

The role of international cooperation among botanical gardens as a tool for the *Global Strategy for Plant Conservation*

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Abstract

Creating an informal international association between botanical gardens and arboreta and establishing linkages with other environmental organizations can be a crucial tool to help carry out the Global Strategy for Plant Conservation. Support and assistance among partner organizations can multiply the effectiveness of their work to develop strategies for plant conservation. The Minnesota Landscape Arboretum in 2001 initiated a multilateral cooperative partnership with several university botanical gardens in Russia (Tver, Petrozavodsk, and Moscow) and Estonia. Since then joint programmes and activities have been realized. There have been reciprocal visits of teaching and grounds maintenance staff, participation in joint presentations at conferences and seminars, the creation of a format for an international children's programme (underway), and informal but very meaningful on-site discussions while visiting each other's gardens. The programme of cooperation has led to the recognition of the importance of botanic gardens and arboreta for plant conservation in various regions of Russia, Estonia and Minnesota and to international friendships between the partners. This has fostered a sense of mutual responsibility and not just among the staff of the gardens, but also among different population groups in the regions. This experience of cooperation between gardens at the University of Minnesota, the State Universities at Tver, and Moscow and Petrozavodsk, the Tallinn Botanical Garden and the University of Tartu can be used as a model for successful promotion and implementation of the Global Strategy for Plant Conservation.

Key words: International, Cooperation, Garden partnerships, Plant conservation, Minnesota Landscape Arboretum, Russian Botanic Gardens

Introduction

There are many gardens in the world that have barely enough resources to maintain themselves, moreover work to save indigenous flora. At the 1994 Garden Management Course at RBG Kew, then Director, Dr. Ian Prance lectured the class on giving aid to gardens in need, especially those in the Tropics. He was working in the Amazon to help local's plant forest openings with native species of economic value to raise funds for survival. The overarching goal was to save plant species. He encouraged all to do like wise.

The Minnesota Landscape Arboretum (MLA) is a northern garden and we do not work in the tropics. Dr Prance's response was simple (I paraphrase), "No one is working with northern gardens and the MLA should be the leader in working with northern gardens."

Getting Started

If a garden is to help another one that has few resources, how does one find such a garden? Since the University of Minnesota Faculty in Horticulture has been breeding for cold hardiness, we looked at places in which they were collecting germplasm or working with a scientist. We ended up in Estonia, at the Tallinn Botanic Garden, working with the former Director, Dr. Heiki Tamm. To locate a garden, however, one easy way is to contact Botanic Gardens Conservation International (BGCI) for names of gardens

meeting your specifications of what you want in a collaborator plus their contact information.

However, what would be your specifications? First, is it a garden doing work to save endangered species and promoting the use of native flora? Again that can probably be determined by BGCI or from conversation with garden personnel, web sites, etc.

Second, visit the garden. One can tell a lot just by looking around. Resources or not, does it look well maintained? Is the grass mowed, are the beds weeded, are the trees protected from machinery gouging, are there people visiting the garden, does anyone care! It's really not hard to tell visually, even if the spoken or written word is something different. You also need to meet the main contact person and perhaps some of the staff to see if they work together and whether or not you can work with them.

Third, make sure it is a garden which has a similar climate or climatic zone in which you have expertise. It really is necessary to understand climatic conditions, those conditions that you know and work with in your own garden. If you don't understand winter or desert, for instance, you can have a misguided idea of the potential struggles a garden will have just to maintain plant life, moreover have it stay healthy and survive over time.

Fourth, who runs the garden or makes the major decisions. It must be someone you can work with on an intellectual level as well as on an emotional level, and someone you can trust. If a garden leader says they will collaborate for XYZ cause, will they indeed do so if you hand over resources. Some discussions, formal or informal are necessary, and that can happen at the garden visit, at national or international meetings, or in bringing the individual to your garden. It might be best to create a written document of agreement.

Fifth, there will be a need to give funds to the garden you select. To ensure that you have continuing funds, it would be wise to have a special account upon which to draw. At the MLA we have the Plant Exploration Fund. This is a fund set up to allow University scientists to go world wide to collect germplasm for plant hardiness breeding. It now also allows the garden director to help northern gardens in tough economic straits. The money comes into the fund through donations made by people going on Arboretum Garden tours.

In a few cases you may need to know whether or not you can actually get the funds to the garden you are working with! Political or bureaucratic red tape may make it difficult to help financially and in some cases there is the possibility of theft along the way.

Sixth, you need to be a believer! If a garden can maintain its facilities and employ adequate staff, it can then work on conserving local flora. You must believe this will happen and that your help, financially or otherwise will bring about a positive outcome.

