Annual Report 2011

Regreening Program









2011 Partners



Ugliest Schoolyard Contest:

Corporate Sponsor:



Ashley's Landscape Supplies Botanix Azilda Greenhouses **Brown's Concrete Products** Canadian Tire (Regent Street) City of Greater Sudbury Echo Rentals Freskiws Sudbury Inc. Garson Home Hardware Holla's Produce and Greenhouses Hollandia Land and Environmental Solutions Home Depot McDowell Construction Equipment Premier Tech Biotechnologies Southview Greenhouse Growers Stevens' Solutions **Sudbury Master Gardeners** Sudbury Horticultural Society Vale WD Tree Removal

2011 Highlights

In 2011, the Regreening Program created 26 temporary employment opportunities, reclaimed 5.6 hectares of barren land located in the Lake Laurentian Conservation Area (LLCA), and planted over 60,000 tree seedlings and almost 30,000 shrubs/understory trees throughout Greater Sudbury. External funding, material and in-kind contributions enabled the implementation of the first year of the 5 *Year Plan 2011-2015*. A quick summary of accomplishments is shown in the table below.

Emerging from the *Biodiversity Action Plan*, the 5 *Year Plan 2011-2015* outlines specific operational requirements in fulfilling our commitment to increasing local biodiversity. A tree and shrub supplier was contracted for the 5-year period covering this Plan. A multi-year contract with one supplier will allow advanced planning of shrub propagation and delivery to meet the requirements of the 5-year Plan and will facilitate the use of locally collected seeds. This year, seeds from ten different shrub and understory species were collected for propagation. Permanent test plots were set up for ten of the species planted this year to monitor their success. To date, over one third of all shrubs planted by the Program were planted in the 2011 season.

VETAC's Urban Landscape sub-committee continued with the seventh annual "Ugliest Schoolyard Contest". The grand prize winner was St. John's Catholic School in Garson. In all, 20 local businesses, corporations and special interest groups provided funding, materials and offered services to complete the schoolyard regreening project. Corporate funding from Xstrata Nickel enabled the Committee to extend the prize package to three runner-up schools: Walden Public School in Lively, École catholique Ste Thérèse in Val Thérèse, and Gatchell School in Sudbury. Schoolyard transformations occurred from late August into November.

The operational scale forest floor transplant project proceeded again in 2011 thanks to continued partnership with Ontario Ministry of Transportation (MTO). This year, 27 sites received forest floor mats placed in plots measuring 4mx4m. Each site contains 5 plots for a total of 135 plots covering a total of 2,16om² or about half an acre. An additional 285 trays of vegetation mats (roughly 96m²) salvaged from open, rocky sites were transplanted to suitable areas at LLCA, Coniston Hydro Road and the Savannah area.

The table below outlines the various regreening components followed by the 2011 achievement and the accumulated total since 1978.

| Regreening Component | 2011 | To Date (since 1978) |
|--|-----------|----------------------|
| Tree Planting | 66,161 | 9,276,622 |
| Shrub Planting | 29,451 | 80,343 |
| Area Limed | 5.6 ha | 3,435 ha |
| Area Fertilized | 5.6 ha | 3,217 ha |
| Area Seeded | 5.6 ha | 3,145 ha |
| Forest Floor Transplants | 0.22 ha | 0.61 ha |
| Program Cost | \$844,308 | \$26,830,736 |
| Temporary Employment Opportunities | 26 | 4,562 |
| Awards | - | 14 |
| Number of Schoolyards Regreened | 4 | 26 |
| Volunteer Tree Planters | 171 | 10,152 |
| Trees Planted by Volunteers | 9,780 | 341,917 |
| Trees Provided for Residential Plantings | 1,600 | 423,301 |

Tree Planting

Spring and fall planting activities resulted in 66,161 tree seedlings and 29,451 shrub/understory trees planted throughout Greater Sudbury. Since 1978, 9,276,622 trees and 80,343 shrub/understory trees have been planted by the Program.

Vale aerial seeded 150 hectares of barren land located to the west of Garson-Coniston Road in the fall of 2010. This was the main planting site for the crew this spring. Species planted included the typical first phase planting mix of Jack Pine, Red Pine, and White Spruce. This first phase planting mix has been modified for the term of the 5 *Year Plan 2011-2015* to include Green Alder, a shrub that increases soil fertility by converting nitrogen from the atmosphere with the help of specialized bacteria attached to its roots. Nearly 8,000 Green Alder were planted in the aerial seeded site and another 500 in the site that was manually limed by the crew in 2010 off Dubé Road near Moonlight Beach. The Green Alder were grown from local seed collected by staff in the fall of 2010.

As part of our agreement with Tree Canada, an annual regeneration assessment must be completed on the trees that were donated. Collège Boréal has undertaken this task and has found at least 99% survival in one year old plots and at least 97% survival in two year old plots.

