



Bashful Bulrush,  
*Trichophorum planifolium*  
JULIE AUBIN  
Photo: Issac Applebaum

### *Flora: Fragile Habitats, Declining Ecosystems*

The sculptures illustrating this report to the community are just some of the fifty original ceramic pieces depicting Canada's most endangered plants in the installation *Flora: Fragile Habitats, Declining Ecosystems* by Ontario artists Julie Aubin and Darlene Benner. Julie and Darlene began researching their exciting project to interpret the beauty of Canada's endangered flora in porcelain in 1998 in cooperation with Royal Botanical Gardens. Since then each has executed 25 individual pieces that inspire, puzzle, provoke thought and touch off discussion as to the meaning of "endangered." The *Flora* exhibit was first put on display in 2004 at Burlington Art Centre and in 2005 at Grimsby Public Art Gallery. It is booked at various galleries and museums for future shows.



*Flora: Fragile Habitats, Declining Ecosystems*, Burlington Art Centre, 2004

#### OUR MISSION

To be a living museum which serves local, regional and global communities while developing and promoting public understanding of the relationship between the plant world, humanity and the rest of nature.

#### ÉNONCÉ DE MISSION

Être un musée vivant au service des communautés locale, régionale et internationale, tout en développant et en promouvant la compréhension par le public des relations entre le monde végétal, l'humanité et le reste de la nature.

#### VISION AND MANDATE

Royal Botanical Gardens has a vital role to play as a botanic garden in the 21st century with key roles in the areas of horticulture, conservation, education science and research.

#### FUNDERS

Royal Botanical Gardens is funded by the people of Ontario through Ontario Ministry of Culture, City of Hamilton, Regional Municipality of Halton, Royal Botanical Gardens members, The Auxiliary of Royal Botanical Gardens, and many corporations, foundations and individuals.

## LETTER FROM BOARD CHAIR AND EXECUTIVE DIRECTOR

The year 2005 was a watershed for Royal Botanical Gardens. It was a year that saw questions asked and answered regarding the long-term mandate of Canada's largest botanical garden. It was not an easy year, but it was essential that a thorough review of the organization take place. The development and eventual adoption of a comprehensive plan, entitled "A Fresh Start for RBG," was written by a 10-member committee representing our funders: Province of Ontario, Ministry of Culture, Regional Municipality of Halton and City of Hamilton, together with Royal Botanical Gardens management, Board and Auxiliary and McMaster University. We would like to thank the individuals who sat on the Review Committee. Their collective work and subsequent report form the basis of our current business plan for 2006 and is an invaluable tool in moving forward to create, as the authors of the report stated:

*"a fresh, long-term vision for [Royal Botanical Gardens] in the 21st century. It links to the past and points to the future.*

*The Committee is of the view that [Royal Botanical Gardens] should, in the long term, fulfill the mandate of a modern botanic garden. Such a mandate has unique value to the region, the province and beyond."*

This annual report to the community is more than a set of financial statements. Our intent is to provide a definition of what a botanical garden is and does, together with an overview of activities at the Gardens during 2005. It is important to note that in 2005 the Gardens showed a small surplus. This is a significant improvement over 2004 and 2003.

In meeting with stakeholders and donors, it is clear that many, even those with our best interests at heart, do not fully understand the breadth of our landholdings or the scope of our work. This report tries to put these realities into an understandable context. Our playful inclusion of the liner, Queen Mary 2, in Royal Botanical Gardens' Cootes Paradise is one attempt at underscoring the scale of our 1,100 hectares (2,700 acres) or 11 square kilometers. Our cultivated lands represent six per cent of the total area. Remarkably, within the balance of Royal Botanical Gardens' natural lands grow 20 per cent of all uncultivated plants in Canada and nearly a third of all plants of Ontario!

Our responsibility now, with plan in hand and our mandate confirmed, is to protect, nurture and communicate the importance of our living museum, our Royal Botanical Gardens. Initiating a botanical garden at the western tip of Lake Ontario in the 1920s and 30s by City of Hamilton was no accident. Thomas B. McQuesten, a Hamilton lawyer and politician recognized as the driving force behind the founding of Royal Botanical Gardens, wrote to a colleague of his frustration:

*"We have to do good by stealth in this world and of course it is a fact of life which is evident in many activities, that a man who is striving to occupy himself with what are undoubtedly higher things, is called upon to meet never-ending difficulties in the way of performing them."*

We take heart that the struggle to do the right thing is not new, and has never been easy. We look forward to continuing the work of the institution in the areas of horticulture, education, conservation, science and research, and to ensuring that Royal Botanical Gardens continues and expands its unique role.



Terry Yates,  
Board Chair



Mark Runciman  
Executive Director



White Prairie Gentian,  
*Gentiana alba*  
DARLENE BENNER  
Photo: Sheila Clennell

## 2005 BOARD OF DIRECTORS

Under the Distinguished Patronage of  
The Honourable James K. Bartleman,  
Lieutenant Governor of Ontario

### Officers of the Board (from July 27, 2005)

Terry Yates, Chair

William Bennett, Vice-Chair

Christine Kerr, Vice-Chair

Ruth Lee, Treasurer

Stephen Oliver, Acting COO  
(until October 2005)

Mark Runciman, Acting Executive Director  
(from October 2005)

### Appointed by Council, City of Hamilton

(Term expires November 2006)

Ian Brisbin

Councillor Phil Bruckler

Yvonne Cunningham (until July 27, 2005)

Judge Peter Mitchell

Terry Yates (from July 27, 2005)

### Appointed by Council, Regional Municipality of Halton

(Term expires November 2006)

Councillor Rick Craven (from July 27, 2005)

Councillor Jane Fogal

Belinda Gallagher

Kathy Graham (from July 27, 2005)

Christine Kerr (from July 27, 2005)

Ruth Lee

### Appointed by the Lieutenant Governor-in-Council, Province of Ontario

Eric Cunningham (until November 16, 2008)

Madeleine Davidson

(from July 27, 2005 to April 12, 2007)

Alan Goddard (until July 27, 2005)

Ken Parker (until July 27, 2005)

### Additional members in place of appointments by the Governor General in Council, Canada

(Term expires July 27, 2008)

William Bennett

Andrew Nizielski

### Representing McMaster University

Dr. Peter George, President (until July 27, 2005)

### Auxiliary Liaison Member

(Auxiliary president term 2005–2006)

Rosemary Russell, President

### Royal Botanical Gardens

Board Appointments (until July 27, 2005)

Roger Couldrey

David Howell

Rick Kington

Annette McCoubrey

Marnie Spears

Grant Walsh, Chair

### Director Emeritus

Dr. Leslie Laking



No other botanical garden in the country possesses the natural botanical richness found at Royal Botanical Gardens.

Royal Botanical Gardens owns significant tracts of land in an area of Ontario that is ecologically unique. These natural lands exist at the intersection of the Carolinian and Saint Lawrence forest regions, situated at the western end of Lake Ontario. Royal Botanical Gardens' properties contain environmentally sensitive ecosystems, such as sections of the Niagara Escarpment (a UNESCO World Biosphere Reserve), remnants of oak savannahs and prairies, important Great Lakes coastal wetlands, and populations of nationally and provincially listed endangered plants and animals.

Cucumber Tree, *Magnolia acuminata*

DARLENE BENNER

Photo: Peter Hogan

## 2005 QUICK FACTS

Royal Botanical Gardens is the largest botanical garden in Canada. Royal Botanical Gardens features within its 60 documented collections approximately 40,000 plants displayed in five major garden exhibition areas.

### HISTORY

1930 — Received Royal Charter from King George V

1932 — Opened to the public

1941 — Established by an Act of the Provincial Legislature

### CHARITABLE REGISTRATION NUMBER

13350 0850 RR0001

### VISITATION

480,000 (approximate)

Paid visitors, school groups, conference attendees, trail users, etc.

