

Community Involvement in the Restoration of High Park

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ABSTRACT

The High Park Volunteer Stewardship Program (High Park VSP) is a volunteer led community initiative whose purpose is to restore the ecosystems of the natural areas of High Park to presettlement conditions. The group works in partnership with the City of Toronto Parks and Recreation Division in this endeavour.

This paper provides an overview of the inner workings of this volunteer organization, from planning to operations, including our participation in restoration events and how we communicate with the public. It provides some perspective on why we have been successful, our accomplishments and learnings. It also provides some insight into the challenges and opportunities for growth.

1 Introduction/History

1.1 Natural History

The Toronto area is unique in that it sits in a transition zone. As a result, it includes vegetation characteristic of the Carolinian forest region, Great Lakes-St. Lawrence forest region, and Deciduous forest region.

The 399-acre High Park is a bio-island, being the last sizeable natural area remaining on Toronto's Iroquois Sand Plain. These sands were laid down on the shores of glacial Lake Iroquois, the larger version of Lake Ontario, that was formed when the glaciers retreated from our area 12,800 years agoⁱ. As Lake Iroquois receded, the Iroquois Sand Plain in High Park was modified into flat and rolling uplands and ravine bottomlands. An extensive watershed of ponds and streams was also created.ⁱⁱ

High Park is made up of a unique combination of vegetation communities. These communities include the remnant woodlands and Oak savannahs of widely spaced oak trees, low shrubs and prairie grasses in the upper table lands; the red oak, cherry and maple forests of the lower slopes; the mixed forests of hemlock and red oak in the ravine bottom lands, and the park's ponds and associated wetlands and streams.

High Park still supports a remarkable assemblage of rare flora and significant vegetation communities. They include four nationally/provincially and thirty-seven regionally rare plant species. About 125 acres (30 per cent) of High Park is considered ecologically significant based on extensive studies by the Ontario Ministry of Natural Resources. These are made up of 110 acres of oak woodlands and 15 acres of marshlands. High Park has been identified as an Area of Natural and Scientific Interest (ANSI).

1.2 Toronto Parks and Recreation Involvement in High Park

In 1873 John Howard deeded his property to the City for use as a public park by the citizens of Toronto. With the exception of Colborne Lodge and a small farming operation, this land was in a relatively natural state. Over the next century, the City's development of the park included: roads and parking lots, restaurant and concession facilities, a zoo, playgrounds, a greenhouse and work yard, allotment gardens, recreational facilities and picnic areas, ornamental gardens, groomed turf areas, walled revetments along the pond shorelines, and more. The park evolved to meet the demands, public sentiment, and management practices of the day.

Starting in the mid-1970s, things began to change. Around 1974, the City realized that the natural environment of the Park represented a key asset and began to reduce mowing in order to encourage and preserve the Oak savannah. In 1976, the Ministry of Natural Resources conducted an ecological Study of Grenadier Pond and the Surrounding Areas of High Park under the supervision of Allan Wainio. In 1986, the City Parks Department undertook a survey of the Ravines of Toronto and produced working plans to address their rehabilitation and preservation. The High Park Ravine including the Savannah study was completed in 1988 and recommended further reduction of mowing practices in order to encourage the regeneration of the Black Oak Savannah vegetation. This recommendation was implemented. In addition, the propagation of native woody plants was recommended and the native plant propagation program began at the High Park Greenhouses.

The Department initiated a further study in 1988 with the purpose of developing a comprehensive management philosophy that would guide the implementation of appropriate park stewardship. This study included all aspects of High Park: transportation and traffic flow, safety and recreation, the natural environment and virtually all aspects of park use, development and maintenance. At the request of Parks and Recreation, Steve Varga of the Ministry of Natural Resources (MNR) conducted a Botanical Inventory and Evaluation of the High Park Oak Woodlands in 1989ⁱ. His recommendation resulted in High Park being identified as an Area of Natural and Scientific Interest.

In response to this report, the City initiated a broader study (than the original done in 1988) of the Park, concentrating on regeneration and restoration techniques. This was conducted by staff of Parks and Parks Planning sections. A report, *High Park: Proposals for Restoration and Management and Framework for Restoration*, issued in draft form in May 1992ⁱⁱ, was subjected to extensive public consultation over the summer and was adopted in a revised form by City Council in February 1993. This report recognized, among other things, the importance of High Park's natural areas and delineated an approach to the restoration and management of these areas. This approach was approved in principle by City Council.

In 1991, herbaceous native plant propagation began at the High Park Greenhouses on a limited basis. By 1995, it had expanded considerably. In 1996, a concerted effort began to establish a native plant nursery both as a source of plants and seed and as a demonstration site and educational resource.

