



Hunt Institute for Botanical Documentation
5th Floor, Hunt Library
Carnegie Mellon University
4909 Frew Street
Pittsburgh, PA 15213-3890
Telephone: 412-268-2434
Email: huntinst@andrew.cmu.edu
Web site: www.huntbotanical.org

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About the Institute

The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

UNITED STATES NATIONAL ARBORETUM

The first obligation of an arboretum, any arboretum, anywhere in the world, is the maintenance of a living collection of woody plants from the lowest shrub to the tallest tree. Implicit in this obligation is the necessity that each be correctly named so that they may constitute a living museum, and that within limits of available space they should be displayed in such a fashion that the currently accepted ideas of plant relationships be made evident. The only admitted limitation to the kinds of plants to be grown in any arboretum, is climate.

Beyond these primary matters, the administration of any arboretum may extend the aims and functions variously. It is traditional for all arboretums where studies are carried on that there should be a library, a herbarium, and such greenhouse equipment as may be needed to assure the maintenance of living collections and others for display purposes if so desired.

The U. S. National Arboretum is assigned to the United States Department of Agriculture under the direction of the Secretary and is integrated in the organization of the Department with the Bureau of Plant Industry, Soils, and Agricultural Engineering, since the plant research of that Bureau is most closely allied to the plant research program of the Arboretum. In addition to the staff of the Arboretum, there is an Advisory Council appointed by the Secretary, of persons with a wide range of horticultural interests and representing many different geographical parts of the United States.

Anything more than this, no matter how excellent falls into the category of decoration. Much of it is excellent, much of it is highly desirable but it remains, secondary.

In establishing the living collections two purposes must be served: those of the scientists whether resident or visiting and those of the general public from the most casual guest to the most enthusiastic horticulturist. The first group will insist upon the accuracy of labeling and may discuss the wisdom of choice of specimen as to whether or not it is wholly typical of the species or represents some outlying variant, a discussion that will engage taxonomist and plant breeder. The other group will range in interest from those who are concerned only with the gross appearance of the plants as used in the landscape to those who are particularly interested in these same points and may as well need a more complete knowledge of varieties stemming from a species or its hybrids with other species and forms whether of taxonomic or horticultural importance.

If one remembers the limitations imposed primarily by climate and to lesser degrees by soil and terrain, it is easy to see that no two arboretums are likely to be identical in the development of collections, for each will properly give importance to those things that find optimum conditions and include all others as part of the scientific whole.

The U. S. National Arboretum, authorized in 1927, has grown slowly through the succeeding years, largely as a result of the vicissitudes that have affected the world in general, the most conspicuous being two world wars when public funds were needed for defense and one period of grave financial depression. The initial major delay came in the years given over to acquiring the forty some properties that now make up the total of approximately four hundred acres.

The tract, as required, lies within the District of Columbia, with R Street, Northeast and New York Avenue as its northern boundaries; M Street, Northeast, its southern; Bladensburg Road, its western and the Anacostia Parkway, its eastern. The map on Page ___ gives a better idea of its irregular shape and the diagrammatic map within that map, its relationship to the major traffic lines and public areas of that portion of the District.

In most general terms, the whole area may best be described as two high areas divided by a diagonal plain, the latter itself traversed diagonally by a small creek that flows in to the Anacostia River. The western ridge is less extensive and more definite in area than the eastern with its highest point known as Mount Hamilton, an affectionate rather than a topographically accurate name. The eastern ridge that rises steeply from the river and comes gently down into the great central area is known as Hickey Ridge from the name of one of the former owners, a name that reappears for the creek that once meandered across the central area, but now carries so large a flow of storm waters from the city streets outside the property, it hardly resembles a stream at all.

The high ground is broken on its flank by various valleys, some sharply marked, some most gentle and there are related to the main flow line of Hickey Creek, various minor valleys, some with small spring fed trickles, some now dry, except after storm.

The whole makes as varied a terrain as one might wish with almost every exposure, including those northern slopes that bear the brunt of all cold wind and a few southern slopes that warm up quickly and early in the year.

The variation in soils is almost as great as the variations in terrain and work has been held to a minimum in altering it. A few areas have been drained to make them more accessible; several artificial ponds have been made and fertilizers and soil building materials have been added only in the quantities needed to assure the establishment of the planting.

PLANNING

In preparing the general plan for the entire area several approaches were made that lead up to the final expression as indicated on Page___.

