

PLANNING AND ESTABLISHING A NURSERY IN THE WESTERN HIGHLANDS OF SCOTLAND

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Two years ago after a tour of the Scottish nursery stock market I decided to start a container unit producing trees and shrubs in the Western Highlands. The decision was momentous. It led to a complete transition in my own life and that of my family; it brought a diversification to a traditional family run hill farm producing sheep and cattle for the store market; and it marked the first full commitment by the development agency in the Highland region to the development of nursery stock in the Western Highlands of Scotland.

My story begins and ends with Kinsealy Research Centre, Dublin, Ireland. Not only did I find the encouragement which eventually led to the establishment of Barguilean Nurseries but also at Kinsealy the ingredients of what was to be, two years later, my own business.

Though relatively small as a research station the work that has been produced from the Institute is well known throughout the world of horticulture. Considering the scarce resources and manpower the pioneering is considerable. Kinsealy for a "drop-out" like myself was perhaps the best possible place I could have spent my first six months. For it was there that my mind was opened up to the great range of technical possibilities facing the industry. I was baptised in innovation and from that point on and during spells at various other institutions and nurseries I kept returning to the basics which had been digested at Kinsealy.

I made my way to Denmark and Holland where I spent a year working principally on Arne Jensen's nursery at Orting near Aarhus in Jutland. After the academic atmosphere of the research station it was time to tackle other people's commercial disciplines. During the next eight months I worked my way through the apprenticeship of being a nurseryman and it was there that I learnt a great deal about the discipline of commercial life and the need to establish high standards in all aspects of the work. One begins to catch the details of the work itself and the respect with which it is tackled in Denmark and Holland.

I returned in October, 1976, to my native Scotland. During the months in Denmark I had opened correspondence with a number of key people in Scotland about the prospects for a new nursery there. Isn't it surprising, looking back, how few people

had anything relevant to say in those early days of planning? I polled opinions from every point of view in those summer months in 1976 before my return and got only the vaguest suggestions about the commercial viability of large scale nursery development in Scotland. In some ways it was disappointing to find so few people enthusiastic but, in other ways, it was good for it threw me back on my own resources and fueled my determination to return and get stuck in even if it were against the odds.

During the course of the summer months my correspondence with the Highlands and Islands Development Board — HIDB — produced a very favourable response. My timing was perfect. The HIDB had just wound up a successful five year pioneer project at Ormsary in Argyll to establish the possibility of creating a commercial nursery stock development in the West of Scotland. My initial approach to the Board was received with cautious enthusiasm and over the next few months before my return the general principles of my venture were established and explored in correspondence.

So on my return to Scotland in October the first step was to look at the market here. What I found confirmed my suspicions. Despite a long tradition of nursery stock production in Scotland, and the existence of many famous nursery families in the North East of the country, production in the last few years has lagged badly. The shift to containerised shrubs and trees has accelerated at tremendous paces in the rest of the UK. In Scotland this hasn't produced much of a revolution in production methods. To this day the bulk of production is open ground and the thrust of marketing directed principally towards the traditional local authority market. However, in the intervening years there has been an enormous upsurge in garden centre interest and these outlets are spreading fast throughout the country here north of the Border. These retail outlets now account for a very considerable turnover and the garden centres are obliged to look to England, Holland, and Denmark for an alarmingly high proportion of their needs. A two week tour of Scotland during that first month of my return showed that in the Glasgow and Edinburgh corridor, garden centres were stocking their beds with container plants grown largely in England and that, when approached for a reason, the answer was always the same: "but where can we find continuity of supply at the right quality here in Scotland? Whom can we rely on to deliver when we need the stock? There are only a few scattered specialists and we haven't the time to shop around. We must be able to trade with a company that can fulfill all our needs and make planning our purchases trouble free."

The first economic model we produced for a nursery would have called for an investment of £120,000. Money like that wasn't available and so we pared away the capital equipment and devoted all available resources to stock purchase and working capital. A figure of £60,000 was arrived at, incorporating an initial £15,000 of investment capital, with the remainder being devoted towards creating a fast build up of cash flow to facilitate the development of the nursery.

The model was accepted in the next few weeks by the Highland Board and after a series of meetings between myself and them the decision to get going was given in January, a bare three months after the formal approach. It goes without saying that I have been very considerably impressed with the amount of help I received from the HIDB and have nothing but praise for the enthusiasm and support they have given to the venture since it was conceived.

In March, 1977, the bulldozers roared onto a most unlikely location for a nursery stock unit. A four acre site with a 9 meter drop from one end to the other was gouged and terraced until the site was ready for building.