Recognizing the critical need for on-going, systematic and broadly representative community input and consultation, the Parks Department recommended the establishment of a High Park Citizens' Advisory Committee (interim) which was approved by City Council in February 1993 and became a permanent Committee with the approval of its Terms of Reference in September 1995. This Committee, of which the High Park Volunteer Stewardship is a part, plays a key consultative role in the management of High Park.

Out of the proposals for restoration and management came the High Park Oak Woodlands project. Its objectives included:

- characterizing the historic land-uses and evidence of factors leading to present conditions of the significant oak woodlands of High Park
- characterizing key quantitative and qualitative variables to document existing ecological conditions of the significant High Park woodlands, and
- providing basic information useful in the design of programs of restoration for significant oak woodlandsⁱⁱⁱ

The consulting firm, Applied Ecological Services Inc (led by Steven Apfelbaum), was retained by Parks and Recreation to conduct a detailed restoration strategy study in 1994. This study resulted in a better understanding of the Oak Savannah system and outlined a Test Plot Program that would measure the effectiveness of proposed restoration techniques. In addition, conducting limited tests would serve as a barometer of the public's acceptance of such measures. This program was implemented in 1996 by Parks and Recreation in partnership

with the Volunteer Stewardship Program and is on-going. The results of the 3-year program are currently being analyzed by our consultant; a full report with recommendations is expected later this year.

In support of its studies and initiatives, Parks and Recreation drew together a group of technically skilled individuals as an informal consultative body to comment on various matters relating to the High Park Oak Woodlands; Pond, Wetland and Stream; and Ravine Ecosystem research and work. This group, called the “Technical Resource Group”, is composed of Parks and Recreation staff and many experts drawn from various organizations and agencies in the Toronto area. The Department continues to draw upon this valuable group of professionals and volunteers.

Over the past ten years, Parks and Recreation has increasingly encouraged the participation of the public in promoting the significance of High Park's natural areas and their involvement in restoration and management activities. Major initiatives that provided opportunities for participation have included Pond and Wetland rehabilitation around Grenadier Pond, native plant production in High Park Greenhouses, Black Oak Savannah restoration and Test Plot work. Forest management in the Ravine areas of High Park, whose implementation began in the autumn of 1998, represents yet another such opportunity.

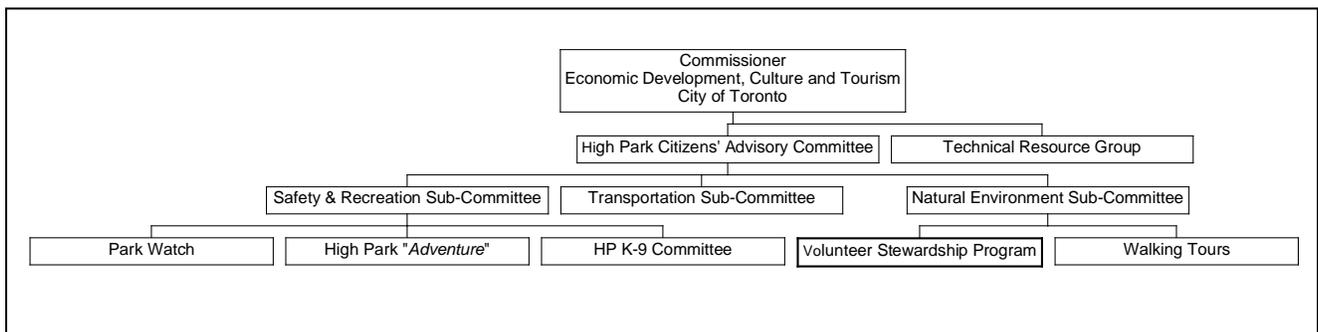
1.3 Community Involvement in High Park

In the late 1980s and early 1990s, community interest was growing within the High Park area to balance conflicting uses of the park, provide input into Park restoration and management, and to generally learn more about the natural and human history and flora and fauna of the park. Although advisory councils were well established for recreation centres, no similar citizens’ forum was common for parks.

In January 1992 the community raised some major concerns in regards to the removal of trees (deemed a safety hazard). This concern resulted in a meeting between members of the community and Herb Pirk, Commissioner of Parks for the City of Toronto. The meeting and continuing discussions accelerated the release of the previously mentioned *High Park Proposals for Restoration and Management* and the establishment of the Citizens’ Advisory Committee. Since that time the High Park Citizens’ Advisory Committee (HPCAC) has grown and evolved, fulfilling its mandate of providing the Commissioner of Economic Development, Culture and Tourism (responsible for Parks and Recreation) with on-going public input and assistance in all matters concerning High Park.

