

2000



Land Reclamation Program

# Annual Report

**December 1, 2000**

December  
2000

The Planning and Development Department

Regional Municipality of Sudbury



## **2000 PROGRAM**

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# 1) PROGRAM ACHIEVEMENTS

## a) Summary

In 2000, The Regional Municipality of Sudbury's Land Reclamation Program continued its dedication towards a greener Sudbury. With a work crew of over 300 individuals, the program was able to plant over 520,000 trees. The millennium year was marked by a ceremonial plant of the 5 millionth tree. With the completion of the fall plant, the total trees planted within the Region's boundaries exceeds 6 million. An effort was made to reclaim areas around Silver Lake and Kelly Lake / Southview Dr. by liming , fertilizing, and seeding over 16 hectares of land.

*The following summarizes some of the activities that occurred:*

Task	Result 2000	Total Completed
Area Limed	16.2 ha	3,294 ha
Area Fertilized	15.7ha	3,135ha
Area Seeded	16.2 ha	3015 ha
Trees Planted	529,184	6,050,897

### Funding Partners

- The Regional Municipality of Sudbury
- TransCanada Energy Limited / Tree Canada Foundation
- Eddie Bauer /Tree Canada Foundation
- Millennium Tree Program/Tree Canada Foundation
- Human Resources Development Canada (HRDC)
- Ontario Works
- INCO Limited
- Falconbridge Limited

### Other Partners

- District of Sudbury Social Services Administration Board
- Nickel District Conservation Authority
- YMCA - Employment Services
- Laurentian University - Geography Department
- Sudbury Community Foundation
- Vermillion Forest Management Company

## **b) Labour**

With the assistance from various funding agencies, many different positions were made possible this year. These positions ranged from working in the “field” planting trees, to administration and support. The labour force this year was primarily made up of participants from the Ontario Works Program. HRDC funding for - Job Creation Partnership (JCP) participants was made available late this year with only 5 weeks remaining in the tree planting season. This labour enabled us to complete our targets and plant the trees that were donated to the program. Other positions were also made possible through JCP such as a Researcher, Geographic Information System (GIS) Technician, Administrative Assistant, Computer Graphics Technician and Crew Leaders.

## **c) Ontario Works**

This was the fourth year that the Land Reclamation Program has “partnered” with the District of Sudbury Social Services Administration Board and the Regional Municipality of Sudbury’s Health and Social Services Department to facilitate the Community Placement component of the Ontario Works Program.

Two sessions, each twelve weeks in duration, provided 50 people the opportunity to fill 25 full time positions, each participating two days per week at eight hours per day, and 80 people the opportunity to fill 20 part time positions, each participating one day per week at eight hours per day. A third and fourth session were made available this year in an effort to accommodate the needs of secondary and post secondary students. Post secondary students were provided with 20 part time positions (one day per week) for 80 participants, over an 11 week period from June 12 to August 24. Secondary students were provided with 10 part time positions (one day per week) for 80 participants, over a 7 week period from July 10 to August 24.

The individuals who participated on the program planted tree seedlings and “greened” barren landscapes by spreading lime, fertilizer and seed. In addition to assisting with the 2000 Land Reclamation Program, these individuals received job experience, a work history, a letter of reference, certified Workplace Hazardous Materials Information System (WHMIS) training as well as job search skills.

Our “partnering” with Ontario Works has been very successful. Many individuals have gained valuable work experience and have become employed.

## LABOUR STRUCTURE - 2000 Land Reclamation Program

Program	Number of Positions	Cost to Region	Activity
Regional Municipality of Sudbury <i>Temporary/Summer Students</i>	3	80 %	administrative assistant, tree planting, liming
Regional Municipality of Sudbury <i>Temporary Employees</i>	5	100 %	Supervisor, Foreman, Crew Leader/Bus Driver, labourer, GIS mapping
Human Resource Development Canada ( <i>Job Creation Partnership</i> )	10	NIL	tree planting
	2	\$0.70/hr (each)	crew leaders
	4	NIL	research, GIS mapping, computer graphics, administration
Ontario Works	45 <b>130 people</b> <b>Session 1</b>	NIL	tree planting, liming
	45 <b>130 people</b> <b>Session 2</b>	NIL	tree planting, liming
	20 <b>80 people</b> <b>Post Secondary</b>	NIL	tree planting, liming
	10 <b>40 people</b> <b>Secondary</b>	NIL	tree planting, liming

**Total**
**144**

## d) Job Creation Partnership

Human Resource Development Canada united with the Land Reclamation Program through the Job Creation Partnership late this year with only 5 weeks left in the season. We were fortunate to receive 16 job placements. These included 10 labourer positions, and 6 technical and administrative positions. Individuals participating on the Program through JCP worked eight hours a day, four days per week for the remaining five weeks of the Program. The technical and administrative positions were extended beyond the field end date, which will be beneficial in wrapping up the events of the year 2000 and preparing for the next season. All participants were provided with Job Search Skills seminars, which included topics on resume writing, interview preparation and job search skills. They also received certified WHMIS training and a letter of reference.

