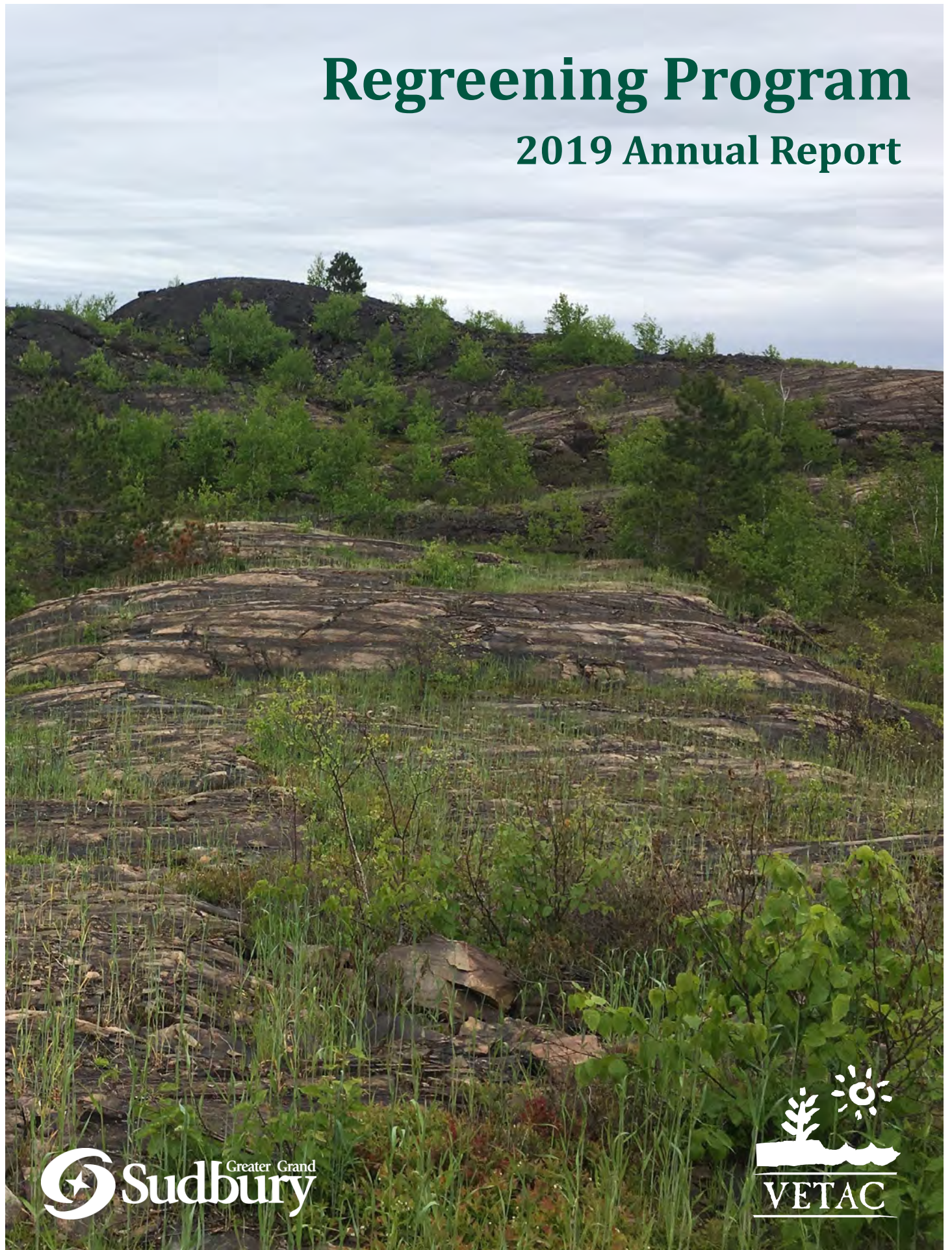


Regreening Program

2019 Annual Report



2019 Partners

Regreening Program

City of Greater Sudbury
Collège Boréal
Conservation Sudbury
Sudbury earthdancers
KGHM
Laurentian University
Rainbow Routes
Sudbury INO, a Glencore Company
tentree
Tree Canada
Vale

Ugliest Schoolyard Contest

Corporate Sponsor: Sudbury Integrated Nickel Operations, a Glencore Company
Azilda Greenhouses
Brown's Concrete Products Ltd.
Dixon Contracting
Futurescape Landscaping
Greater Sudbury Regreening Program
Jetty's Landscaping Supplies
KGHM
Sudbury Horticultural Society
Sudbury Master Gardeners
Southview Greenhouse Growers
Vale

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2019 Highlights

Work continued as directed by the **5 YEAR PLAN 2016-2020**. External funding, material and in-kind contributions from a variety of partners ensured another successful year.

The Regreening Program created 31 temporary employment opportunities, limed six hectares of barren land in various locations and planted over 42,000 tree seedlings and almost 37,000 shrubs and understory trees throughout Greater Sudbury.

Regreening Component	2019	To Date (since 1978)
Tree Seedlings Planted	42,713	9,858,424
Shrubs and Understory Tree Seedlings Planted	36,994	431,342
Area Limed	6.0	3,4084 ha
Area Fertilized	6.0	3,258 ha
Area Seeded	6.0	3,185 ha
Forest Floor Transplants	0.1684 ha	1.89 ha
Program Cost	\$823,783	\$33,525,552
Temporary Employment Opportunities	31	4,806
Awards	1	15
Number of Schoolyards Regreened	2	47
Volunteer Tree Planters	562	12,911
Trees Planted by Volunteers	4,033*	381,917
Trees Provided for Residential Plantings	985*	431,399

*values are included in the Tree, Shrubs and Understory Tree Seedlings Planted.

The 15th annual “Ugliest Schoolyard Contest” hosted by VETAC continued again this year. The winners were Lansdowne Public School and École St-Denis. In all, a dozen local businesses, corporations and special interest groups provided funding, materials and offered services to complete the schoolyard Regreening projects. Corporate funding from Sudbury Integrated Nickel Operations, a Glencore Company (Sudbury INO), in the amount of \$20,000 enabled these schools to become greener, more engaging environments for students. Schoolyard transformations occurred from late August until the end of October.

The large-scale forest floor transplant project proceeded again in 2019 thanks to continued and new partnerships. This year, 19 sites containing 146 plots received forest floor mats contributing to the total area of 1.89 hectares since 2010.

Among other activities, the Biodiversity Research Assistants conducted long-term monitoring of forest floor transplants and shrub transects.

The Regreening Process

Crushed Limestone, Fertilizer and Seed

The liming activity this year focused on an area of barren land west of Coniston, a small portion as a continuation of past liming activities along Garson-Coniston Road and a hill along the new Maley Drive extension. A total of six hectares of barren land were manually limed using a crushed dolomitic limestone. Fertilizer and seed consisting of agricultural and native species was applied to the sites in early September.

The seed mix contained:

- 40% fall rye (*Secale cereale*)
- 20% Canada wildrye (*Elymus canadensis*)
- 20% little bluestem (*Schizachyrium scoparium*)
- 10% slender wheatgrass (*Elymus trachycaulus*)
- 10% alsike clover (*Trifolium hybridum*)

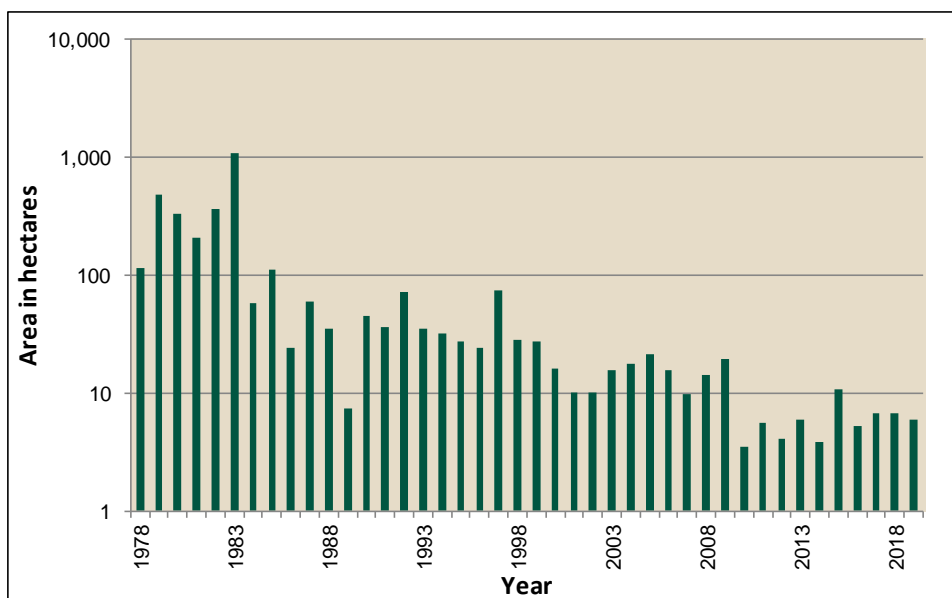
About 4.5 kg of uncleaned poverty oat grass seed collected locally by the crew weeks in advance was sowed in four small plots in the aerial lime site.