Membership of the HPCAC is made up of: ratepayer and resident associations, recreational stakeholders, long term interest groups, business and park entrepreneurs, as well as community residents. The HPCAC has three sub-committees that provide input on different aspects of park policy and use: Safety and Recreation, Transportation, and Natural Environment. The High Park Volunteer Stewardship Program (VSP) is a sub group within the Natural Environment sub committee, as highlighted in our organizational chart below.

Figure 1 – Structure of the High Park Citizens’ Advisory Committee



1.4 Birth of the Volunteer Stewardship Program (VSP)

The High Park Volunteer Stewardship Program was launched nearly three years ago on June 19th, 1996, and was one of the first initiatives of the formally established Citizens' Advisory Committee. Looking back, the birth and rapid development of the Volunteer Stewardship Program was in large part due to work initiated by Parks and Recreation at the High Park Greenhouses in 1991. Anticipating the requirement for native plant material, the department encouraged some of its staff to determine how to best propagate and reintroduce native plants to High Park. The efforts of staff were discussed at Natural Environment sub-committee meetings. It was at these meetings where the concept of a volunteer organized restoration group was also first raised. The partnership between the community and the Parks and Recreation department seemed like a natural fit. Terry Fahey, a member of the High Park Greenhouse staff, was involved in the exploratory restoration work that the Greenhouses were performing, and was able to obtain native plant material and lead us in our early restoration activities.

Our first volunteer event was preceded by considerable discussion on how we should undertake restoration efforts in the park, and how we should best organize our efforts. Faced with the fact that there was no established formula for restoration within the park, we decided that we would learn through our experience, and shape and mould the program as we learned. It was with this optimism that we embarked on our restoration efforts, and our group grew from there.

2 What We Do

The purpose of the Volunteer Stewardship Program is to restore the ecosystems of the natural areas in High Park to presettlement conditions. We work with the City to plan, coordinate, and implement restoration activities in the park, we facilitate community involvement in the park, and we educate the public and communicate our efforts.

We support a variety of initiatives such as the Oak Woodlands Test Plot Program (mentioned earlier) through our Sunday afternoon and Wednesday evening restoration events. We have also developed Scout and Guide event days, as well as special events associated with Earth Day and Harvest Festivals in High Park. Our goal is to develop the knowledge and expertise of our volunteers in all aspects of ecosystem restoration, to become a model for community involvement in ecosystem restoration, and to apply the knowledge gained to the restoration of High Park.

Our restoration activities run throughout the year, and vary depending on the season. Our activities include planting, removal of invasive weeds, brushing, seed harvesting and cleaning, and plant propagation in the Greenhouse. Controlled burns are managed by the Ministry of Natural Resources, and the seasonal level variation of Grenadier Pond is managed by Parks and Recreation staff.

3 What We Have Accomplished

At the end of 1998 we had 200 active volunteers. Since our launch in June 1996, we have:

- invested 4,100 person hours in the park
- worked with Parks staff to develop a 1999 restoration plan
- propagated 11,000 potted native plants
- reintroduced 26,000 potted native plants (balance propagated by Greenhouse staff)
- removed innumerable stands of weeds
- organized and led a number of Scouting & Guide activity days
- assisted the TRCA with their school pond planting program
- made several presentations on our program to interested community groups

The efforts of our group have contributed to the reintroduction of regionally rare and extirpated species such as Stiff Gentian, Butterfly Milkweed, and Spiked Liatris to the park.

In 1997, we also launched an Adopt-A-Plot program, which provides an opportunity for groups to focus their restoration efforts on a specific area in the Park. Our program develops a restoration management plan and provides plant material, tools, and instruction on the group's restoration activities in consultation and partnership with the High Park Greenhouses and operations staff. The Adopt-A-Plot program enables the group to show up on their own schedule and manage their own time.

We are currently working on roughly 20 different sites within the park, with many on the order of 1000 square feet. Several sites run 2000 to 3000 square feet. At this point we are still experimenting with various techniques, in an effort to increase our efficiency and thus the area under our stewardship. We will likely always be constrained by the time required to plant native plants, but are looking to develop effective methods for the control and elimination of invasive weeds.

For purposes of reference, it is helpful to compare us to other volunteer groups in Toronto. The High Park Volunteer Stewardship program is the largest volunteer organization in Parks and Recreation for the former City of Toronto. For comparison, an area that draws a significant number of volunteers is Health Care. The Toronto General Hospital has 700 volunteers and is well known and well established. The fact that we have grown to 200 active volunteers in only two years is a testament to the public's interest and appetite for the environment and restoration. We are also likely the largest volunteer led volunteer organization in Toronto, and in partnership with Parks and Recreation, organize and manage one of the most successful restoration activities in Toronto.

