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Over the Fence Project

ABSTRACT

Grassroots Albany is an environmentally-conscious community group based in Toronto's Annex neighbourhood. A previously commissioned tree survey indicated the number of declining canopy trees in the neighbourhood. The Ecological Resource Group (ERG) was brought in to work directly with individual homeowners and provide organisation and expertise. ERG members encouraged the implementation of increased plant community types from ground level to forest canopy.

Project goals included increasing:

- urban vegetation / biomass
- the use of native species
- biodiversity
- the number of layers of urban vegetation
- the connections between natural systems
- custodial awareness of natural systems in land owners
- general knowledge of the complexity and importance of our urban ecology

During this two-year project, seventy-five neighbourhood households collaborated with ERG on plant selection and location. Nearly 2,500 native plants were introduced in this manner, demonstrating that what people do in their own backyard can have a direct, significant effect on the functioning of a healthier urban environment.

This paper addresses several issues -- in general, and as they apply to this project:

- 1.) challenging traditional landscape ethics and increasing the emphasis on environmental concerns
- 2.) native vs. non-native plants
 - a) community awareness of native plants
 - b) realities of the urban situation -- existing gardens of exotics
- 3.) community participation and thoughts on
 - a) the development of a prototype so other communities can do this with less one-on-one assistance from consultants (e.g. ERG)
 - b) fostering "ambassadors" in community groups to take on the consulting rôle

Introduction

"If we become good stewards of neighbourhoods, we become good stewards of Earth."¹

¹ Vernon C. Brink, Preface, Naturescape British Columbia. The provincial guide.

Where the Annex is:

The Annex is a primarily residential area in central Toronto, just north of Bloor Street West. Our project concentrated on an area in the north-west corner of the Annex, between Bathurst and Howland Streets to the west and east and Dupont Street and Barton Avenue to the north and south respectively.

What the Annex is:

The Annex is a gracious neighbourhood of predominantly Victorian and turn-of-the-century homes with mature canopy trees and well-established gardens. The specific area of our project evidences the general pride of ownership of the residents in their well-tended gardens. It is mainly an upper middle class neighbourhood of professionals who enjoy the proximity of Toronto's downtown core -- employment, shops (especially along Bloor Street West), and other services. Although it is difficult to generalize based solely on the sample group to whom I spoke, it appears that Annex residents (particularly those who participated in our project) tend to show a keen awareness of the urban situation (e.g. pollution, environmental degradation) and feel a real sense of community.

Who is Grassroots Albany:

Grassroots Albany is a community group centred around Albany Street in the Annex. Its members are focussed on improving their local natural environment. This group, on its own, has initiated a number of environmental and ecological projects. The project that eventually evolved into 'Over the Fence', began with a pioneering endeavour for such a community group -- namely, the hiring of a forester to study the trees in the neighbourhood and to write a report on their health.

Why This Project:

Concern about the health and longevity of their mature trees prompted Grassroots Albany to commission the tree survey, which was completed in 1991. The author of the survey, Marshall Buchanan, found "there was a 50 year age gap between the existing overstorey and the next generation. In addition, the predominant species (Silver Maple) is aging, and many specimens are nearing the end of their average life span in an urban setting. Such invasive exotic species as Tree of Heaven represent a substantial proportion of the existing urban forest that is less than 30 years old."²

The tree survey gave focus to community action. People in the Albany area did not start out as advocates of native species, but evolved into such through the impact of the tree survey. The process of organising themselves, commissioning the report, and digesting its findings engendered a sense of personal attachment, ownership, and responsibility among the residents towards the neighbourhood's trees, their own urban woodland. No less important was their acquired, heightened sense of being part of a larger whole.

Who is ERG:

The Ecological Resource Group (ERG) is a voluntary, non-profit organisation founded in 1994 and dedicated to the improvement and understanding of urban ecology. Its membership during the period of this project was made up of community-oriented individuals with environmental backgrounds, interests, and skills. As an ERG member, the author has participated in each phase of the process in which ERG was involved.

