

# Annual Report 2010

Regreening Program





#### 2010 Partners

## Regreening Program:



















## **Ugliest Schoolyard Contest:**

Ashley's Landscaping

**Botanix Azilda Greenhouses** 

Brown's Concrete Products

Canadian Tire (Regent Street)

City of Greater Sudbury

Echo Rentals

Holla's Produce and Greenhouses

Hollandia Land and Environmental Solutions

Southview Greenhouse Growers

**Sudbury Horticultural Society** 

**Sudbury Master Gardeners** 

Vale

WD Tree Removal

Xstrata Nickel

## 2010 Highlights

The 2010 Regreening Program created 26 temporary employment opportunities; reclaimed 3.5 hectares of barren land located in the Ramsey Lake Watershed; planted over 90,000 tree seedlings and over 3,300 shrubs throughout Greater Sudbury; and, hand-transplanted 0.4 hectares of forest floor mats (roughly the official size of a football field). Outside funding, material and in-kind contributions enabled the continuation of the Program's major objectives as well as newly initiated projects associated with the Biodiversity Action Plan. A quick summary of accomplishments is below.

| Regreening Component                     | 2010      | To Date      |
|------------------------------------------|-----------|--------------|
| Tree Planting                            | 92,742    | 9,210,778    |
| Shrub Planting                           | 3,324     | 50,575       |
| Area Limed                               | 3.5 ha    | 3,429 ha     |
| Area Fertilized                          | 0 ha      | 3,212 ha     |
| Area Seeded                              | 0 ha      | 3,139 ha     |
| Program Cost                             | \$766,307 | \$25,676,432 |
| Temporary Employment Opportunities       | 26        | 4,536        |
| Awards                                   |           | 14           |
| Number of Schoolyards Regreened          | 4         | 22           |
| Volunteer Tree Planters                  | 553       | 9,981        |
| Trees Planted by Volunteers              | 14,464    | 332,137      |
| Trees Provided for Residential Plantings | 888       | 421,701      |
| Area of Forest Floor Mats Transplanted   | 0.4 ha    | 0.4 ha       |

#### Implementing the Biodiversity Action Plan

The Biodiversity Action Plan, which was released in late 2009, was rapidly promoted and steps were taken towards its implementation early in 2010. The City hosted a breakfast meeting on January 14<sup>th</sup> for all the Biodiversity Partners to outline and discuss plans for the Greater Sudbury Biodiversity Forum 2010. As 2010 was the International Year of Biodiversity, the City planned several events around this topic that included opportunities for the Partners to promote their initiatives and projects at free booths at the events. The Partners were also asked for suggestions for even greater community involvement and participation in biodiversity-related activities. This annual report covers all aspects of the Regreening Program's efforts to meet the objectives of the Action Plan from ongoing regreening efforts to increasing diversity of plants around wetlands to education and participation of students and the general public.

## **Program Operations**

#### Tree Planting

Spring and fall planting activities resulted in 92,742 tree seedlings and 3,324 shrubs planted throughout Greater Sudbury. To date, 9,210,778 trees and 50,575 shrubs have been planted by the Program.

Vale aerial seeded two areas totaling 150 hectares located along the Wanapitei River south of Coniston in the fall of 2009. This was the main planting site for the crews in the spring of 2010. Species planted included the typical first phase planting mix of Jack Pine, Red Pine, White Pine and White Spruce. Additionally, due to the presence of a large wetland, almost 9,000 Black Spruce and Tamarack were added to the species mix. There are also several wooded pockets close to the wetland within which a handful of deciduous understory species were added to increase biodiversity.

The area limed around Bennett Lake by the Regreening Crew in 2009 was also a primary planting site in the spring. Five deciduous understory species and six shrub species were planted within the Bennett Lake watershed to add diversity. Red Pine was planted in more open rocky areas and White Spruce was planted in shadier areas.

A total of six species of deciduous understory trees and eight shrub species were planted this year to increase diversity throughout Greater Sudbury. These species were planted at numerous sites including Bennett Lake, along various trails and around wetlands.

Tree Canada provided almost 50,000 trees and shrubs for the spring plant and Vale provided over 4,500 pine seedlings for the fall plant. Over 40,000 of the trees purchased this year came from a local source – the new greenhouse at Collège Boréal. Last fall a citizen collected White ash seeds that were passed on to Collège Boréal to grow. It was very successful, resulting in 2,400 seedlings that were planted in and around the Lake Laurentian Conservation area by the Regreening crew in the fall.



#### **Collecting Native Seed**

This year the Regreening Program engaged in seed collection of various deciduous shrub species. Wild Raisin



seeds were collected by the Field Interns from Windy Lake Provincial Park with permission from Parks staff. Dr. Stephen Monet also collected mountain holly in a nearby area. Late in the fall, Green Alder seeds were picked from shrubs in Coniston that were planted by the Program in 1995. Green Alder will be a great addition to the species mix as it is a nitrogen fixer. All seeds were sent to the Ontario Tree Seed Plant for processing and from there will be sent to growers to produce seedlings for the Program in the future.

Regreening Program;
Tree Planting - 2010

Road

Tree Program

Tree Planting - 2010

Tree

Refer to the tree planting map below for locations of the 2010 planting sites.