4 Operations

Being a volunteer group led by volunteers, we must maximize the return on our personal time in the organization and implementation of our efforts and activities. Simplicity (including ease of managing the program) and consistency is the key to our operations.

Our events are run every other Sunday year round at 10:30 am and are 2 ½ hours in duration. From May through August, we add an evening event every other Wednesday at 6:30 pm, and we gather at the south entrance of the Grenadier Café and Tea House prior to our events.

We run announcements of our events in the community newspapers and publications such as NOW Magazine, as well as in our local councillor's calendar of community events. We have expanded our announcements to all of the Toronto and ethnic newspapers through the Toronto Digest, a weekly publication of events compiled and distributed to all of the news services by Toronto City Hall.

Ours is truly grass roots marketing. We have no brochures on our group but with the assistance and support of Parks and Recreation we distribute our latest newsletter to potential volunteers. We have not held any press conferences to promote our efforts, and we have no formal marketing plan. Over and above our announcements in local newspapers, our volunteer base has grown through word of mouth.

5 Planning

We have a core group that is responsible for planning all of our events. This core group is made up of the "original seven" that embarked on the vision of community based restoration in High Park over two years ago, and we act as the catalyst, driver and cheerleader for the program. Tony Jovan, David Kirkpatrick, Ron Luft, Terry Fahey, Kathleen Keefe, Ron Allan, and myself make up the original seven. In addition to the original seven, other people, such as Charles Kinsley, have joined us. We come from all walks of life and experiences. Several of the core group are very knowledgeable in native plants, while some of us have no formal training but bring enthusiasm, organizational, promotion, and leadership skills.

Annually we discuss projects or areas of the park that each of us has an interest in pursuing. At a high level, we plan the activity for each event, such as plant propagation, transplanting, planting, weeding, buckthorn removal, etc, at least 6 months in advance. We get together monthly at one of our homes to plan the specifics around the upcoming month's events. Rounding out the group on the planning side are Arthur Beaugard, Coordinator of Plant Production for the High Park Greenhouses (recently promoted to Manager of Natural Environment and Horticulture), Carol Walker Gayle, Urban Forestry Planner (recently replaced by Beth McEwan), and Carol Guy, Supervisor for High Park; all from the Parks and Recreation Division. Although the Parks and Recreation folks may not always join us at our planning sessions, we gather their input for discussion at our meetings.

Our future activities are often predetermined by our earlier initiatives. For example, many of our events involve maintaining previously planted areas with weeding and watering as necessary. Only as our volunteer group grows, or the areas under our management are well along the road to being restored, do we expand our efforts to new sites. We have learned through trial and error the capabilities of volunteers, Parks staff, and the park environment itself to adapt to the challenges of restoration.

At our monthly meetings, we plan the details associated with the upcoming events. Planning details range from the specific area in the park that we will be working, to the techniques that we will employ and the tools that we will require, to provisions for plants and specific plant material that we would prefer for that area, to watering and the removal of bagged weeds, etc.

Our monthly planning sessions are critical for sharing information, evaluating the success of our past month's events, discussing ways to improve our events based on volunteer feedback or perceptions, and brainstorming for special events. These sessions are also important for reconciling differences of opinion on how we should approach our work. For example, should we focus on removing invasive weeds from all of the richest native plant sites around the park, or should we instead focus on eradicating weeds from one area or adjacent areas and gradually increase their size over time? This means trading off long term progress against the decline of some of the loveliest areas within the park. Or trading off the fact that by maintaining the richest areas of the park we are simply removing the weeds that blew or crept in from the year before, and merely holding a defensive position, a stalemate, against the onslaught of non-native plants. These philosophical discussions tend to be very passionate and emotional. I think what keeps us together and makes us successful is our respect for each other, our willingness to discuss issues where we know that we have differing opinions, our willingness to try new approaches, and the fact all of us share a common purpose and understand that there is no set formula for success. Our experience has shown that a technique that may have phenomenal results in one area of the park may indeed be a stunning failure in different area of the park. Experience, persistence, observation, and experimentation have been our greatest teachers. Friendship and our love for the park have been our binding and driving force.

Potential restoration activities must meet several criteria before they can be seriously considered as events:

- The restoration activity must be meaningful for the volunteers. In other words, volunteers must leave the event with a sense of accomplishment and satisfaction.
- We must be able to impart the necessary knowledge or skills to be used for the activity in a few short minutes, or have enough experienced volunteers to mentor and guide new volunteers in the activity
- We must be able to achieve a set objective within the 2 ½ hour activity (event) period
- We must be able to point to a long-term contribution of our 2 ½ hour event. We must make tangible progress upon which we can build successive events.