Much of ERG's work began with the notion of an ecological quilt of linkages and evolved into the Living Links Programme, of which the Over the Fence Project was one. The linkage approach is essentially a holistic one, looking at how environmental factors both natural and man-made interact and affect each other culminating in (and often limiting) the ecology of any particular area. For example, a fence is not just a structure, but also defines a community, both human and otherwise. Once the fence is removed, it eliminates both physical and

² Mercedes Sawosch and Marc Willoughby, ERG Action 21 application

psychological barriers and gives rise to new interrelationships. As can be appreciated, this can give rise to opportunities and challenges for a community that undertakes a naturalisation and regeneration approach.

How ERG became involved with Grassroots Albany:

A serendipitous meeting between members of both groups at the Royal Winter Fair Winter Garden show in the fall of 1995, convinced all concerned that working together on this project would be mutually beneficial and move the project forward.

Our Process:

1. Grassroots Albany started the ball rolling in 1995, by chatting with neighbours, knocking on doors, and leaving flyers at every door (“papering the neighbourhood”).
2. Several months prior to the planting day of each year, a meeting was held in the neighbourhood to introduce potential participants to the project. At the first meeting, in February 1996, we concentrated on introducing residents to native plants and the ecosystem approach to doing plantings in their back yards. ERG and Grassroots Albany members provided a slide presentation and, along with other visual aids, gave general advice. In the second year, we encouraged participants to remove their front lawns and replace them with tall grasses, forbs, and ground covers at a workshop in November 1996. Grassroots Albany and ERG members led small group discussions on the project and provided one-on-one assistance to participants in completing their social surveys and selecting appropriate plants.
3. The social surveys furnished information on how residents used their yards (e.g. for entertaining), what types of plants they cultivated (e.g. vegetables) and what other factors affected their use of their yards (e.g. children’s play area or pets). These gave us some indication of the types of plants which would be appropriate to the site (e.g. no plants with poisonous berries in households with small children).
4. Homes were divided into “clusters” by block or side of the street. The first year, a pair of ERG members was assigned to each cluster and did site inventories on each back yard. Such features as planting beds, mature trees, decks, drainage patterns, sun/shade patterns, etc. were noted. In the second year, ERG members trained ambassadors to help residents with their site inventories. About 10% of resident-completed site inventories were submitted and the rest were completed by ERG members.
5. Plant material was selected by the residents from a prepared list in consultation with Over the Fence members. The lists were developed by an ERG member, who, through his work as a Landscape Architect, is constantly involved in naturalisation projects.³ Particular attention was paid to including under-represented indigenous plants and those with high survival rates in urban settings. Residents pre-paid Grassroots Albany or ERG members for their plants.
6. ERG placed the plant orders with the various nurseries, with some plants delivered, and others picked up by ERG members. ERG also ordered mulch and topsoil.
7. Finally, we arrived at Planting Day. Planting Festivals were held on June 1, 1996 and May 24, 1997. People picked up their plants, mulch, and topsoil, mingled with neighbours, enjoyed donated muffins and juice, watched as then-mayor Barbara Hall planted a trillium in the local park, (May 24, 1997) and generally soaked in the ambiance of the gorgeous spring days.
8. Post-planting follow-up took place in fall 1996, spring 1997, and again in fall 1997, wherein ERG members assessed the progress of the plants.

³ Marc Willoughby, Landscape Architect, Toronto, Ontario

The Outcome:

In 1996, we had 54 households involved in the project and 859 plants installed. The next year, the 60 households who participated planted almost twice as many plants as the previous year -- 1,625! This is especially notable given that there were only 21 newcomers the second year.