Refer to the following page for a map of the location of liming activities.

To date, 3,484 hectares of barren land have been treated with crushed limestone by the City's Regreening Program.

Area Limed 1978 to 2019

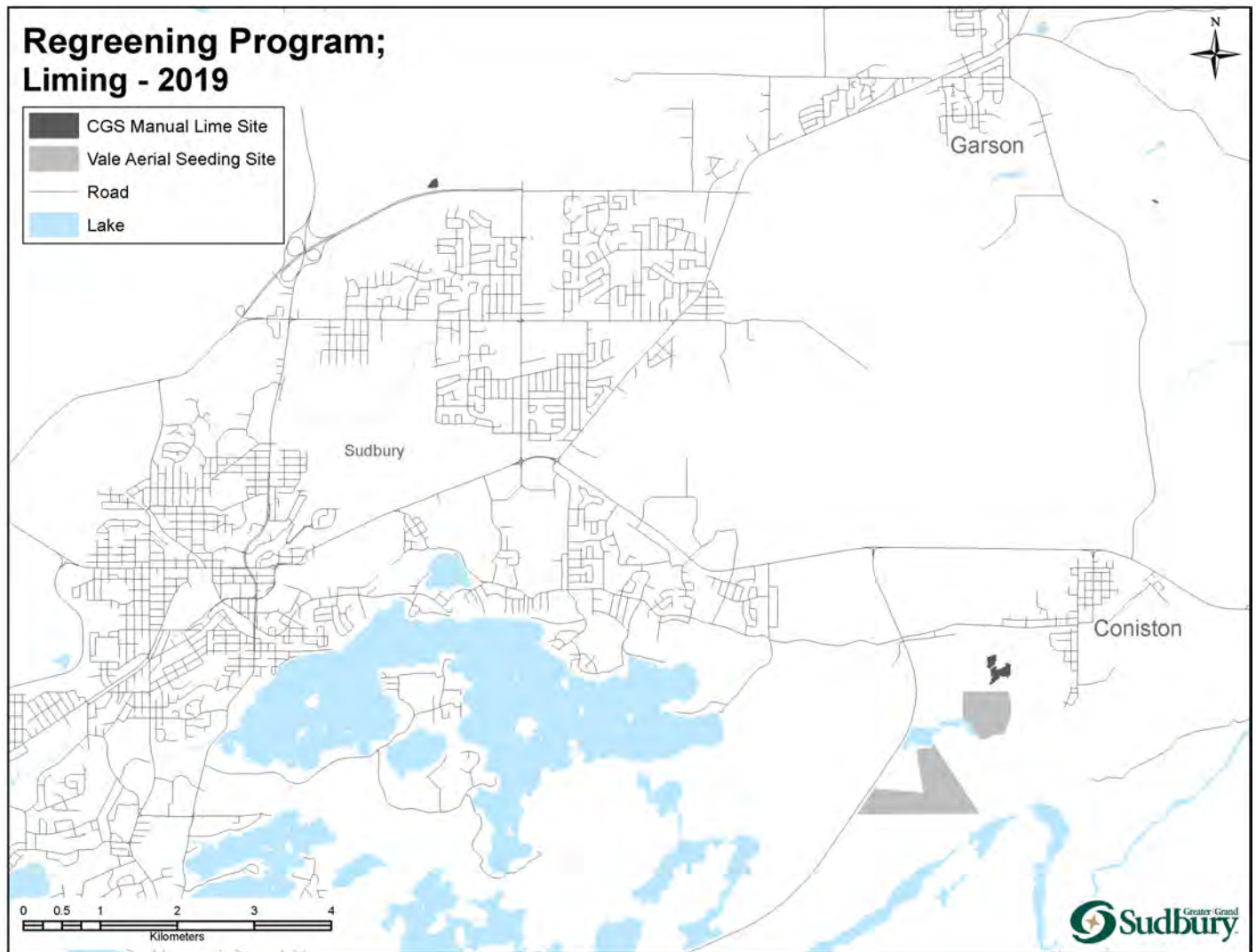
The bar graph below indicates the area in hectares per year that were limed by the municipal Regreening Program since 1978 with a grand total of 3,484 hectares limed to date.



Vale Aerial Seeding Program

As part of its ongoing collaboration with the City's Regreening Program, Vale aurally seeded barren land south-west of Coniston using a pelletized limestone, fertilizer and the same agricultural/native seed mixture as the Regreening Program. The total area covered measures approximately 100 hectares and will be given special attention for tree/shrub planting activities in 2020.

Map - Lime Site 2019



Tree Planting

Spring and fall planting activities resulted in 42,713 tree seedlings and 36,994 shrub/understory tree seedlings planted throughout Greater Sudbury. Since 1978, a total of 9,858,424 trees and 431,342 shrubs/understory trees have been planted by the Program.

Tree Canada provided funding for 20,000 trees and shrubs this year and tentree donated funds to have all 64,146 tree seedlings planted. In addition, Vale donated over 18,000 seedlings to the Program, including jack pine, red pine and white spruce.

A total of six species of deciduous understory trees, 13 shrub species and eight canopy tree (conifer and deciduous) species were planted in 2019. To date, 28 species of canopy trees (13 conifer and 15 deciduous), 11 species of understory trees and 40 species of shrubs have been planted. That is a total of 79 different tree and shrub species planted to date.

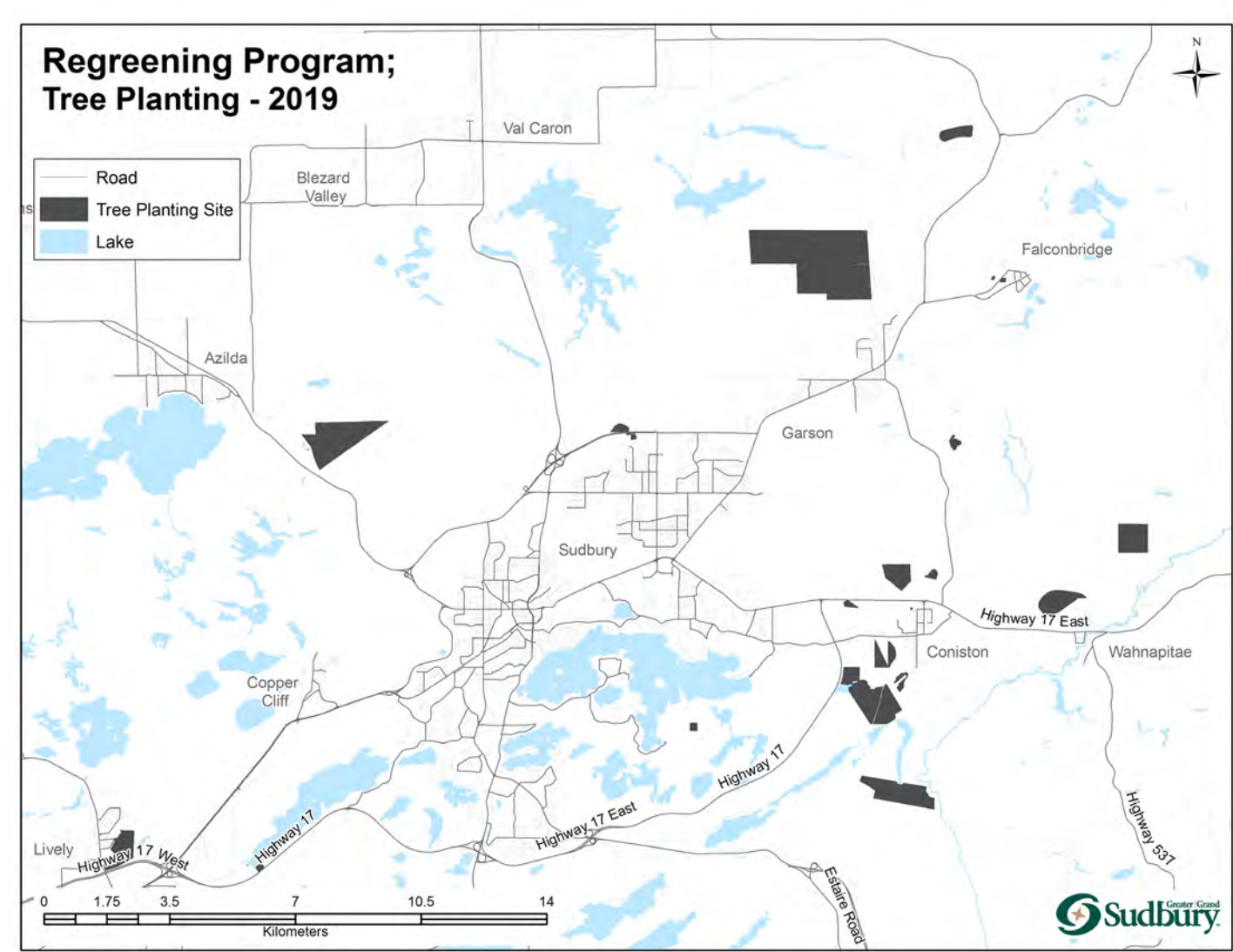
Vale aerially limed and seeded 100 hectares of barren land located to the south-west of Coniston in the fall of 2018. Part of this area has been reserved as a whip-poor-will compensation site, and as such, planting material focused mainly on lower growing shrubs and understory trees with less focus on tall trees. Species included rose, elderberry, dogwood, green alder and few red oak, tamarack, white pine and white spruce.

