



## TOWARD A MORE RATIONAL APPROACH TO PLANT COLLECTIONS

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Like so many issues that should, on the face of it, be rather simply resolved, the question of how living plant collections should be developed and constituted can be plainly answered: The plants of a public garden should be those needed to fulfill its stated purposes.

Of course I do wish to say a few more things — and so will plead that nothing is as simple as we first suppose, nor as simple as we would like it to be. I'll try to answer the larger question of what a rational approach to plant collections might be, by answering three smaller questions: What is wrong with the way collections have developed in the past? Why is it wrong? And how can we make our collections more efficient and useful in the future?

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First, I want to clarify several terms I shall be using repeatedly. By *public gardens* I mean all those institutions whose principal activity is to maintain living plant collections for use in serious programs for the public. These programs may involve display, research and education. The institutions either operate on public money or under favorable tax status, implying an obligation to the public. When I refer to a *collection*, I mean all those living plants purposefully assembled by an institution according to some criterion or criteria, stated or assumed.

### UNDISCIPLINED GROWTH

That established, let's turn our attention to what makes our simple, theoretical question so difficult to resolve in practice. What *is* wrong with the way things have been done? First, to say that a collection should serve the institutional purposes presupposes that those purposes have been clearly stated in operational terms. However, even institutions which can point to a formal statement of what they are about have seldom translated this to the level of programs and services. For many foundation-owned public gardens, the legally required charter statement is simply a general, legal justification of the

corporation's existence and has little operational relevance. The governing board, whose duty is to assure the interpretation of the charter in operational terms, seldom gets around to it. For school and government owned public gardens, a statement covering their purposes has rarely been required, and the gap between governing board and garden is usually great.

The first thing that is wrong, then, is the absence of purposes stated in terms that are useful in daily operations.

But beyond this, there is usually pressure, real or imagined, to get things done — to design gardens, to plant, to initiate programs. And seldom is pressure put on managers to develop detailed policies and procedures. Quickness is rewarded above carefulness. The desire to get things done is further reinforced by the natural tendency to want to be all things to all people. Name a constituency and you will find those eager to serve it, often without thought as to how resources might be better used. Nature trails, fragrance gardens, ethnic gardens, conservatories — all as unimpeachable as motherhood — crop up with alarming redundancy to serve the handicapped in variety, children of all ages, senior citizens, the urban poor, and the rural deprived. So, to the lack of well defined goals, we must add the drive to implement programs without regard to planning or purpose.

Both of these work hand in glove with a third force which has contributed to the undisciplined growth of plant collections. This is the notion that if we hire "good" staff without ensuring that their

enthusiasms mesh well with those of the institution, the enthusiasm and competence of that staff will somehow justify expenditure of resources. The horticulturist who is really "into" birches, the botanist dedicated to describing and preserving the flora of the Amazon basin, or the educator devoted to opening the



world of plants to urban youngsters — each is appropriate to the purpose of some institution, but they are all out of place in an institution dedicated to the study and interpretation of collections of high altitude flora of the Colorado Rocky Mountains. If they are allowed to indulge their enthusiasms, a subversion of purpose is bound to result.

### *INEFFICIENT USE OF RESOURCES*

This brings us to the second question: Why is it wrong? Undisciplined growth of plant collections is wrong because it interferes with the efficient use of resources to fulfill the purposes for which an institution was established. Activities which involve spending money should derive directly from the institution's charter purposes, or the purposes for which it was originally justified. If I did not believe this to be true, I'd be pursuing a career in lighthouse-keeping or with the French Foreign Legion! The very nature of institutions is in question. An institution is an organized group of people using resources to fulfill a long-range purpose. Those who provide the resources expect them to be used for the stated purpose. Anything else is subversion, unless an agreement from the donors, or from a court acting on their behalf, is obtained. People who give money to fight cancer have the right to expect that the money will not be used to fight measles or multiple sclerosis.

A profit-making institution will run into trouble if its managers think that

making automobiles or computers is its central task. You and I seldom invest in General Motors because we believe in automobiles. We somehow feel that our investment should return something. Museums believing that programs for children are their first priority will likely decline in their stewardship of collections, and thereby lose their special purpose. And a public garden — a museum caring for collections of living plants — will run into trouble if it neglects the care of its collections and their use in public programs. The centrality of collections to public gardens, as previously defined, suggests that institutions claiming the title, but not basing programs on their collections, should be called something else. An institution primarily involved in research on plants over which it does not exercise ownership and continuing stewardship should be called a botanical institute. A display garden with

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unrecorded or temporary collections is really a park. And an institution that teaches people about plants without using a carefully assembled and recorded group of objects to do this is a school. All definitions are arbitrary at their base, but this does not negate the utility of

definition and purpose. These serve to parcel out the multitude of worthwhile tasks that need to be done. Most important, they keep our institutions on a straight path through time.

### *SAFEGUARDING COLLECTIONS*

The third question, then, is how existing conditions might be corrected. I believe strongly that every institution which claims to be a public garden, as I have defined it, should have a staff position charged with maintaining the physical and conceptual integrity of the collection. That position is usually called curator — the caretaker. The more fragile the collection, the greater the need to safeguard it. But a curator's job does not stop with preserving the collection — he or she must also work as an advocate for its use, and in order to do this must oversee its orderly development consonant with the institutional purpose and the needs of the community. In other words, the curator acts like a governor on an engine to assure flexibility of operation with stability of purpose.