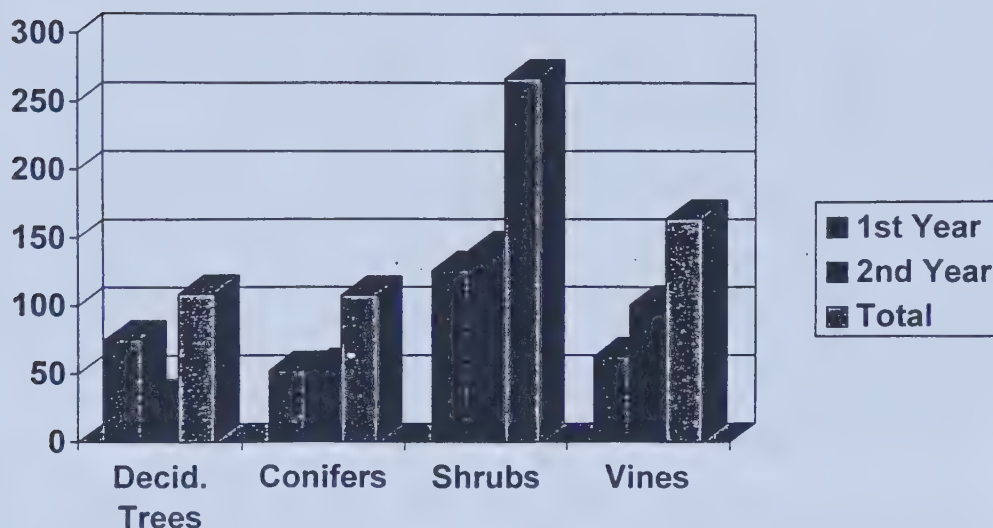


Figure 1 Woody Plants installed

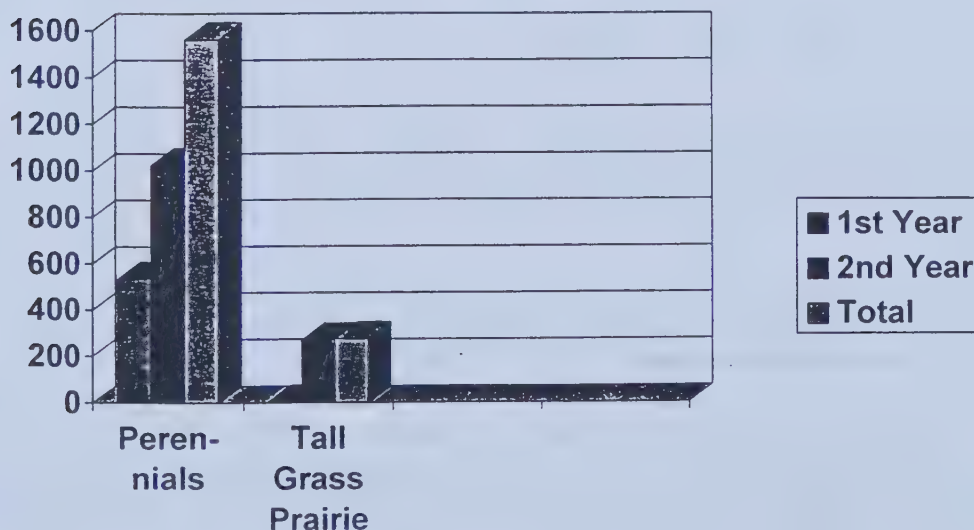


Figure 2 Herbaceous Plants installed

1. Challenging Traditional Landscape Ethics

ERG found that many residents were unaware of the environmental effects of design choices that they had made in the past and needed assistance in overcoming their reliance on what they had come to view as “tried and true.” For example, tall prairie grass is not indigenous to the area, although there is some in High Park which is not that distant. But, at community meetings, ERG members pointed out that a tall grass prairie is superior to a traditional lawn in the following ways:

- better water infiltration into the soil
- more drought tolerant, so may help wean people of the habit of watering plants each day in the summer -- sprinklers left out for hours with water running off across the sidewalk, down the road and into the storm sewer
- creates wildlife habitat
- more visual interest/ variety, winter interest
- decreases lawnmower use, thus decreasing noise, fossil fuel consumption, and pollution
- its use demonstrates the value of education about ecological systems (e.g. forest, prairie, wetland) and indicates the usefulness of plants previously regarded as weeds (e.g. goldenrod)

No one jumped on the bandwagon to have a tall grass prairie front yard, but 219 tall grass prairie plants found homes in various gardens in the neighbourhood during the second planting day, May 24, 1997.