A few planting sites were selected from the **5 YEAR PLAN 2016-2020** and several others were selected to accommodate Tree Canada trees. Two new sites were also selected for the planting of species in transect plots and supplemental planting at past manual liming sites and planting sites.



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

Map – Tree Planted Areas 2019



Quality & Survival Assessments

Tree Canada requires that funded plantations be evaluated for quality and survival. The quality assessor visited the planting crew on-site in the spring and in the fall. Overall, he found the crew's quality was 94% for spring trees and 97.7% for fall trees. Survival assessments were also conducted. There was an average of 91% survival for first year plantations, 96% survival for second year plantations and 93% survival of fifth year plantations. Pine and deciduous trees tended to have the greatest survivability (90%) with lower scores for shrubs like elderberry, sumac and dogwood (70%).

Volunteer Tree Planting Events

The Regreening Program is able to offer seedlings, planting equipment and guidance to local groups wanting to participate in the regreening effort. Volunteer participation provides an educational opportunity on environmental issues and information on the City's Regreening Program, tree planting experience as well as a sense of community pride and ownership of the natural environment.

This year, the main planting groups were local students that received the school presentation by VETAC's Regreening Outreach Coordinator. As a follow-up to the presentation, many schools were offered a planting activity on or close to their school property as allowable. The Regreening Program was able to supply this group with nearly 2,000 seedlings. In total, 512 students from 10 schools participated in planting seedlings.

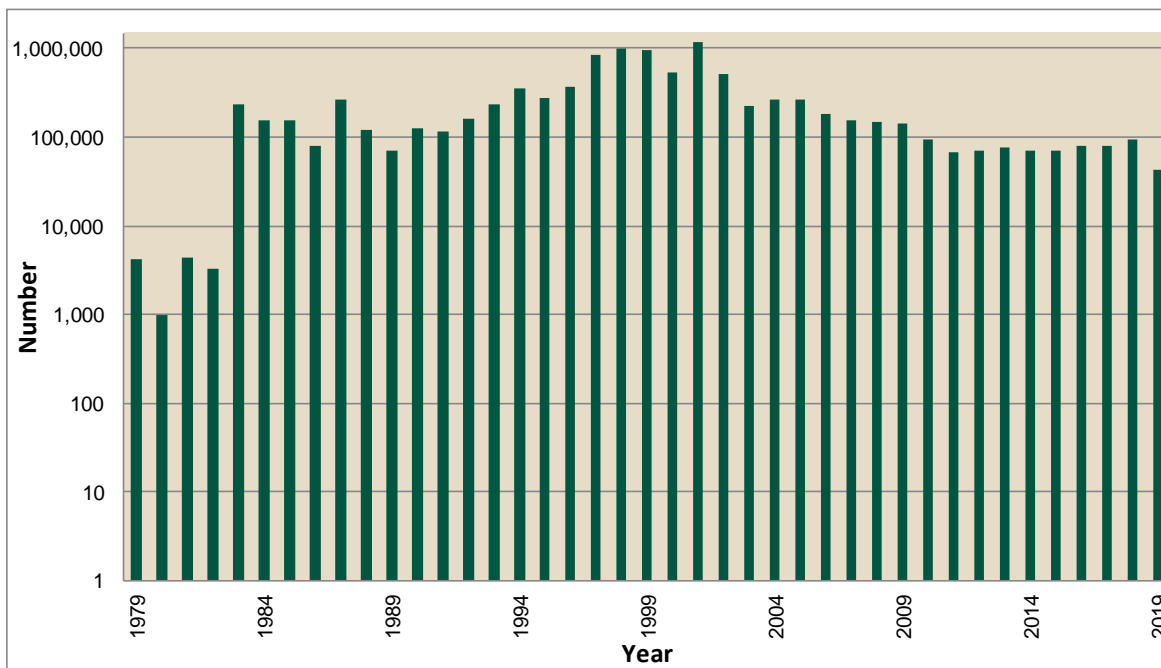
Other group planting activities included St. Patrick's Church Youth Group, Laurentian University Ski Trails members, Laurentian University Cross-Country Ski team, Capreol Ski Club and Ecological Restoration students from Laurentian University. Together, 562 volunteers planted 4,033 seedlings this year.

Since the volunteer program began, 12,911 volunteers planted 381,917 seedlings.



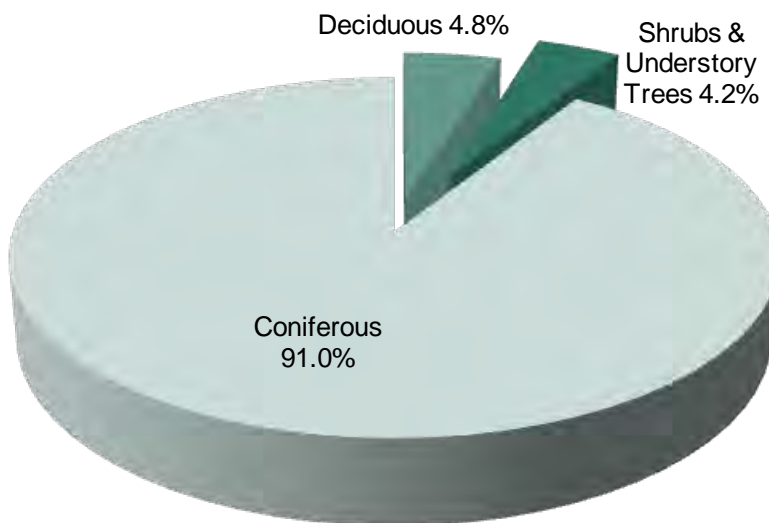
Number of Trees Planted 1979 to 2019

The bar graph below indicates the number of trees planted each year since 1979 for a grand total of 9,858,424 trees.