### CORE PROGRAM AREAS

Horticulture  
Conservation  
Education  
Science and Research

### EMPLOYEES

Spring and summer: 145

Off season: 60 full-time (15 part-time)

### MEMBERSHIP

5,100 memberships

(combined individual and family involving more than 10,000 individuals)

### AUXILIARY VOLUNTEERS

350 volunteers provided

39,000 volunteer hours



Rock Garden

### ROYAL BOTANICAL GARDENS SIZE

Total: 1,100 hectares  
(2,700 acres or 11 square kilometres)

Cultivated Gardens:  
121 hectares (250 acres)

Nature Sanctuaries:  
971 hectares (2,450 acres)

Trails: 30 kilometres

### FUNDING

Annual revenue: \$8,404,145

58.5% Self-generated revenue

27.8% Government of Ontario

6.6% City of Hamilton

7.1% Region of Halton

### INVESTMENT MANAGER

Jarislowsky, Fraser Ltd



### HORTICULTURAL COLLECTIONS AND HIGHLIGHTS

8,000 taxa (different species and cultivars) in the permanent collection; maintains the International Lilac Registry

#### Rock Garden

100,000 spring flowering bulbs and 70,000 summer annuals

#### Arboretum

Features over 400 species and cultivars of lilacs, as well as extensive magnolia and crabapple collections

#### Laking Garden

250,000 iris, peony and daylily blooms; ornamental grasses; as well as an extensive Perennial Garden and a Heritage Garden

#### Hendrie Park Gardens

The Gardens' largest garden area is noted for its collection of 2,000 antique and hybrid roses in the Centennial Rose Garden, as well as Woodland, Scented and Medicinal Gardens and World of Botany

#### Mediterranean Garden/RBG Centre

Two-storey indoor garden, features plant species from the world's five Mediterranean regions

### HERBARIUM

80,000 specimens

### WILDLIFE SPECIES RECORDED

#### AT ROYAL BOTANICAL GARDENS

Birds: 248 species

Water birds: 38 species

Mammals: 25 species

Fish: 64 species

Amphibians: 9 species

### PLANT SPECIES RECORDED

#### AT ROYAL BOTANICAL GARDENS

1,108 species

### CULTURAL, SPECIAL EVENTS AND CONFERENCE FACILITIES

Annual events: Mediterranean Food & Wine Festival, Tulip Festival, Lilac Festival, Iris and Peony Celebration, Rose Celebration, Herb Fair, Dinner Theatre summer series, Tapas @ The Gardens, Red-Hot Jazz and Cool Blues, Paws in the Gardens, Gears and Gardens

Meetings and conferences:

hosted 55,660 people

Weddings and receptions:

68 couples married at the Gardens

### FACILITIES

RBG Centre,  
680 Plains Road West, Burlington

This administration, research and public learning facility houses the auditorium, classrooms, archives and herbarium, Mediterranean Garden, the children's Discovery Garden, The Garden's Café, Fountain Court Cafe and the Gardens' gift shop.

The Nature Interpretive Centre,  
Arboretum, Hamilton

The NIC, our gateway to Cootes Paradise, features exhibits on our wetland restoration activities and is the hub of our formal education program and children's camps.

Rock Garden Teahouse and Turner Pavilion Teahouse, Hendrie Park Gardens

Open seasonally, these areas provide visitors with a quick lunch or snack.



# WHAT IS A BOTANICAL GARDEN?

David A. Galbraith, PhD, Head of Scientific Development

In a world seemingly dominated by big-box stores and cloned franchise restaurants, botanical gardens are each as unique as fingerprints. Varying enormously in their sizes, collections, histories and governing agencies, they are refreshing links to a sense of place, and a sense of plants, that is sorely needed in the 21<sup>st</sup> century.

With plant collections and cultivated gardens in five locations, Royal Botanical Gardens offers major horticultural displays and is an important attraction for visitors from the local area and from farther afield. Its herbarium and library contributes to research and education, as do some university-based gardens. Royal Botanical Gardens is foremost amongst the roughly 70 per cent of botanical gardens and arboreta in Canada that own or manage areas of natural botanical beauty and ecological significance and use these to interpret the world of plants for the public.

With all of these different features — gardens and research, education and natural lands, community amenities and cultural festivals — just what, then, makes a garden botanical? In fact, there is no standard definition of “botanical garden” that includes all of the various attributes and programs. Certainly the use of the name botanical garden is not controlled by any agency or association, and professionals in the public horticulture sector continue to debate just how the term should be used.

Dr. Roy Taylor, former Director of the University of British Columbia Botanical Garden, wrote in the *Canadian Encyclopaedia*:

*“A botanical garden is distinguished from a public park or display garden [...] by having a documented collection of woody or herbaceous plants on which scientific research and teaching are conducted. [...]”*

At the heart of this succinct definition is the thought that botanical gardens are expert in developing living plant collections with complete documentation as to their origins and identification, and that they are able to use those living collections as part of a program of public enjoyment, education and discovery. They are, in fact, living biodiversity centres where knowledge about plants, and the plants themselves, are propagated for the next generation.

Equally important to the identity of botanical gardens is the ability to identify plants with authority, the process known to biologists as taxonomy. Literally meaning “to fix a name to an object,” taxonomy is a living skill that cannot be replaced by reference or guide books. With about 5,000 species of native plants across Canada, over 400,000 species of wild plants around the world, and hundreds of thousands of ornamental, horticultural or heritage

varieties, no one can know them all. Professional taxonomists and botanical gardens form networks through which knowledge is refined, shared and promoted.

The behind-the-scenes work of botanical gardens is by no means only of academic interest. Applied research into the economic and social uses of plants has long been central to their missions. The earliest botanical gardens were teaching and research centres for plant-based medicines. The archetype of a modern large botanical garden, Royal Botanic Gardens, Kew, in London, UK, substantially changed the economy of the British Empire in the 19th and 20th centuries. A particularly important example is the successful collection and transport to Kew of viable rubber tree seeds (*Hevea brasiliensis*) from Brazil in the 1870s, the progeny of which were developed into major plantations in South East Asia. Today’s world economy is still dependent upon the rubber obtained from the descendants of this program.