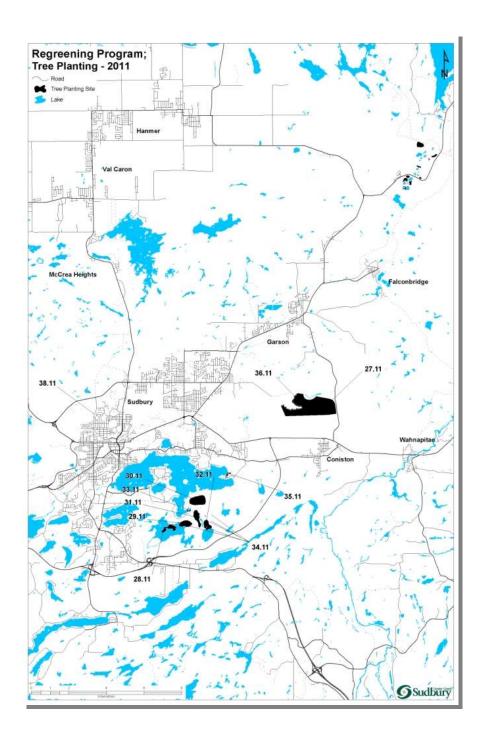
A total of five species of deciduous understory trees and eleven shrub species were planted this year to increase plant diversity throughout Greater Sudbury. Main planting sites for these species included the Kettle Lakes and LLCA, as identified in the 5 *Year Plan 2011-2015*.

Tree Canada funded 38,633 trees and shrubs for this year and Vale donated 48,636 seedlings (Jack Pine, Red Pine and White Spruce). The Nickel District Conservation Authority (NDCA) also provided funding for 8,000 trees and shrubs to be planted specifically within the LLCA.

Refer to the tree planting map on the next page for locations of the planting sites.

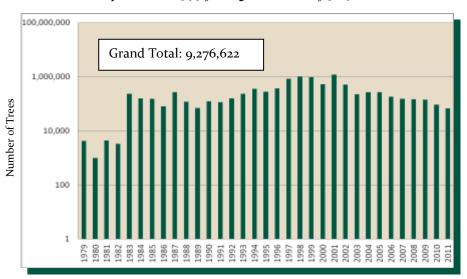






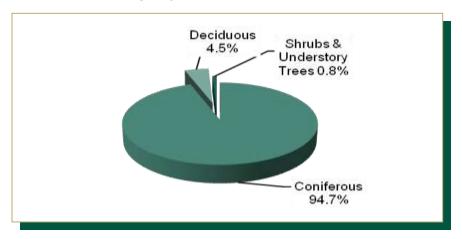
Number of Tree Planted 1979 to 2011

The bar graph below indicates the number of trees planted each year since 1979 for a grand total of 9,276,622.



Percent of Species Planted 1979 to 2011

The pie graph below illustrates the percentage of each type of species planted since 1979.



Volunteers

This year, 14 volunteer groups involving nearly 200 individuals planted almost 10,000 tree seedlings throughout Greater Sudbury. The following is a list of the groups that participated in tree planting activities this year:

- Capreol Ski Club
- Walden Trails Club
- FedNor
- Lively Golf Club volunteers
- Silver Lake Stewardship Group
- LoEllen Park Secondary School's Environmental Club
- Ministry of the Environment
- Citizens in the Gatchell area
- Sudbury Game and Fish Club
- St. James Parish Youth Group
- Junction Creek Stewardship Committee
- Simon Lake Stewardship Group
- St. David School
- Bio Ski Club

Stan Finnson of the Capreol Cross Country Ski Trails presented a Certificate of Appreciation to the VETAC committee for donating trees to the club on an annual basis. The certificate was placed in the awards case in the Foyer of TD Square.

The Regreening Program is able to offer seedlings, planting equipment and direction to any local group wanting to participate in the regreening effort. The volunteer program provides educational opportunity on environmental issues, information on the City's Regreening Program, tree planting experience as well as a sense of

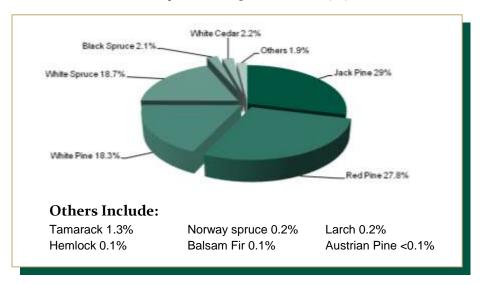
community pride and ownership of the natural environment. Many thanks to all the volunteer groups this year, their efforts affirm the importance of trees in our local environment.





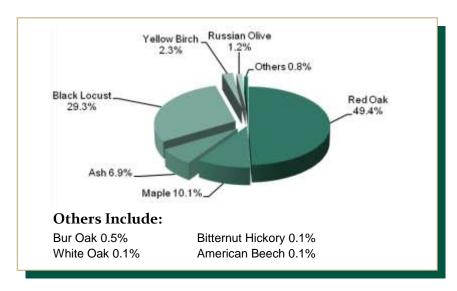
Percent Coniferous Species Planted 1979 to 2011

The pie graph below illustrates the percentage of each coniferous tree planted since 1979.



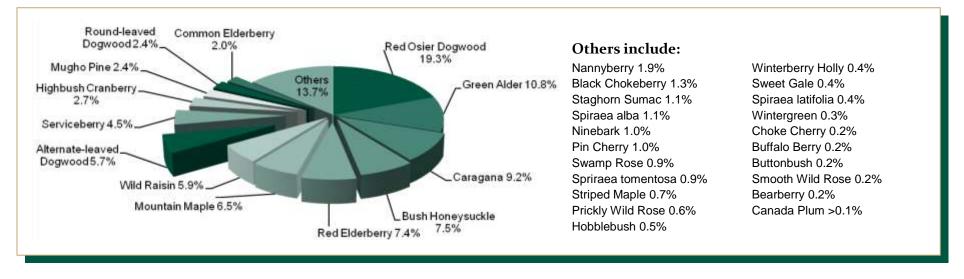
Percent Deciduous Species Planted 1979 to 2011

The pie graph below illustrates the percentage of each deciduous tree planted since 1979.



Percent Shrubs and Understory Trees Planted 1979 to 2011

The pie graph below illustrates the percentage of each type of shrub or understory tree that has been planted since 1979.