Ongoing Support

Once one has made the commitment to a garden, one must keep that commitment for at least 5–10 years, or some significant period of time, so the garden can begin to develop its own support system from its own efforts. It should be the supporting gardens role to counsel and help guide the supported garden to self sufficiency. This is not always easy and the MLA has not been as active in this area as it should be. There are, however, certain things beyond funds that the supporting garden should look at for determining success.

Learning from each other: The MLA likes to support the staff of the garden it is working with by sending them to conferences like those sponsored by BGCI. At such meetings we have learned from what our fellow gardens have done, what works and what doesn't. The conference is a setting in which to easily transfer information; how to raise funds successfully; how to market your garden; perhaps research or educational techniques; garden maintenance; children's education; etc.

Don't forget to listen and learn yourself. We often learn more than the gardens we sponsor. If you don't learn something new when visiting a garden, consider it time lost.

The MLA Experience

The MLA staff helped the Tallinn Botanic Garden build a research greenhouse. Dr. Heiki Tamm wanted a research greenhouse and found that he could purchase a greenhouse package from Finland for \$5,000 US, hire grad students for \$600 US per year and buy a small heater for \$500 US. We sent him \$6,000 US and he built the greenhouse. We also sent a gardener to Tallinn to learn gardening techniques and share gardening experiences.

We made acquaintance with Dr. Yuri Naumtsev of the Botanic Garden of the State University at Tver, Russia, and Dr. Alexei Prokhorov at the Botanic Garden of the State University at Petrozavodsk, Russia, at a national meeting of the American Public Garden Association. We helped buy equipment for Dr. Prokhorov to help maintain his garden, and a van for Dr. Naumtsev so that his staff could get to their research site, a special calcareous area on the Upper Volga River hosting special vegetation which they are documenting. We continued to support Tver by helping to sponsor a conference in 2004 at their University.

The MLA has sent several Russian garden staff to conferences in Estonia and the U.S. The MLA has since worked with the State University at Moscow, Apothecary Garden and the University of Tartu Botanical Garden, Estonia, where Dr. Tamm is now located.

What did the MLA receive in return?

Supporting a garden that needs help is not a tit-for-tat situation and should not be thought of as such. However, we have received many benefits from our associations. First, is the exchange of research information and plant material, which helps both gardens. Second, is a new view of how another garden produces successful programmes, especially in the area of children's education. We have adopted many ideas. Third, ideas on how a garden's maintenance works where a good idea or two pops up, the landscape of a tropical conservatory, a new conservatory built over the old one, etc. Fourth, there are many small ideas that can be picked up, macro-photography of insects, flower interiors, etc. as desk top wallpaper for youth (it must be wild, humorous or gross) that they can get for free; bird stands behind and higher than garden signs or labels so the birds sit on the stand rather than on the sign. Fifth, and perhaps most important, international good will. We try always to be ambassadors of good will which can often be in short supply. We have the chance to rectify that.

Present work of the Minnesota Landscape Arboretum

At present the MLA is involved with Tver, Moscow Apothecary, and the University of Tartu in a project that involves children and their parents or mentors monitoring trees in

their neighborhood. Dr. Naumtsev has taken the lead in this project which involves students in the 10–16 year age group at each garden. The student needs to find out all s/he can about a tree(s) over the period of a year, first assessing its condition, and recording everything about the tree that can be found. The student monitors the tree for a year and then does a report. The reports are submitted to the garden, judged and the student with the best report at each garden gets a prize. A second year will allow the student to continue the monitoring but to also develop plans for improving the tree situation in his/her neighbourhood and presenting it to the proper elected officials.

This kind of project can be a heavy work burden but think of the benefits! Young people learning more about trees and their environment, young people making recommendations about their environment, young people educating their parents and perhaps their city officials, young people involved in good work not bad things, and young people having fun.

Costs

In the 12 years the MLA has been involved with the gardens in Russia and Estonia, it has spent about \$60,000 US or about \$5,000 US per year. Removing the expenses of bringing 35 Russian Garden Directors to the MLA from Washington, D.C. (about \$20,000 US) the average cost per year is more like \$3,000 US. We make more than that on one good Arboretum garden tour!

Summary

It is important that gardens in the wealthy nations of the world set up cooperative agreements. It may be difficult or easy, it will cost you some of your own resources, but you will gain exponentially. Remember that funds are not the only help you can give: Russian garden directors visiting the MLA heard about dried flower arranging from our auxiliary. They could do it as a money maker and pay local people some of the profits. They learned about the MLA's cold hardy research, about marketing and PR, and about budgeting. They saw the educational programmes, the collections, the gardens and demonstrations; and they saw the people visiting and learning. They also had a good time! We also learned about their gardens and the creative things that they were doing that we could incorporate into our programmes.

The garden you help will gain confidence, understanding and credibility and therefore generate creativity. Eventually your partner garden will begin to help other gardens. It is an ongoing win-win situation.