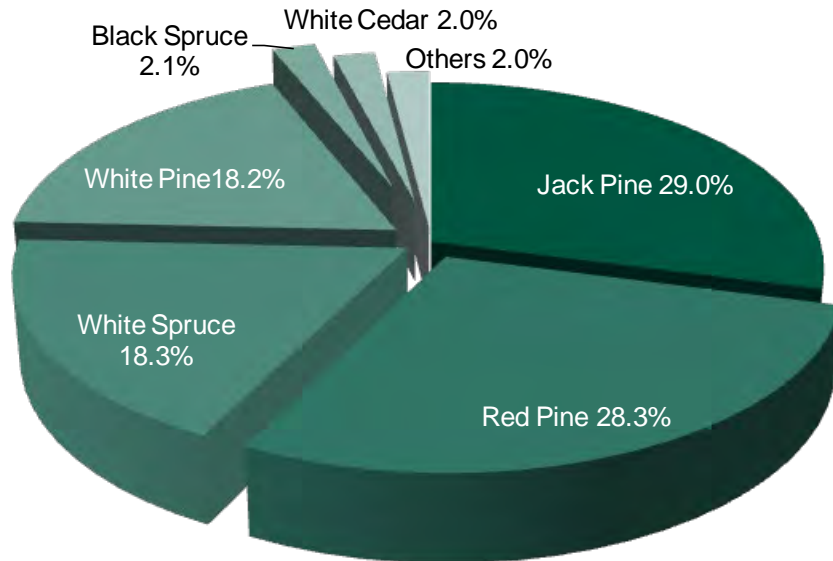
Percent of Species Planted 1979 to 2019

The pie graph below illustrates the percentage of each type of species planted since 1979 for a grand total of 10,289,766 plants.



Percent Coniferous Species Planted 1979 to 2019

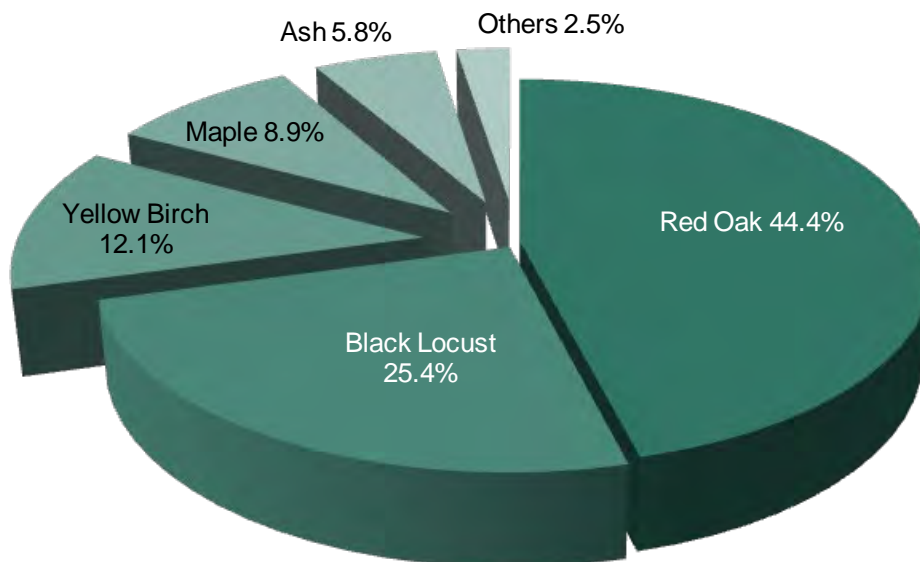
The pie graph below illustrates the percentage of each coniferous tree species planted since 1979 for a total of 9,360,681 trees.



Others Include: tamarack 1.3%, balsam fir 0.3%, Norway spruce 0.2%, larch 0.2%, hemlock 0.1%, and Austrian pine <0.0%.

Percent Deciduous Species Planted 1979 to 2019

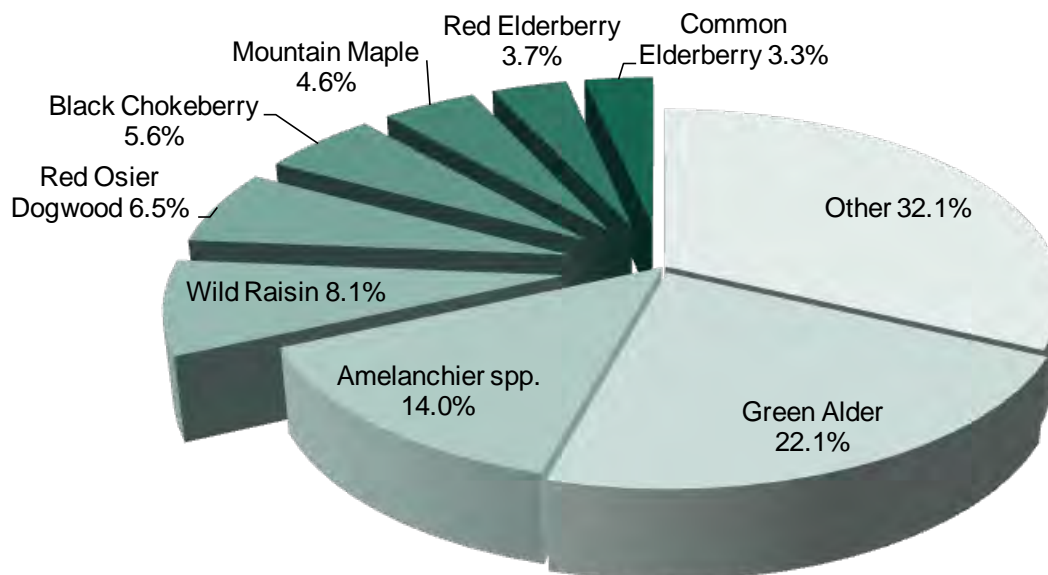
The pie graph below illustrates the percentage of each deciduous tree species planted since 1979 for a total of 497,743 trees.



Others Include: Russian olive 1.0%, bur oak 0.7%, ironwood 0.5%, American beech 0.1%, basswood 0.1%, bitternut hickory <0.1% and white oak <0.1%.

Percent Shrubs and Understory Trees Planted 1979 to 2019

The pie graph below illustrates the percentage of each type of shrub or understory tree species planted since 1979 for a total of 431,342 plants.



Others include: round leaf dogwood 3.1%, striped maple 3.1%, alternate leaf dogwood 3.1%, staghorn sumac 2.2%, bearberry 2.2%, mountain-holly 1.8%, caragana/Siberian pea shrub 1.7%, bush honeysuckle 1.4%, smooth wild rose 1.4%, winterberry holly 1.2%, hardhack 1.1%, American mountain-ash 1.0%, swamp rose 0.8%, high-bush cranberry 0.8%, common juniper 0.8%, choke cherry 0.7%, clematis 0.6%, buffalo berry 0.6%, prickly wild rose 0.5%, showy mountain-ash 0.4%, white meadowsweet 0.4%, mugho pine 0.4%, nannyberry 0.4%, ninebark 0.4%, snowberry 0.3%, broad-leaved meadowsweet 0.2%, hobblebush 0.2%, buttonbush 0.2%, pin cherry 0.2%, Canada yew 0.2%, black chokeberry 'Viking' 0.2%, wild black currant 0.2%, flowering raspberry 0.1%, sweet gale <0.0%, wintergreen <0.0%, red chokeberry <0.0%, American hazel <0.0%, sandcherry <0.0%, and Canada plum <0.0%.

Seed Collecting

Seeds and berries of various species were collected by staff, crew and volunteers this year and shipped to the nursery to grow for future stock. The result was almost 8 kg of cleaned seed. See the adjacent table for species and quantity of cleaned seeds/berries collected in grams.



Species	Cleaned Seed Weight (in grams)
Mountain Maple	2,481
Alternate Leaf Dogwood	1,616
Mountain Holly	1,063
Wild Raisin	539
Red Osier Dogwood	539
Staghorn Sumac	425
Ironwood	383
Green Alder	340
Round Leaf Dogwood	301
Running Serviceberry	57
Bearberry	51
Snowberry	46
American Mountain-ash	40
Smooth Serviceberry	34
Black Chokeberry	19
Common Juniper	15
Fly Honeysuckle	10
Round Leaved Dogwood	3

The crew also collected over 4.5 kg of uncleaned poverty oat grass seed, thanks to K. J. Beamish Construction Co. Ltd. in Hanmer for allowing the crews access to their site. Seeds for these native grasses are not readily available commercially and therefore must be collected manually from local sources.



Biodiversity

Forest Floor Transplants

The practice of transplanting forest floor plants has occurred yearly since 2010 as a technique to re-introduce species, improving habitat, creating a seed bank and increasing the diversity of older reclamation sites. Continued partnership with KGHM allowed for the ongoing forest floor transplants north of Hanmer near the North Range Exploration Property as well as the Victoria Project Site in the Fairbank Lake area. A private landowner again provided access to a site in Chelmsford and City land was also utilized off Vermilion Lake Road. From June to September, vegetation was harvested from all sites, providing a greater variety of species represented in the mats recovered.