Assisted Migration

The intent of assisted migration in the context of the Regreening Program is to plant native species a little farther north than their current growing range in anticipation of climate change effects on vegetation. Historically, naturally caused climate change events have been slow enough to allow for plant species migration. It has been suggested that the current rate of climate change may be occurring too quickly for some native species to migrate on their own.

Several species were selected for assisted migration. Those that were planted this year include:

- White Oak
- Bitternut Hickory
- Hobblebush

These species are found occasionally in the southern part of this growing zone, which extends as far south as Parry Sound. Other species planted this year whose northern limit is at or just to the south of Greater Sudbury include:

- Black Chokeberry
- Alternate-leaved Dogwood
- Round-leaved Dogwood
- Swamp Rose
- Hardhack

Test plots at different locations were set up for future monitoring of the successful adaptation of these species.



Seed Collecting

A seed collection map was developed using Google Maps to display historical and current seed collection sites. This map will serve as a working tool that staff and VETAC members can update as new seed collection locations are discovered. The Regreening Program is collaborating with Collège Boréal to develop a local seed bank.

Berries from Mountain Holly, Winterberry, Wild Raisin, Bristly Sarsaparilla and seeds from Ironwood, Green Alder and Mountain Maple were collected and sent to the Ontario Tree Seed Plant for processing. These seeds were later sent to Verbinnen's Nursery to grow the plants for the 2012 and 2013 season. An undetermined amount of seeds of Hobblebush (provenance: Magog, Quebec), a local Serviceberry species and almost 700 Sand Cherries were shipped directly to the propagation nursery.

The table below outlines the amount of seed collected for each species listed.

| Species | # Seeds Collected |
|----------------------|----------------------|
| Mountain Holly | 5,139 |
| Winterberry | 10,913 |
| Wild Raisin | 11,250 |
| Bristly Sarsaparilla | 13,904 |
| Ironwood | 9,025 |
| Green Alder | 22,800 |
| Mountain Maple | 4,594 |
| Hobblebush | undetermined |
| Serviceberry | undetermined |
| Sand Cherry | 699 |



Broadcasting Native Seed

An alternative to planting native forest floor species is broadcasting the seeds directly. If successful, this method may prove less expensive and less labour intensive provided native seed can be located and collected. This year, approximately 25,000 Bristly sarsaparilla, 167,000 Pale corydalis, 16,000 Wild columbine and undetermined quantities of Mountain-holly and various sedges were collected and spread directly at several sites. Success of the broadcasting efforts will be monitored over the next few years to determine success.

Sucker and Bulb Transplants

Winterberry holly and Mountain-holly are both desirable species for their use by wildlife (birds and mammals) and to increase local biodiversity. Transplanting suckers from both species involves digging up a shoot with part of the root system attached. This process is highly labour intensive. Only 16 suckers of each species were collected and transplanted in the LLCA. Further monitoring of these transplants to determine success will be conducted before any further transplants are attempted.

A total of eight bulbs of Nodding trillium and Pink lady's-slipper were also transplanted in the fall. The bulbs were dug with a large soil plug attached to ensure the root systems remained intact during transport and replanting. Again, these sites will require monitoring in the following year to determine success.

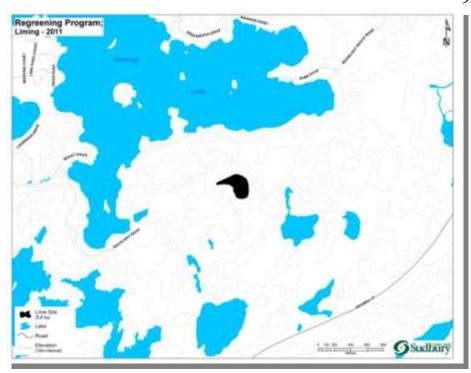


Liming, Fertilization and Seeding

Liming activities took place within the Ramsey Lake watershed located within the LLCA. Approximately 5.6 hectares of barren land was manually limed. Refer to the liming map to the right for liming location.

In keeping with the recommendations set out in the 5 Year Plan 2011-2015, modifications were made to the fertilizer and seed application rate and the seed composition. Typically, 400 kg/ha of fertilizer 6-24-24 are applied to barren land. The composition of the fertilizer was not altered, but applied at a rate of approximatley one third less. The seed composition was altered considerably, and consisted of a ratio of 90% fall rye and 10% alsike clover. To test the suitability of the application rate, part of the site was seeded at the typical rate, and the remaining site was seeded at roughly half the rate.

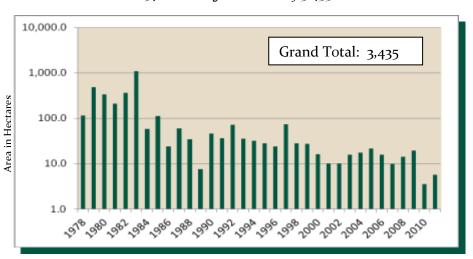




To date, 3,435 hectares of barren land have been treated with lime.

Area Limed 1978 to 2011

The bar graph below indicates the area in hectares per year that were limed since 1978 with a grand total of 3,435 ha limed to date.



Forest Floor Transplants



Continued partnership with the MTO allowed for the forest floor transplant activity to proceed again in 2011. These transplants have successfully increased the biodiversity within the CGS. The donor sites (construction corridor of the Highway 69 widening project) are far from exhausted of desirable plant material that could be utilized into the future.