Volunteers also participated in regreening activities by planting trees. This year, 19 volunteer groups involving over 500 individuals planted almost 15,000 tree seedlings and over 500 shrubs throughout Greater Sudbury. The following is a list of the groups that participated in tree planting activities this year:

Capreol Ski Club
St. Patrick's Church Youth Group
FedNor
Junction Creek Stewardship Committee
Silver Lake Stewardship Group
LoEllen Park Secondary School's
Environmental Club
Ministry of the Environment
Bio Ski Club
Roots & Shoots participants

**TD Bank Employees** 

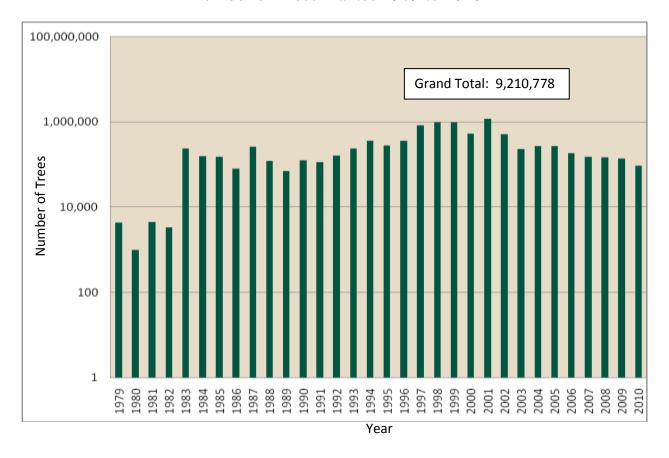
Ontario Summer Games participants Science North Native Plant Workshop attendees Valley View Public School, Val Caron Valley East Nursery Cooperative School CGS Lake Water Quality Program Lively High School Sudbury Revolver Club DEW CAN Ste. Marie School, Azilda

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.

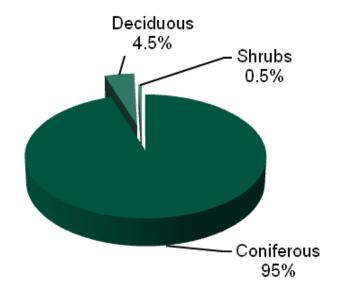
As part of our agreement with Tree Canada, an annual regeneration assessment must be completed on the trees that were donated. Collège Boréal has undertaken this task and has found at least 95% survival in two year old plots and at least 98% survival in one year old plots.

Sudbury

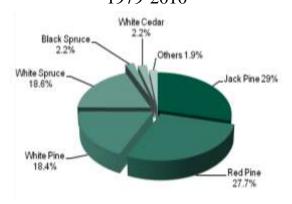
## Number of Trees Planted 1979 to 2010



Percent of Species Planted (1979 to 2010)



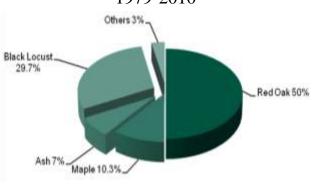
## Percent Coniferous Species Planted 1979-2010



#### Others Include:

Tamarack 1.3% Larch 0.2 % Norway Spruce 0.2% Hemlock 0.1% Balsam Fir 0.1% Austrian Pine <0.1%

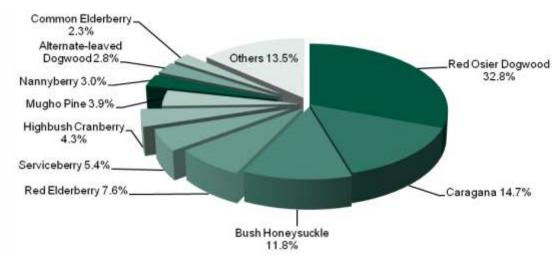
## Percent Deciduous Species Planted 1979-2010



#### Others Include:

Bur Oak 0.5% Russian Olive 1.3% Yellow Birch 1.1% American Beech 0.1% Bitternut Hickory <0.1%

## Percent Shrubs and Understory Trees Planted 1979 – 2010



#### Others Include:

Staghorn Sumac 1.8% Spiraea alba 1.8% Ninebark 1.6% Pin Cherry 1.6% Round leaf Dogwood 0.9% Winterberry Holly 0.6% Sweet Gale 0.6% Spiraea latifolia 0.6% Wild Raisin 0.6% Green Alder 0.5% Wintergreen 0.5% Swamp Rose 0.4% Spriraea tomentosa 0.4% Choke Cherry 0.4% Buffalo Berry 0.4% Buttonbush 0.4% Bearberry 0.4% Black Chokeberry <0.1% Canada Plum <0.1%

A total of 50,575 shrubs, 413,615 deciduous and 8,797,163 coniferous seedlings have been planted to date.

## Liming

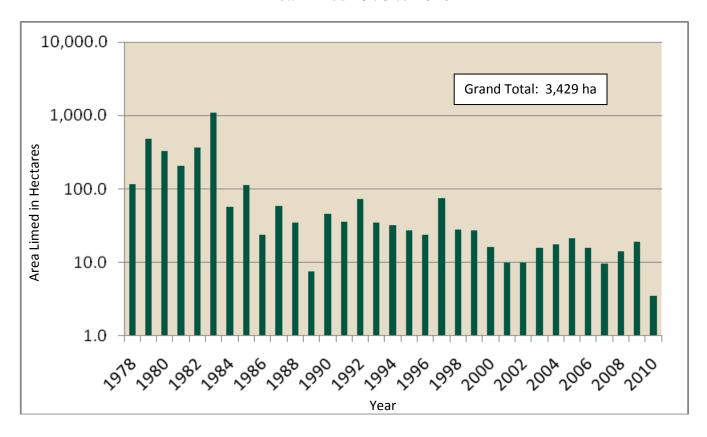
Liming activities took place within the Ramsey Lake watershed located off Moonlight Beach Road this year. Approximately 3.5 hectares of barren land was limed. No fertilizer or seed was spread due to the proximity of the lake. In the fall, 160 red pine seedlings were planted on the limed area.

To date, 3,429 hectares of barren land have been treated with lime.

Refer to the liming map below for location of liming activity.