How native plants would look in the same garden with exotics was a concern with residents regarding any of the plants. We found it helpful to have pictures (especially those in colour) from books, catalogues, etc. When people can see a photo of a native plant (e.g. an Eastern Redbud) in bloom, chances are greater that they will be willing to plant it in their yard. Many see only a limited palette of plants that will survive in shade, when they contemplate the kind of continuous, vibrant colour only annuals can provide. But with a bit of work and creativity, (and encouragement from Grassroots Albany and ERG members) a woodland garden can be (and has been) created, with colour throughout the seasons.

Parking is at a premium in this neighbourhood and some front yards are completely dominated by parking pads. A possible future venture would be to encourage these householders to replace the pavers down the centre, where the car wheels do not touch, with ground cover plantings and use permeable pavers for new installations.

Fences -- everyone has a little plot of land to call their own -- fenced off from neighbours. Some of the older fences are old wire fences, probably from the 1940's or earlier, that are only 3 - 4 feet high, open, and support vines & shrubs. These fences allow a vista from one's back door, across several neighbours' yards, thus providing a sense of community, plus a sense of a larger world than just one's own back yard. In the last couple of decades, 5 to 6 foot high wood fences have become the rage, blocking out views of neighbours' back yard parties, sun, and views beyond one's own yard. In addition, most fences block the passage of small wildlife. By removing one or more sections of a fence, this passage may be enhanced. Furthermore, residents can still feel a sense of privacy yet feel a greater sense of community while having places where the vistas are greater.

Since this area is a bird flyway, we (Grassroots Albany and ERG) encouraged people to adopt plants that offered food and/or shelter. Otherwise, we did not strongly emphasise wildlife habitat for a couple of reasons, namely, this very urban area is cut off from other systems such as ravines, by the railroad to the north and major traffic thoroughfares in the other directions, hence, there is little mobility for wildlife. Also, we had no desire to increase the population of (or people's perception of such) pest animals, including racoons, squirrels, and skunks.

2. Native v.s. Non-Native

2. a) community awareness of native plants

In this neighbourhood, most people had some concept of what native plants are, although they would not necessarily know what particular plants were native to their area and climatic zone. One of the first tasks of ERG was to educate the residents in this regard. Early in the project, at public meetings organised by Grassroots Albany, ERG provided the participants with the native plant information. Through the use of a slide presentation, followed by group discussions accompanied by photos and information on the specific native plants on our plant selection lists, ERG was able to sensitize the participants, both visually and cognitively, to the “native” options available to them.

Given the age of the neighbourhood and the profusion of established landscapes and active gardening, there was, of course, the recurring question of native vs. introduced (“exotic”) plants, and which was preferable from an ecological versus aesthetic or cosmetic value. Some of the residents equated native plants with “wild” plants or weeds and raised the concern that native plants are, could or would become rampant and take over the garden. In order to deal with these concerns, ERG’s educative process included disseminating information on the merits of native versus introduced plants.

We emphasised the following advantages of native plants:

- low (or lower) maintenance
- greater resistance to pests and diseases
- potentially higher degree of hardiness and rate of survival of native plants because they are adapted to local soil and climate conditions, with many also being tolerant of urban conditions (including pollution, salt, etc.)
- opportunity for conservation and preservation of some rare and endangered native species through the introduction or reintroduction of the plants to neighbourhood
- part of our natural heritage
- opportunity for variety (i.e. biodiversity) and beauty by the planting of native species which can be aesthetically pleasing and harmonious with the rest of the garden, blending in with the overall look of the neighbourhood (without being monotonous)
- opportunity to encourage a symbiotic naturalising effect on the overall environment as native wildlife, including birds, are attracted by native plants.