From June to September, regreening crews dug up the top 4 inches (10 cm) or so of soil containing plants, seeds, microorganisms and invertebrates from the new Hwy 69 S corridor. The vegetation was transported to older reclamation sites for transplanting. Criteria for the receptor sites included sufficient canopy cover, low understory species diversity, sufficient soil depth and organic layer (>5cm) and large enough areas to allow the species room to spread. Plots were established measuring approximately 4m by 4m. Over the season, 135 plots were completed at 27 different locations.

In addition to the understory floor mats that were transplanted, 285 trays (or roughly 96m²) of vegetation growing on exposed rocky sites were salvaged and relocated to various sites of similar condition within older reclamation areas. Barren exposed rocky habitats are abundant in the Greater Sudbury area. These rocky areas are suitable habitats for exposed drought tolerant species where natural colonization has been limited due to the absence of seed sources. Species targeted for this exercise included grasses (Poverty oat grass) and upland sedges, lichens, shrubs (Sand cherry, Bearberry) and herbs (Wild columbine, Bristly sarsaparilla, Pale Corydalis). Transplants were not established in the usual 4m x 4m plots, but rather conformed to the rocky habitat, in small fissures and pockets of soil. Transplant locations included exposed areas of Bennett Lake, the Savannah, Coniston Hydro Road and Mount Ramsey (LLCA).

Since 2010, vegetation has been transplanted to 76 understory sites and 4 exposed sites covering an area of 0.61 ha.





Monitoring of eleven of the sites established in 2010 revealed that the transplants were successful with many species surviving and some even beginning to spread outside the original plot area. The most abundant species included Wild sarsaparilla, Wintergreen, Starflower, Bunchberry, Canada mayflower, Blue bead lily, Large leaf aster, Common hairgrass, Bracken fern, and Low sweet blueberry. Species displaying aggressive spread tended to be the ones that spread by trailing stems or runners (stolons) and included Woodland strawberry (o-75cm spread) and Common strawberry (o-120cm spread). Others that spread by underground stems (rhizomes) include barren-ground strawberry (o-15cm) and Starflower (o-15cm). Other species that displayed spread included Wintergreen (o-15cm), Canada mayflower (o-15cm), Fringed bindweed (o-20cm) and Wild red raspberry (o-50cm).





Ugliest Schoolyard Contest

The Canadian Biodiversity Institute and Earth Day Ottawa initiated the Ugliest Schoolyard Contest in 1998 in Ottawa. VETAC's seventh annual version of this Contest was another overwhelming success thanks to the tireless efforts of Mr. Wayne Hugli, Co-chair of VETAC's Urban Landscape Sub-committee and the generous support from all sponsors. The winning school, **St. John Catholic School** in Garson, was selected from the 5 applications received. Thanks to the financial support from Xstrata Nickel in the amount of \$75,000, runner-up prizes were awarded to three area schools:

École catholique Ste Thérèse, Val Thérèse Walden Public School, Lively Gatchell Public School, Sudbury

In addition to the Xstrata Nickel funding, each school received a voucher for the purchase of concrete materials from Brown's Concrete Supplies, and topsoil donated by Vale. As the winning school, St. John also received assistance with their project from the VETAC committee and was provided with additional in-kind donations to enhance the project.

St. John School had a very well organized and enthusiastic team in place that worked with VETAC to plan and carry out the project. School Council Chair Doug Rosener took the lead and worked closely with Principal Tricia Dowdall-Cirelli and School Council Secretary Lisa Parise.

The first stage of the project involved the planting of fifteen large caliper maples (Acer rubrum 'Autumn Blaze') and hackberry (Celtis occidentalis) trees throughout the schoolyard. These trees were provided and planted by Freskiws Sudbury Inc. thanks to Xstrata Nickel Funding. Premier Tech Biotechnologies donated MYKE (a

root growth supplement) which was used during the planting to promote better root growth.

In mid-August Vale donated more than 20 truckloads of topsoil which were delivered to the school and spread by volunteers using equipment that was donated by Echo Rentals and McDowell Construction Equipment. Using this material, a large percentage of the schoolyard was prepared for the laying of sod which would be used to create a soccer field and playground for the older students.

Ugliest Schoolyard Contest - Donations 2011

Sudbury Master Gardeners: \$250 Sudbury Horticultural Society \$600 Xstrata Nickel \$75,000 Total: \$75,850

Sponsors

Ashley's Landscape Supplies • Botanix Azilda Greenhouses
Brown's Concrete Products • Canadian Tire on Regent Street
City of Greater Sudbury • Echo Rentals
Freskiws Sudbury Inc. • Garson Home Hardware
Holla's Produce and Greenhouses
Hollandia Land and Environmental Solutions
Home Depot • McDowell Construction Equipment
Premier Tech Biotechnologies
Southview Greenhouse Growers • Stevens' Solutions
Sudbury Master Gardeners
Vale • WD Tree Removal

Special thanks to our corporate sponsor:



In early September, thanks to the generosity of Hollandia Land and Environmental Solutions and Xstrata Nickel nearly 3,000 rolls of sod were laid by students and volunteers under the leadership of

the City's Regreening crew. In one day, this barren, gravel-covered section of the playground was turned into a beautiful green space. To ensure the survival of the sod, the Sudbury Catholic District School Board hired a local company to water the sod for one week using a water truck. For the next three weeks a sprinkler was set up in that area using hoses borrowed from neighbours. Volunteers took turns moving the sprinkler around to ensure that all the sod was well watered during this crucial time.

Using a portion of the Xstrata Nickel funding, six metal picnic tables and four park benches were purchased and installed, and more than twenty large stones were strategically located to provide seating throughout the schoolyard.