## e) Volunteers

Over 10,000 trees were planted by over **250 volunteers** who assisted with this year's program. These volunteers were involved in a variety of organized groups or clubs. The volunteer program provides educational opportunity on environmental issues, information on the Region's Land Reclamation Program, as well as tree planting experience.

## 2) EVENTS

### a) Tree Giveaway

The annual Tree Giveaway was held Friday, May 12/00 and Saturday, May 13/00 at the New Sudbury Shopping Centre. Over **12,000 tree seedlings** were handed out by more than 10 volunteers. The tree species given out included White Spruce and the very popular Cedar. Over 6,000 individuals received trees.

Once again, Cambrian College was on hand to conduct soil testing for pH levels to anyone who brought in a sample, and the Master Gardeners were also available to offer gardening and landscaping advice.

The purpose of this event is to let the community know about the activities of the Land Reclamation Program and promote tree planting. This year we used this opportunity to promote the upcoming book "Healing the Landscape" which is a pictorial overview of the progress this Program has made in restoring trees to the Sudbury Region. Order forms were available to interested parties to prepay for a copy of the book, which will be available by March 31, 2001. Many interested individuals donated to this year's "collection" box, which totalled **\$1,622.25**.

## **b) Appreciation Barbeques**

This year, barbecue lunches were held for the participants of the Ontario Works Program. At these events, participants were thanked for their participation in the Land Reclamation Program and for their compliance to the Ontario Works Program. Awards, in the form of Program T-shirts and hats, were distributed to individuals with outstanding attendance and dedication to their Placement.

In all, four lunches were held to encompass the two sessions (12 weeks each) and the six crews per week (Full time and Part time). On July 25 & 26/00, this event took place for Session I and on Oct. 17 & 18/00, for Session II. These barbeques were held at Fielding Park in Walden where people were able to relax in the beautiful landscape and watch some of the water fowl which inhabit the park.

These lunches were a great success, and the Participants were feeling a part of something that was important, and appreciated by many people.

## **c) Continuous Improvement Sessions**

Upon completion of their work session, participants and employees took part in an information session to discuss the Program activities. Questions were asked to determine what improvements and efficiencies could be made. The intent of this session, was to provide all participants a forum for discussing their ideas, as well as an opportunity to learn what issues remain challenges for improvement.

Several suggestions were made and should be investigated for the 2001 season. One suggestion was to improve communication between supervisory staff members via walkie talkies which would in turn provide consistent direction to work crews in various locations of the site. Washroom facility accessibility was also an issue, although we already do the best we can to accommodate the crew in this issue.

## **d) Planting of the 5 Millionth Tree Ceremony**

On Wednesday, September 13/00, at 3:00pm, the Land Reclamation Program celebrated the ceremonial planting of its' 5 millionth tree. This event took place at Memorial Park on Minto Street, where a 12 foot tall Red Pine was planted. The event was attended by representatives from the VETAC Committee, many of our partners, members of council, provincial government, interested citizens and our Land Reclamation Crew. The media was also on hand.



### **e) A Gift That Grows campaign**

This campaign has enjoyed another successful year with over 30 people donating to the Sudbury Community Foundation's, Tree Fund, generating over \$700. This program helps to celebrate an event or commemorate a memorial, by planting a tree seedling in dedication to someone special. These trees are planted in the Tom Davies Commemorative Forest, located within the Lake Laurentian Conservation Area. The fund contributes a variety of trees to this forest such as White Pine, Red Pine, Jack Pine, White Cedar, Tamarack, and White Spruce.

The donations are pooled with other such gifts and invested - with the interest income distributed as a grant, back to the Land Reclamation Program. The capital is never touched and continues to grow, generating income to aid in the preservation, protection and improvement of watersheds, forests and ecosystems within the Regional Municipality of Sudbury.

## **3) PROJECTS**

### **a) Mapping and Cartography**

#### **i) GIS Mapping**

Mapping is an important part of the planning and activities of the Land Reclamation Program. There has been a great deal of work completed by the Region's Land Reclamation program as well as by other groups and organizations. The records of what was planted, when and where, are very important to plan future efforts as well as monitor the survival and quality of previously planted and reclaimed sites.

***We have completed GIS mapping for the Land Reclamation Program for the following:***

- Tree Planting Sites (2000)
- Tree Planting Sites (1979 - 2000)
- Grassing and Greening (2000)
- Grassing and Greening (1978 - 2000)
- Monitoring and Research Sites (1978 - 2000)
- Work in Progress Sites (2000)
- Junction Creek Proposed and Clean-Up Sites (1999 - 2000)
- Proposed Land Reclamation Sites (1999 - 2003+)

To upgrade records of the program's activities utilizing current technology, all previous mapping of Land Reclamation activities (tree planting and greening)

were digitized and stored on computer. With this type of mapping, a cumulative map can be constructed by overlaying or adding all activities from year to year. In this format, Land Reclamation progress can be clearly defined.

Another project completed was to identify what areas in the Region still required some form of treatment. This was accomplished by first updating a base map outlining roads, buildings, residential areas and bodies of water. From this point, FRI maps from the MNR were utilized to determine what areas from their analysis were still in need of reforestation. The work that the Land Reclamation Program had completed was deleted from this map and all other areas were “ground truthed” for accuracy.