## Area Limed 1978 to 2010





#### Forest Floor Transplants

A new initiative this year was an operational scale forest floor transplant project. Thanks to partnership with Ontario Ministry of Transportation (MTO) forest floor mats were dug from the highway 69S construction zone and transplanted in reclamation areas in Greater Sudbury. A small scale transplanting exercise was conducted six years ago that not only survived, but some species are now migrating beyond the limit of the plot. Thanks to MTO, this small field trial has turned into a major component of regular Program operation. It is hoped that this partnership will continue into the future as opportunities arise.

The first bag of lime was emptied on Greater Sudbury's barren landscape 32 years ago. The small conifer seedlings that were subsequently planted on the limed soil have now become stands of trees measuring up to 25 feet (8 m) tall. Unfortunately, trees alone don't make a forest. A healthy, self-sustaining forest requires soil microorganisms and insects, fungi, lichens, mosses and a broad variety of forest floor plants. To help jump-start the forest development process, forest floor transplants were removed from a healthy forest area along Hwy 69S that was subject to construction activity and transplanted into some of Greater Sudbury's reclamation areas.

From June to October, regreening crews dug up the top 4 inches (10 cm) or so of soil containing small plants, seeds, microorganisms and insects and brought them to older reclamation sites for transplanting. Plots were established using the transplanted materials, each measuring 4m by 4m. Over the season, almost 250 plots were completed, which was enough material to cover a football field (roughly one acre). Several smaller plots were also established for special transplanted material, including Pink Lady's Slipper, Sundew, Pitcher Plant and lichen.



Typical donor site Hwy 69S: Large trees already cut down for highway expansion.



Typical forest floor plants at the donor sites that are absent or rare at Greater Sudbury reclamation sites.



Regreening crew digging up forest floor vegetation. Sections measure approximately 60cmx50cm by 10cm in height.

Plants were dug up from donor sites along the highway 69S construction corridor, transferred into large plastic trays and finally delivered to receptor sites by the City's regreening crew. Approximately 100 different species of plants (including lichens and mosses) were collected and transplanted into Greater Sudbury's reclamation sites. These nodes of diversity will provide a seed source for these plants to disperse and colonize adjacent areas over time. A small-scale test plot of this type was set up six years ago and is now thriving and spreading up to 1.5m from the original plot. The process is slow, but without these transplants, natural colonization by these native plants could take hundreds of years.

Vale agreed to assist in another experiment – aerial seeding of lichen. As part of their annual aerial seedling program, in which they disperse crushed agricultural limestone, fertilizer and a grass-legume seed mixture, Vale agreed to include some of the lichen that was collected from the donor site. In addition to this, Field Interns set up small 1m by 1m plots of lichen as well.

Vegetation surveys were conducted at each of the plots to determine what plants were present in the transplants to establish baseline information on species richness. Over the next several years, assessments will be conducted at a number of the receiving sites to evaluate the transplant survival, and eventual spread into surrounding reclamation areas.



Partially completed plot.



Trays of vegetation are loaded into a cube van and ready for transport.



Regreening crew placing forest floor into plot measuring 4m by 4m. Several of the plots were located along trails so the public will have the opportunity to view them with little difficulty.



Completed plot.

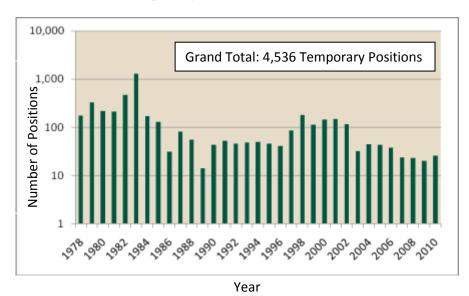
#### Labour

Program staff included two foreperson positions, two crew leaders, two field interns and fifteen worker positions. There were a total of five summer students involved in regular regreening 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 below.

| Program                    | Positions | Weeks                | Cost to City | Activity                                                               |
|----------------------------|-----------|----------------------|--------------|------------------------------------------------------------------------|
| CGS Temporary Staff        | 21        | 31<br>26<br>30<br>26 | 100%         | Foreperson (2)<br>Crew Leader (2)<br>Field Interns (2)<br>Workers (15) |
| <b>CGS Summer Students</b> | 5         | 17                   | 85%          | Tree planting, liming                                                  |
| <b>Total Positions</b>     | 26        |                      | -            | -                                                                      |

In total 26 temporary positions were created. To date 4,536 temporary positions have been created.

## Temporary Positions 1978 to 2010







## **Funding**

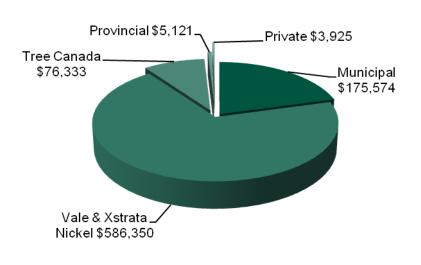
The Regreening Program relies on donations to operate the yearly Program. Many successful partnerships have been developed over the years and new opportunities are always being investigated. The table below outlines funding sources by type of donation received in 2010.