A great deal of preparation had been put into the design of the nursery not only to make it easy to service but with as much attention as possible being given to the aesthetic virtues of the site itself, which is in the midst of some of the most spectacular mountain scenery in the world. Some initial landscaping was done in the first year to soften the scars left by the bulldozers. Since then the initial site has reached full capacity and, seen from above, where the road passes the site, the nursery creates its own landscaping with the variety of colours and textures of the plants. Phase two, which brings in another three acres in autumn, 1978, will be accompanied by the creation of large stock plant areas on the high banks surrounding the nursery.

Barguillean Nurseries has every right to be branded a Kinsealy nursery since from the beginning I have incorporated a number of systems pioneered at the Institute. I think I am right in saying that Barguillean is the first nursery in the UK to incorporate automatic capillary beds throughout the development and it is about these beds that most of my talk at Bristol this year was directed.

Barguillean has now worked with capillary beds more than 40 metres long and 10 metres wide, for almost two years and I am convinced that this system should be better understood and more widely applied. It involves the nursery in an irrigation system for containerized plants that is trouble free, efficient,

labour saving, cheap to build and maintain, and brings versatility to the design of the nursery.

Each bed is basically a basin with concrete shuttered 4 inch sides six inches deep constructed on *absolutely level* ground. The inside of the bed has two 12 inch trenches dug out equidistant down the centre of the bed. The bed is then lined with a strong lining material like Typar upon which is then spread a polythene lining material to be waterproof. The lining material below protects the polythene and prevents it from being torn by stones or gravel, resulting in leaks which make the bed inoperable. The bed, once fully lined, is then filled with four inches of sand trodden down firmly by a gang of men as the bed is filled. Once filled the bed is flooded with water to ascertain where high and low spots lie. High spots are raked off to fill low 'puddled' areas and supplementary sand added where necessary to finish off the bed. Left to dry off for a few days without the addition of further water, the trenches for seepage pipes are now carefully dug along the line of the original 12 inch trench described at the beginning of the paragraph. The trench is easy to dig out a spade width at a time from the firm moist sand. It looks very neat when completed and it is into these two trenches that a 90 mm slotted draining pipe is installed from one end of the bed to the other. The pipe should be surrounded with fine grade gravel and then topped off with sand. Around one end of the pipe a small tank large enough to accommodate a ball cock and valve is excavated from the sand and lined with concrete by the means of shuttering boards. From this tank the pipe leads out and down through the bed. The ball cock and valve, when fitted, can be adjusted to ensure the right level for water in the bed which should be adjusted to about one inch beneath the surface of the bed. The bed will now operate automatically and you can send the staff home for the weekend without fear for your stock (Figure 1).

A new nursery doesn't just arrive on the scene without a struggle to gain recognition. No matter how professional your approach, no matter how strict your grading and quality, it takes time to get going. Alas, banks and lending agencies prove impatient, financial resources are thin at the end of the first twelve months, and you have a lot of bills to pay, and less and less time to be given second and third chances. You must, as we discovered at Barguilean, get the whole conception right at the beginning. You must get the figures right and not be strapped for working capital before you have even got half off the ground, for momentum must not only be kept up in the first year, it must drive on solidly in year two so that your customers feel your confidence.

I arrived on the scene in Scotland barely two years ago and



Figure 1. Plastic Houses and Capillary Beds at Barguillean Nurseries Ltd.

by September, 1977, I had to get moving on the sale of my first year's efforts. By Christmas, 1977, we had sold only £5,000 of stock and the going was uphill. But perseverance pays, and over the next six months the thousands of miles of driving I did bringing samples to people, making contacts, sweating out orders, using my instincts where they were necessary and screwing up my courage when my morale dropped, paid off. Garden centres in Scotland and the North of England began to realize the scale we were attempting and have initial confidence in our ability to deliver a grade and quality of plants up to and, in some cases, above the standard they were used to.

Year one, which ended in March, 1978, produced sales of only £14,000 but already this year Barguillean sales are touching £50,000 with a great deal of our own stock coming forward for sale in the coming months. An analysis of the sales produces an interesting picture. Average sale is £350. So during these first 18 months sales have been built up almost exclusively on sample orders. It is an indication of the confidence being felt in the trade at the present time that a new nursery like my own can produce sales figures of this magnitude 18 months after the nursery was built. But the quality has to be right, and you must never give up the discipline of grading out religiously and delivering orders that are uniform in shape and size. For it is here that your reputation will be built.

In developing my nursery I acknowledge the great assistance received from J. G. D. Lamb and J. C. Kelly of the Kinsealy Research Centre and from the managerial expertise of J. J. Costin.