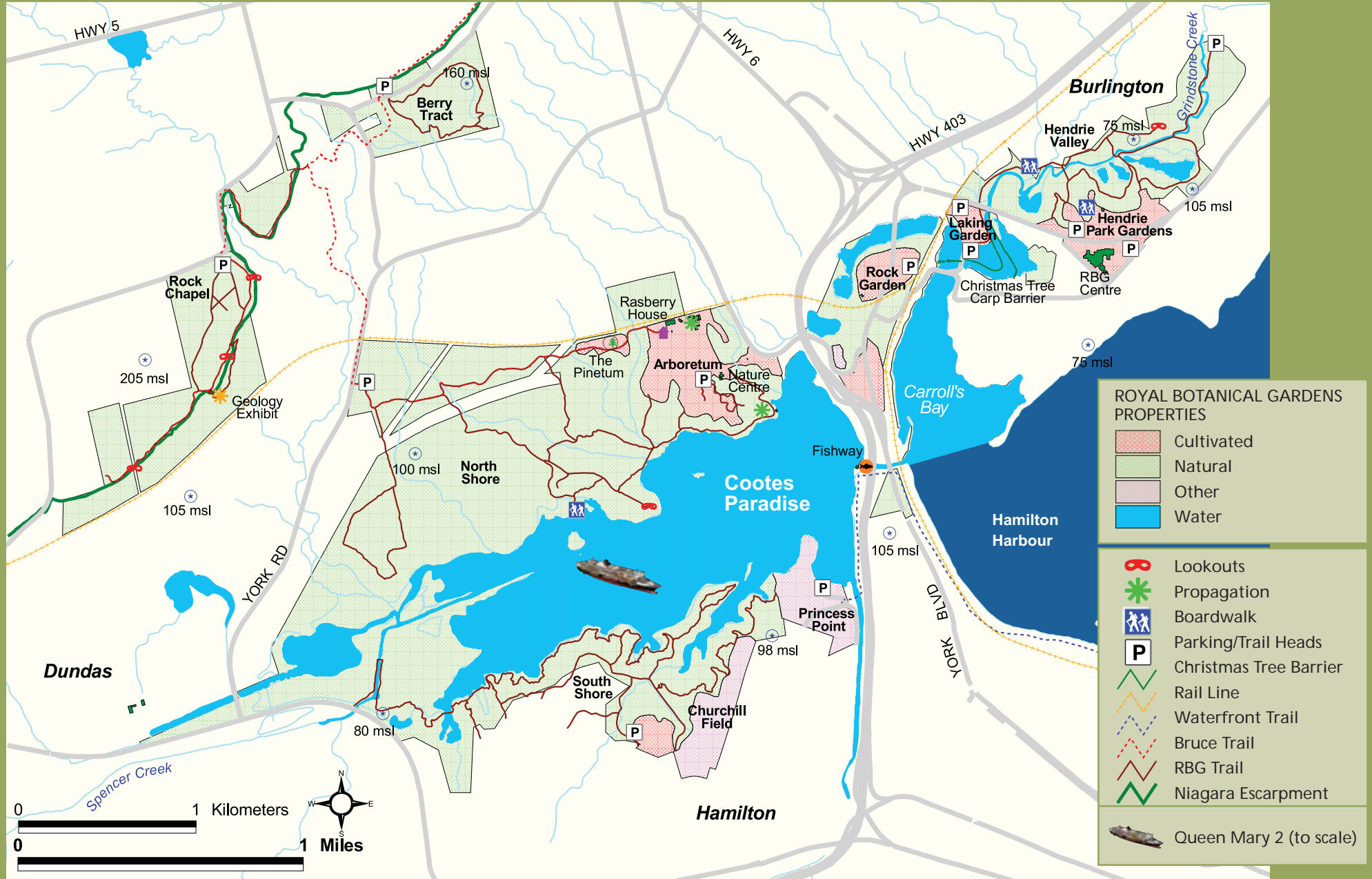
Closer to home, botanical gardens in Canada are involved in promoting horticulture as a form of occupational therapy, cultivating wild plants for novel food crops, using trees along roads to collect carbon dioxide from traffic emissions and abate sound pollution, growing endangered plants to boost wild populations, and testing natural medicines in the fight against diseases like diabetes. Increasingly, botanical gardens are being called upon to protect and promote the world of plants for the benefit of people and the planet. For example, the United Nations’ Convention on Biological Diversity has expressly recognized the role of botanical gardens in achieving ambitious goals for conserving the world’s plants.

So what are botanical gardens? In an era of specialization and oversimplification they are many things to many people. They are centres of education, conservation and research. They are beautiful horticultural displays, public amenities and community resources that teach practical skills for healthy living. They are places where people can connect to the living world throughout the year, following the changing seasons; where visitors can return again and again to beautify places cherished by earlier generations. In these places families build traditions, communities come together, and people learn and grow.

Dr. Leslie Laking, Royal Botanical Gardens’ longest-serving director, expressed the diversity and excitement of all of the things that make up a modern botanical garden when he wrote:

*“[Royal Botanical Gardens] puts nature’s beauty on display but it isn’t a park system. It teaches but it isn’t a school. It protects and preserves forest and marsh but it isn’t a conservation authority. It collects and propagates botanical knowledge and plant life. It is not a library, museum or laboratory. It’s all those things and more than their sum.”*

# ROYAL BOTANICAL GARDENS PROPERTIES





# HORTICULTURE

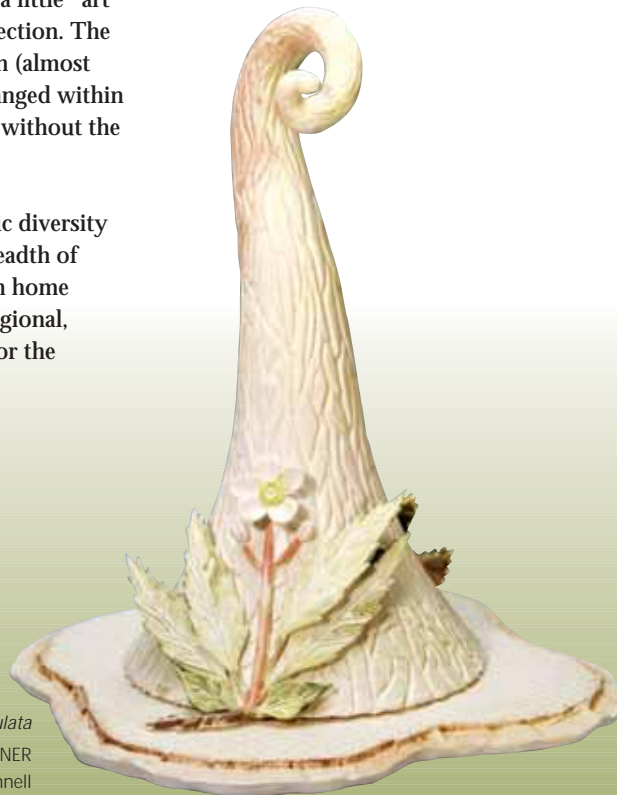
Harry Jongerden, Interim Director of Horticulture

The horticultural mandate of a botanical garden is to create beautiful gardens while demonstrating the science of horticulture. This delicate balance between art and science has always been a challenge to maintain.

Here at Royal Botanical Gardens our most significant natural assets, along with the vast natural lands that we steward, are to be found in our plant collections: lilacs, irises, roses and over 50 other unique collections. Royal Botanical Gardens' expertise in lilacs is such that we are entrusted with maintaining the International Lilac Registry. Other significant collections can be found throughout Royal Botanical Gardens' five garden areas – roses in Hendrie Park Gardens, irises in Laking Garden and hedges at the Arboretum, for example.

Plans have been formulated to bring a little “art” to the scientifically arranged iris collection. The current “irises all in a row” collection (almost 1,000 different kinds!) is being rearranged within a more aesthetically pleasing display without the loss of any scientific integrity.

Our plant collections preserve genetic diversity and demonstrate to gardeners the breadth of beauty available to them in their own home gardens. We are a significant local, regional, national and international resource for the gardener, both hobbyist and expert.



Spotted Wintergreen, *Chimaphila maculata*

DARLENE BENNER

Photo: Sheila Clennell



Lilac Dell, Arboretum

THE SPIRIT OF NATURE PHOTOGRAPHIC GROUP



Laking Garden



Hendrie Park Gardens

THE SPIRIT OF NATURE PHOTOGRAPHIC GROUP



## EDUCATION

Barbara McKean, Manager of Education

A botanical garden is, by definition, an educational institution, directed through our mandate to share the knowledge that we grow as broadly and widely as possible. Since 1941, Royal Botanical Gardens has grown through the cultivation of a strong scientific and educational base, and in 2005 our educational function was reaffirmed in the mandate review report.

Our educational mission provides a focus for our efforts:

*Education at Royal Botanical Gardens encourages environmental stewardship by providing meaningful and diverse learning experiences that connect people with the plant world and help them to understand the crucial role that plants play in sustaining and enhancing our lives and the environment.*

Royal Botanical Gardens has offered education programs for adults and children since 1947, and we currently host and lead a wide slate of in-house and outreach programs for learners of all ages, from preschoolers to seniors. Our most basic programming goal is to offer a wide range of relevant and high-quality programs that support our mandate. Our ultimate goal is the development of public understanding and appreciation of the relationship between the plant world, humanity and the rest of nature, as expressed through Royal Botanical Gardens' mission.

