walk the blocks every few days and view the progress of cutting wood development. By eliminating improper timing as excuse for poor rooting we will all improve our success ratio. The cuttings taken from stock plants will be of a heavier size and have a higher level of stored carbohydrate than rapidly growing production plants. These stored carbohydrates will ensure the plants survival through the first winter.

As you can tell, I represent a biased opinion on the use of stock blocks. I truthfully can not think of a good reason against the use of stock blocks. I'm sure that some of you are thinking of a particular plant and saying that we don't need stock blocks for that plant. You're right, every plant that you're growing probably doesn't need to be in the stock block. But don't let that stop you from planting out the other 99% of your plants.

At Spring Meadow Nursery, Inc. we maintain and use over 20 acres of stock plants. They are planted on a spacing of 2 to 3 ft in the row with rows 7 ft apart. These stock plants support the sale of 1.5 million potted liners per year. We could grow our stock plants on a much closer spacing if it was needed.

I still think some of you are unconvinced. Think for a minute about your pruning crew out in the field pruning that plant for which you don't need a stock block. Now look at the ground. Do the plant prunings, on the ground, represent what you consider good cutting wood? Are the plant prunings 6 to 8 in. long, heavy, and the kind of wood the propagation department usually takes as cuttings? If they are, then I think we need a talk on plant pruning next year!

TOM McCLOUD: What is your fertilizer program?

DALE DEPPE: We are top dressing with a slow-release fertilizer in the spring and herbiciding with Surflan in a band along the row. Nothing magical about what we do.