The Regreening crews hand dug the top 10 cm of soil containing plants, seeds, microorganisms and invertebrates from the donor site. The vegetation was then watered overnight and transported to regreened (receptor) sites in Greater Sudbury for transplanting. The focus this year was understory sites for shade tolerant species, but several exposed mats for shade intolerant species were also transplanted at various sites.

Criteria for selecting receptor sites for the understory transplants included sufficient canopy cover, low understory species diversity, sufficient soil depth and organic layer (>5cm) and large enough areas to allow the species to spread. Plots were established each measuring approximately 4m by 4m.

In 2019, 5,447 trays of plant material were transplanted covering an area of approximately 0.168 ha. Of these, 813 trays went into exposed sites and the remaining 4,634 trays went into understory sites. There were 19 sites in all, 146 plots and over 40 species re-introduced to the regreening sites.

Over the 10 years of this initiative, a total of 1,547 plots have received understory transplants covering a total area of approximately 1.89 ha, 255 plots received exposed transplants covering an area of 0.125 hectares and 184 different species have been introduced. The area covered by forest floor is now the equivalent to nearly a dozen NHL sized hockey rinks.



Long-Term Monitoring

Understory Transplants

Eleven sites established in 2010 have been set up as long-term monitoring sites to track success of transplants and examine species composition over time. This year, all 11 sites were monitored which included 53 4x4m plots. Results are showing that 76 species are spreading out of the original plots, of which, 16 species are spreading over 3m, 11 species are spreading 2-3m, 12 species are spreading 1-2m and 37 species are spreading under 1m. Blue bead lily (*Clintonia borealis*) is currently holding the record at 9.95m spread.

The most common species found in past plots has been wild sarsaparilla (*Aralia nudicaulis*), Canada mayflower (*Maianthemum canadense*), starflower (*Trientalis borealis*), wavy hair grass (*Deschampsia flexuosa*), red maple (*Acer rubrum*) and low sweet blueberry (*Vaccinium angustifolium*).

Shrub Transects

Adding a variety of shrubs and understory trees to recovering landscapes has many benefits from enhancing habitat to increasing the resistance and recovery from effects of natural disturbances such as climate change, disease or insect infestations. To gauge the success of these species, transect plots are established to test their survivability and suitability through compiling long-term monitoring data.

This year 15 species were planted in transect plots including two new species: red osier dogwood (*Cornus sericea*) and prickly wild rose (*Rosa acicularis*). Currently there are 38 species represented in transect plots, 17 have only one replicate while 21 have multiple replicates. Work will continue to add replicates and new species as they become available. Monitoring has taken place over the past 9 years and after assessing 14 species in past transect plots all but one species showed relatively high survival rate (>80%).

Direct Seed Sowing

This project was initiated to determine seed dispersal techniques that can be employed to help promote regeneration in difficult to plant areas such as rock outcrops and wetlands. If successful, this would increase diversity in these areas without the need to plant seedlings. Seeds of various species were collected, cleaned and directly sown in specific areas. Species included wild columbine (*Aquilegia canadensis*), pale corydalis (*Corydalis sempervirens*), smooth blackberry (*Rubus canadensis*), bristly sarsaparilla (*Aralia hispida*) and false Solomon's seal (*Maianthemum racemosum*) for dry sites as well as blue flag iris (*Iris versicolor*), milkweed (*Asclepias syriaca*) and trout lily (*Erythronium americanum*) for wetter areas.

Lichen Transplants

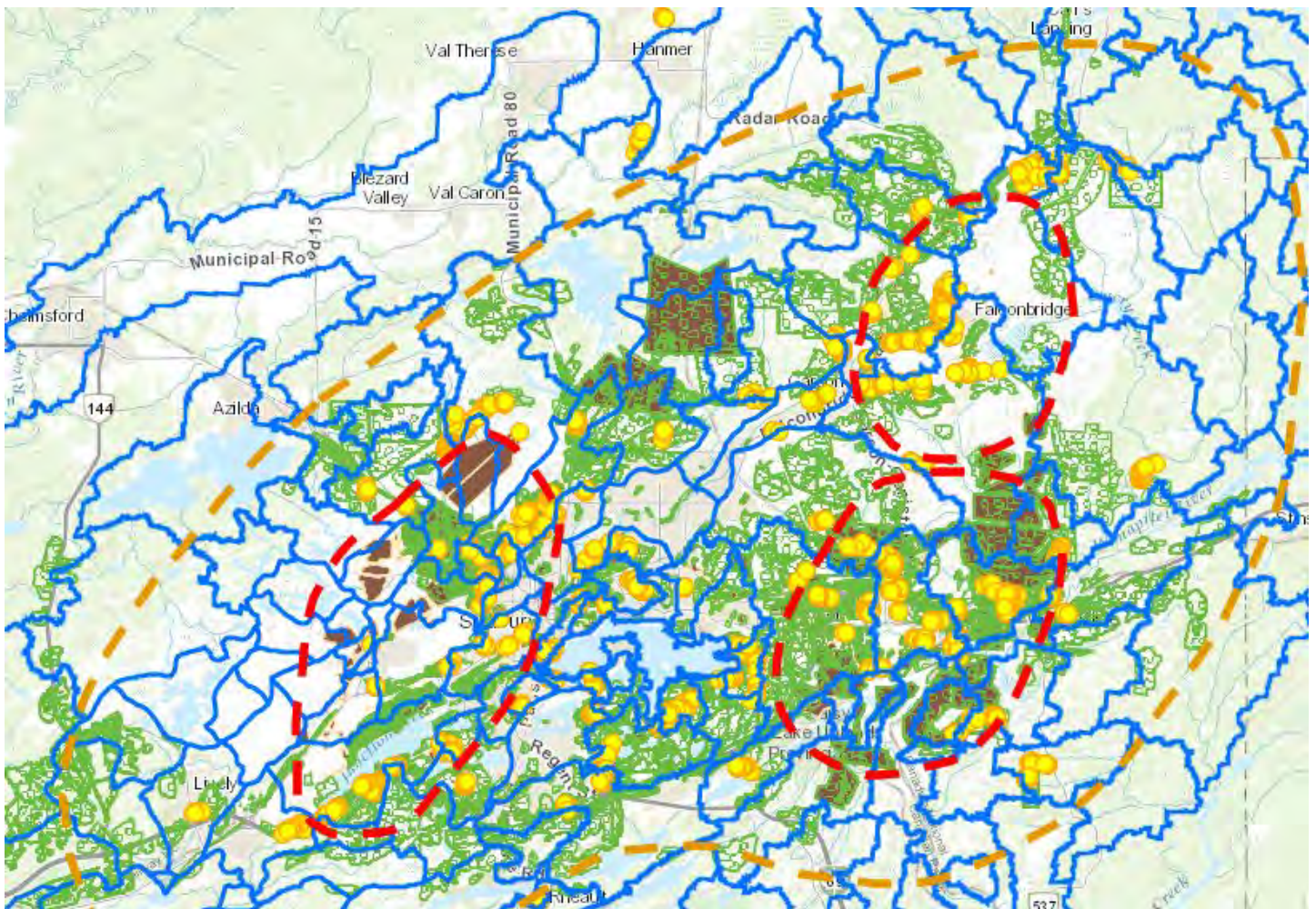
To determine the efficiency of fragments versus mats of grey and green reindeer lichen, 4mx4m plots were established this year. They will be monitored in the coming years to determine which method of transplanting is most efficient. Both methods have been employed in the past, but lacked proper plots for comparison purposes.

Pink Lady's Slipper Monitoring

Plots of pink lady's slipper were established early in the forest floor mat exercise and have since been monitored. This is the largest native orchid in the area and is typical of dry upland conifer stands. The presence of multiple pink lady slipper individuals 10 years after transplanting indicates that this species is surviving and thriving. It generally takes 10 years from germination to flowering stage. So far, after the initial decline in flowering individuals, there appears to be some stabilization of flowering individuals. One individual was found to have migrated 241 meters from the original plot. An explanation is still subjective, but does indicate a wider span is required to monitor spread in the future.

Regreening App

Early in the year, the Regreening App was updated to include all 2018 tree planting and liming activities. Also, the forest floor mats have now been added and will be updated annually along with the tree and liming data. All 2019 data have been compiled and will be uploaded in early 2020.