The Land Reclamation data summaries completed in the past years were updated to the current level of technology available today. All year end mapping summaries were digitized and compiled on a database and a cumulative map was developed including activities over the past twenty years for tree planting and greening activities.

Through the use of other data sources for urban use areas, waterways and already forested areas, as well as Land Reclamation activities, a proposed Land Reclamation map was created which outlines areas in the Region that are still in need of some form of reclamation activities, be it liming or tree planting or both.

Updating yearly efforts and locations of activity, can now be completed much more efficiently and in a shorter time frame. GIS mapping has produced drawings that are very clear and easy to read. One of the added benefits of GIS mapping is that various combinations or pieces of information can be produced, as information is now stored in a data base.

Future plans are in progress to develop interactive mapping. All of the Land Reclamation activities will be available via the internet. The end user will be able to see all available layers associated with the Land Reclamation Program. Layers such as tree planting sites, grassing and greening sites, research and monitoring sites, proposed Land Reclamation and tree planting sites. Data bases associated with the layers and pictures will also be available for viewing. This service will allow anyone interested to see where we have been and follow where we are going with the Land Reclamation activities.

## **ii) Five Year Plan**

We have utilized GIS mapping to assist with the development of a five year plan. The use of GIS has enabled us to produce more accurate mapping. In addition, the

quality and production of the drawings are very professional and easier to read.

This five year plan identifies the future direction for the program and outlines what areas are left for reclamation and tree planting. This plan will serve as a tool for planning yearly programmes as well as providing an overall outlook for the program. The capability of GIS, will allow us flexibility in creating drawings with various pieces of information.

## **b) Monitoring and Research**

Ongoing research projects that were initiated in previous years were monitored in the fall of 2000. These projects included Leaf Compost Experimental Plots and a Black Spruce Survival Study. Other research projects were difficult to monitor due to the late start of the funding for this position.

## **c) “ Healing the Landscape”**

A bilingual artistic photographic book celebrating land reclamation achievements in the Sudbury region was initiated as a ‘Millennium Project’, by the VETAC Committee. The book is to celebrate the regreening of the Sudbury Region and the beginning of the new Millennium. The purpose of creating this keepsake is to illustrate the marriage of science and art in a compelling story of revegetation and restoration of the devastated Sudbury area. 5,000 books will be printed in full colour, high gloss, landscape format (11.5” x 10”). A portion of these books (3,500) will be donated to libraries, schools and environmental organizations across Canada and the world and the remaining 1,500 will be sold. All proceeds derived from the sale of this book will be donated to the Sudbury Community Foundation's Tree Fund, thereby furthering the ‘regreening’ effort in the community. “Healing the Landscape” will be available to the public on March 21, 2001 at Tom Davies Square, Chapters, Black Cat Too! and Muirheads and retails at \$ 39.95 + GST.

## **4) OTHER**

### **a) Media**

Several media covered the progress and/or activities of the Land Reclamation Program. Media response was positive and responded to many of our programs and events, including the Annual Tree Giveaway, the planting of the 5 Millionth Tree Ceremony and the ongoing production of “Healing the Landscape”.

### **i) Newspapers**

- Sudbury Star
- Northern Life

**ii) Magazines**

- Canadian Geographic (May/June 2000)

**iii) Television**

- MCTV Evening News
- Local Cable (Prevue Channel)
- Dessau, Germany

**iv) Radio**

- CBC Radio

**5) CHALLENGES FOR 2000**

The 2000 Land Reclamation Program was successful. All of the goals and expectations for the Program were met.

Several challenges have been explored for 2001. These include:

- Securing long term commitments from funding “partners”
- Initiating projects and programs proposed by VETAC sub-committees
- Establishing a long term tree supply
- Initiate a program to increase liming phase of program

## 6) FINANCIAL SUMMARY

The Land Reclamation Program was very fortunate to receive funding and material from outside “partners”. This year’s program cost over \$800,000 to operate. The Region of Sudbury contributed just over **\$131,000.00**. The Region therefore contributes **17%** of the Program. The other **83%** of the program costs are financed from others.

Financial Summary - Including “In-kind” contributions of labour and material.

Program Contributions by Others	Number	Weeks	Source	Amount
<b>LABOUR</b>				
HRDC - Job Creation Partnership	12	5	Federal	
	4	14	Federal	\$44,758.00
Ontario Works	380	4,400	Provincial	\$419,200.00
Jobs Ontario	3		Provincial	\$3,885.00
<b>CASH CONTRIBUTION</b>				
INCO Limited			Mining Co.	\$25,000.00
Falconbridge Limited			Mining Co.	\$10,000.00
District of Sudbury Social Services <i>Administration Board</i>			Provincial	\$36,600.00
<b>MATERIAL CONTRIBUTION</b>				
NDCA (Trees)	9,600		Private	\$2,880.00
<b>Tree Canada Foundation:</b>				
-Eddie Bauer Co.(Trees)	50,000		Private	\$15,000.00
-TransCanada Energy (Trees)	200,971		Private	\$60,291.30
-Millennium Tree Program (Trees)	69,594		Private	\$20,878.20
<b>Sub-Total</b>				<b>\$637,197.50</b>
<b>Region of Sudbury Contribution</b>				<b>\$138,424.00</b>
<b>Region Tree Purchase Reserve</b>				<b>\$40,000.00</b>
<b>GRAND TOTAL</b>				<b>\$816,916.50</b>