### 2005 HIGHLIGHTS

#### SCHOOL PROGRAMS

Royal Botanical Gardens' formal education programs are multi-sensory, hands-on and involve exploration of a wide variety of environments at the Gardens. Offered for all ages from pre-school to grade 12, these programs are designed by qualified teachers in consultation with school officials, to meet the expectations of the Ontario curriculum. We currently offer close to 40 curriculum-based programs to schools from around the Golden Horseshoe.

- Early in 2005, a grant from the Museums Assistance Program through the Partnership for Plants initiative, allowed us to develop new web-based learning materials to complement our biodiversity school programs.
- We hosted a climate change travelling exhibit from the Canadian Museum of Nature, and focused new programming in this area.
- Student teachers from various Faculties of Education developed their outdoor education skills during placements with us.
- In September we hosted the first "Bay Area Field Trip Fair." This event brought field trip destinations from around the Golden Horseshoe to Royal Botanical Gardens to showcase their programs for teachers, and it will be continued in 2006.



Children learn and have fun as they take part in nature education programs, sponsored by TD Financial Group.

#### DAY CAMPS

Royal Botanical Gardens offers exciting day camp and outdoor leadership experiences for children from four to 15. These camps are offered through the summer, as well as during the Christmas and March Breaks. Much like our formal education programs, these camps provide children with the opportunity to develop an understanding and appreciation of the plant world and the rest of nature through hands-on experiences, canoeing, nature walks and a variety of other outdoor games and activities. We currently offer a total of 53 camp-weeks each year, along with an extensive youth outdoor leadership training program, with over 1,000 participants in 2005.

#### PUBLIC PROGRAMS FOR CHILDREN AND FAMILIES

Royal Botanical Gardens presents a number of programs targeted for families, and children between the ages of three and 12, including our two longest-standing programs; the Junior Gardeners' Club (since 1947) and the award-winning Junior Naturalists' Club (a partnership program with Hamilton Naturalists' Club). Both these programs run throughout the year and seek to stimulate a life-long connection with gardening and nature. Family Sunday Fundays are held each month, and children's workshops in painting, cooking and nature lore are offered through the year. Our GeoQUEST programs were a popular addition to family programming in 2005.

#### BIRTHDAY PARTIES

Royal Botanical Gardens offers educational birthday parties at our Nature Interpretive Centre. These are designed to enrich and develop the imagination and knowledge of nature for the participants.

## ADULT EDUCATION

Royal Botanical Gardens offers over 250 public programs each year aimed at lifelong learners who wish to explore the various ways that plants touch our lives. Reflecting the Gardens' broad mandate, topics range from introductory to advanced level workshops and courses in gardening, birdwatching, native plant identification, painting, photography, flower arranging, botanical crafting, ethnobotany, and a smorgasbord of cooking classes. Courses are led by Royal Botanical Gardens staff, Auxiliary members and freelance experts and are presented indoors or out, as lectures, field studies, workshops or tours. Approximately 3,500 people participate annually.

## HORTICULTURAL THERAPY

Plants can be used to stimulate the emotional, physical and intellectual well-being of the chronically ill, the elderly, and psychiatric patients, and Royal Botanical Gardens is widely recognized for its expertise in this therapeutic medium. Our staff travel the Province to deliver workshops for recreational therapists from across Ontario, and coordinate a number of freelance instructors who deliver programs in a variety of seniors' homes on our behalf. Approximately 3,400 people participated in horticultural therapy training and programs in 2005.

## ON-SITE INFORMAL PROGRAMS AND INTERPRETATION

Casual visitors to the Gardens have a variety of opportunities to access our collections on an intellectual basis. Interpretation is a key component of the visitor experience and increasing our interpretive efforts helps us to drive new and repeat visitation. Interpretive tours during peak hours enhance the visitor's experience of the collections, while interpretive signage and hands-on Discovery Carts encourage exploration on a variety of levels. Our Discovery Garden provides a great way for children to explore their relationship with the natural world. Fishway demonstrations introduce thousands to our marsh restoration project, while children's activities at festivals connect children and the environment through the arts.

## GROUP TOUR PROGRAMS

Developed for the group travel market, Royal Botanical Gardens offers a variety of packages. Enhanced packages include guided tours and/or workshops. Royal Botanical Gardens partners with other regional attractions and acts as a tourism hub in the Greater Bay Area.

## OUTREACH PROGRAMS

Royal Botanical Gardens provides speakers to special interest groups and conferences and conventions throughout the province. We provide these groups with talks, slide shows and presentations on a wide range of topics. In 2005, Royal Botanical Gardens education staff spoke at professional development conferences and workshops across Ontario, for teachers, conservation education specialists and environmental educators, including the national Canadian Environmental Education and Communication conference, and the Ontario Society for Environmental Education Workshop.



Geocaching is fun for all ages and a great family activity.

## GeoQUEST: A NEW ROYAL BOTANICAL GARDENS ADVENTURE

Thanks to the generous support of the Nemar Foundation, in 2005 we were able to develop and launch a new range of programs under the GeoQUEST banner. Using Global Positioning System (GPS) technology, and based on a rapidly growing form of outdoor recreation called geocaching, GeoQUEST programs provide youth, families and adults the opportunity to learn how to use GPS units in an ecologically sensitive way, as they search for ecological knowledge.

Nemar's funding helped us to purchase a class set of GPS units, and hire a geocaching coordinator to develop new programs for schools, birthday parties and our day camps, as well as weekend workshops for individuals and families. We were also able to train staff as GreenCheck trainers (a national standard for GPS certification), and will be delivering intensive professional workshops in GPS and outdoor navigation in 2006.

Our weekend GeoQUEST programs are a great way to get families active and outdoors — even those with 'tweens' and young teens, who might not normally be interested in going hiking with their family. They also allow participants to "test drive" a GPS unit before investing in their own. Good media coverage and rave reviews from participants have made this unique set of programs a great success. Public GeoQUEST workshops are offered regularly throughout the year on Sunday afternoons. See our public program calendar inside *Now @ THE GARDENS* for details.

# SCIENCE AND CONSERVATION

David A. Galbraith, PhD, Head of Scientific Development; Carl Rothfels, Acting Natural Lands Steward, Field Botanist and Herbarium Curator; Tys Theysmeyer, Aquatic Ecologist

## AQUATIC HABITAT MANAGEMENT AND RESTORATION

### Cootes Paradise Marsh

Restoration of Cootes Paradise Marsh, one of the most important sites in Ontario for fish spawning and for birds and other wildlife, depends upon addressing problems ranging from water quality and levels, to invasive species. Water quality is fundamental; excess nutrients, sediment and toxins from runoff are the most serious issues. Further damage has been caused by regulation of lake levels and alteration of seasonal stream flows. Invasive species such as carp (*Cyprinus carpio*) have been favoured by these changes. As the carp's spawning and foraging behaviour uproots and crushes marsh plants, marsh ecosystems collapse.

The aquatic ecosystem recovery work at Royal Botanical Gardens is termed "Project Paradise," a partnership involving many stakeholders. Now in its second decade, this program involves monitoring, active intervention to reduce stresses, and restoration of damaged plants and other features. In 2005 efforts continued to address nutrient loads and invasive carp.



Leopard Frog (*Rana pipiens*)

### Hendrie Valley Marsh

Ecological restoration significantly ahead of progress in Cootes Paradise; many areas now boasting 100 percent aquatic plant cover; for most part carp excluded and water quality improving.

Partner: Environment Canada

### MONITORING

We monitor select animal or plant species and other indicators of the health of natural systems.

### Water Quality

In 2005 sewage overflow in Westdale Inlet was eliminated; in May, West Pond had the best water quality since monitoring was initiated in 1972; by late summer creeks were low; excessive algal growth indicated that overall water quality had declined to poor.