In the first place, it must be recognized that three groups of persons will be concerned with the Arboretum: first, the resident staff whose activities fall into two groups according to their positions, namely the scientific staff and the staff that operates and maintains the Institution; second, the visiting scientists, who will be primarily concerned with research problems that stem out from laboratory, herbarium and library work after preliminary field work; and the third, the great numbers of visitors, amateur and professional who will primarily be concerned with the appearance and behavior of plants as they grow and as they may be used alone or in combination with other plants.

The city plan and the terrain within the area make it possible to provide special points of entrance for each group so that one finds three fixed points on the perimeter of the area: the site of the administration building at Bladensburg Road and R Street, Northeast for the scientists both resident and visiting; the location as related to New York Avenue, Northeast, for the maintenance activities, with their service activities; and the familiar entrance from M Street, Northeast, for the general visitors.

All of these points must be accessible to all and one must be able to go from one to another freely as need be. This intercommunication with a need to make all portions of the arboretum accessible by roadway, not just to the visiting public but to emergency officers whether police or firemen, set the basic pattern of the road system.

Roads are necessary but in the naturalistic landscape of an area like this they are kept subordinate in design and visibility as much as possible, except in those few areas about buildings where they are essentially an extension of the building uses. In general they are found in valleys so the riders may look up slopes to displays or just below the hill crest so that long views may be had from the eminences, but persons looking up to the heights from below will not see persons or vehicles silhouetted against the sky.

The next element in such a study is an estimated contrast between the planted areas and the open spaces.

The existing stands of natives on the property are so little different from those available for study in Rock Creek Park there has been no necessity to consider conservation in its basic aspect. Among themselves, they vary considerably in value so it has been possible to thin many stands judiciously and to remove other poor stands entirely to make way for new plantings. Fortunately some of the original parcels that make up the arboretum had been farm areas without trees, so that some clear areas were available from the beginning. All clearing operations have been carried out in several steps, first with the removal of dead, injured and obviously imperfect specimens, second with the studied removal of trees that interfered with such long views as can be had within the area, and third, those relatively few that have responded so rapidly to care as to produce problems of crowding or overshadowing.

Since the total acreage is not sufficient to permit the planting of large blocks of many species in addition to the specimens, that type of planting has been restricted, but the old landscape devices of solid masses of trees, irregularly scattered groups and solitary free standing individuals have been remembered since in our climate with its long hot and usually brilliantly sunlit summers it is a wonderful experience to walk about in the sun, to walk through broken shade, to walk in complete shade, especially when we can also look out from it into the sunlit open spaces.

While in general the happiest arrangements for planting any arboretum are those that are considered naturalistic, the necessities of displaying a labelled collection of plants to show the "Plant Kingdom" brings one close to the traditional solution of series of easily maintained beds in which are planted in precise fashion with the labels making a scene of cemetery-like monotony. An effort to escape this has been made here that will be discussed on Page _____, and later we plan in a separate leaflet.

All good designers have recognized the value of an occasional formal element employed in an informal scheme and several such are to be found in the Arboretum. The two already developed through the generous gifts of the Garden Club of America and The Woman's National Farm and Garden Association, each present a degree of formality in plan but no excessive formality in development. When the administration building is completed there will be the opportunity for extremely formal work to harmonize with the excellent, somewhat austere masses of the building and at the same time make the necessary transition to the natural scene behind and below the building.

The garden minded visitor entering at the M Street Gate will find the small office building, eventually to be given over entirely to information and other public services.

Continuing to the north he will come to the irregularly elliptic area where the representatives of the "Plant Kingdom" have been set out. (See Map, Page___) A trip about this area will give him a quick view of the basic elements of the plant kingdom as it flourishes in this part of our country.

From the plan (Page___) he will see that roads go off from this central area with its "summary" of the total planting, to right and left and the same plan indicates^S some of the features to be seen as they now exist and as they are now visualized for the future.

If the visitor is truly familiar with other arboretums, he may note that in this, the plantings throw emphasis upon elements that are less stressed elsewhere. This is planned. It is to be hoped that all our choices of significant materials will justify the choice. Insofar as has been possible they have been chosen because they were not only satisfactory in this area, but extremely beautiful in themselves. Their less showy kin are relegated to less conspicuous positions and those that grow poorly in our climate to the least obvious spots.