# KEY FACTS

## 2000 Quick Summary

- 529,184 tree seedlings were planted in 2000
- 16.2 ha or 39 acres of land was limed, at locations off Southview Drive, and around the Silver Lake watershed
- 15.7 ha or 38 acres of land was fertilized
- 16.2 ha or 39 acres of land was seeded
- almost 300 individuals participated in the Program through Ontario Works
- 12 individuals participated in the Program through Job Creation Partnership
- over 250 volunteers participated in this year's program, planting trees throughout the Region
- over 12,000 tree seedlings were given away to residents of the Regional Municipality of Sudbury
- to date, 6,050,897 tree seedlings have been planted throughout the Regional Municipality of Sudbury as a part of the Land Reclamation Program

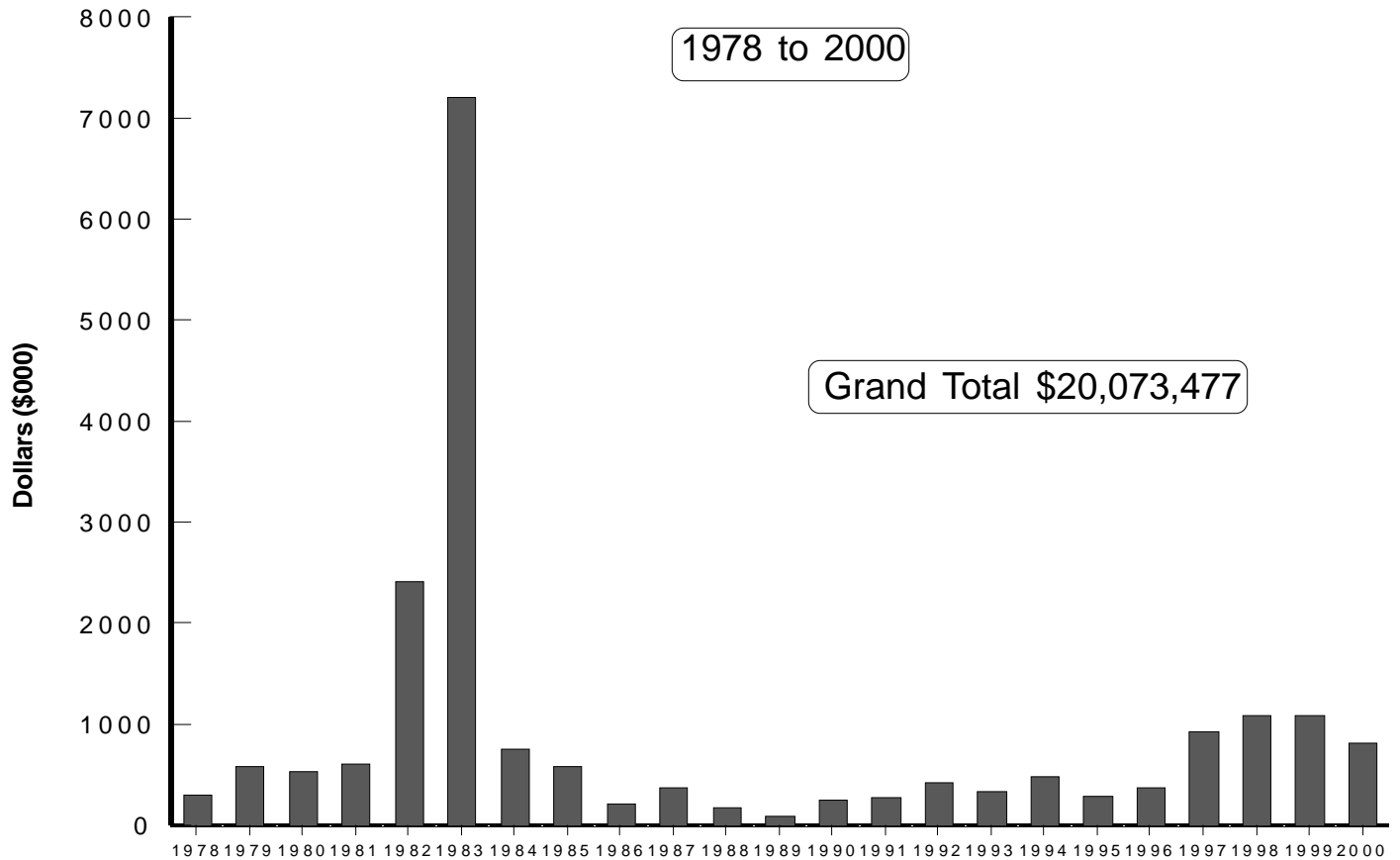
## Funding Partners Included

- The Regional Municipality of Sudbury
- TransCanada Energy Limited / Tree Canada Foundation
- Eddie Bauer / Tree Canada Foundation
- Tree Canada Foundation
- Human Resources and Development Canada (HRDC)
- Ontario Works
- INCO Limited
- Falconbridge Limited