| Program Contributors                | Weeks                                                      | Number            | Source     | Amount                |
|-------------------------------------|------------------------------------------------------------|-------------------|------------|-----------------------|
| LABOUR                              |                                                            |                   |            |                       |
| YMCA - SJS                          | 17                                                         | 5                 | Provincial | \$5,121               |
| CASH                                |                                                            |                   |            |                       |
| Vale                                | Program Operation One time donation for biodiversity event |                   | Mining Co. | \$250,000<br>\$20,000 |
| Xstrata Nickel                      | Program Operation Biodiversity initiatives                 |                   | Mining Co. | \$200,000<br>\$40,000 |
| Sudbury earthdancers                | •                                                          |                   | Private    | \$1,825               |
| Margaret Atwood Birthday Caper 2009 |                                                            |                   | Private    | \$1,250               |
| MATERIALS                           |                                                            |                   |            |                       |
| Vale                                | 4,500 seedlings                                            |                   | Mining Co. | \$1,350               |
| Tree Canada                         | 51,322 seedlings                                           |                   | Private    | \$76,333              |
| UGLIEST SCHOOLYARD CONTEST*         |                                                            |                   |            |                       |
| Xstrata Nickel                      | Cash contrib                                               | Cash contribution |            | \$75,000              |
| Sudbury Horticultural Society       | Cash contribution                                          |                   | Private    | \$600                 |
| Sudbury Master Gardeners            | Cash contribution                                          |                   | Private    | \$250                 |
| SUB TOTAL                           |                                                            |                   |            | \$671,729             |
| City of Greater Sudbury             |                                                            |                   |            | \$175,574             |
| GRAND TOTAL                         | _                                                          |                   |            | \$847,303             |

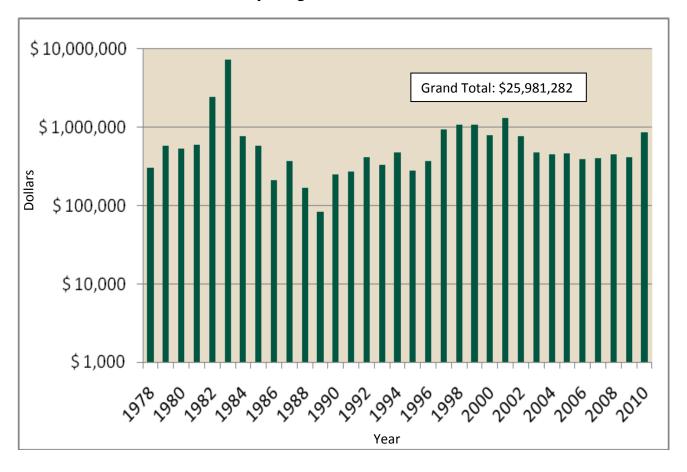
<sup>\*</sup>Does not include material, equipment and other in-kind donations provided by other sponsors.

Since 1978, the City's contribution to the Program has averaged 14.4% of the total costs with 85.6% coming from outside sources. To date, the Program costs exceed \$25 million.

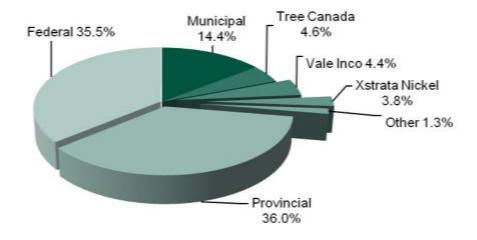
## Funding Contributions 2010



## Yearly Program Costs 1978 to 2010



## Percent Funding Contributions by Source 1978 to 2010



## **Ugliest Schoolyard Contest**

The Canadian Biodiversity Institute and Earth Day Ottawa initiated the Ugliest Schoolyard Contest in 1998. VETAC's sixth 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, **École catholique Félix-Ricard** in Sudbury, was selected from the 6 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:

Redwood Acres Public School, Hanmer Alexander Public School, Sudbury King Christian Academy, Sudbury

As the winner of the contest this year, École catholique Félix-Ricard in Sudbury received over \$23,000 in financial support for their project from Xstrata Nickel, as well as assistance in the planning and coordination of their project, and additional funding and material donations from a wide variety of sponsors (listed to the right).

In early June, Wayne Hugli met with the principal and two teachers from the school to begin working on a plan for the regreening project. The major focus of the project was to be the conversion of a large area of the schoolyard into a small park-like setting with trees, grass, gardens and seating for students.

Since there was a problem with drainage in this area, the school board created a new drainage ditch that was lined with large river stones to accommodate any excess water that would accumulate during heavy rainfall.

In mid August, Botanix Azilda Greenhouses was hired to plant twelve large trees throughout the yard with equipment provided by Echo Rentals. Tree guards were installed to protect the new trees from damage.

#### Sponsors:

Ashley's Landscape Supplies

Botanix Azilda Greenhouses

Brown's Concrete Products

Canadian Tire (Regent Street)

City of Greater Sudbury

Echo Rentals

Holla's Produce and Greenhouses

Hollandia Land and Environmental Solutions

Southview Greenhouse Growers

Sudbury Horticultural Society

**Sudbury Master Gardeners** 

Vale

WD Tree Removal

Special thanks to our corporate sponsor:



Vale provided more than 10 large truckloads of topsoil to the school and Botanix Azilda Greenhouses arranged to have it spread in preparation for the sod laying that would take place after the students and teachers returned to school in September. Twelve large Manitoulin stones that were provided by Ashley's Landscape Services were placed strategically throughout the schoolyard to provide natural seating areas.

Four picnic tables and two park benches were purchased with funds provided by Xstrata Nickel and the school board arranged to have them installed in an area that was lined with pea stone to create an outdoor teaching area.

In early September a small group of students from the school built a large rectangular planter and three circular planters with concrete blocks that were donated for the project by Brown's Concrete Products. These planters were filled with topsoil and composted manure provided by Canadian Tire on Regent Street and the Sudbury Master Gardeners.

A few days later students, teachers and parent volunteers spent the morning laying rolls of sod that were donated for the project by Hollandia Land and Environmental Solutions. With the help of Greater Sudbury's Regreening Crew the barren ground was covered with a beautiful carpet of green grass composed of nearly 900 rolls of sod.