In mid-September a large number of free-form flowerbeds were developed throughout the playground using garden mix that was purchased with funding from the Sudbury Horticultural Society and Sudbury Master Gardeners. Freskiws Sudbury Inc. provided a miniexcavator for the day. Garson Home Hardware and Canadian Tire on Regent Street donated bags of composted manure and topsoil that were added to the gardens to provide additional nutrients for the soil. Hardy shrubs and perennials donated by Botanix Azilda Greenhouses, Canadian Tire on Regent Street, Holla's Produce and Greenhouses, and Southview Greenhouse Growers were planted by students and volunteers in those flowerbeds and other locations

throughout the yard. Volunteers from VETAC, Sudbury
Horticultural Society and Sudbury Master Gardeners, as well as
members of the City's Regreening crew and a small group of students
from Laurentian University, ensured that all of the donated plants
had found a new home before the end of the day.

Mulch that was donated by Freskiws Sudbury Inc. and WD Tree Removal was used to cover the new gardens to help retain moisture and prevent weed growth.

Team Depot from Home Depot also contributed to this regreening project. With lumber and plant material donated by the store this small group of volunteers constructed three large wooden planters and filled them with perennials and annuals to brighten up the area next to three of the new park benches.

An outdoor classroom was developed for the younger students using large stones that were donated by Ashley's Landscape Supplies. Another outdoor classroom was created in the shade of three of the new trees that were planted in an area that was enclosed with concrete curbs donated by Brown's Concrete Supplies and filled with pea stones. A large flowerbed was created on one side of this area to provide a more natural environment for classes that will make use of this space.





To provide shade for younger students who use the existing play structure a shade sail was purchased with a portion of the funding and metal posts were installed to support them. The principal of the school said the new green spaces and seating attract the students "like a magnet" when they are in the schoolyard.

Gatchell School used its funding to plant eight large caliper maple (Acer rubrum 'Autumn Blaze') trees and install three picnic tables to create shaded outdoor seating. Plants were added to their wooden planters and large stones were placed for additional seating.

A shaded green space was developed for the students at École Ste Therese through the planting of ten maple (Acer rubrum 'Embers' and 'Autumn Blaze' and Acer saccharinum 'Skinner-Silver Maple') trees, the laying of sod, and the installation of four park benches and four picnic tables. Several large stones were also added for additional seating.

As the Rainbow District School Board's newest green school, Walden Public School community has been working with a landscape architect for a couple of years to develop a master plan for its new playground. Using the \$15,000 that was provided from Xstrata Nickel, a \$3,000 grant from "Greening Canada's School Grounds" and approximately \$6,000 that was raised by the school council, an impressive outdoor learning environment is being developed for the students and teachers at this school.

Using all funding sources, Walden Public School was able to plant twenty-two large caliper red maple (Acer rubrum 'Autumn Blaze'), linden (Tilia flavescens 'Glenleven') and prairie silk locust (Gleditsia triacanthos 'Prairie Silk') trees and a very unique outdoor education area was developed using outdoor musical instruments. Large stones for seating and sod were also added.

All four school communities were overwhelmed by the generosity of the many community sponsors who donated toward their projects.

14 Xstrata Nickel's generous funding and the additional donations received for this project enabled VETAC to provide a new stimulating green environment for these deserving school communities. The results of all of the schoolyard projects are very impressive and will provide a greatly improved environment for the students and teachers at these schools.

Since the inception of the contest, twenty-six schools have been provided support for their regreening projects and VETAC looks forward to assisting more schools in the future. Generous financial support and donations from local businesses and organizations in our City will ensure the continuation of this Contest well into the future.









Labour

Program staff included one foreperson position, two crew leaders, two field interns and fifteen worker positions. There were a total of six summer students involved in regular reclamation activities as well. Student positions were partially funded by YMCA Summer Job Service for a period of 17 weeks. A summary table of labour distribution is to the right.

In total 26 temporary positions were created. To date 4,562 temporary positions have been created.

The table below outlines the temporary positions created and the number of weeks worked, with a total of 26 positions created in 2011.

| Program | Positions | Weeks | Cost to City | Activity |
|---------------------------|-----------|----------------------|-----------------|--|
| CGS Temporary Staff | 20 | 33 31 30 26 | 100% | Foreperson (1) Crew Leader (2) Field Interns (2) Workers (15) |
| CGS Summer Students | 6 | 17 | 85% | Tree planting, liming |
| Total Positions | 26 | | | |





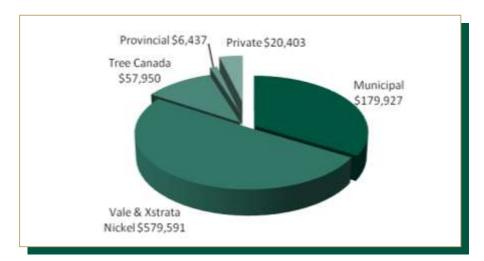
Funding

The Regreening Program relies on donations to operate the yearly Program. Many successful partnerships have been developed over time and new opportunities are always being investigated.

The table below outlines funding sources by type of donation received and the pie graph to the right outlines funding contribution by source in 2011.

Since 1978, the City's contribution to the Program has averaged 14.6% of the total costs with 85.4% coming from external sources. To date, the Program costs exceed \$26 million.

The pie graph below illustrates 2011 funding contributors and their associated dollar amount.