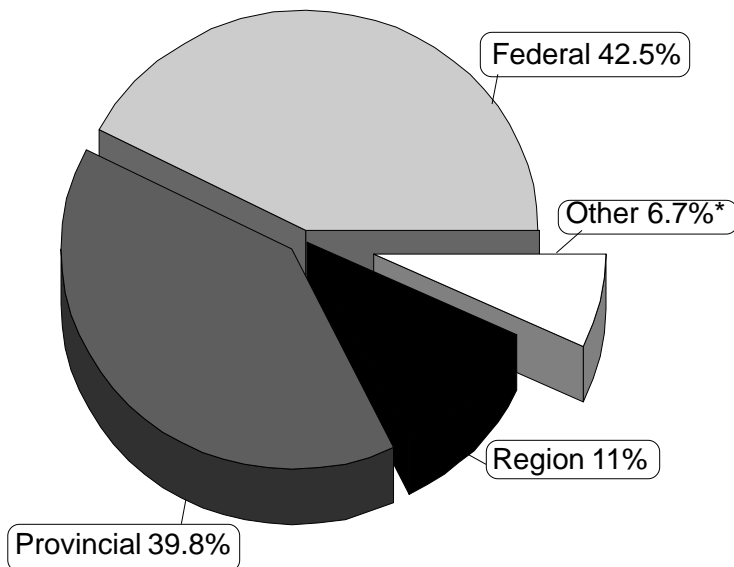
## Other Partners Included

- District of Sudbury Social Services Administration Board
- Nickel District Conservation Authority
- YMCA Employment Services
- Laurentian University - Geography Department
- Sudbury Community Foundation
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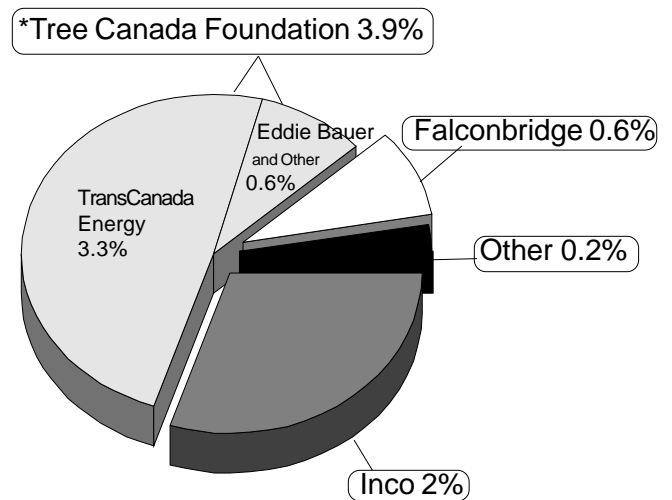
## Yearly Financial Contributions To Date