If a restoration activity or environmental challenge fails these criteria, we discuss alternate management techniques that could be employed by volunteers or Parks staff to meet the challenge. Events that have failed our

criteria include the removal of purple loosestrife and black swallowwort (dog strangling vine) on a large scale, and the removal of Japanese knotweed. Potential management techniques that are being discussed or have been employed to meet these challenges include the introduction of beetles to control loosestrife, the reintroduction of mowing to control swallowwort, and an experiment to monitor the success of monthly pulling of knotweed in a defined area. Thus in spite of the fact that a restoration activity or challenge may be too great around which to build an event, we can often develop some creative alternatives to meet the challenge, in partnership with Parks and Recreation staff.

6 The Event

We always attract new volunteers to our events. New volunteers can make up anywhere from 10 percent to 50 percent of the group at any event. We begin each event by having each person introduce themselves. We always have a member of Parks staff with us to support the event with plant material, tools, water, and their knowledge and enthusiasm. Following introductions we provide an overview of the work to be performed for that event. At that point we depart for the location where we will be working.

During the walk to our destination, we take the opportunity to welcome the new volunteers, make them feel comfortable, and find out how they learned of our efforts. Upon reaching our destination we evaluate the success of our past events focused at that location, discuss the techniques that have been previously employed, why they have been employed, the results that we are trying to achieve long term, and our objectives for this specific event. We then provide some pointers on the practices that we will employ that day. For a planting event this might be as simple as providing information on the clustering of certain plants, the plants' shade tolerance, and instructing everyone to leave the empty containers next to their planting, so that the person watering can find their plant.

We partner up new volunteers with experienced volunteers, to help the new volunteers apply the techniques that we have discussed and to answer their innumerable questions. Our experienced volunteers are the ones best suited to answer questions, demonstrate techniques one-on-one, and provide their personal perspective on our activities. Our experienced volunteers embody the spirit, enthusiasm, and living knowledge of our group.

The involvement of Parks and Recreation (including Development and Support, Forestry and Parks Operations and Greenhouse staff) at our events is extremely important. The staff member supporting the event (if not already well versed) is briefed on the event, the objective and techniques to be used, in advance of the event by the appropriate Parks and Recreation person. These events have evolved as true partnerships with leadership and expertise being, in general, equally present and exercised by Parks staff and key volunteers. This is beneficial for the members of the core planning group by ensuring that there is never an obligation for members of the group to be present for any given event. This is also beneficial for staff members new to volunteering, in that they get the opportunity to build their skills by working with a large volunteer group while being supported by the more experienced volunteers. This builds a strong sense of ownership and belonging by all involved.

Other important aspects of our events:

- The social aspect, the sense of community and purpose and belonging, is crucial to the on-going success of our efforts
- We draw people of all ages, from teens to retirees, and families as well. We have volunteers from diverse cultures and backgrounds, from across the Greater Toronto Area (GTA).
- There is never an obligation to attend an event, nor is there a log kept of people's participation
- We celebrate the success of the group on our anniversary in June and at a year-end event in November. Contrary to other volunteer groups, we do not recognize the contributions of individual volunteers. The feeling is that we all contribute as our personal time permits, and that everyone is always welcome, whether they are a new volunteer, a regular, or not so regular volunteer. Every one makes a difference.

- The events are free fun, free entertainment
- Many of us work to remember everyone's names and to welcome back each new volunteer by name at the next event they attend

7 Communications & Promotions

Many volunteers come out on a seasonal basis. Some prefer to work in the Greenhouse propagating plants in the winter and spring, while others prefer to get involved in the summer. In order to keep in touch with all volunteers, we publish a newsletter at the start and middle of each year, which is reproduced and distributed by Parks and Recreation. The newsletter includes a calendar of events for the upcoming six months, our accomplishments over the past six months, as well as an overview of some of the new projects and initiatives under consideration.

In order to manage our volunteer group effectively, we developed a form to capture their specific interests with regard to restoration, event organization, and their desire to get involved in other activities within the park. We have used this information in the past to personally call each volunteer regarding upcoming events, or to enlist their involvement in specific activities. We also share this information with other High Park Citizens' Advisory Committee (HPCAC) groups in which the volunteers have expressed an interest.

We have established a post office box for the return of volunteer forms, and have an information line provided by Parks and Recreation with a recorded announcement on upcoming events. The information line is common to all of the volunteer groups operating in High Park, and enables callers to obtain information on upcoming Walking Tours, Volunteer Stewardship events, information on Park Watch, and general park events.