Two large truckloads of garden mix were provided by the Sudbury Horticultural Society for the creation of a series of large flowerbeds at the far end of the new park. Students, teachers and parent volunteers worked with members of the Horticultural Society and two City employees to spread composted manure and plant shrubs and perennials throughout those new gardens. The plant material and composted manure for these gardens were donated by Canadian Tire on Regent Street, Botanix Azilda Greenhouses, Southview Greenhouse Growers, and Holla's Produce and Greenhouses. After everything was planted the students spread mulch that was donated by WD Tree Removal over the flowerbeds and pathways to help maintain moisture and reduce weed growth.









Xstrata Nickel's generous funding and the other donations received for this project enabled VETAC to provide a new stimulating green environment for this deserving school community. Since this schoolyard is also used extensively by the general public it will also be a real asset to the neighbourhood.

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-two 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.





#### Media Coverage

The 2010 contest was promoted in local papers in the following articles and photo inserts:

- Ugliest schoolyard transformed by makeover September 14, 2010 - Northern Life
- Ugliest Schoolyard: School received more than \$25,000 to regreen September 16, 2010 – John Lappa – photo insert
- Nouveau terrain de jeu vert
   September 22, 2010 Le Voyageur p.8
- Makeover: Ugliest Schoolyard Contest
   November 5, 2010 Sudbury Star photo insert

#### 2009 Ugliest Schoolyard Contest Update

École publique de la Découverte, the 2009 winner of the Ugliest Schoolyard Contest, hosted its grand opening ceremony showcasing the newly regreened schoolyard on June 17<sup>th</sup>. The event was combined with their year-end BBQ and over 100 people were in attendance including Mayor Rodriguez who referred to the Contest as a worthwhile project. The school community greatly acknowledged the support of all businesses who donated material and equipment to the project and big thanks went to Xstrata Nickel for their tremendous financial support.



## **Biodiversity Forums**

As 2010 was the International Year of Biodiversity and the first year of the implementation of the City's Biodiversity Action Plan, several venues were chosen to help communicate the message of biodiversity to the general public including children and students. Efforts were made to address each age group in order to inspire environmental stewardship in the local environment.

Lawrence Poole: Lessons from the Jungle

The first portion of the forum was held February 21 when speaker Laurence Poole presented his 'Lessons from the Jungle' to hundreds of local high school students during two day-time sessions at the Fraser Auditorium and one evening session for the general public.

Lawrence Poole, an internationally acclaimed speaker, author, columnist and heuristic training consultant, has trained thousands on the principles of motivated creativity, strategy, self-empowerment and leadership that are favored in Nature. A pioneer in heuristic learning (self-discovery), Lawrence shares his uncommon experiences with passion, pleasure and simplicity. His multimedia conferences feature video and pictures, sounds and even exotic odors from the rainforest so participants can experience the mystic and strange beauty of the neotropical jungle.

Paralyzed in car accident, Lawrence Poole is, with little doubt, the only researcher on Earth who treks jungles in a wheelchair! This energetic and passionate man studied Nature's laws for more than 30 years and, after exploring the most diversified ecosystems on the Planet, he draws from his work important conclusions that he has translated into best practices and success strategies.

Lawrence provided presentations on February 17<sup>th</sup>, at the Fraser Auditorium at Laurentian University to 150 local French and French Immersion High School and College students, 350 local English High School Students and 100 members of the general public at three separate sessions.

Stephen Monet, Manager of Environmental Planning Initiatives provided a brief overview of local biodiversity initiatives being implemented through the new Greater Sudbury Biodiversity Action Plan. Mayor Rodriguez also provided opening remarks to the students.

Information booths were on display in the foyer hosted by a number of organizations and institutions involved in the Biodiversity Partnership and included:

Daytime and Evening:

Laurentian University
Collège Boréal
Cambrian College
Greater Sudbury Biodiversity Partnership
Ministry of Natural Resources
Junction Creek Stewardship

**Evening Only:** 

Healthy Community Initiative
Sudbury Naturalists
Sudbury Horticultural Society
Sudbury Master Gardeners
Ontario Parks
Sudbury Food Connections
Vale







The Kratt Brothers: Wild Creature Adventures

The second presenters for the Biodiversity Forum 2010 were chosen to address the younger citizens. The City of Greater Sudbury, with the financial support of Vale and Xstrata Nickel, invited the Kratt Brothers to our City. Both Chris and Martin Kratt, stars of the popular TV shows *Kratts Creatures*, *Zoboomafoo*, and *Be the Creature*, gave an educational and entertaining presentation on *'Wild Creature Adventures'* at Glad Tidings Church on Saturday, April 10<sup>th</sup>. Combining curiosity, humour, and scientific knowledge, the Kratt's have been helping children learn in an entertaining way since their television show Kratts' Creatures first aired in 1996. The presentation was a natural tie-in to the City's Biodiversity Action Plan, which encourages youth of all ages to become environmental stewards. The event was attended by over 700 people.

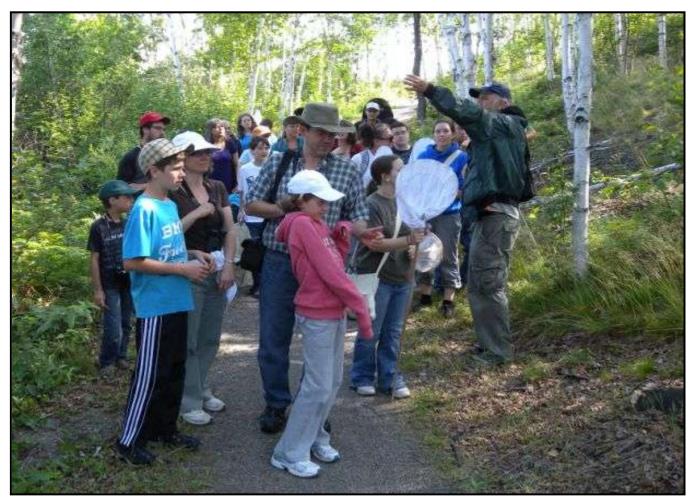
The Kratt Brothers have a winning formula for getting kids excited about preserving the environment and inciting their curiosity in the wildlife that surrounds them – which is what the City wants to do through its environmental initiatives as well. Following each show, the Kratt Brothers responded to numerous questions from the young audience and held an autograph signing session after the second presentation.