### OVERALL PERCENTAGES



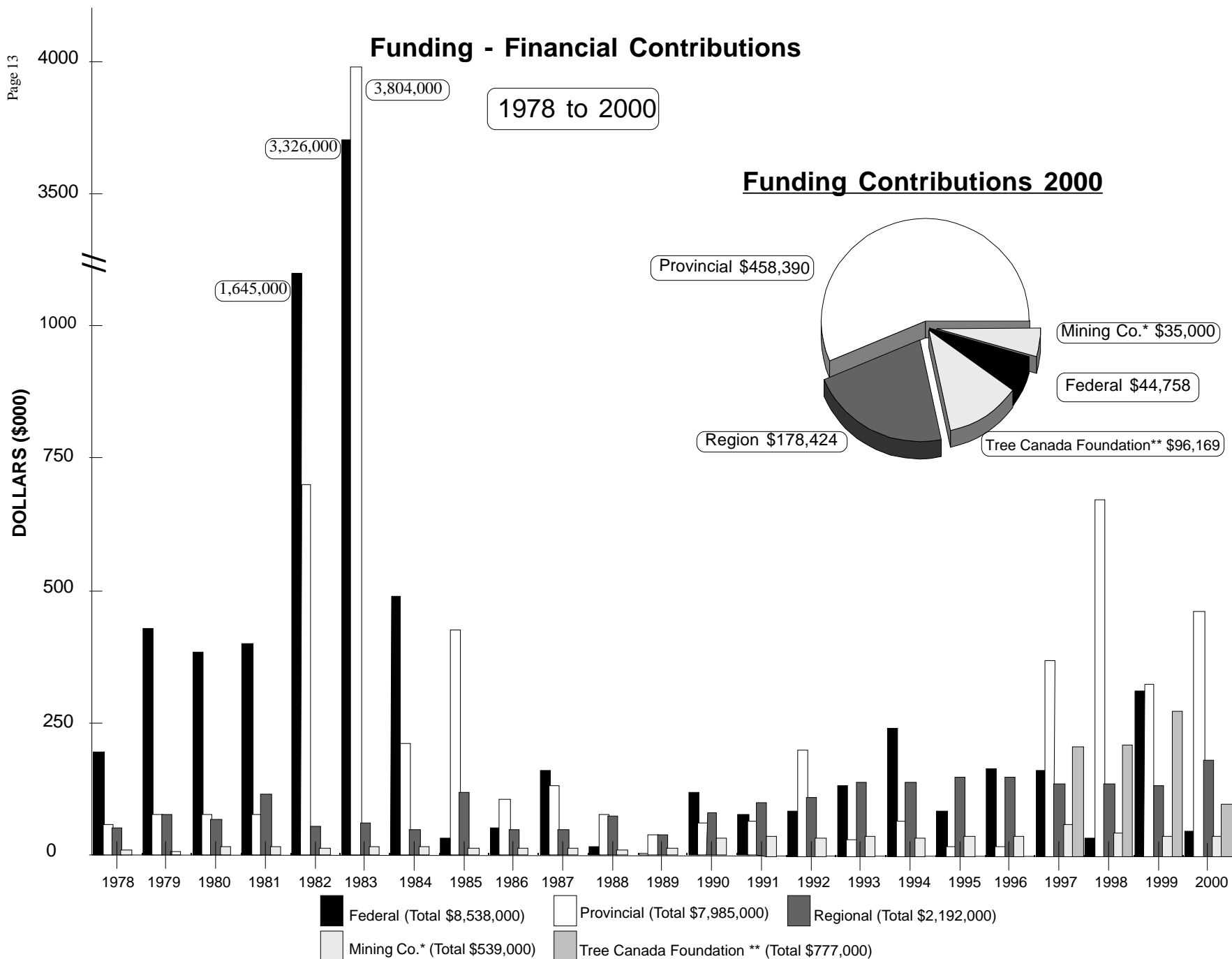
### \*OTHER 6.7%



\*Tree Canada Foundation includes many sponsors including Eddie Bauer and Trans Canada Energy.