Regreening Outreach Coordinator

To help celebrate the 40th anniversary of Regreening in 2018, members of VETAC expressed the importance of reaching out to the younger people who are no longer growing up in an environment as impacted as their parents did. VETAC partnered with Conservation Sudbury to seek funding and a Regreening Outreach Coordinator was hired to visit schools and deliver a slide presentation to students about the history of Sudbury's past and the successes of the Regreening Program.

The Coordinator began in August 2017 and gathered all background information and formulated two presentations (one each for grade 6 and grade 11 students) where a direct link to the Ontario Curriculum could be made. The presentations were subsequently modified to accommodate grade levels 3 through 12 as requested.

The Northern Ontario Heritage Fund Corporation (NOHFC) was the main funder that kick started this initiative. Additional funding and support from the City, Conservation Sudbury, KGHM, Sudbury Horticultural Society, Sudbury INO, Vale and VETAC was enough to continue with the classroom presentation for the school years 2017-2018 and 2018-2019.

In the 2018-2019 school year, 43 schools (24 of which were new from the previous year) were visited and 94 presentations were delivered which reached 147 classes involving 3,095 students. Additionally, presentations were given at an Earth Day event hosted by the University of Sudbury where five high schools attended the two day event. Planting activities were also offered in the spring. Ten schools involving 512 students from 26 classes from grades 3-9 planted 1,931 tree seedlings.

Seed bombs are small balls of clay, compost and seeds that can be launched into inaccessible areas to help reseed them. Seed bomb workshops were provided to seven schools for 227 students in 14 classes. One school was offered a tour of the Jane Goodall Reclamation Trail in which 87 students participated.

Over the two school years this initiative was offered, 58 schools were visited and provided with 169 presentations to 255 classes involving 5,279 students. Twenty-four schools participated in tree planting which engaged 1,149 students from 57 classes resulting in 4,034 seedlings planted.

In an effort to keep the momentum and service available beyond the funding term, the Coordinator and VETAC worked to assemble a "virtual" presentation to be distributed to schools via the website. The full presentation in English was recorded before the end of June, and finally assembled and uploaded to the City's website before the end of the year. Work will continue into the New Year to add the French equivalent. The presentation is available as a four-part series on the City's [website](#).



Ugliest Schoolyard Contest

The regreening work continued at local schools again this year as a result of VETAC's 15th annual Ugliest Schoolyard Contest. Thanks to the generous grant of \$20,000 from Sudbury INO and numerous sponsors providing material, supplies, services and financial support, two schools received assistance in transforming their schoolyards. The grand prize winner was *Lansdowne Public School* and the runner-up was *École St-Denis*.

In addition to the Sudbury INO funding, schools also received funding from Vale for the purchase of soil and a voucher for the purchase of concrete materials from Brown's Concrete Supplies. Other financial contributions were received from Sudbury Horticultural Society, Sudbury Master Gardeners and KGHM. In-kind donations from Azilda Greenhouses, Futurescape Landscaping Supplies, Jetty's Landscape Supplies and Southview Greenhouse Growers ensured the projects were a great success.

Each school received five large caliper trees which were planted in raised beds made of stone which doubles as seating. On September 9th at École St-Denis and on September 12th at Lansdowne Public School, enthusiastic students from Kindergarten to Grade 8 joined a team of volunteers from the Sudbury Horticultural Society. Older students prepared the beds by adding soil and composted manure so they would be ready for planting. Students from the junior grades planted hardy shrubs and perennials which had been purchased earlier in the summer. Once all of the plants had been added to the garden beds they were mulched and watered by students from the primary grades.



The Sudbury Horticultural Society Board members contributed towards the purchase of four packages of 15 bulbs of [Liberation 75 tulips](#) that were delivered to each school later in the fall to enhance their new planting beds with spring colour. As a way to incorporate the new regreening project into their learning experience, each school was also provided [“Soil Your Undies”](#) kits which included underwear for the experiment. They were encouraged to consider trying the experiment next spring to test soil quality in one of the garden beds.

Sudbury Horticultural Society photographer Lisa Robinson helped to document the two projects with her extensive collection of photos which were used to create SmugMug photo galleries and YouTube videos. These can all be accessed through the website www.greatersudbury.ca/VETAC.

Rainbow District School Board and Conseil scolaire catholique du Nouvel-Ontario were great partners and added additional improvements to the two schoolyards this year which enhanced the efforts this Contest provided. Each school was supplied with a [Schoolyard Maintenance Manual](#) to assist them with the ongoing care of their new green spaces. Packages containing labeled photos of shrubs and perennials used in each planter were also provided to each school. It was suggested that they use the photos to help identify the perennials and shrubs when they begin to grow and bloom next year.

In October a newspaper ad was published in the [Northern Life](#) (see page 6) thanking all sponsors of the contest. Without the on-going support for the Contest from all the sponsors these important regreening projects would not be possible.



The Canadian Biodiversity Institute and Earth Day Ottawa initiated the first Ugliest Schoolyard Contest in Ottawa in 1998. Based on this example, VETAC's local version of the Contest launched in 2005 and has seen 47 local schoolyards regreened through the generous support of dozens of local businesses and organizations. Thousands of local students are benefitting every day from the improved schoolyard environments.

Labour

Program staff included one foreperson, four crew leaders, fifteen workers and six summer students involved in regular regreening activities. The Biodiversity Research Assistants were mainly engaged in data collection in the field and were accompanied by two volunteers from Atikameksheng's Developing Indigenous Environmental Keepers program. An additional summer student was shared with the Lake Water Quality Program in field activities. In total 31 temporary positions were created in 2019.

The table below outlines the temporary positions created and the number of weeks worked, with a total of 31 positions created in 2019.

Position Title	# Positions	# Weeks	Cost to City	Activity
Foreperson	1	31	100%	Supervision
Crew Leader	4	27	100%	Supervision
Biodiversity Research Assistant	1	52	100%	Field data collection and analysis, seed collection
Biodiversity Research Assistant	1	27	100%	Field data collection and analysis, seed collection
Developing Indigenous Environmental Keepers	2	16	Nil	Assist in data collection and analysis, seed collection
Worker	15	24	100%	Tree planting, liming, transplanting, fertilizing, seeding, seed collection
Summer Student	6	17	85%	Tree planting, liming, transplanting, seed collection
Summer Student	1	17	100%	Assist in field data collection, tree planting, liming, transplanting, seed collection
Total Positions	31			



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.

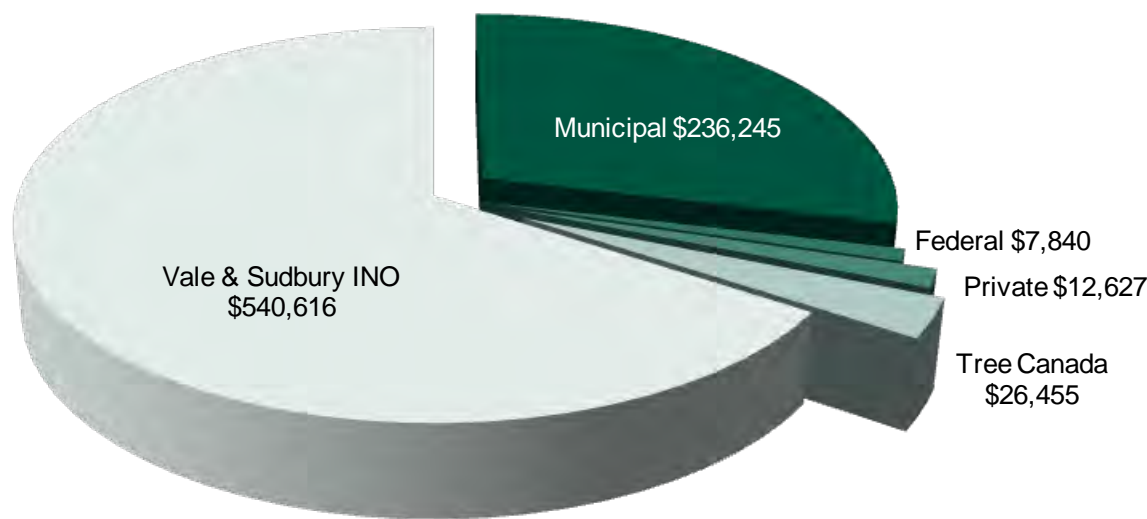
The table below outlines the program contributors and the dollar amount associated with their contributions in 2019 for a total of \$823,783.