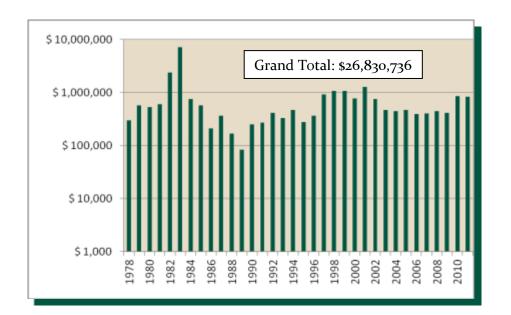


The table below outlines the program contributors and the dollar amount associated with their contributions in 2011.

| Program Contributors | Weeks | Number | Source | Amount |
|--|----------------------------------|-------------------------------------|-----------------|-----------|
| Labour | | | | |
| YMCA - SJS | 17 | | Provincial | \$6,437 |
| Cash | | | | |
| Vale | | | Mining Co. | \$250,000 |
| Xstrata Nickel | | | Mining Co. | \$240,000 |
| Sudbury earthdancers | | | Private | \$5,100 |
| Materials | | | | |
| Vale | | 48,636 seedlings | Mining Co. | \$14,591 |
| Tree Canada | | 38,633 seedlings | Private | \$57,950 |
| NDCA | | 8,000 seedlings | Private | \$14,453 |
| Ugliest Schoolyard Contest (Does not inc | lude material, equipment and otl | her in-kind donations provided by c | ther sponsors). | |
| Xstrata Nickel | Cash C | contribution | Mining Co. | \$75,000 |
| Sudbury Horticultural Society | Cash C | contribution | Private | \$600 |
| Sudbury Master Gardeners | Cash C | contribution | Private | \$250 |
| Sub Total | | | | \$664,381 |
| City of Greater Sudbury | | | | \$179,927 |
| Grand Total | | | | \$844,308 |

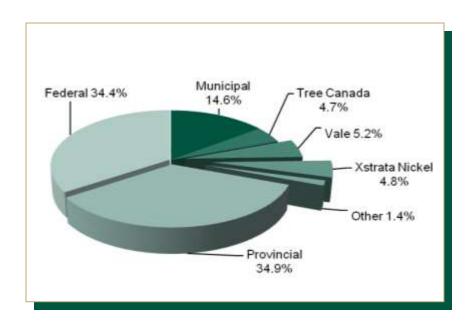
Yearly Program Costs 1978 to 2011

The bar graph below indicates yearly program costs from 1978 to 2011 with a grand total of \$26,830,736.



Percent Funding Contributions by Source 1978 to 2011

The pie graph below illustrates funding contributions in percentages by source from 1978 to 2011.



Events

Earth Day

VETAC attended the Earth Day event at Tom Davies Square on April 30th and promoted the forest floor transplanting that occurred last year with a video loop of the activity, as well as the newly developed FrogFind and Whip-poor-will surveys available on-line. Three copies of *Healing the Landscape* were provided to the organizing committee as door prizes for attendees.

The Main Branch Library also hosted various informational booths during Earth Month. On April 18th, the Regreening Program was featured along with biodiversity initiatives, the Lake Water Quality Program and EarthCare.

Garden Festival

This year the Annual Tree Giveaway was held during the Sudbury Horticultural Society's Garden Festival at Market Square on May 28th & 29th. Over the two day period, 1440 white spruce seedlings were given to local residents to plant on their properties. Information on the FrogFind and Whip-poor-will surveys were also distributed.

International Forestry Week

On September 20th during International Forestry Week at Science North, the Field Interns and Peter Beckett set up a booth with informational materials for the general public on regreening and local biodiversity.





Communications

Communicating the successes of local regreening efforts continues yearly, to both local audiences and groups abroad. Media coverage was widespread with positive comments on initiatives associated with the Program and VETAC. Presentations, tours, and field trips featuring planting activities were also provided to a wide range of audiences.

Mining Hall of Fame Induction Ceremony

Staff provided Regreening Program photos for a slide presentation by Ontario Public Service Green Office in Toronto for the Mining Hall of Fame Induction Ceremony in February. One of the inductees worked in Sudbury for some time and the organizing committee was very interested in showing the positive changes in Sudbury's environment during their event.

Ontario Biodiversity Strategy

On June 22, Stephen Monet presented Greater Sudbury's biodiversity initiatives at the Ontario Biodiversity Council's release of the Ontario Biodiversity Strategy in Toronto.

Ontario Horticultural Association Convention

The Ontario Horticultural Association Convention was held in Greater Sudbury July 15 and 16 with the theme 'Greater Sudbury's Regreening Story'. Stephen Monet was the plenary speaker at the event with approximately 300 people in the audience. Tours of the Jane Goodall Reclamation Trail were offered to participants of the Convention over the two days and were led by several VETAC members.



Heritage Fair

Resources (web links, brochures and photographs) were provided for several local area students completing Heritage Fair projects on the Regreening Program.

Television

EarthCare Minute segments featured:

- Animal Biodiversity which introduced the FrogFind and Whip-poor-will on-line surveys and
- Plant Biodiversity which focused on the Regreening Program's forest floor mat transplant activity

Livable Cities Forum, ICLEI Canada



Stephen Monet contributed to bringing local biodiversity issues to an international platform at the *Liveable Cities Forum: Designing Biodiversity Friendly Communities*, an official side event to EcoCity World Summit 2011. The Conference was held from August 21 – 22 in Montréal, Quebec.