## Funding - Financial Contributions

1978 to 2000



\* Mining Co. includes: INCO and Falconbridge

\*\*Tree Canada Foundation includes various sponsors



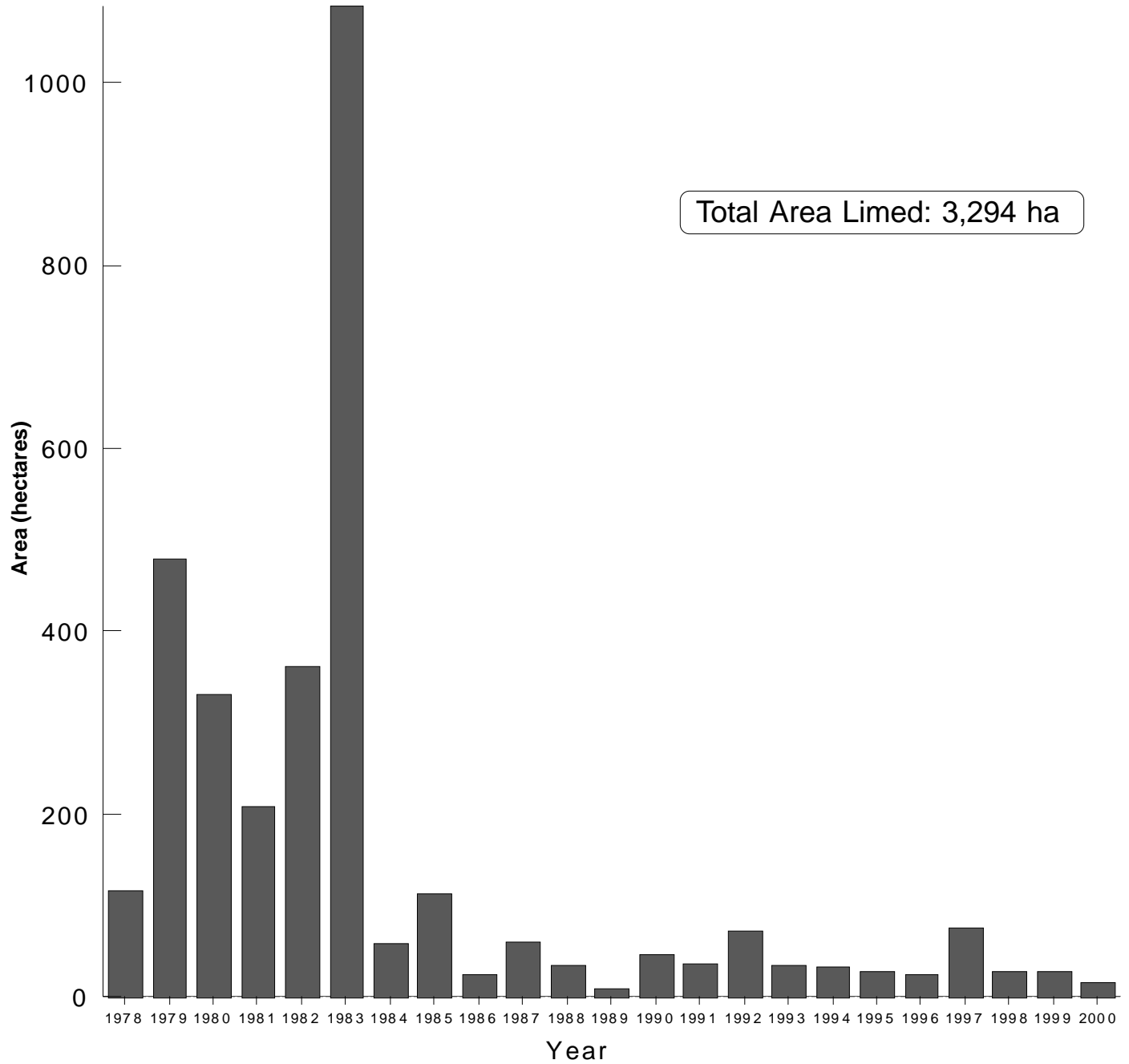
Regional Municipality of Sudbury

The Planning and Development Department  
December 2000



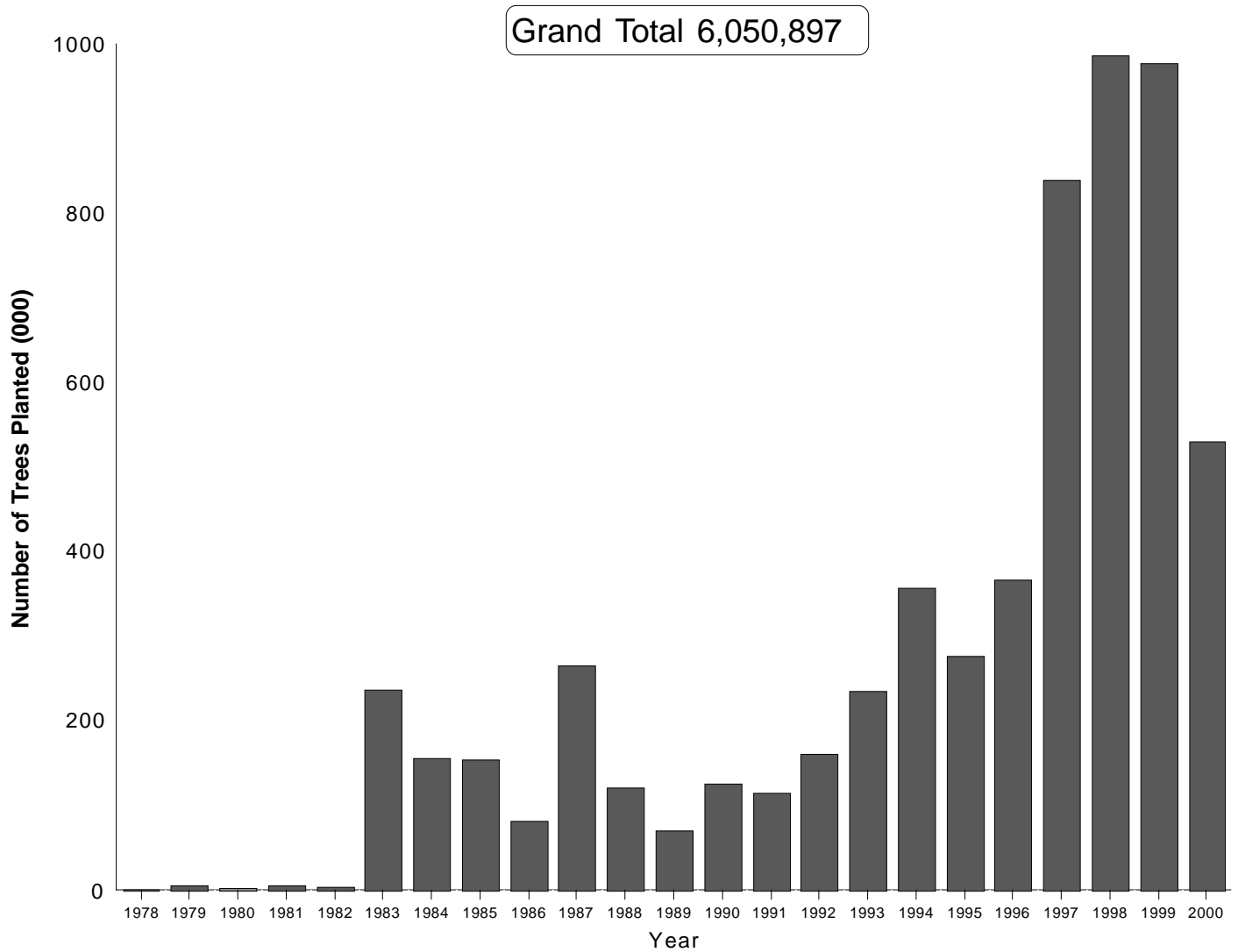
## Yearly Liming To Date

1978 to 2000