Program Contributor	Description	Source	Amount
Labour			
Employment & Service Development Canada	Wage subsidies for 2 summer students over a 16 week period	Federal	\$7,840
tentree	Financial support to have 64,146 seedlings planted	Private	\$6,415
Cash			
Vale	Financial contribution	Mining Co.	\$250,000
Sudbury INO	Financial contribution	Mining Co.	\$265,000
Sudbury earthdancers	Financial contribution	Private	\$4,162
Materials			
Tree Canada	Funding to purchase 20,000 seedlings	Private	\$26,455
Vale	Donation of 18,078 pine seedlings	Mining Co.	\$3,616
Ugliest Schoolyard Contest *			
Sudbury INO	Financial contribution	Mining Co.	\$20,000
Vale	Financial contribution	Mining Co.	\$2,000
KGHM	Financial contribution	Private	\$1,000
Sudbury Horticultural Society	Financial contribution	Private	\$600
Sudbury Master Gardeners	Financial contribution	Private	\$450
Subtotal	Sum of external funding sources	Various	\$587,538
City of Greater Sudbury	Financial contribution	Municipal	\$236,245
Grand Total	Sum of all funding sources	Various	\$823,783

*(does not include material and in-kind donations provided by sponsors)

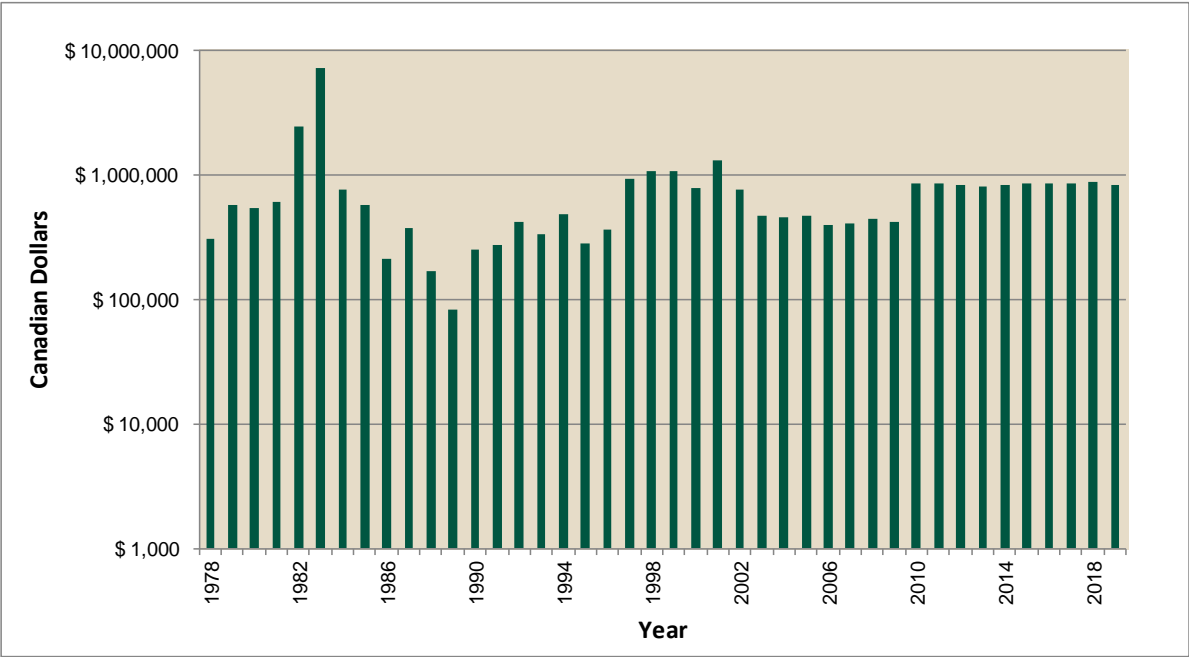
Funding Contributions by Source 2019

The graph below illustrates 2019 funding contributions by source.



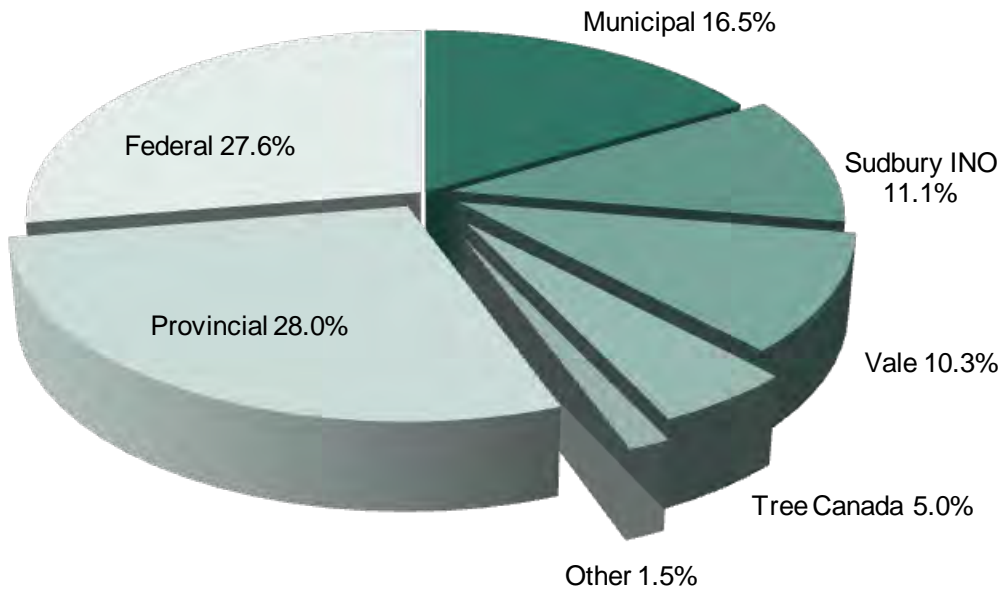
Yearly Program Costs 1978 to 2019

The bar graph below indicates yearly program costs from 1978 to 2019 with a grand total of \$33,525,552.



Percent Funding Contributions by Source 1978 to 2019

The graph below illustrates funding contributions in percentages by source from 1978 to 2019.



Since 1978, the City’s contribution to the Program has averaged 16.5% of the total costs with 83.5% coming from external sources. To date, the Program costs exceed \$33.5 million.

Events

Tree Giveaway

The annual Tree Giveaway was held at the 9th annual Sudbury Gardening Festival on May 25. Almost 1,000 seedlings [623 black chokeberry (*Aronia melanocarpa*) and 362 stepplebush (*Spiraea tomentosa*)] were given away to the public for planting at home. This type of community outreach helps the greening of urban spaces with native plants while citizens are able to share their greening stories and experiences. Many VETAC members helped staff the booth and Graeme Spiers conducted soil testing through Laurentian University.

Summer Tours

As a continuation of the 40th Anniversary Tours that were so well received in 2018, Peter Beckett committed to providing two tours for the public again this year. Seven people attended the tour on Saturday, July 6 at the Jane Goodall Reclamation Trail and 16 people (half dozen being from out of town) attended the tour on Sunday, October 6 at Dynamic Earth. The tours both ran from 2:00 to 3:30 p.m. Tour dates were announced in EarthCare Sudbury's summer 2019 [Green Living magazine](#) on page 15 (note second date was rescheduled).

Sudbury Integrated Nickel Operations Open Houses

Sudbury Integrated Nickel Operations hosted a drop-in event mainly for schools on September 12th at Levack Public School and a Family Day for staff in Falconbridge on October 26th which included a tour every hour of the smelter. The City set up a booth at each event to showcase greening efforts including the Ugliest Schoolyard Contest.

VETAC Field Trips

Four field trips were held in 2019 to allow VETAC members to experience and familiarize themselves with stages of ecological recovery of local sites. The development of the various stages was discussed during the visits by the members present.

Award

Canadian Network for Environmental Education and Communications (EECOM)

EECOM awarded VETAC with the [Outstanding Organization Award](#) at its May 10, 2019 conference. The Outstanding Organization Award is presented for a contribution to an environmental education or communication project which demonstrates an increase in public awareness about the environment and fosters environmental education initiatives. Jennifer Babin-Fenske, Coordinator of EarthCare Sudbury Initiatives, was able to accept the award on behalf of VETAC at the conference where the theme was climate mitigation and adaptation. The City issued a [news release](#) on May 17.