To maintain the disciplined growth and use of a collection, a curator must have the backing of the director as well as the support and respect of the programmatic and horticultural staff. The curator must be willing to turn down requests from colleagues when they ask to use institutional resources for personal purposes. Advocacy, in the sense in which I use the term, requires the suppression or sublimation of the curator's personal plant likes and dislikes. The easiest way

to do this is to have a well designed hierarchy of policies based on institutional purposes, the top level of which is approved by the governing authority. These policies are translated, at the lower levels, to the procedures by which operating staff carry out day-to-day activities. Any flexibility built into the system, and there should always be some, should be carefully considered and closely controlled.

The director should certainly make it clear to all staff involved in display, education, and research that their jobs are firmly tied to the use of the collections for the institution's purposes.

## TWO TYPES OF COLLECTIONS

At this point I want to discuss two kinds of collections that I believe to be proper for a public garden. They are, first, the *discretionary* collections which are firmly based on an institution's purposes and relevant to its programs for the public. The composition of these collections may change at a faster or slower rate, depending on the nature of the programs and the needs of the institution's constituency. There are four sorts of discretionary collections based on their use: *research*, *display*, *educational*, and *evaluation*. Individual plants in the first three, or in the entire collection, may be *temporary* or *permanent*. Collections for evaluation are always temporary. To elaborate, my institution might have a collection of Trilliums which are being worked on by researchers. This would

then be a *discretionary research collection*. Four of the plants might have high value as ornamentals and, at some time, be propagated for use in displays. These accessions would also be part of a *discretionary display collection*. Two of the Trilliums in the display collection and one found only in the research collection might be used by the instructor of a course on spring-flowering native plants. These would be part of the *discretionary education collection*. When the researchers have finished their studies, they might well discard all the Trilliums for which no continuing use exists. The research collection of Trilliums would be considered, then, a *temporary discretionary research collection*. The display collection of Trilliums would probably have an undefined life and might be considered *permanent* — at least as permanent as any discretionary collection would be. All discretionary collections exist only so long as the institution needs them for programs.

The second major type of collection is the *obligatory collection*. This is a collection which an institution obligates itself to maintain and care for as a resource for other institutions and professionals to use for their own purposes. An obligatory collection is developed, for purposes of preservation, as a service to the public garden, and the horticultural and botanical community. In effect, the collection is itself a purpose of the institution, and all such collections are *permanent*. The financial burden of obligatory collections is controlled by the size and complexity of the plant group. A

small public garden with a budget of \$100,000 a year might maintain an obligatory collection of *Pinus strobus* or *Hydrangea quercifolia*. It might grow all registered cultivars and maintain documented specimens from known localities in the wild. It could even attempt to obtain a good representation of the species by encouraging systematic collecting in the species' natural range. Larger institutions might have proportionately larger obligations. Although a public garden would not necessarily use its obligatory collection in programs, any such multiple use would add to the efficiency of resource use. At present, the closest we come to obligatory collections are those which public gardens, serving as registration authorities, often maintain of the genera for which they are responsible. I believe that public gardens as a group must develop a nationwide, perhaps worldwide, system of obligatory collections if we are to fulfill our role as serious professionals managing worthwhile institutions.

I alluded previously to the value of the multiple use of collections. It stands to reason that if we have four or five uses for a given plant, we will achieve some efficiencies in the use of our resources. The problem has always been a human and technical one. First of all, people have not wished to do the desk work required to cross-reference collections among educational, display, research and preservation programs. Secondly, we seldom plan far enough ahead to enable us to assemble collections even five years before they are to be used. Instead, we have collected in an almost random

fashion from seed lists, gifts, and exchange programs. Because one institution sends a collector to China, fifty sister institutions wind up growing the same *Betula* collection from the same junction on the same trail in the same province. To what point? Do all of them have programmatic uses for the *Betula*? More likely none of them has, and they add it only because they are curious or acquisitive.

If we truly strive for rational development of collections we must work for a reasonable correspondence between programs and plants. I do not want to leave you with the impression that I believe we must only add plants for which a present use exists. The time it takes to raise many plants to maturity and the need to change programs dictate that we build certain general collections. Using the *Betula* as an example, any garden maintaining discretionary educational collections to support programs on winter gardens, small trees for homeowners, or trees with attractive bark, would want to add a *Betula* to its collection,

if only to evaluate it *vis a vis* other *Betulas*. A garden doing studies on bronze birch borers would, and should, be interested. Certainly a public garden with an obligatory *Betula* collection would add such a plant to its documented collection.

But a garden emphasizing native plants, or one whose purpose is tightly centered on evergreens, should not succumb to the urge to add every plant available. If we must add a plant for educational uses, why not have it serve a landscape need as well? If we add it for research purposes,

why not use it in educational programs as an example of attractive bark for landscape use?

And this brings us back to my earlier point — our limited resources will not permit us to be all things to all audiences. We should build on strengths related to our major purposes, and use all collections as often as possible in our programs. The National Geographic Special on the Baobab tree demonstrated that a single species can hold an audience's interest for an hour and be used to teach many important lessons about plants. I'm not suggesting that our collections be restricted to single plants — but it might help to ponder how we could carry on if we were so limited.

Finally, if each plant is to serve more than one purpose, then it would belong to more than one collection. Our *Betula* example would be included in a number of *conceptual collections*: the winter garden collection, the attractive-barked tree collection, the small tree collection (all educational), the *Betula* collection (research), and the parking lot landscape collection (display).

I began with the simple truth that the most rational collection is one whose plants fulfill an institution's purposes. I've outlined the reasons why no public garden has such a collection — and likely no public garden ever will. This is why, when asked for a title, I used "Toward A More Rational Approach to Plant Collections." I believe we can do much better than we have, and hope this presentation and the discussion to follow will help as we asymptotically approach our goal. 🌿