We are able to leverage the strengths of the HPCAC by highlighting our efforts at each of the highly successful High Park Walking Tour events. These tours are led by scientists, artists, and naturalists, and focus on such themes as the influence of High Park on Canadian Art, Bat Night, Grasses, Native Flora in a Carolinian Forest, Prose and Poetry in the Park, and more. Those expressing an interest in our VSP program are provided with a volunteer form that they can fill out and return. We also are involved in the training of Park Watch volunteers. These volunteers act as park hosts, providing direction and assistance to the public, and act as eyes and ears for Parks and Recreation staff and Toronto Police.

In order to build awareness and support for our efforts at a political level, we provided a presentation and information package in late 1997 to our incoming City of Toronto councillors. This was done as part of a larger presentation by the HPCAC to educate the councillors on our group, our efforts, the challenges that surround our programs, and the areas for which we would be looking for their support.

One of the most important exercises that we undertook when launching our volunteer program was to develop a vision statement and strategy for our group. This not only served to build consensus and focus our efforts and purpose, but also enabled us to clearly articulate our mandate to new volunteers, Parks and Recreation staff, the public and the media.

8 Why We Have Been Successful

First and foremost, we have been successful because of our partnership with the City of Toronto Parks and Recreation Department. The partnership is especially successful because both groups complement each other so well. In Parks and Recreation, we have a group that has demonstrated its commitment to capital projects and initiatives that support restoration in the park. During times of fiscal restraint, however, this group's resources have been reduced. In the Volunteer Stewardship program, we have a significant group of people committed to dedicating their time to restoration activities in High Park. Both sides bring an extensive knowledge of native plants, propagation techniques, and a personal desire to see our efforts successful.

Building on the partnership, we have been successful because we have been able to collaborate on our efforts and initiatives. As we well know, there is no formula for restoration. Success comes through experimentation, observation, patience, and a willingness to learn together. We share a common purpose and desire, and have been able to build a sense of ownership and meaningful volunteerism. We have been able to learn of each other's challenges and limitations, and by doing so, develop some creative solutions for overcoming those hurdles, thus making us stronger through our partnership.

Another key to our success has been the education of our volunteers. During the winter months we have worked with Parks and Recreation to run training sessions on plant propagation techniques, and look back at the conditions to which we are trying to return, through archival pictures. We learn through osmosis and the sharing of knowledge. At the beginning of every event, we review the objective of that day's efforts, the techniques that we will apply, the rationale for their application, and results that we have observed around the park. In addition, by partnering new volunteers with experienced volunteers at our events, we are able to quickly build the skills and basic knowledge of all volunteers.

A significant development has been our ability to work in the High Park Greenhouses during the winter months. It has enabled us to maintain momentum, continuity, and enthusiasm of the volunteers by keeping them involved year round. It has allowed us to work on the full cycle of restoration, from seed collection to plant propagation to the reintroduction of plants into the park, reinforcing the sense of ownership. It has also allowed us to introduce a training program whereby the first hour of the event is devoted to a specific topic, such as the physiology of germination, in order to further develop the knowledge of our volunteers.

Another reason for success has been the public's appetite for anything associated with the environment. Not only has this enabled us to attract volunteers in large numbers who have an overwhelming desire to learn and contribute, but it has also enabled us to attract highly knowledgeable and skilled individuals interested in the organization and evolution of the program. This has resulted in a continually improving and well run volunteer program, and a group eager to address issues as they arise.

We have also been successful because we respect the value of everyone's time and commitment. We have refined our events so that all of the plant materials and tools that we require are awaiting the volunteers when they arrive. The location that we are to work in has been evaluated and the work carefully planned. Annoyances such as Poison Ivy are avoided wherever possible, and pointed out when in close proximity. Volunteers are comfortable leaving our events when ever they need or choose, and if the weather is too hot, too cold or too wet, we will often pack up early and head over to the Grenadier Café and Tea House for some refreshment. In spite of the fact that we are serious about the restoration of the park, it is also important that we have fun and enjoy the work that we are doing. It should never be felt to be a burden.

At a very high level, another reason for our success has been the High Park Citizens' Advisory Committee's ability to reconcile divergent points of view. Discussion now occurs at the community level before proposals and recommendations are forwarded to Parks and Recreation, and all individuals and groups in the community must build support and gain consensus on views and direction. Without this support and willingness to become part of the solution, unpopular views are put in perspective and addressed by the community. This not only provides Parks and Recreation clear direction from the community, but also provides them with a forum for the discussion, review, and support of new ideas and initiatives.