Tours and Presentations

March 8 – Peter Beckett gave a presentation at Cambrian College on Healing the Sudbury Landscape to 30 students from the College's Environmental Monitoring and Impact Assessment Program and Environmental Technician Program.

March 31 – Peter Beckett and Graeme Spiers gave a presentation on Regreening Sudbury and a tour of Kelly Lake hill before and after treatment sites as well as Copper Cliff sites to 20 students enrolled in the Mineral Exploitation and Biosphere Program at Laurentian University.

April 2 – Sarah Woods attended a poster presentation at the School of Architecture by second year Architecture and Ecology students. Groups studied various components of the Junction Creek watershed, including regreening and made good use of the Regreening App and the City of Greater Sudbury website in their research.

April 10 – Peter Beckett and Graeme Spiers provided a presentation on 40+ years of Regreening the Sudbury Landscape and a tour of a number of treated sites to 15 students from Camborne School of Mines (United Kingdom) as part of the M.Sc Field School Ontario 2019 Tour.

May 11 – Franco Mariotti, Peter Beckett and Graham Spiers provided a tour of the Jane Goodall Trail for 25 participants from the Ontario Nature Regional meeting.

June 11 – Tina McCaffrey with staff members Cory Laurin, Kayla Stewart and Christine Hurst and Education Outreach Coordinator Cassieanna Krane provided a tour of the Jane Goodall Reclamation Trail for 87 students from Valley View Public School.

August 12-18 – Stephen Monet and Bill Lautenbach provided talks to a delegation from Peru at a 5-day event hosted by the Laurentian University's School of Mines. There was also a presentation by Sudbury Integrated Nickel Operations and Quentin Smith gave a tour on behalf of Vale. Peter Beckett and Graeme Spiers also toured this group which included members of the University, the senate and government elected officials. They also attended a one week short course with the group on land restoration.

September 4 – Tina McCaffrey provided a presentation to the second cohort of the Developing Indigenous Environmental Keepers program which is being administered by Atikameksheng. After the talk and question period, the 24 students toured the Jane Goodall Reclamation Trail with assistance from staff members Cory Laurin, Kayla Stewart and Christine Hurst.

October 21 – Bill Lautenbach provided a presentation to 25 members of the Rotary Club of Sudbury on municipal perspectives from 40 years of land restoration activity.

November 3-7 – Peter Beckett and Graeme Spiers had a poster on Sudbury, Ontario, Canada: 40+ Years of Healing a Smelter-Impacted Landscape through Creating Novel Functional Ecosystems at the [SETAC North America 40th Annual Meeting](#) in Toronto.

December 11 – Chase Beaudoin of Northern Wildflowers shared the Sudbury restoration story with the Brigham Young University Regreening Club in Provo, Utah. He shared a video of Dr. John Gunn’s Tedx presentation “[Global lessons from a hard-rock mining town](#)” available online as well as one of the Regreening Classroom Presentations. Approximately 15 club members were in attendance and included undergraduate and post graduate students.

Conferences

56th Annual Alberta Soil Science Workshop, Calgary, Alberta

The [Workshop](#) themed ‘Soil Resilience and Extreme Events’ was held from February 19-21 at the Delta Calgary South. On February 20 Graeme Spiers and Peter Beckett provided a one hour session on “Sudbury Landscape Status Forty Five Years after the Superstack”.

7th Annual North Dakota Reclamation Conference

"Reflecting on Reclamation" was the theme of this conference held at the Astoria Hotel and Events Center in Dickinson, North Dakota on February 25-26. Progress in reclamation policies, soil remediation and vegetation establishment were in the spotlight. The session on February 25 highlighted keynote speaker Graeme Spiers, who presented a talk on “The Sudbury Protocol – 40 years of Landscape Healing.” The event was covered by [Tri-State Livestock News](#), [Roundup web.com](#), [Morning Ag Clips](#), and again in [Roundup web.com](#).

SER 2019: 8th World Conference on Ecological Restoration

The Society of Ecological Restoration (SER) held its [8th World Conference on Ecological Restoration](#) themed Restoring Land, Water & Community Resilience from September 24-28 in Cape Town, South Africa. Peter Beckett provided a presentation on Sudbury, Ontario, Canada: 40+ years of healing and creating novel functional ecosystems on a smelter-impacted landscape. Refer to page 17 of the [abstract](#).

Latornell Conservation Symposium

As Chair of VETAC, Peter Beckett was an invited Keynote Speaker at the [Latornell Conservation Symposium](#), held in Alliston, Ontario from November 19-21. His talk was entitled Sudbury, Canada – 40+ Years of Regreening and Healing a Smelter-Impacted Landscape.

Communication

Publications / Web News

March 5 – Article: [Growing up among the slag heaps of Sudbury was a gift](#), Suesan Saville contributed to The Globe and Mail.

March 25 – Online Article: [Sudbury - A mine town's fall and recovery](#), by Merete Lindstrøm.

May 17 – Online Article: [VETAC Recognized for Raising Environmental Awareness](#), City of Greater Sudbury

June 7 – Article: [‘Moonscape’ Sudbury deserves global recognition for its environmental 180](#), by John Gunn, Guest Column, Northern Ontario Business.

Summer 2019 – Article: [Seeing is believing – Sudbury’s Regreening Program](#), Green Living magazine, EarthCare Sudbury, page 15.

August 19 – Online Article: [Regreening plays a big role in protecting water quality, study finds](#), by Darren MacDonald, Sudbury.com

September 25 – Online Article: [Sudbury’s green miracle still not complete - 'We’ve shown the world what we can do. Now it’s time to finish the job that we started four decades ago'](#), Bill Steer, Special to The Nugget, Sudbury Star.

September 25 – Online Article: [Vale continues annual aerial seeding targeting barren land south of Coniston - Company says annual reseeding across area an attempt to correct ‘some historic mistakes’](#), CBC News.

October 10 – Advertisement: [Contest Winners Ugliest Schoolyard](#), City of Greater Sudbury, Regreening Program, Northern Life, page 6.

November 1 – Online Article: [Sudbury's acid-damaged lakes have recovered faster than expected, experts say](#), Sudbury.com.

November 8 – Article: [Sudbury's regreening inspired this Seattle architect to rethink how humans build](#), Colleen Romaniuk, Sudbury.com.

Radio Interviews

March 5 – [CBC's Ideas airing a documentary about Sudbury](#), Morning North with Markus Schwabe.

April 22 – [The Sudbury Effect: Lessons from a regreened city](#), CBC Radio’s IDEAS with Paul Kennedy (scroll to correct date).

August 25 – [La restauration des sols et des forêts de la région de Sudbury](#), Radio-Canada’s program “Les années lumière” with Damien Grafton (chose 13 h 21).

Television

September 13 – [2019 Ugliest Schoolyard Contest Makeover at Lansdowne Public School](#), with Molly Frommer, CTV News Northern Ontario.

VETAC Members 2019

Chair

Dr. Peter Beckett, Laurentian University

Co-Vice Chairs

John Negusanti, Citizen

Sarah Woods, Conservation Sudbury

Members

Nathan Basiliko	Laurentian University
Katherine Benkovich	Sudbury Integrated Nickel Operations
Jennifer Braun	Wood PLC; Blue Heron Environmental
Hannah Burke	Wahnapitae First Nation
Tony Fasciano	Citizen
Vanessa Felix	KGHM, Pioneer Construction
Enzo Floreani	Sudbury Master Gardener
Jenny Fortier	Northern Wildflowers
Marc Hébert	Collège Boréal
Wayne Hugli	Sudbury Horticultural Society
Jim Ilnitski	Citizen
Bill Lautenbach	Citizen
Tim Lehman	Ministry of Natural Resources and Forestry
Serena Maki	Blue Heron Environmental
Franco Mariotti	Citizen
Stephanie Marshall	Sudbury Integrated Nickel Operations
Tina McCaffrey	City of Greater Sudbury, Regreening Program
Samantha McGarry	Sudbury Integrated Nickel Operations
Stephen Monet	City of Greater Sudbury, Environmental Planning Initiatives
Laura Mucklow	Sudbury Integrated Nickel Operations
Mike Peters	Citizen
Quentin Smith	Vale
Graeme Spiers	Laurentian University
Ben van Drunen	Hollandia Land & Environmental Solutions



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