For the keen observer, one time is quite as good as another to visit any arboretum, but for those who like to follow the pattern of renewed growth, a visit in late March will show only the green of willow and birch, the red of maple, the dull brown of elm, the early bloom of pear (Pyrus calleryana), the precocious star Magnolia, with daffodils in the grass below crab apples and a floor of porcelain violet and greenish blues in the Garden Club of America garden from squill, Chionodoxa and Anemone.

Mid-April will bring the Magnolias, the flowering quinces and the early blooms of Azaleas and Rhododendrons, most of the Oriental cherries and part of the flowering crab apples, these last represented in fine assortment, thanks to the generosity of The American Association of Nurserymen.

As the early Magnolias wane, the crab apples increase in beauty and number of kinds in flower, but the most spectacular of all native Magnolias, M. macrophylla, with its huge leaves produces its first blooms, large and sweet scented. The mid-season and late flowering Azaleas are complemented by the general mass of evergreen Rhododendrons and Kalmias. The latter is native to the place and under protection is coming back to health as are great masses of the native Azaleas.

When the special areas for Deutzia, Philadelphus and Weigela are established, they will make their claims for attention. At this writing they are still in nursery formation only.

Another projected area is one to be devoted to summer flowering shrubs such as crape-myrtle, althea, Buddleja, Elsholtzia, Hydrangea, and the like with Pyracantha for accent.

As summer progresses into autumn, the berried shrubs begin to show off with, we hope, particular emphasis always in Pyracantha, though ~~the~~ Cotoneaster and Viburnum will one day make their own particular claim.

Autumn brings its own colors and in the arboratum, the maple collection makes its familiar pictures, yellow to deep crimson, the sweet gums and sour gums, native to our area, together with the native dogwood furnish the brilliant red to purple bronze. Especially on Mount Hamilton one will see first the brilliant pure yellows of tulip poplar and the less abundant hickories, both yielding in turn to the dull crimson to russet of oaks, with a touch of gold to yellow brown where the native beeches come close to the roadways.

In the Garden Club of America valley the spider lilies (Lycoris radiata) will spread their glistening dancing flower heads down the slopes and to the south near the few Lebanon cedars sheets of Sternbergia lutea will light their golden cups.

As autumn advances, all the conifers will rise in prominence and those like some junipers and the Cryptomeria will take on their purple bronze colors for the winter season.

Camellia sasanqua will run its annual race with frosts in some years with more varieties than others.

Late November will show chiefly the special beauties of newly fallen leaves on forest floors, the clean bark colors of the deciduous trees and shrubs, with many patterns and subtle variations before one meets the green, gold, crimson stems, of willows, cornels, Kerrias -- brown as well as the quite distinct colors that come in the shadows in valley and woodland from the moister air and the lower hanging sun. Whether the time will even come when we dare use sheets of autumn Crocus to pick up the violets and lavenders, can only be determined by a reduction of the rabbit and squirrel population!

Although in many ways, an arboretum presents the general appearance of a park, it is in reality a living museum and visitors are expected to consider it as such.

The garden minded visitor will come to see what a plant looks like, to decide for himself whether or not it is the particular plant he wants in his own garden. He will find, we hope, many new plants he has never known, that he may wish even more acutely for his garden. He may discover combinations of plant materials he might not have thought of that can be copied. And he can verify his own plants that seem doubtfully named.

The plant breeder can study wider ranges of plant materials than he might assemble for himself.

The landscape architect can consider the place as a reference library with data to be used or scorned.

The scientific staff will be variously employed, with technical studies that will be most useful to their technical confreres, with descriptive treatments of plant groups that will be of interest to botanist, nurserymen, and everyday gardeners, with breeding programs that should lead to the production of new plants particularly suited to our own climates; with the writing of texts of popular nature that will serve all classes of readers.

Although a living plant collection in the Nation's Capital cannot serve all parts of the country equally well, the same is true of any arboretum located elsewhere in our country. It is of great interest, however, as a center where many species typical of northern flora and where many typical of southern flora find their northern limits. It also lies in an area where the summers are long and hot, which is true of wide areas of our country, but the winters are relatively mild though fluctuating. In short it is representative in varying degrees of large areas in this country that have, as yet, no extensive horticultural history or literature.

What will it do for you, the visiting citizen? Just what any museum would do, furnish you with such data as has been accumulated to date and inspiration to press on in your own work.

What can you do for it? Make it your project as several organizations have already done by gifts, plants, and affection. Talk about it. Urge others to share in its upbuilding, its growth, its excellent function, but work for it whether your appeal is to the gardener-neighbor next door or to those special persons who make up "our government" and are still when home, the neighbor next door.