Just as important as having the knowledge and disseminating it as information, was the need to accept the residents’ concerns as real, allowing them to articulate their fears without the danger of ridicule. Suffice it to say that some avid gardeners found it difficult to overcome what peers, gardening magazines, shows and garden centres had lead them to believe was a “proper” garden. And, in fact, ultimately not all of the neighbourhood participated in the native planting project. But, most did, with approximately 20 residents attending each of the 2 information sessions and 75 households participating in the plantings over the 2 years.

2. b) realities of the urban situation – existing gardens of exotics

The position we took with this project was to work with residents' gardens as they existed -- native plantings could go alongside exotic plants in existing beds. If people wanted new beds, so much the better; they could be exclusively native. It does not necessarily follow that native plantings and exotics have to clash. ERG recognised that the "purity" of idea of native plant regeneration or naturalisation had to be tempered by the reality of the pre-existing gardens and therefore spoke in terms of biodiversity.

The realities of the urban situation demand what, indeed, will grow and thrive in urban conditions. This applies equally to native and exotic plants. Therefore, ERG evaluated all plants based on criteria such as the following.

Will the plants:

- tolerate pollution
- be appropriate size for small urban lots
- be appropriate for growth restrictions (e.g. not so tall they need to be disfigured to allow power or telephone lines to go through)
- tolerate being walked on

We took our cue from what was growing in the neighbourhood at the time. In other words, what survives? Then we balanced that assessment against the effect that the plant had or would have on other species. The Tree of Heaven (surely a misnomer, if ever there was one), *Ailanthus altissima* and Manitoba Maple, *Acer negundo* are pest species. They were found growing up in fences, against houses. Most property owners were unaware that these plants would become trees until it was too late and shaded out or out-competed the plants that surround them. As a result, the culling of invasive exotics became, along with turf removal, one of our goals in the second year. A further goal was the removal of dying or hazardous trees. A number of the mature Silver Maple, *Acer saccharinum* trees were in a state of decline and required removal of limbs. This tree work was completed in the spring of 1998.

3. Community Participation and Thoughts on

3. a) the development of a prototype

The strengths and weaknesses of any community-based project are determined by its membership. This is equally true of a residents group like Grassroots Albany as it is of a consultative group like ERG. As one member of Grassroots Albany put it, “you have work with the resources you have in the community”⁴. Consequently, the potential for success of any project depends to a large extent on the individuals within the community as to their experiences in life, what they have been exposed to and what their attitudes are.

Obviously, Grassroots Albany, or at least that part of the group who were its activists and opinion leaders, was aware of the limitations of its resources as it pertained to native plant awareness and expertise, which is why they sought to supplement their resource base by allying themselves with ERG. This showed a degree of self-awareness and sophistication that came from a fairly clear sense of direction, something that is perhaps not as evident in all community-based groups.

Appropriately enough, the analogy that the previously mentioned individual gave was a gardening one. An outside group (like ERG) can only sow the seed (the idea of doing a project like Over the Fence), but must allow the seed to be fertilised by the soil and germinate in its own way and in its own time by the members of any given community.

Symbiotically, ERG saw the Over the Fence Project as an opportunity to develop a prototype for other community-based naturalisation programmes, the idea of a prototype being a work in progress. Up to this point in the project, ERG was of the view that the prototype should include just the basics:

- the plant list
- social surveys
- a very straight-forward site inventory
- instructions on how to plant and maintenance
- contact with a group like ERG:
 - to train trainers with respect to site inventories and plant selection
 - to order plants and help on Planting Day

What the Over the Fence Project came to show, however, is that this minimal intervention by those in a consulting role does decrease the amount of control of the process. This may be seen as a conflict between two principles, one of the value of naturalisation and the other of empowering community involvement in all material aspects of decision-making. But, one has to recognise whose community it really is and accept that the empowerment of the community in reclamation and urban ecological restoration is a distinct value in itself, in the hope that, with educational opportunities, the longer term consequences of community empowerment will ultimately pay off.