### Submergent Marsh Plant Monitoring

Monitoring indicated overall plant growth limited and restricted to waters less than 0.5m deep. General improvements in coverage, diversity of submergent plants noted. Highlights included rediscovery of Slender Naiad (*Najas flexilis*) after 50-year absence, significant increase in plant cover in Hendrie Valley, and discovery of probable Fries' Pondweed (*Potamogeton friesii*) at Mercer's Glen, a first record for Hamilton if confirmed.

Partner: Environment Canada

### Marsh Monitoring for Amphibians

Ongoing monitoring indicated gradual increase of several species. Yellow-Spotted Salamanders (*Ambystoma maculatum*), Leopard Frogs (*Rana pipiens*), American Toads (*Bufo americanus*) and Green Frogs (*R. clamitans*) most regularly encountered. Highlight of 2005 was discovery of Spring Peepers (*Hyla crucifer*) in Spencer Creek floodplain.

Partner: Bird Studies Canada

### Mollusc Inventory

Freshwater clams are a primary diet item of carp; prior to carp exclusion these were virtually eliminated from Cootes Paradise. Still uncommon overall, five species of clams were recorded in 2005; most common was the provincially rare Paper Pond Shell (*Utterbackia imbecillis*).

Partners: Fisheries and Oceans Canada, Conservation Halton, Hamilton Conservation Authority

### Sunfish Pond Turtles

Study of turtle populations as part of environmental assessment for CN Rail track expansion. Four turtle species documented in nesting and trapping survey.

Partner: CN Rail

## FISHERIES BIOLOGY AND HABITAT MANAGEMENT

A total of 73,519 fish (40,363 large; 33,156 incidental) of 34 different species were documented in 2005; over 5,500 (5,449 large, 61 incidental) non-native fish (carp, goldfish, and carp/goldfish hybrids) were prevented from entering the marsh.

Until carp exclusion began in 1997, native fish were rare and several species had been eliminated from the marsh. The total number of native fish has increased remarkably since the project began: most species have increased by a factor of four. The total number of carp continued to decline in 2005. Over the past five years adult carp attempting to enter Cootes Paradise for spawning and feeding has decreased by more than 20,000 fish.

Fish mortality over the winter in the Harbour continues to be substantial across species despite recovery efforts, demonstrated by decline in total number of fish through the Fishway over past two seasons and disappearance of 2003 year-class of Largemouth Bass (*Micropterus salmoides*).



### Rare Fish Species Encountered in 2005

- Bigmouth Buffalo (*Ictiobus cyprinellus*, nationally listed — Special Concern): three individuals recorded, one of our rarest fish (none found in 2004).
- Walleye (*Sander vitreus*): single large female, a first for the Fishway; were abundant in the Harbour historically.
- Greater Redhorse (*Moxostoma valenciennesi*): two of these rare fish were pulled up in same Fishway basket — first record of this provincially rare fish for entire western end of Lake Ontario.
- Golden Redhorse (*Moxostoma erythrurum*): one found — first documented record of this species for Canadian drainages of Lake Ontario.

*Partners:* Environment Canada, McMaster University, Bay Area Restoration Council, Fisheries and Oceans Canada, Hamilton Harbour Remedial Action Plan, Canadian Centre for Inland Waters

### Fisheries Management and Monitoring Plans

Fisheries management plan for Hamilton area was an important project in 2005, as the region's major spawning grounds are located at Royal Botanical Gardens.

*Partners:* Ontario Ministry of Natural Resources, City of Hamilton, City of Burlington, Hamilton and Halton Conservation Authorities, Fisheries and Oceans Canada, and local angling clubs

### RESTORATION PROJECTS

#### Aquatic Plantings

Over 8,000 wetland plants were planted at Cootes Paradise in 2005; three focal areas included reeds at mouth of Desjardins Canal/Spencer Creek, introduction of key marsh species (Hardstem Bulrush, *Scirpus acutus*) along south shore of



Cootes Paradise, and White Water Lilies in West Pond.

*Partners:* Project Paradise partnership and many school groups contributing “Mini Marsh” plants, Bay Area Restoration Council

### Southern Wild Rice (*Zizania aquatica*) Reintroduction

Monitoring and preservation of important native annual aquatic plants in large populations in Hopkin's Bay.

*Partner:* Dr. Peter Lee, Lakehead University, Thunder Bay

### Princess Point Earth Day Planting

Nearly 1,000 shoreline shrubs planted in April by over 120 volunteers; part of ongoing shoreline recovery; also dissuades Canada Geese.

*Partners:* Earth Day Hamilton, Bay Area Restoration Council

### Grindstone and Spencer Creek Channels

Maintenance and recovery of channel shape through removal of debris and beaver dams, allowing for bank stabilisation and migration of spawning fish.

*Partner:* Hamilton Conservation Authority

### Long Valley Brook

Volunteer planting of nearly 1,200 native plants (Blue Flag, *Iris versicolor*; Softstem Bulrush, *Scirpus validus*; Fox Sedge, *Carex vulpinoidea*; Red-osier Dogwood, *Cornus stolonifera*; etc.)

*Partner:* Bay Area Restoration Council

### Spencer Creek Floodplain

Reconnection of creek to floodplain, and direction of flow into West Pond and Hopkin's Marsh; habitat improvement in Spencer Creek, floodplain restoration and improvement of water quality entering Cootes Paradise.

*Partner:* Hamilton Conservation Authority

Hoary Mountain-mint, *Pycnanthemum incanum*

JULIE AUBIN

Photo: Issac Applebaum

### INVASIVE PLANT SPECIES CONTROL

#### Phragmites Project

Determination of which strains of Common Reed (*Phragmites australis*) (native or invasive) grow at Royal Botanical Gardens for direction of future control program.

*Partner:* Environment Canada

#### Carroll's Bay Nature Sanctuary

Diverse rare plant and animals occur in Carroll's Bay. In 2005, efforts focused on plan development, an educational campaign to reduce boating impact, and preparation of signage to mark sensitive portions off-limits to motorized vehicles. Water quality has improved, but area remains dominated by invasive carp.

*Partners:* LaSalle Park Marina, Environment Canada, Hamilton Harbour Remedial Action Plan

### TERRESTRIAL HABITAT MANAGEMENT AND RESTORATION

Royal Botanical Gardens' Nature Sanctuaries include a wide diversity of terrestrial habitats as well as wetlands. These range from the eastern tip of Ontario's Carolinian forest zone to remnant prairies and oak savannahs. Stewardship of these properties includes monitoring and rare species recovery, documenting wildlife populations, active ecological restoration, and control measures for invasive species.

### MONITORING

#### Hickory Island

Monitoring following vegetation destruction by large colony of Double-crested Cormorant (*Phalacrocorax auritus*) to document how vegetation responds as cormorants move away; cormorant colony declined to 15 nests in 2005. Highlights included discovery of Herring Gull (*Larus argentatus*) nest, a first for Royal Botanical Gardens. Limited vegetation recovery included Common Milkweed (*Asclepias syriaca*) and Staghorn Sumac (*Rhus typhina*).

### **Bull's Point**

Twenty-five stations established at Bull's Point to aid in planning restoration programs on this peninsula jutting into Cootes Paradise.

### **Rare Bird Monitoring and Research**

Nationally endangered Prothonotary Warbler (*Protonotaria citrea*) nested successfully at Royal Botanical Gardens in 2005, as did Northern Pintail (*Anas acuta*), a new waterfowl species for Royal Botanical Gardens and very rare breeder regionally, Herring Gull (new to our properties), and Trumpeter Swans (*Cygnus buccinator*), the subject of a concerted reintroduction effort.

*Partners:* Endangered Species Recovery Teams

### **Eastern Bluebird Nestbox**

Volunteers assisted with maintenance and monitoring of Eastern Bluebird (*Sialia sialis*) nesting boxes along the North Shore trails.

