WINTER PROTECTION OF NURSERY STOCK WEBFOOT STYLE

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In winter protection, "Webfoot" style, we are striving for saleable nursery stock in the spring that will bring the buyer to our nursery again and again. We are also looking at costs — a major part of our costs is labor; in fact, the greatest cost of winter protection is LABOR. We must so structure our winter protection facilities to keep this cost to a minimum. A great deal of labor cost can be eliminated if the stock can be grown in the structure used to protect the plants during cold weather. For the most part we leave our plants where they are grown, covering them prior to winter. We do move some stock from the canned area to larger structures before severe winter weather arrives.

We have for years used steel reinforcing concrete mesh. It is known in the trade as $6\times6\times8$. This wire reinforcing mesh comes in a 7' wide roll, 150' long. Cut into 10' wide sections it will give a quonset frame 105' long. A foot can be left between each section, gaining an additional 14'. This material, on today's market, will cost \$8.20 per 100 sq. ft. Some labor is involved in cutting this 8 gauge wire. A 24" bolt cutter will do the job. We unroll the mesh, placing a plank on either end to hold it flat. As we cut off each 10' section we move the plank. Cut a 10' measuring stick which will speed up the job. Cut in between the spaces; this will leave a 3" end to stick in the ground. A man on either side of the row of containers spreads the mesh, setting it down over the stock; pressure of the foot sets the mesh in place. We space our cans 5½' to 6' wide. This gives an arc that during a normal winter will shed the snow. If you are in an area of heavy snow fall, drive a stake through the mesh, setting it under one of the wires, holding it in place with a small staple or bent-over nail. We use the same method for 3's and 5's. The section of wires are longer so, of course, you do not get as many pieces out of a roll. We always use a stake under the higher sections or snow will collapse them. We use 4 mil \times 12' plastic to cover the lower quonsets. The sides are covered with soil or sawdust of sufficient amount to keep the edges in place.

The end plastics are left open until we know it is going to be cold, then we drop the ends, setting a couple of cans or anything handy to hold the ends down.

We begin to set the wires over the stock in mid-October when it is too wet to work in the fields, perhaps placing the plastic over the wires at the same time, only covering one side, then throw the plastic off the wire to let the rains get every plant good and wet. We watch the weather forecast. In early or mid-November we put the plastic in place, covering the quonset. We do not drop the ends until we know it will be cold. The stock must be wet — this is MOST important.

The only source of heat in these low structures is the ground. A low ceiling perhaps 3' at the most traps the heat. If stock is wet we have never had any losses. During a mild spell of weather in late January or early February we uncover the plants, throwing the plastic between the two rows of quonsets. We do this when we know we are to have heavy rains. If necessary, we recover at night if it looks as if it will get enough cold to harm the stock.

We have other structures that we grow in for one year before setting stock in the fields. One is a quonset structure $17'\times100'$, covered with saran cloth but also covered with 4 mil polyethylene during the winter.

The balance of our growing houses have fibre glass roofs, with saran cloth for shade around the sides. All are enclosed with 4 mil polyethylene before cold weather sets in. All have overhead watering but no heat. We keep them closed tightly during cold weather. We also keep the 5'×7' door open until we know it will be cold enough to hurt the stock. We used to heat these houses with Hi-Low heaters — burning kerosene — but we found that we do not get any winter injury if we just keep the houses closed tightly when it is cold.