In the short term, however, one may have to accept that there may be reduced environmental benefit: firstly, if residents choose their own plant material with minimal or no consultative supervision, the plant material may not be appropriate to the site, which may in turn affect survival rate. Secondly, there may be a decrease in demand for plants appropriate to the ecosystem in the neighbourhood. For instance, people may emphasise forbs and ground covers in their gardens and not include canopy or evergreens. We saw this in the second year of the Over the Fence Project even with our intervention. This is especially of interest given that the original purpose of the project was to increase the canopy. Only in the first year did people plant canopy trees to any

⁴ Amanda McConnell, Grassroots Albany, Toronto, Ontario

Whether this was a loss of direction, a lack of consensus between the Grassroots Albany opinion leaders and the membership as a whole or merely a detour resulting from a realisation of the array of opportunities presented by the Over the Fence Project is difficult to say. But, it does raise questions about whether or not a need exists to continually reinforce the original objective or merely to recognise the political need for flexibility in order to accommodate as many interests as possible to maintain the sense of community involved (i.e. broad-based involvement) in like projects.

Nevertheless, whether with or without consultative intervention, a community planting project such as this proves itself beneficial in many ways:

- the residents' sense of community increased, developing a shared or common sense of purpose in a project like this, resulting in consideration of and, in some cases, implementation of the reduction of barriers (e.g. fences down) and the involvement in community events (e.g. meetings and Planting Festival/ Planting Day)
- there was a general sense of optimism in what could be achieved
- they developed or embraced an important connection with nature (i.e. "touch" nature, rather than being distant from it)
- they acquired a sense of stewardship of their environment as people became proud of their baby plants (nurturing) and were pleased to show people how their plants were doing, resulting of course in a real disappointment when a plant died. But, this too had a beneficial effect as they sought out the reason from ERG as to the possible causes of the mortality, evidencing a pro-active approach, rather than a fatalistic, defensive or accusatory approach, although they did sometimes sometimes become frustrated by outside forces (e.g. squirrels chomped off trilliums, the wet summer causing the trees to suffer). But, the more stalwart realised that this was also part of their relationship with nature.
- they developed a community of knowledge and experience which they came to respect and share. Piles of compost and mulch placed on driveways for them to access became gathering spots not just to load up one's wheelbarrow or bucket with growing medium, but for neighbours to visit and trade gardening pointers. This also occurred at the pick-up points for the plant material (in other neighbours' driveways).
- they developed a sense of pride in their own contribution to the environment and, perhaps more importantly, a realization of their ability to make such a contribution. They were proud of what they themselves have done. For although ERG and Grassroots Albany members provided them with opportunity and assistance, the householders themselves chose and installed their own plants.
- biodiversity, biomass, forest structure and native plant proportion components were improved
- awareness of urban forest issues were promoted outside the community through the media
- the hiring of part-time labourers (to lift turf and assist with planting) created employment benefits

3. b) fostering "ambassadors"

A project like Over the Fence could be taken on by any existing community organisation, since these organisations already have the infrastructure and the people with energy and commitment.⁵ It is not far-fetched to believe that groups such as ratepayers associations, boys and girls clubs, church groups and even daycare centres could become involved in this kind of project, thereby turning community involvement into ecological action. As with any volunteer endeavour, those involved want to be assured there are people willing to help.

Community involvement means volunteers, means commitment (time, energy, communication – getting the word out about the project).

When volunteers are being relied upon to do the work, there are a number of attendant problems. The number of volunteers and their level of commitment will likely ebb and flow. There must be facets of the project that keep up their interest levels. Nevertheless, volunteers' energies will not always remain high. Our project went great guns for 2 years and the major volunteer contributors spent many long hours on it. It was decided at the end of the second year to take a break, simply supply native plants to an existing annual sale of perennials in the spring of 1998, then return to Over the Fence for spring of 1999.