### **Odonate (Dragonfly and Damselfly) Count**

Abundance and diversity of dragonflies and damselflies are important indicators of wetland habitat health; a total of 26 species (total of 627 individuals) recorded during 2005 event; highlights included a Skimming Bluet (*Enallagma geminatum*), new for the count, and seven Fragile Forktails (*Ischnura posita*), new for Royal Botanical Gardens.

## **HABITAT MANAGEMENT**

### **Escarpment Property Management**

Development of access to new Cartwright Nature Sanctuary (Hamilton Naturalists' Club/Conservation Halton) via Royal Botanical Gardens' Berry Tract Nature Sanctuary; facilitates access to newly-discovered populations of endangered American Columbo (*Frasera caroliniensis*).

*Partners:* Hamilton Naturalists' Club, Hamilton Conservation Authority, local property owners

### **Old Snake Road**

New fence, interpretive signs, transplanting of native Big Bluestem (*Andropogon gerardii*) to protect natural areas from Old Snake Road to High Level Project as part of CN Rail track expansion project.

*Partner:* CN Rail

### **Trailwatch**

Volunteer program to monitor condition of Royal Botanical Gardens' nature trails continued in 2005.

*Partner:* Auxiliary of Royal Botanical Gardens

## **RESTORATION PROJECTS**

### **Princess Point Savannah**

Continued monitoring of rare oak savannah habitat at Princess Point; extensive control and burn program for invasive woody plants.

### **Sassafras Point**

Continued monitoring of site of large 2004 prescribed burn at Sassafras Point, focussing on key tallgrass plant species; acorns were collected for propagation.

### **Burlington Heights "High Level" Project**

Restoration of endangered prairie habitat; transplanting of 600 clumps of Big Bluestem from Snake Road to the High Level in vicinity of McQuesten Monument. Area seeded with native species (Pointed-leaved and Showy Tick Trefoils, *Desmodium glutinosum* and *Desmodium canadense*, and Indian Grass, *Sorghastrum nutans*).

*Partner:* CN Rail

### **York Boulevard Prairie Burn**

Volunteers assisted with a very successful prescribed burn of York Boulevard Prairie in May; monitoring continued from 2004; invasive woody plant control program and seeding in fall with Pointed-leaved Tick Trefoil seed from Sassafras Point.



Royal Botanical Gardens' staff and volunteers oversee the burn at the Princess Point savannah.

## **INVASIVE SPECIES CONTROL**

### **Invasive Plant Control**

Manual removal of invasive species from Long Valley Brook subwatershed, particularly Garlic Mustard (*Alliaria petiolata*), non-native honeysuckles (*Lonicera* spp.); newly-discovered patch of Flowering Rush (*Butomus umbellatus*) from Hendrie Valley; noxious invasive Giant Hogweed (*Heracleum mantegazzianum*); project included surveying all locations and removal of all known plants.

### **Nuisance Wildlife Control**

Ongoing program to monitor and humanely control populations of Canada Geese (*Branta canadensis*) and non-native Mute Swans (*Cygnus olor*). Oiling of eggs prevented hatch of 388 Canada Goose eggs and 24 Mute Swan eggs in 2005. *Partners:* Canadian Wildlife Service, City of Hamilton, McMaster University

## FIELD BOTANY AND HERBARIUM

Documenting the diversity of plant life within Royal Botanical Gardens' Nature Sanctuaries has been a major focus since the 1950s. Royal Botanical Gardens' herbarium, known internationally as "HAM," includes approximately 80,000 plant specimens ranging from historic horticultural collections to the inventory of free-living plants within the sanctuaries.

### Herbarium Development

Over 400 new plant specimens added to the herbarium in 2005. Requests for specimens included projects as far away as British Columbia on species such as Himalayan Balsam (*Impatiens glandulifera*), Lesser Swinecress (*Coronopus didymus*), Hedge Bindweed (*Calystegia sepium*), Indian Hemp (*Apocynum cannabinum*), and the Foxtail (*Setaria*) species. Partner: Museum Assistance Program, Canadian Department of Heritage



American Columbo (*Frasera caroliniensis*)

### Flora of Royal Botanical Gardens' Nature Sanctuaries

*Checklist of the Spontaneous Flora of Royal Botanical Gardens' Nature Sanctuaries* printed in 2005; contains diverse information on the flora of Royal Botanical Gardens' 1,000 ha of Nature Sanctuaries; is available in Royal Botanical Gardens' gift shop and on the website.

### Six Nations Ethnobotany Program

Two-year project aimed at documenting plant diversity at Six Nations of the Grand River, in co-operation with community and traditional healers; training of intern (Pat Hess) in field botany, plant identification, herbarium specimen preparation; resulted in a herbarium collection for Six Nations Polytechnic Institute in Ohsweken, Six Nations of the Grand River. Partners: Museum Assistance Program of the Canadian Department of Heritage, Six Nations Polytechnic, McMaster University Indigenous Studies Program

### SIGNIFICANT NEW PLANT COLLECTIONS

Among the 2005 field botany collections and observations, several are particularly outstanding:

#### American Columbo (*Frasera caroliniensis*)

Nationally endangered member of gentian family can live for over a decade before blooming, after which it dies. Nationally significant new populations discovered in 2005 in Hendrie Valley and Cootes Paradise Nature Sanctuaries and at Cartwright Nature Sanctuary (Hamilton Naturalists' Club/Conservation Halton) bordering Royal Botanical Gardens' Berry Tract Nature Sanctuary.

#### Water Lettuce (*Pistia stratiotes*) and Water Hyacinth (*Eichhornia crassipes*).

Non-native floating aquatic plants discovered in 2005 in Desjardins Canal and in Grindstone Creek. Water Lettuce is new record for Ontario; Water Hyacinth is very rare. Probably escapees from aquaria or water gardens, neither is likely to survive over winter at Royal Botanical Gardens. Water Hyacinth is possibly the most damaging invasive plant on earth. Ongoing monitoring is planned for 2006.

#### Slender Naiad (*Najas flexilis*)

Previously known from single collection in 1948; rediscovered in 2005 in old Spencer Creek channel, where it was once common.

#### Bouchon's Pigweed (*Amaranthus powellii* ssp. *bouchonii*) and a hybrid pigweed (*Amaranthus X soproensis*)

Two rare species collected in Toronto; poorly understood. Bouchon's Pigweed is focus of current research on its evolution. Collection of *A. p. bouchonii* is likely third time in Ontario; *A. X soproensis* may have been recorded only once before in the province.

## PLANT TAXONOMY

Taxonomy is the science of naming organisms and working out their relationships with close relatives. Royal Botanical Gardens' plant taxonomist, Dr. James Pringle, has been a leading figure in plant taxonomy in North America for over forty years.

### Flora of North America and Taxonomy of the Gentian Family

Contributed manuscripts on taxonomy of the Gentianaceae and conducted research in the Missouri Botanical Garden herbarium and library.

### Field Taxonomy and Education

Led trips in annual Wildflower Pilgrimage, for the Hamilton Naturalists' Club and research field trips in western North Carolina; taught undergraduate course in plant taxonomy for Ontario Universities field course program.

## RBG'S LIBRARY AND ARCHIVES

### Library Development

Volunteers from the Auxiliary managed library services in 2005. Significant portion of monograph collection (books) was placed into storage pending decisions about redevelopment. Not affected were serials (journals and other regular publications), Canadian Centre for Historic Horticultural Studies (CCHHS) and Royal Botanical Gardens' own archives.



### Royal Botanical Gardens Archives

The archives provided valuable historical documents to staff and the board in 2005, including material for Royal Botanical Gardens Mandate Review Committee; many others also used archival material (especially photographs), including editors of Dr. Laking's forthcoming book *Love, sweat and soil: A history of Royal Botanical Gardens from 1930 to 1981*.