Canadian Business and Biodiversity Council National Workshop

The Canadian Business and Biodiversity Council (CBBC), established to assist Canadian businesses in conserving biodiversity and sharing conservation experiences, held its first national Business and Biodiversity Workshop November 24th in Toronto to identify and discuss a range of conservation issues in a Canadian business context. Mr. Glen Watson, Environmental Projects Coordinator, Vale, provided a talk in the subject of *Working with Your Local Community-Community Engagement* highlighting his experiences

assisting in the development of the *Biodiversity Action Plan for Greater Sudbury*. The purpose of the workshop was to inform businesses and share experiences about a range of current issues in biodiversity conservation and ecological sustainability in business planning.

Radio

• An aggressive media campaign was developed to promote the Ugliest Schoolyard Contest this year; a public service announcement was released March 17th, information was posted on Facebook and Twitter, and Radio spots were aired from April 4 to 8 on Hot 93.5 and Le Loup. On March 24th, Tina McCaffrey provided a radio interview with Brad Hulme and Shannon Dowling on KICX 91.7 FM regarding the 2011 Ugliest Schoolyard Contest. Once the winners were chosen, a media release was issued June 10th and many of the local radio stations made

mention of the contest and the winners in the days following.

- April 28 CBC Morning
 North played taped
 segments from Stephen
 Monet's presentation to
 Council the evening prior
 regarding the Regreening
 Program Annual Report

 2010.
- April 29 Radio-Canada conducted a live interview with Stephen Monet regarding the Regreening Program.





- May 30 Tina McCaffrey was interviewed by CBC Radio (Megan Thomas) at the donor site along Hwy 69 S regarding the forest floor transplanting exercise. An on-line article entitled "Barebottomed forests get new carpeting" was posted on June 7th on the CBC News website and included a brief video clip of the crew loading vegetation onto an ATV to be transported out of the donor site and an audio clip of the interview.
- June 6 Stephen Monet was interviewed by Radio-Canada (Philippe Levoguer) on forest floor transplants. Then the Regreening Crew was filmed at the donor site and crew members were interviewed. The next day filming occurred again as the crew transplanted the vegetation in Sudbury.

Newspapers

- *'City a regreening success'* by Mike Whitehouse, The Sudbury Star, Friday, April 29, 2011 page 3
- *'City engaged in 'unique' regreening process'* by Martha Dillman, Northern Life (on-line) April 29, 2011
- 'City switches up regreening program' by Martha Dillman, Northern Life, Tuesday, May 3, 2011, page 4.
- May 18 Stephen Monet interviewed by Ariad Communications for a Vale internal mini-newspaper to highlight a number of partnerships across Canada.

Publications

- Canadian Reclamation Magazine Issue 1 Volume 20
 Spring/Summer 2011 "Living Landscape Greater Sudbury's biodiversity Action Plan" pps.16 19 by Stephen Monet and Tina McCaffrey
- Green Living Sudbury Summer 2011"For the Birds" pg. 22 and "Boosting biodiversity in Greater Sudbury" pg.23 both by Leigha Benford (placement student from the Science Communications Program at Laurentian University)
- Five Years of Regional Centres of Expertise on ESD (Education for Sustainable Development) UNU-IAS, Yokohama, Japan. 124 pp.
 "RCE Greater Sudbury Launches Biodiversity Action Plan" pg. 99.
- May 27 Stephen Monet interviewed by Pat Kerr, free-lance writer preparing an article for the Ontario Arborist. The article entitled "Valuing Trees and Tree Workers" appeared in the July-August 2011 issue of Ontario Arborist Magazine.

Presentations, Tours & Field Trips

- February 22 Stephen Monet gave lecture in Fundamentals of Risk Assessment, a course at MIRARCO. His lecture covered ecological risk management through the development and implementation of the Greater Sudbury Biodiversity Action Plan.
- May 5 Stephen Monet presented the history of the Regreening Program and Biodiversity Action Plan to a representative of the Associación de Desarrollo Económico Social Sta. Marta from El Salvador. An interpreter, a representative of the United Church of Canada and a representative of the Sudbury Community Foundation were also present.
- May 13 Stephen Monet presented the Greater Sudbury
 Biodiversity Action Plan to the Ontario Planning Commissioners
 meeting held at the Vale Living with Lakes Centre.
- May 26 Stephen Monet presented to the Donovan/Elm West CAN on the Biodiversity Action Plan and the new actions relating to ecological recovery and regreening.
- June 16 Tina McCaffrey lead several Musegetes Foundation members on a short tour of transplanting vegetation at sites off Hwy 69 N.
- June 17 Stephen Monet presented biodiversity initiatives to Sudbury Catholic Schools – Celebrating a Decade of Conservation Success at St. Charles College.
- June 23 Stephen Monet provided a tour of the Greater Sudbury regreening to ten members of the Manitoulin Nature Club.
- June 28 Stephen Monet presented biodiversity initiatives at Sudbury 2011 – Mining and the Environment International Conference V.

• July 13 - VETAC members provided a tour of the Jane Goodall Reclamation Trail to staff from Verbinnen's Nursery, the City's contract seedling grower for the next 5 years.

On-line

- Sudbury as an environmental success story is featured on the <u>VisionarEase Inc.</u> website.
- The video clip developed for the Earth Day event outlining the forest floor transplant mat process is available on <u>YouTube</u>.
- The Biodiversity Education and Awareness Network (BEAN) is promoting how Sudbury's BAP can be used as a blueprint for other towns/cities.

Other

The City of Greater Sudbury – Regreening Program received a Certificate of Participation from the United Nations Environment Program (UNEP) for contributing to the Plant for the Planet: Billion Tree Campaign. This project began in 2007 and the City's



Regreening Program has pledged and planted 598,043 trees since then.

