

JARDIN BOTANIQUE DE MONTRÉAL

4101 EST, RUE SHERBROOKE

MONTRÉAL, CANADA



MONTREAL BOTANICAL GARDEN

4101 SHERBROOKE STREET EAST

MONTREAL, CANADA

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Fr. Marie-Victorin, Director,
Montreal Botanical Garden,
Montreal.

Copie

Dear Sir:

In my article series: "The Botanical Garden of the Future", which I wrote some four years ago, I worked out the principles according to which I feel a modern Botanical Garden should be designed. Ever since then these principles have been so firmly rooted in my mind that I have taken them for granted and seem to have neglected to discuss them thoroughly with you and the others concerned with the development of this garden.

Permit me therefore to explain in the following lines one of the main principles which I have followed in designing the Montreal Botanical Garden and which gave rise to the discussion we had on Dec. 9th :

In all the Botanical Gardens with which I am acquainted, the various display gardens are scattered all over the ground. The reason for this is twofold. Firstly, most of these gardens were designed by landscape architects who had had no previous experience with Botanical Gardens and had never worked in one themselves. Their idea was to provide points of special interest in all sections of the park. In itself, this of course, is perfectly all right for a large public park where display gardens are simple, consisting mainly in masses of flowers of a few varieties which are easy to maintain. In fact, the idea sounds so much all right and is so plausible that Botanical Gardens repeated this mistake over and over. That it is a mistake to do this in a Botanical Garden where display gardens are extremely complicated units and contain collections of hundreds of varieties, these landscape architects did not know, but those who afterwards had to maintain these gardens never stopped cursing, as I had ample opportunity to observe. Neither were the visitors well served, since they had to hunt around for hours and to walk many miles to find and see some special display in which they were interested. Those visitors who walked around aimlessly as the majority of botanical garden visitors do, missed most of the special displays altogether. This also I have had ample opportunity to observe myself and I have experienced it on my own body when visiting foreign botanical gardens.

The second frequent cause for the scattering of display gardens is the fact that many botanical gardens have been started without a general scheme for the whole layout and have been developed haphazardly and in pieces. This procedure results also in a great many left over corners which are then filled with any plant material that happens to be on hand. Such nondescript groups scattered all over the ground are the plain mark of poor landscape design. Since they are scattered they also are costly and difficult to maintain, consequently they are soon neglected and develop into eyesores. The New York Botanical Garden, for instance, offers many samples of such mixed neglected groups which mean nothing and teach nothing and which in a botanical garden with the main purpose to educate the visiting public are still less excusable than in an ordinary public park.

In botanical gardens designed in this manner the nursery is usually relegated to some far off corner being considered as an unsightly and unfortunate necessity. This also is a grave mistake which results in a serious and permanent handicap for all horticultural activities of the garden.

Being fully cognizant of these pitfalls I resolved to avoid them in designing the Montreal Botanical Garden and decided to bring about as complete a centralization of the points of main activity as could be achieved. This, I knew would result in increased ease and smoothness of administration, greater efficiency of the working staff, increased convenience for the visiting public and, since order is the mainstay of any complicated organism, also in an aesthetically satisfactory arrangement.

For these reasons I placed the nursery, as the heart of the garden, almost in the center of the grounds. It is many times larger than in any Botanical Garden which I know, since I conceive it to be not only a place where plants are raised for use in the various parts of the garden but also as a center for all horticultural education, public and otherwise, which I feel a modern Botanical Garden should provide. The testing of new varieties of annuals, perennials and various economic plants, which has to be carried on constantly in order to keep the display gardens up to date, also centers in the nursery, as well as any plant breeding work we may undertake later on. A spacious plant breeding and testing field has been provided in addition and adjacent to the nursery. Since for the first few years our nursery will require considerable space, a good part of the breeding and testing field will be used as a temporary extension of the nursery. It can be expected, that as we progress with the planting of our grounds, and as our nursery will gradually be emptied and reduced to normal size, our breeding and testing activities will increase and will demand more and more space until a fair balance is established.

For the coming year a part of the breeding and testing field will be put at the disposal of Mr. Racine for a first attempt at children's gardening. If this trial works out satisfactorily and children's gardening instruction becomes an

established part of our activities, a suitable piece of land has to be set aside for this purpose. So far I have always visualized this children's garden as an entirely separate unit, located possibly at the far northeast corner of what is now the golf course (corner of Viau St. and Rosemont Blvd.). It should have its own little shelter house, providing a small work room, room for the teacher, tool rooms, toilets for boys and girls and what else may be required. This, of course, would be the summer quarters only, while for the winter as well as for special lectures in the evenings in the summer a large room will be provided in our new administration building. In this manner the summer activities of the gardening children will be entirely divorced from the other activities of the garden which I believe will be the best for both parties concerned. I do not know as yet how the soil conditions are at the corner of Viau and Rosemont Blvd., that has to be investigated. If they are not suitable, another piece of land has to be selected on Rosemont Blvd.; or it might be possible to use the land north of the playground after the houses are removed. The location off Pie IX Blvd. would have the advantage of being easily reached by street car which may have to be considered. This has to be investigated next summer and be thoroughly discussed.

Returning to the nursery I wish to state that I have no fear that it will ever be unsightly and will in its prominent position spoil the beauty of the park. In the first place it comes in no place nearer than 100 ft. to any main road and the exhibition greenhouses, which will be built in front of the wall, will hide more than half of the nursery. Around the other half, inside of the nursery fence, a 40 ft. wide strip has been reserved for a mixed planting of such varieties of trees, shrubs and perennials as may be required regularly for demonstration purposes in the universities and schools of Montreal. This planting will save us from the necessity of cutting such demonstration material from the plants in our collections, which is highly undesirable, and it will serve at the same time as a windbreak and screen around the nursery. Besides that, the whole nursery is clearly divided into blocks, each block having again a sheltering hedge of *Thuja occidentalis*. If the nursery is kept up as well as a good nursery should be kept it will be not only not unsightly but actually an object of beauty and will hold so much fascination for those of the visitors who peep in at the gates that we shall often be asked for permission to visit the nursery.