### Centre for Canadian Historic Horticultural Studies (CCHHS) Archives

Researchers made use of many archival resources in 2005, including The Isabella Preston papers; writers from *Canadian Florist Magazine* used documents and photographs for 100th anniversary publication; specialists from Burlington's Ireland House Museum researched development of an 1830s garden.

## CANADIAN BOTANICAL CONSERVATION NETWORK

The Canadian Botanical Conservation Network was established in 1995 to promote the role of botanical gardens in plant conservation and sustainable development, through about 20 member institutions across Canada.



### Investing in Nature — A Partnership for Plants in Canada

Canada-wide project (one of 16 around the world) to draw together education and conservation specialists from botanical gardens and arboreta across Canada, providing new resources for their programs. *Partners:* Botanic Gardens Conservation International (BGCI) and HSBC Holdings plc; Museum Assistance Program, Department of Canadian Heritage

Wood-poppy, *Stylophorum diphyllum*  
JULIE AUBIN  
Photo: Peter Hogan

### The North American Botanic Gardens Strategy for Plant Conservation

North America-wide targets for botanical gardens in conservation and sustainable development, under themes of UN's Global Strategy for Plant Conservation.

*Partners:* BGCI, American Public Gardens Association (APGA), US Center for Plant Conservation, Association of Botanical Gardens of Mexico

### Genetic Markers in Conservation and Biodiversity Studies

Application of genetics methods and pilot project on gene banks in conservation of rare plants, with focus on endangered Wood-Poppy (*Stylophorum diphyllum*).

*Partners:* Professor Brad White, Natural Resources DNA Profiling and Forensics Centre, Trent University; Wood-Poppy Recovery Team; Endangered Species Recovery Fund; George Weston Limited

## RESEARCH PARTNERSHIPS

A research partnership with University of Guelph was proposed in 2005, to be formalized in 2006. The agreement includes facilitating new projects and working together on an annual symposium.

## EXTRAMURAL RESEARCHERS

### Pollination Biology of Wild Roses at Rock Chapel

Study of breeding systems of wild *Rosa* species and potential pollinators, at Royal Botanical Gardens' Rock Chapel. Continuation of 2004 project. *Team:* Victoria MacPhail (Graduate Student); Dr. Peter Kevan (Supervisor) Environmental Biology Dept., University of Guelph

### Site Specific Risk Assessment of the Dundas East Landfill Site

Study of ground water quality around old land fill site in Dundas by City of Hamilton, including two monitoring wells on Royal Botanical Gardens property. *Team:* Justin Redman, Public Works Dept, City of Hamilton



Students participating in an archaeological excavation at Princess Point.

### Mechanical Vectors of *Heterosporosis* sp.

Tests for mechanisms of transmission of debilitating parasite (*Heterosporosis*) affecting yellow perch (*Perca flavescens*) in Great Lakes. *Team:* Dr. John S. Lumsden and students, Ontario Veterinary College, University of Guelph

### Erindale College Archaeological Field School at Princess Point

Archaeological excavations of ancient indigenous camp sites at Princess Point; continuation of ongoing research program seeking evidence of occupation from about 2,000 to 400 years ago. *Team:* Dr. Jennith E. Curtis and students, Anthropology Department, University of Toronto at Mississauga

### Seed Collection for Provincial "Trees for Tomorrow" Program

Seeds collected from native trees at Royal Botanical Gardens' Arboretum used for reforestation programs for natural lands in southwestern Ontario. *Team:* David Depuyat, Ron Thayer, Mark Emery Elgin, Oxford and Middlesex Stewardship Committee, Ontario Ministry of Natural Resources, Aylmer

### McMaster University Animal Behaviour Field Course

Foraging behaviour of Chickadees studied along Royal Botanical Gardens' nature trails. *Team:* Dr. Margo Wilson and students, Psychology Department, McMaster University

ROYAL BOTANICAL GARDENS  
(A corporation without share capital)

FINANCIAL STATEMENTS  
FOR THE YEAR ENDED DECEMBER 31, 2005

AUDITOR'S REPORT


To the members of Royal Botanical Gardens

We have audited the statement of financial position of Royal Botanical Gardens as at December 31, 2005, and the statements of operations, changes in net assets and cash flows for the year then ended. These financial statements are the responsibility of the organization's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the organization as at December 31, 2005 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles. As required by the Corporations Act (Ontario), we report that, in our opinion, these principles have been applied on a basis consistent with that of the preceding year.

The prior year's comparative amounts were reported on by another auditor.



Brownlow & Associates  
Chartered Accountants  
Ancaster, Ontario  
April 26, 2006

(The accompanying notes form an integral part of these financial statements)

ROYAL BOTANICAL GARDENS  
(A corporation without share capital)

STATEMENT OF FINANCIAL POSITION  
AS AT DECEMBER 31, 2005

<b>ASSETS</b>	<b>2005</b>	<b>2004</b>
<b>CURRENT ASSETS</b>		
Cash and cash equivalents	\$ 515,730	\$ 288,251
Investments, at cost (note 3)	3,585,925	2,445,941
Accounts receivable	195,282	306,232
Inventory	153,824	109,200
Prepaid expenses	26,828	34,113
Other assets (note 13)	14,746	314,746
	<hr/> 4,492,335	<hr/> 3,498,483
INVESTMENTS, AT COST (note 3)	8,702,504	9,049,111
CAPITAL ASSETS, NET (note 4)	13,123,043	13,818,334
	<hr/> \$ 26,317,882	<hr/> \$ 26,365,928
<b>LIABILITIES AND NET ASSETS</b>		
<b>CURRENT LIABILITIES</b>		
Accounts payable	\$ 1,109,850	\$ 988,037
Deferred operating contributions (note 5)	3,094,941	2,786,385
	<hr/> 4,204,791	<hr/> 3,774,422
DEFERRED CAPITAL CONTRIBUTIONS (note 6)	19,686,070	20,295,625
	<hr/> 23,890,861	<hr/> 24,070,047
<b>NET ASSETS</b>		
Unrestricted	(386,819)	(432,756)
Investment in capital assets (note 8)	627,555	627,176
Endowments (note 9)	1,983,137	1,944,644
Board restricted funds (note 10)	203,148	156,817
	<hr/> 2,427,021	<hr/> 2,295,881
	<hr/> \$ 26,317,882	<hr/> \$ 26,365,928

Commitments and contingencies (note 14)

ROYAL BOTANICAL GARDENS  
(A corporation without share capital)

STATEMENT OF OPERATIONS  
FOR THE YEAR ENDED DECEMBER 31, 2005

REVENUE	2005	2004
Operating grants		
Province of Ontario Ministry of Culture	\$ 2,334,755	\$ 2,418,500
City of Hamilton	555,862	579,000
Regional Municipality of Halton	594,945	574,685
	<u>3,485,562</u>	<u>3,572,185</u>
Amortization of deferred capital contributions (note 6)	936,419	969,712
Amortization of self-funded capital assets	137,965	-
Investment income (note 7)	102,880	20,724
Admissions	304,944	475,925
Donation from the Auxiliary of Royal Botanical Gardens (note 11)	37,000	159,922
Membership fees and donations (note 7)	1,293,672	818,572
User fees and other income (note 7)	2,105,703	3,040,422
	<u>8,404,145</u>	<u>9,057,462</u>
<b>EXPENSES</b>		
Operations and maintenance		
Gardens, parklands and sanctuaries	1,808,446	2,002,176
Buildings and equipment	1,649,560	1,460,052
Amortization of capital assets (note 8)	1,074,385	1,078,739
	<u>4,532,391</u>	<u>4,540,967</u>
Scientific and research program	613,848	840,840
Educational program	415,677	466,985
Administration	1,410,819	1,319,425
Development and membership	100,716	225,980
Other programs and projects	685,972	586,323
Marketing, admissions and sales	549,810	857,956
Investment management fees	52,805	49,306
	<u>8,362,038</u>	<u>8,887,782</u>
Excess of revenues over expenses before the following	42,107	169,680
Strategic studies and reorganization costs	-	(294,022)
	<u>\$ 42,107</u>	<u>\$ (124,342)</u>