One approach is to keep the project simple. A reduced amount of work that does not burn out the volunteers and has a minimal number of problems is ideal. (This may be easier said than done.) We will be instituting a number of changes to simplify the process leading up to Planting Day, 1999 to test this theory. Because we hope to attract more participants by increasing the geographic area, ERG members will not be doing site inventories and consultations for plant selection with each homeowner. Instead, these services will be made available for a fee and Grassroots Albany will be training residents how to do their own site inventories. (These will be much simplified versions of those previously done.) We have high hopes for these changes.

If, indeed, these changes are effective, it will give further impetus to use of the prototype in other communities. Several of us, who have informally discussed the Over the Fence project with others from other communities have received expressions of interest. "How can we do this in my neighbourhood?", is what we are asked.

It is important that the project be made fun, not just for the participants, but also for the volunteers.

According to a friend of mine, whose masters thesis in Environmental Studies focussed on environmental education:

- education alone does not always accomplish an objective;
- grassroots involvement alone does not always accomplish an objective;
- but** by combining the two, you create opportunities that are fun and therefore encourage greater participation, thereby increasing the probabilities of being able to accomplish the objective.⁶

If, as one resident says, she became an advocate of native plants due to the tree survey and this project, the scope of educational opportunities for a project like this are encouraging.

⁵ Amanda McConnell, Grassroots Albany, Toronto, Ontario

⁶ Kate Oxley, MES, Toronto, Ontario

Conclusion

“Though every site is unique, with its own ecological design considerations, ‘Over the Fence’ has demonstrated that the urban ecology of a neighbourhood can be improved at a community scale and across fragmented private lands, by tying those fragments into overall ecological goals and patterns.”⁷

We **cannot recreate** the forest in an urban residential area. The reality of buildings and hard pavements (road, sidewalk, driveways, parking pads, walks) do not enable that many trees to be that close together as in a forest. A further reality is how many and what kind of plants people are comfortable with on their property. As it is. Some householders do not wish any further shade on their gardens; they feel there is not a good selection of plants for these conditions. Not everyone has shade, so there is an opportunity to create a meadow, or a wetland in a low spot.

A project like Over the Fence demonstrates there are many alternative plants to the traditional annuals and exotic shrubs and perennials that may be grown in shady, forest-like conditions. Plants from forest ecosystems may thrive here. This includes plants from all of the strata in the forest: canopy, understorey, shrub layer, herb or ground layer, and forest floor. When a participant is willing to install native plants in all of these layers, it is very exciting.

The success of the first year of Over the Fence and the enthusiasm with which it was greeted by participants and would-be participants alike, encouraged Grassroots Albany and ERG to embark on a second year. More than half of the Year 2 participants were “repeat customers”. We look forward to building on these foundations, to develop a prototype so that volunteers in other neighbourhoods may participate in an ecologically meaningful and enjoyable project such as this.

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⁷ ERG flyer

Reclamation and Restoration of Settled Landscapes

September 27th – 30th, 1998
Markham, Ontario

PROCEEDINGS

Hosted by the

SOCIETY FOR ECOLOGICAL RESTORATION
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and the

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Reclamation and Restoration of Settled Landscapes

September 27th – 30th, 1998

Markham, Ontario

The report may be cited as;

Reclamation and Restoration of Settled Landscapes, 1998. Proceedings of the 23rd Annual Meeting, Canadian Land Reclamation Association in association with the Society for Ecological Restoration Ontario Chapter, Markham, Ontario.

ACKNOWLEDGEMENTS

The Society for Ecological Restoration Ontario Chapter and the Canadian Land Reclamation Association would like to acknowledge the assistance of Sir Sandford Fleming College in the production of these proceedings.

The Associations would also like to thank the companies and associations that generously sponsored the conference:

Aggregate Producers' Association of Ontario
Aquaphyte Remediation
Beak International
Dufferin Aggregates
Environment Canada
Ecological Services Group
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