Again, Biodiversity Partners were invited to display their information booths in the lobby to address the younger generation of future naturalists. There was much activity at the information booths as the material on display was appealing to both parent and child.



#### **BioBlitz**

In collaboration with Laurentian University a BioBlitz was held on campus on Saturday, June 19<sup>th</sup> in which the public was invited to participate. This event was organized by Dr. Joe Shorthouse in order to celebrate the international year of Biodiversity, and to support the City of Greater Sudbury's Biodiversity Action Plan.



A BioBlitz is a special type of field study where a group of scientists and volunteers conduct an intensive biological inventory, attempting to identify and record all species of living organisms in an area. This BioBlitz was more general than regular BioBlitzs in that besides entomologists there were botanists, mycologists and vertebrate zoologists along with the general public. The field trip concentrated on the flora and fauna of the birch transition zone around Laurentian University. The 2010 BioBlitz was sponsored by the City, Vale, Xstrata Nickel, Laurentian University and the Biological Survey of Canada. This event attracted over 30 people, many of them children. Dr. Joe Shorthouse, professor of entomology with Laurentian University gave a talk on his view of changes in Sudbury and some diversity of plants and animals. Following the presentation, a tour was lead by experts in the fields of plants, bugs, birds including a professional bird caller. The Field Interns explained the transplant process at some of the plots located near Bennett Lake. Afterwards, there was an open house in the Biology Lab where insect cabinets, plants and animals were on display.

#### Georges Brossard

After giving up his job as a notary, insect-lover Dr. Georges Brossard spent decades travelling with his wife to more than 100 different countries collecting insects. Brossard is a famed entomologist and founder of the Montreal Insectarium, and has been involved with building insectariums all over the world. Brossard has also written and directed 20 episodes of *Mémoires d'insectes* (Insect Diaries), and was the creator and host of the televised series *Insectia*. He is the cofounder and copresident of Montreal's Cinéma IMAX les Ailes.

On June 9<sup>th</sup>, the City partnered with Collège Boréal, to arrange to have Georges Brossard address students enrolled in the French and French Immersion programs at local schools as a continuation of the Biodiversity Forum. His enthusiastic rapport with the students and knowledge of insects was a huge hit with the hundreds of students in attendance. Students were able to hold live insects and

view many other specimens on display. Through Brossard's exceptional story telling skills, students were able to explore many exotic places and see strange insects from around the world. A repeat performance was delivered to the general public that evening at Science North. Many local citizens took part in this engaging seminar.

On June 10<sup>th</sup> EarthCare Sudbury hosted a breakfast meeting with Georges Brossard as the guest speaker. His presentation was well received as he is an energetic speaker and story teller. Although insects can seem strange and many people fear them, Brossard emphasized their importance as part of biodiversity and tried to gain sympathy from the crowd. His show included live insects that he passed around to numerous people in attendance. During his talk, Brossard acknowledged the regreening crew and the work being undertaken to restore the Sudbury environment. After the talk, Dr. Monet and Field Interns Kierann Santala and Jesse Popp took Dr. Brossard on a tour of the vegetation mats. It is believed that he will be a new ambassador for Sudbury.





Local insects: the insect world in Sudbury's recovering forest has never been studied for insect populations in the past. To rectify the situation a joint research project between the City and Laurentian University was initiated to provide the basis for an intensive study of Sudbury's insect population. Housed at Laurentian University and supervised by entomologist Dr. Joseph Shorthouse, two biology students were engaged in capturing, identifying, and cataloguing insects on campus. Thousands of insects were sorted and pinned into display cases and others sent to expert entomologists across Canada to ensure proper identification. Some of the display cases are to travel from school to school for students to learn more about the insects around them. Over several years, an inventory of insects in Sudbury will be established for what is known as the birch transition zone. The cost of the project was \$20,000, with the City contributing \$12,000, most of which came from Vale and Xstrata Nickel funding for biodiversity initiatives.

#### Informing the Greater Sudbury Community

Great efforts were made to inform the general public, local organizations, students and agencies of the new biodiversity Action Plan for Greater Sudbury. Below is a listing of all presentations that were delivered.

- January 20 Stephen Monet presented Living Landscape A Biodiversity Action Plan to City Council's Policy Committee.
- January 31 Stephen Monet presented Greater Sudbury's biodiversity initiatives to the Sudbury Horticultural Society.
- February 17 Stephen Monet gave three presentations on local biodiversity initiatives to precede talks by Lawrence Poole at the Biodiversity Forum.
- February 21 Stephen Monet presented on Greater Sudbury's biodiversity initiatives at the Seedy Sunday event at Market Square.
- March 10 Stephen Monet presented on Greater Sudbury's biodiversity initiatives at the Canadian Land Reclamation Association (CLRA)/MIRARCO Reclamation Discussion Group.
- March 16 Stephen Monet lecture on Greater Sudbury's biodiversity initiatives to Dr. Jorge Virchez's environmental and sustainability class at Laurentian University.
- May 15 Stephen Monet presented Greater Sudbury biodiversity initiatives at the Native Plant Workshop put on by Science North and the City.
- May 18 Stephen Monet presented the Greater Sudbury biodiversity initiatives at the Community Action Network (CAN) Summit.
- October 27 Tina McCaffrey presented on community participation in the development of the Biodiversity Action Plan at the Ontario Centre for Climate Impacts and Adaptation Resources (OCCIAR) Workshop held at the Willet Green Miller Centre Auditorium.