Working Together

The Biodiversity Action Plan identified the importance of working with the community and promised to provide opportunities for the general public to get involved in restoring our ecosystem, creating and managing wildlife habitat and tracking plants and animals in our City. In 2011, two on-line surveys were developed for the general public to engage in tracking animals in the City.

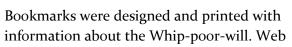
FrogFind



The Regreening Program partnered with Junction Creek Stewardship staff to initiate the FrogFind program for Greater Sudbury. A Flash-based interactive document on the Frogs of Greater Sudbury and an on-line survey were developed in

collaboration with Junction Creek Stewardship staff. The survey and interactive document were made available online at www.greatersudbury.ca/biodiversity. By the end of the 2011 season, 178 entries were submitted via the on-line survey, identifying seven frog species and one toad species in the Greater Sudbury area. This data will be used to track the overall health of the Greater Sudbury ecosystem.

Whip-poor-will





information was created and an on-line survey for the monitoring of the bird through its breeding season in June was developed for the public to participate. By the end of the 2011 season, 142 entries were submitted via email, through the on-line survey, and phone-in reports.





VETAC Members 2011



Chair

Dr. Peter Beckett Laurentian University

Co-Vice-Chairs

Dr. Stephen Monet CGS, Environmental Planning

Ben van Drunen Hollandia Land Environmental

Solutions

Members

Tony Fasciano Citizen

Enzo Floreani Master Gardener

Marc Hebert Collège Boréal

Wayne Hugli Horticultural Society

Jim Ilnitski Citizen

Lisa Lanteigne Vale

Bill Lautenbach CGS, Growth & Development

Lisa Léger Xstrata Nickel

Shirley Makela Citizen

Tina McCaffrey CGS, Regreening Program

John Negusanti Citizen

Mike Peters Citizen

Paul Sajatovic NDCA

Kierann Santala LU Graduate Student

Dr. Graeme Spires MIRARCO

Sarah Woods JCSC

Species List

The tables below outline the scientific and common names of the species of trees, shrubs and understory trees that have been planted by the Program. Those species with an * are non-native.

| Species Scientific Name | Species Common Name |
|--|-------------------------------------|
| Trees | |
| Abies balsamea | Balsam Fir |
| Acer (rubrum, saccharum, saccharinum) | Maples (Red, Sugar, Silver) |
| Betula alleghaniensis | Yellow Birch |
| Carya cordiformis | Bitternut Hickory |
| Eleagnus angustifolia* | Russian Olive* |
| Fagus grandifolia | American Beech |
| Fraxinus (pensylvanica, americana, nigra) | Ash (Red, White, Black) |
| Larix (decidua*, kaempferi*) | Larch (European*, Japanese*) |
| Larix laricina | Tamarack |
| Picea (glauca, mariana, abies*) | Spruces (White, Black, Norway*) |
| Pinus (banksiana, resinosa, strobes, nigra*) | Pines (Jack, Red, White, Austrian*) |
| Quercus (rubra, alba, macrocarpa) | Oaks (Red, White, Bur) |
| Robinia pseudoacacia* | Black Locust* |
| Thuja occidentalis | Eastern White Cedar |
| Tsuga canadensis | Eastern Hemlock |

| Species Scientific Name | Species Common Name |
|--------------------------------|----------------------------|
| Understory Trees | |
| Acer (spicatum, pensylvanicum) | Maples (Mountain, Striped) |
| Alnus viridis ssp. crispa | Green Alder |
| Cornus alternifolia | Alternate-leaved Dogwood |
| Prunus nigra | Canada Plum |
| Prunus pensylvanica | Pin Cherry |
| Sambucus canadensis | Common Elderberry |

| Species Scientific Name | Species Common Name |
|-------------------------------------|-----------------------------|
| Shrubs | |
| Amelanchier sanguinea | Red-twigged Serviceberry |
| Amelanchier sp. | Serviceberry (Amel. sp.) |
| Arctostaphylos uva-ursi | Bearberry |
| Aronia melanocarpa | Black Chokeberry |
| Caragana arborescens* | Siberian Pea Shrub |
| Cephalanthus occidentalis | Buttonbush |
| Cornus (sericea, rugosa) | Dogwood (Red Osier, Round- |
| Diervilla lonicera | Dwarf Bush-honeysuckle |
| Gaultheria procumbens | Wintergreen |
| llex verticillata | Winterberry |
| Myrica gale | Sweet Gale |
| Physocarpus opulifolius | Ninebark |
| Pinus mugo* | Mugho Pine* |
| Prunus virginiana | Choke Cherry |
| Rhus typhina | Staghorn Sumac |
| Rosa (blanda, acicularis ssp. sayi) | Wild Rose (Smooth, Prickly) |
| Rosa palustris | Swamp Rose |
| Sambucus pubens | Red Elderberry |
| Shepherdia canadensis | Buffaloberry |
| Spiraea alba | Narrow-leaved Meadowsweet |
| Spiraea latifolia | Large-leaved Meadowsweet |
| Spiraea tomentosa | Steeplebush |
| Viburnum cassinoides | Wild Raisin |
| Viburnum lantanoides | Hobblebush |
| Viburnum lentago | Nannyberry |
| Viburnum trilobum | Highbush Cranberry |

For further information please contact:
Regreening Program
Environmental Planning Initiatives
City of Greater Sudbury
P.O. Box 5000, Station A
200 Brady Street
Sudbury, ON P3A 5P3
Tel. 705-674-4455, ext. 4605
Fax 705-673-2200

e-mail: regreening@greatersudbury.ca
website: www.greatersudbury.ca/VETAC