All of the display gardens which have to be constantly served from the nursery are grouped as closely around it as possible. The only exception being the annual garden which was put in front of the pavilion to gain a special ornamental effect. The site between Desjardins road and Pie IX was selected for these gardens for several reasons:

Firstly, the mound of earth, which I had in mind to erect there from the very beginning, will give these gardens a certain amount of much needed shelter and will provide a better background than we can have in any other part of the garden. Besides the inner slope of the mound allows the inclusion of terraces in the garden scheme, an opportunity which will be used in several instances.

Secondly, the soil and sand on the west side of Desjardins road have been removed years ago and a partial refill has been made with ashes and street cleanings. We still had to fill in from 3-4 ft. of good top soil to reach the level of the road and that has given us in this place more perfect conditions for intensive garden culture than we have in any other part of our grounds.

Thirdly, to have the display gardens all arranged in a row will be a great convenience for the visiting public since it will remove for ever all doubt as to where one has to go to see them.

Because of the fact that the strip of land between Desjardins and Pie IX is the most valuable piece of ground in our garden, as explained above, it is unwise to waste any of it for nondescript, so called ornamental groups between the display gardens. Besides I utterly fail to see in which way this kind of separation of the gardens could be aesthetically more pleasing than if they adjoined each other directly. They will be separated anyhow by 6-8 ft. high hedges, each one of them will form a closed unit by itself and I am ready to guarantee that each individual garden when completed will be aesthetically pleasing. The only effect which the separation of the gardens by a wide strip of useless plantings could have, would be to force the visiting public to walk a longer distance than is necessary in order to see all the gardens. To create a needless inconvenience I personally consider to be distinctly unaesthetic.

It is also my personal opinion that most particularly for aesthetic reasons we should agree on a definite size for each garden instead of allowing for possible future expansion by leaving spaces between the gardens. This can easily be done and without fear of engaging the future too much, by either starting out with a fairly large collection of varieties and by gradually taking out the ones which have been superseded and replacing them with newer and better sorts (a procedure which I expect to follow for instance in the display garden of ornamental perennials and shrubs) or to allow in the garden itself a certain amount of space between the various groups where if necessary later on a few additional varieties might be planted. Trees can not be rearranged after they have once become firmly established. If we therefore count on later eventually enlarging our fruit tree garden by adding another strip of land to it this will result in the planting of a miscellaneous collection of fruit tree varieties disconnected from the various groups to which they actually belong. It is my opinion that we engage the future and possibly hamper future development more seriously if we leave unused strips between the gardens than if we do not.

How much I am opposed to nondescript mixed plantings in a Botanical Garden can be seen from the fact that even on the mound along Pie IX, which was put there as a shelter and background, I did not plant anything I just happened to have. The whole outside slope has been planted with a collection of 14 varieties of hybrid poplars, comprising some of the most promising poplar hybrids for

pulpwood production which are known at the present. Some of them I obtained from Dr. Heimbürger, others I brought with me from New York. Since 2 or 3 plants of each kind, all that I could accommodate in the Arboretum proper, would not constitute a fair test, I used the opportunity I had on the mound to plant 20 trees of each variety, separating the groups with a group of three trees of *Fraxinus americana*. We have a list on file of the succession in which the varieties have been planted, so that even without labels we shall always be able to determine which variety is which. Some of these varieties will soon show that they can not keep up in vigour of growth with some of the others, some may suffer frost injury or fall prey to diseases. All these will be removed as soon as their inferiority is clearly established and they will be replaced with other promising hybrids until we have established a selection of the 14 most desirable kinds for this part of the country. In this manner I shall make the pleasantly green looking planting on the mound serve not only as a shelter, screen and background but also as an extremely worth while scientifically conducted demonstration.

Nothing as yet has been planted on the inside slope of the mound, since I did not dare to engage it until the gardens in front of it have been definitely established.

So far I have in mind to develop those parts of the inside slope, which are not used as part of the gardens, as a bird refuge. There has to be system also in such a planting in order to make it most effective, and it might well be made to serve as a sample of what a good bird refuge in this part of the country should be like.

Wherever else in the garden I need a screen or shelter I shall always endeavour to make it not merely a green line without character but to let it serve at the same time as a demonstration of some kind. The lesson thus imparted need not always be a scientific one. A screen planting which can be looked at also solely for the reason of its great beauty will constitute just as valuable a lesson in good landscape design.

Permit me to assure you that also in the future I shall cause nothing to be done at this garden without first studying the problem from all angles and considering all possibilities. If I am allowed to continue the development of this garden along the lines which I have followed up to the present you may rest assured that the Montreal Botanical Garden when completed will stand unique not only for the unusual educational opportunities which it offers but also for its attractive landscape design and general beauty.

May I conclude by suggesting that we meet more frequently and more regularly than we have during the last few months so that all that goes on can be discussed from day to day and misunderstandings can be avoided. If you will name an hour which is convenient to you

I shall be glad to come to the University every day or every second day as you wish, or if you can time your visits to the garden to a definite hour I can make it a point to be in my office then and be at your disposal.

Permit me to remain,

Very respectfully yours,

H. Teuscher
Superintendent and
Chief Horticulturist.