#### Media Coverage

In addition to all the presentations on the Biodiversity Action Plan, the media responded well to promoting this Action Plan as well. Below is a listing of all media coverage received regarding the new biodiversity initiative in Greater Sudbury.

#### Interviews:

- January 20 Stephen Monet Biodiversity Action Plan interviews with CBC, Northern Life (Bill Bradley), KICX FM and Q92
- January 26 Stephen Monet Biodiversity Action Plan interview with Mike Whitehouse Sudbury Star
- November 19 -- Stephen Monet was interviewed regarding the Biodiveristy Action Plan for a short documentary (6 min, 45 sec) produced for Responsible Business TV (RBTV). The mini documentary will air on CNBC US/Europe and Asia Pacific, reaching an audience of approximately 335 million.

#### Newspaper Articles:

- City revamps biodiversity plan Adds section on food sustainability January 5, 2010 - Bill Bradley - Northern Life - p. 2
- Plan to deal with city's bad soil January 19, 2010 Mike Whitehouse Sudbury Star p. A3
- Regreening 3,350 hectares done, but 30,000 hectares to go January 26, 2010 - Northern Life - p. 3
- New species, but fewer berries
   January 30, 2010 Mike Whitehouse Sudbury Star Front page
- Landscaping on a monumental scale
   January 30, 2010 Mike Whitehouse Sudbury Star p.A11
- Sudbury's future of regreening
   August 9, 2010 Mike Whitehouse The Sudbury Star Front page con't on p.A4
- Nothing to be bugged about
   August 12, 2010 Bill Bradley Northern Life Front page con't on p.3

#### EarthCare Minute:

 The July 28<sup>th</sup> episode of the EarthCare Minute entitled "Boosting Biodiversity" focused on the removal of forest floor mats from a healthy forest and transplanting it into Sudbury's recovering forests to increase biodiversity.

#### Provincial Coverage:

 Reference to the Biodiversity Action Plan for Greater Sudbury was made on page 37 of Ontario's Biodiversity Strategy Progress Report 2005-2010 – A Report of the Ontario Biodiversity Council.

#### International Coverage:

• A fact sheet and poster outlining Greater Sudbury's Biodiversity Action Plan were prepared by the United Nations University on biodiversity actions being undertaken by Regional Centres of Expertise (RCE). These documents were displayed at the Conference of the Parties (COP 10) - (nations that ratified the Convention on Biological Diversity) that was held in Nagoya, Japan between Oct 18<sup>th</sup> and 29<sup>th</sup>. Following this event, ICLEI Canada and Environment Canada launched Cities and Biodiversity Case Study Series – Canadian Best Practices in Local Biodiversity Management, a 36 page document outlining biodiversity actions taking place in eleven cities across Canada. The Greater Sudbury story is featured on pages 11 to 13 entitled Steady Approach to Biodiversity Recovery. The document can be viewed at: <a href="https://www.iclei.org/biodiversityincanada">www.iclei.org/biodiversityincanada</a>.

#### **Educational Events**

### Earth Day

VETAC participated in the annual Earth Day Event at Market Square on April 17<sup>th</sup> where 888 White Spruce seedlings were distributed to the public. To date, over 400,000 seedlings have been distributed to homeowners in an effort to reclaim urban spaces. On display was a tray of forest floor vegetation typical of what would be transplanted during the field season to give the general public a look at what was to come for the year.

#### Heritage Fair

On May 7<sup>th</sup>, Dr. Peter Beckett, VETAC Chair delivered two presentations at the Sudbury Regional Heritage Fair 2010. The topic of discussion was "Sudbury's Environmental Heritage: Creating the Living Landscape".

#### Native Plants Workshop

The City of Greater Sudbury, through its biodiversity initiative, sponsored the registration fees for participants attending Science North's Native Plants Workshop on May 15th. The two-hour session included an overview of the new Biodiversity Action Plan for Greater Sudbury provided by Stephen Monet. The 50 participants received a complimentary native shrub from the Regreening Program to help inspire native plant selection in residential gardening.

#### St. Benedict Transplanting Activity

Students at St. Benedict School engaged in creating their own forest floor transplant plots on school property in June. This was a great educational opportunity for the students as they will have the opportunity to track any migration of the plants outside the plot area in the following years. The Field Interns assisted in setting up the plots and provided the information necessary for future tracking and data collection.

#### Mining Education Teachers of Ontario

Dr. Peter Beckett hosted a full regreening tour for Mining Education Teachers of Ontario on August 11<sup>th</sup>.

#### Pollution Talks in Russia

Dr. Graeme Spiers gave a soil pollution talk to the Director of Environment from Norilsk, Russia, in May. He was then asked to return in August to give a similar talk to green members of the Russian Government and Industry. They were looking at improving environmental compliance and facilitate movement to western market given the citizen pressures and were interested in how Sudbury was able to mobilize the community and engage industry in the regreening effort. Both Dr. Peter Beckett and Dr. Spiers were in Moscow delivering talks on the Sudbury environment at this event.

#### Friends of the Environment Foundation Tour

On September 28<sup>th</sup>, Stephen Monet and Paul Baskcomb, Director of Planning Services, provided an Environmental Tour of the City for TD Friends of the Environment Foundation (TD FEF) Executive Director, Mary Desjardins, Regional Manager, Ontario North & East Region, Cathy Jowsey and local Branch Manager, Lively, Chantal Viens.