9 What We Have Learned

We have learned a great deal through the efforts and results of our first three years and through the High Park Citizens' Advisory Committee as well. Restoration is no longer a political hot potato. A large group of people has put their time into the restoration of High Park, and the media has supported our efforts through the positive reporting on potentially controversial initiatives such as the controlled burns of the Oak savannah. The well

organized High Park Citizens' Advisory Committee serves as an effective and respected public and community forum on issues that face the park.

There has been growing support and an overwhelming success for restoration in other cities across North America. Chicago has restored hundreds of acres under the stewardship of volunteers^{iv}. Mayor Richard M. Daley has been a supporter of restoration within the city. Native plants can be found on the medians around the city and down the centre of LaSalle Street just outside City Hall^v. US President Clinton passed an Executive Order on April 22, 1994^{vi} regarding the use of native plants. It directs all federal facilities and projects to plant local native species wherever possible. In addition the Agriculture Department is directed to conduct research on the suitability, propagation, and use of native plants for landscaping. The order also calls for outdoor demonstration plots to promote public awareness of native plants.

The attributes of native plants, including their disease resistance, lack of nutrient, water and pesticide requirements, and success in the reduction or elimination of run-off problems, etc are significant benefits^v, and create a strong economic argument for their widespread use.

10 Challenges & Opportunities

We are always looking forward to how we can improve our volunteer program. These are some of our challenges and opportunities:

- Impact of amalgamation within the City of Toronto on resource allocation for regional parks

The Parks and Recreation Department within the City of Toronto has been undergoing budget cuts since the early 1990s. Parks and Recreation have worked to maintain their efforts in restoration, but even this has seen a reduction in staffing levels. Without the continued commitment and on-going support from Parks and Recreation staff, the efforts of our volunteer group will be adversely impacted.

- Visibility of and commitment to the importance of restoration and naturalization in the City of Toronto

The City of Toronto does a wonderful job on capital projects and project management initiatives. These get funding dollars and visibility at City senior management levels. As restoration initiatives continue to be implemented, the need for resource allocation for the operational maintenance of these initiatives will become increasingly necessary to ensure their long term success.

Unless executive and politicians within the City of Toronto continue to embrace the importance and value of restoration and naturalization in Toronto, the allocation of resources supporting restoration efforts may be adversely affected. It would be unfortunate if restoration were to be relegated to the margins of city recognized and funded initiatives, and become vulnerable to cuts from the pressure to reduce or maintain current tax levels.

We would like to see a formal program for restoration across the new city of Toronto. Looking even further, we would like to see prairies, Oak savannahs, and wet lands would replace many of the manicured lawns found on public properties and large traffic medians around the City's streets and highways. In order to realize this vision, the necessary skill sets, knowledge and operations practices must be expanded and further developed. Trials will have to be run to determine the success of certain native plantings in response to urban roadside conditions, so as to develop an inventory of plants suitable for these applications. As recognized by U.S. President Clinton in his Executive Order, the use of native plant material not only preserves our heritage, but also overcomes the water, pesticide and nutrient requirements, run-off problems and erosion problems associated with many non native plants. The use of native plants has enough economic

sense to be applied to all federal buildings through the US, and throughout Chicago and other communities. Surely it makes sense to apply in Toronto as well.

- The City's on-going ability to adapt to support community involvement and volunteer groups

The City needs to re-examine the challenges of working in a dynamic partnership with volunteer organizations. A program such as ours poses new challenges:

- Resource, planning and support requirements
- Influence and expectations of volunteer organizations on park and City policy and initiatives
- The need to reconcile divergent points of view between the organization and staff

This will require changes to the roles of staff to recognize their work with volunteers and the challenges raised by working side-by-side with them. This is very similar to the philosophy and evolution of roles seen in private industry, with the establishment of cross functional teams.

- Development of a new skill set and infrastructure for restoration and naturalization

Restoration and naturalization are relatively new disciplines. They bear little relation to traditional gardening, and are seldom practised in landscaping. In order for the City to ensure long term success in restoration and naturalization, it must continue to develop the associated restoration skill sets and native plant knowledge. The biggest threat that we face is lack of knowledge, and the failures associated with improperly applied restoration practices. Awareness, education and sound practices are our biggest allies.

- Integrating regional environmental concepts and practices into education

Education at the primary, secondary, college and university levels would benefit from the integration of local environmental concepts and practices. Most Canadians have a poor understanding of ecosystems and their importance and impact on our daily lives. This includes the average Canadian's perception and understanding of the importance of restoration and naturalization. A basic understanding is required before environmental and environmentally friendly practices can be embraced on a large scale.