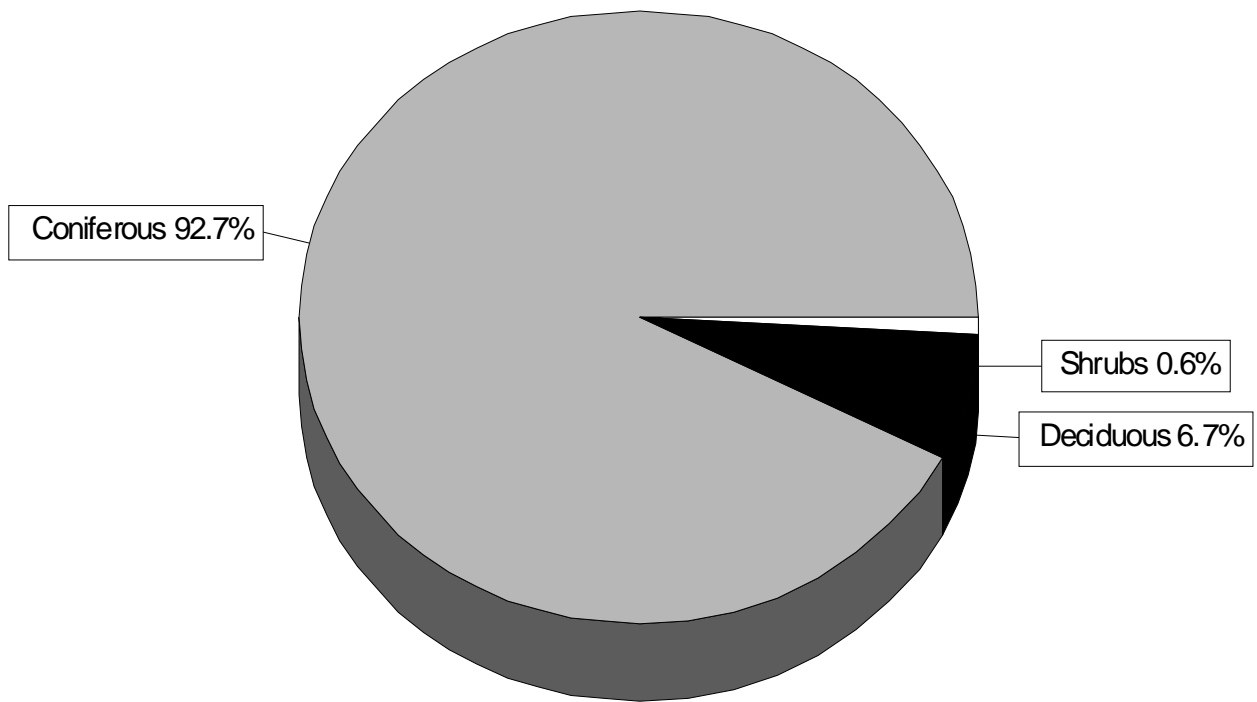
## Yearly Trees Planted To Date

1978 to 2000

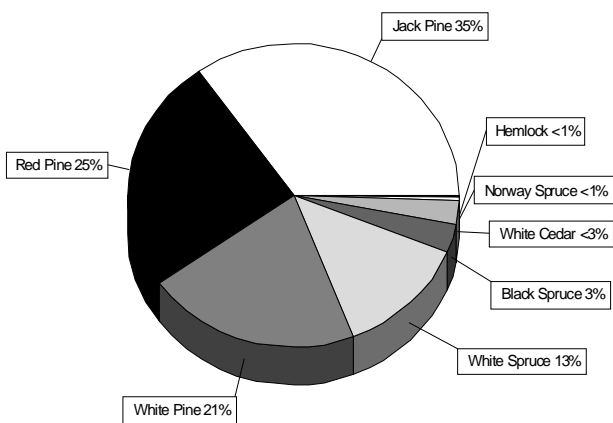


## Percentage Of Species Planted

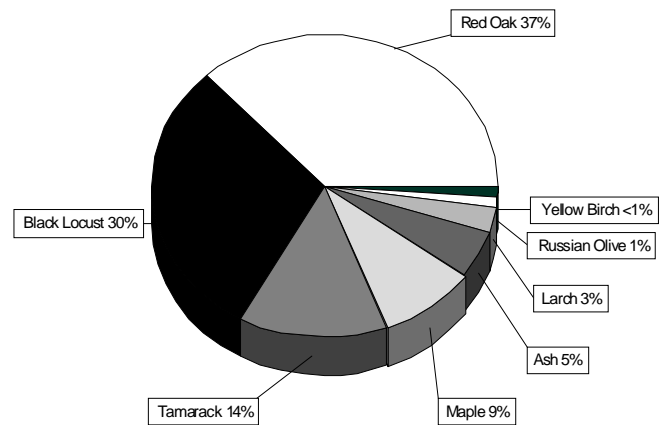
1978 to 2000



### Coniferous Species



### Deciduous Species



## Completed and Future Reclamation Activities

1978 to 2000

Total Treatment Area 29,771 ha

(Lime, Fertilizer and Seed)