#### **Roots & Shoots**

Roots & Shoots, a program initiated by the Jane Goodall Institute, is designed to engage and inspire youth to take action to make the world a better place for people, animals and the environment.

On October 6<sup>th</sup> dozens of high school students participating in the Roots & Shoots conference hosted by Science North attended a field activity where they transplanted forest floor mats into an area devoid of understory vegetation.

Stephen Monet led the group through a recovering forest and Field Interns Kierann Santala and Jesse Popp were on hand to assist the students with the transplanting exercise. Close to 200 elementary school students were engaged in a tree planting activity lead by VETAC volunteers Dr. Peter Beckett, Wayne Hugli and Lisa Léger at Laurentian University.

The Regreening Program also provided tree seedlings to other local groups providing similar tree planting activities for these students including the Nickel District Conservation Authority, Junction Creek Stewardship Committee and Rainbow Routes.





#### Lockerby Field Trip

On October 8<sup>th</sup>, 24 Lockerby Composite School students participated in a two-hour field trip in the Coniston area. Students learned the history of Sudbury's environmental problems and the steps taken to re-establish vegetation in the area. They observed and recorded plant growth and animal signs in impacted and recovering ecosystems and made comparisons of the data. The students were very involved and asked many questions.



#### **Restoration Ecology Tours**

Dr. Peter Beckett and Graeme Spiers led two tours with Restoration Ecology students from Trent/Sir Sandford Fleming College.

#### Cambrian College Tour

Dr. Joe Hamr's class in Environmental Diploma program at Cambrian College went on a tour and received a talk from Dr. Peter Beckett.

#### **Urban Forestry Conference**

Dr. Peter Beckett delivered a talk at the Urban Forestry Council 2010 Conference: Healthy Forests are Rooted in Urban Forests, held in St Catherines on November 5<sup>th</sup>. His talk was entitled *Sudbury's City-Wide Forest Renewal and the School Re-Greening Program.* 

#### Communications

Communicating the successes of local regreening efforts continues yearly, to both local audiences and groups abroad. Media coverage was wide spread 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.

#### EarthCare Minute

The July 21<sup>st</sup> episode of the EarthCare Minute entitled "Regreening Continues" focused on the Program's successes to date in improving the Sudbury environment, focusing on the individuals involved in this task from the workers to the hundreds of volunteers that participate annually.

#### Print Material

A Biodiversity pamphlet was developed aimed at increasing the public's involvement in local biodiversity by participating in several online programs or joining local groups to help track Greater Sudbury's ecological health. Skill levels required vary but there is something for everyone.

#### VETAC Members 2010

Chair Dr. Peter Beckett Laurentian University

Co-Vice-Chair Ben van Drunen Hollandia Land & Environmental Solutions

Jennifer Braun Golder Associates Ltd.

Members Tony Fasciano Private

Enzo Floreani Master Gardener Wayne Hugli Horticultural Society

Jim Ilnitski Private

Mark Kuhlberg Laurentian University

Lisa Lanteigne Vale Inco

Bill Lautenbach City of Greater Sudbury, Planning Services

Lisa Leger Xstrata Nickel

Shirley Makela Private

Tina McCaffrey City of Greater Sudbury, Regreening Program
Dr. Stephen Monet City of Greater Sudbury, Environmental Planning

Charlotte Morden NORCAT

Lara Mountain Junction Creek Stewardship Committee

John Negusanti Ministry of the Environment

Mike Peters Private

Paul Sajatovic Nickel District Conservation Authority

Dr. Graeme Spires MIRARCO
Betty Sutherland Xstrata Nickel

#### **Awards**

| Community Builders Award of Excellence - Environment                    |
|-------------------------------------------------------------------------|
| Sudbury Mining and the Environment Committee Certificate of Recognition |
| Dr. Edward M. Watkin Award                                              |
| Peggy Thompson Publication Award                                        |
| Finalist Award Certificate Bremen Partnership Award                     |
| Community Achievement Elaine Burke Memorial Award                       |
| Model Project Award                                                     |
| United Nations Local Government Honors Award                            |
| Chevron Conservation Award                                              |
| The Government of Canada Environmental Achievement Award                |
| Lieutenant Governor's Conservation Award                                |
| Aboricultural Award of Merit                                            |
| Ontario Shade Tree Council Award                                        |
| Community Improvement Award                                             |
|                                                                         |

## Looking Ahead to 2011+

The Regreening Program focused on following through with the recommendations set out in the *Biodiversity Action Plan for Greater Sudbury* during 2010. With many community engagement activities and plantings focused on biodiversity, actions are well underway that follow the direction set out in the Action Plan. Operational plans are to continue to focus on ecological recovery in Greater Sudbury in 2011 and beyond.

The first item in preparation for 2011+ was the creation of a new 5 year plan for the Program's operations. This 5 Year Plan 2011-2015 was released in December and can be viewed at <a href="https://www.greatersudbury.ca/VETAC">www.greatersudbury.ca/VETAC</a> under the Reports/Publications heading. Highlights from the 5 Year Plan include investigating possible alterations to the fertilizer and seed mixture and application rate, collecting native seed, community-based biodiversity monitoring, and increasing biodiversity on school grounds to name a few.

Engaging the Biodiversity Partners will also be foremost in the coming years. In 2011, there are plans to hold semi-annual meetings with the Partners and create an e-newsletter to communicate local findings to the community at large. Preparations will also be made to host a Biodiversity Forum in 2012.

The Regreening Program has a history of being quick to act on funding from government or other sources. The funding for the time frame of this five year plan is stable; however, the Program must remain flexible to take advantage of other funding opportunities and other partnerships as they arise. It is also important to maintain flexibility to accommodate changing community priorities.

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