At the college and university level, while we do see curricula beginning to include ecological restoration, a greater emphasis would contribute much towards the restoration challenges that face both urban and wilderness areas.

- Revising bylaws to differentiate between noxious alien weeds and native plants

Native plants including Goldenrods, Asters, Milkweeds, and Joe-Pyes are inappropriately recognized as noxious weeds by the Ministry of Agriculture and Food. Purple Loosestrife, Tatarian Honeysuckle, Norway Maple, Japanese Knotweed, Himalayan Balsam, Knapweed and Common St. Johnswort, widely recognized as invasive aliens (noxious weeds), can still be found for sale in nurseries and seed houses around Ontario. Current laws prohibit useful plants and allow problem plants. Clearly one way of reducing the impact of noxious weeds is to ensure that they are properly addressed by existing bylaws, and to end their distribution and sale. The next step is to control their growth. It is estimated that in the U.S., exotic plants are spreading at a rate of 3 million acres of land per year on federal lands.^{vii} Some experts estimate the impact of non native plants and animals on the American economy to be as high as \$123 billion a year.^{viii} This has been termed the "Environmental Challenge of the 21st Century", and often referred to as 'biological pollution'.

The Canadian Biodiversity Strategy (1995) recognizes the need for, “the development and implementation of measures such as policies, plans, legislation, and programs to prevent alien and modified organisms from adversely affecting biodiversity”^{ix}.

- The proper sourcing of pertinent plant material for reintroduction

One of the challenges of restoration and naturalization is the sourcing of plant material from the appropriate bioregion. Unless care is taken in the sourcing of seed for plant material, and the re-introduction of plant material to the appropriate bioregion, the integrity and intent of the restoration will be greatly compromised.

- Encouraging homeowners to ‘Expand the Boundaries of High Park’

Public awareness and education are key to the widespread acceptance of restoration and naturalization. An initiative of our Natural Environment sub committee encourages local residents to use native plants as part of homeowner and community landscaping. Third and fourth generation weed laws in the United States encourage this use and in some instances go so far as to require developers to include in their subdivisions 30 metre scenic easements planted with native plants, wildflowers, and grasses between homes and major streets.

- Enhancing the knowledge and skill sets of our volunteers

One of the limitations that we currently face is the lack of widespread native plant knowledge amongst our volunteers. This creates a challenge when we measure the results of our efforts through the application of different monitoring techniques. Plant identification, as well as knowledge of growth requirements (shade tolerance, drought tolerance, etc) is important to our ability to evolve our program. Roughly half a dozen of our volunteers are highly skilled in plant identification (grasses, forbs, trees, wildflowers, etc) and knowledge. Education, informal and possibly formal, will be an area of focus as we move forward.

These challenges are broad but well worth pursuing in order to ensure the success of our continuing efforts to restore the ecosystems of the natural areas of High Park to presettlement conditions.

REFERENCES

ⁱ Varga, S. 1989.

Botanical Inventory and Evaluation of the High Park Oak Woodlands Area of Natural and Scientific Interest. Parks and Recreational Areas Section, Ontario Ministry of Natural Resources, Open File Ecological Report 8907, Central Region, Richmond Hill, Ontario. Queen’s Printer for Ontario. 48 pp.

ⁱⁱ Perk, Herb. May 1992.

High Park, Draft Proposals for Restoration and Management – A Report to Neighbourhoods Committee from the Commissioner of Parks and Recreation. City of Toronto Department of Parks and Recreation. 94 pp.

ⁱⁱⁱ Apfelbaum, Steven and Larson, John. 1993.

Analysis of Historic and Existing Ecological Conditions of Significant Oak Woodlands at High Park, Toronto, Canada. Applied Ecological Services, Inc. 156 pp.

^{iv} Stevens, William K. 1995.

Miracle Under the Oaks. Pocket Books, New York. 332 pp.

^v Rappaport, Bret and Horn, Bevin. 1998.

Weeding out Bad Vegetation – Control Ordinances. Restoration & Management Notes 16:1, 51-58, Summer 1998.

^{vi} Wildflower, North America's Magazine of Wild Flora. Spring 1995 11(2) p.48

^{vii} Whitson, T. 1995.
Non-Native Invasive Plants: A Biological Disaster. USDA Conference, Denver, Colorado.

^{viii} The White House, Office of the Press Secretary
Statement by the President, February 3, 1999

^{ix} Environment Canada. 1995.
Canadian Biodiversity Strategy – Canada's Response to the Convention on Biological Biodiversity.
Biodiversity Convention Office, Ministry of Supply and Services Canada, Catalogue No. En 21—
134/1995E.