ROYAL BOTANICAL GARDENS  
(A corporation without share capital)

STATEMENT OF CHANGES IN NET ASSETS  
FOR THE YEAR ENDED DECEMBER 31, 2005

	Unrestricted	Investment in capital assets (note 8)	Endowments (note 9)	Board restricted funds (note 10)	Total 2005	Total 2004
<b>NET ASSETS, BEGINNING OF YEAR</b>	\$ (432,756)	\$ 627,176	\$ 1,944,644	\$ 156,817	\$ 2,295,881	\$ 2,341,294
Excess (deficiency) of revenues over expenses for the year	42,107	-	-	-	42,107	(124,342)
Change in investment in capital assets (note 8)	(379)	379	-	-	-	-
Endowment contributions	-	-	-	-	-	20,000
Investment income allocations	-	-	79,228	8,486	87,714	58,929
Transfer	4,209	-	(40,735)	37,845	1,319	-
<b>NET ASSETS, END OF YEAR</b>	\$ (386,819)	\$ 627,555	\$ 1,983,137	\$ 203,148	\$ 2,427,021	\$ 2,295,881

(The accompanying notes form an integral part of these financial statements)



ROYAL BOTANICAL GARDENS  
(A corporation without share capital)

STATEMENT OF CASH FLOWS  
FOR THE YEAR ENDED DECEMBER 31, 2005

<b>CASH PROVIDED BY (USED IN) OPERATING ACTIVITIES</b>	<b>2005</b>	<b>2004</b>
Excess (deficiency) of revenues over expenses for the year	\$ 42,107	\$ (124,342)
Adjustments for:		
amortization of capital assets	1,074,385	1,078,739
amortization of deferred capital contributions	(936,419)	(969,712)
deferred capital contributions recognized as revenue	454,824	(841,563)
deferred operating contributions recognized as revenue	(34,872)	(1,071,008)
gain on sale of capital assets	-	(10,223)
	600,025	(1,938,109)
Net changes in noncash working capital balances related to operations	505,228	136,782
Cash used in operating activities	1,105,253	(1,801,327)
<b>INVESTING AND FINANCING ACTIVITIES</b>		
Acquisition of capital assets	(379,094)	(849,292)
Proceeds on disposal of capital assets	-	10,223
Contributions restricted for capital asset purchases and interest	(127,960)	296,491
Deferred operating contributions and interest	343,429	725,775
Net proceeds on disposal (purchases) of investments	(793,377)	1,664,062
Endowment contributions and investment income	79,228	78,929
Cash provided by investing and financing activities	(877,774)	1,926,188
<b>INCREASE IN CASH AND CASH EQUIVALENTS DURING THE YEAR</b>	<b>227,479</b>	<b>124,861</b>
<b>CASH AND CASH EQUIVALENTS AT BEGINNING OF THE YEAR</b>	<b>288,251</b>	<b>163,390</b>
<b>CASH AND CASH EQUIVALENTS AT END OF THE YEAR</b>	<b>\$515,730</b>	<b>\$288,251</b>
Cash and cash equivalents are comprised of the following:		
Cash	\$ 89,483	\$ 288,251
Cash equivalents	426,247	-
	\$ 515,730	\$ 288,251

(The accompanying notes form an integral part of these financial statements)

## 1. DESCRIPTION

Royal Botanical Gardens is one of Canada's premier cultural, educational and scientific institutions, comprised of more than 1,100 hectares of horticultural display gardens, arboretum, woodlands, wetlands and 30 kilometres of trails. Royal Botanical Gardens is an agency of the Ontario Ministry of Culture and receives additional support from City of Hamilton (the "City"), Regional Municipality of Halton, Royal Botanical Gardens' members, the Auxiliary of Royal Botanical Gardens (the "Auxiliary"), many corporations, foundations and individuals.

The Auxiliary is incorporated under the laws of Ontario as a separate corporation without share capital and was established to promote the objects and interests of Royal Botanical Gardens through volunteer service. The activities of the Auxiliary are undertaken with the approval of the Board of Directors (the "Board") of Royal Botanical Gardens and any profits are to be used by Royal Botanical Gardens. The accounts of the Auxiliary are not consolidated in these financial statements.

Royal Botanical Gardens has an economic beneficial interest in a Crown-controlled foundation, Royal Botanical Gardens Crown Foundation (the "Crown Foundation"), which is not consolidated in these financial statements. The principal objectives of the Crown Foundation are to solicit, receive and distribute money and other property to support the mission and activities of Royal Botanical Gardens.

Royal Botanical Gardens is a registered charity under the Income Tax Act (Canada) and, as such, is exempt from income taxes.

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

These financial statements have been prepared in accordance with Canadian generally accepted accounting principles applied within the framework of the significant accounting policies summarized below:

### (a) Revenue Recognition

- (i) Grants are recorded as revenue when the related expenses have been incurred and the applications for the grants have been approved by the relevant government agencies. Grants, which have been received in advance of incurring the related expenses are included on the statement of financial position as deferred contributions.
- (ii) Unrestricted donations are recognized as revenue in the year in which they are received. Restricted donations are deferred and recognized as revenue in the year in which the related expenses are incurred.
- (iii) Externally restricted contributions for depreciable capital assets are deferred and amortized over the life of the related assets. Externally restricted contributions for land are recorded as a direct increase in net assets invested in capital assets. Externally restricted capital asset contributions that have not been expended are recorded as part of deferred capital contributions on the statement of financial position. Self-funded contributions for depreciable capital assets are deferred and amortized over the life of the related assets. Self-funded capital asset contributions that have not been expended are recorded as part of investment in capital assets on the statement of financial position.
- (iv) Endowment contributions are recognized as direct increases in endowment net assets in the year in which they are received.

(b) Donations in kind

Donations in kind of nil (2004: \$5,000) are recorded at their estimated fair market value at the date of donation and are included in "membership fees and donations" and "other income" in the statement of operations.

(c) Investments

Investments are carried at cost, which includes reinvested interest, dividends and capital gains. Individual investments are written down in the year where there is deemed to be an impairment in value which is other than temporary.

(d) Inventory

Inventory, which consists of items available for sale in Royal Botanical Gardens' gift shop, is valued at the lower of cost or market. Cost is determined on the firstin, firstout basis.

(e) Capital assets

Capital assets are recorded at cost, except for donated assets, which are recorded at fair market value at the date of contribution. The fair market value of donated land at the date of contribution could not be determined and therefore the total 1,100 hectares of land have been recorded at a nominal value of \$1.

Amortization is provided on a straightline basis over the estimated useful lives of the assets as follows:

Building	40 years
Mechanical equipment	20 years
Gardens and natural area infrastructures	20 years
Roadways and parking lots	20 years
Vehicles and equipment	5 to 10 years
Furniture and fixtures	10 years
Computer equipment	3 years

(f) Use of estimates

The preparation of financial statements in conformity with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual amounts could differ from those recorded in the financial statements.

### 3. INVESTMENTS

The investments consist primarily of pooled and money market funds. The total market value at December 31, 2005 was \$13,275,222 (2004: \$12,100,213). The combined rate of return (realized and unrealized) on these investments for the year ended December 31, 2005 was 7.6% (2004: 8.2%).

### 4. CAPITAL ASSETS

Capital assets consist of the following:

	Cost	2005 Accumulated Amortization	Net
Land (note 2)	\$ 9,428	-	\$ 9,428
Buildings	14,301,488	\$ 6,473,469	7,828,019
Mechanical equipment	2,397,523	902,916	1,494,607
Gardens and natural area infrastructures	3,855,756	1,335,516	2,520,240
Roadways and parking lots	1,605,734	835,973	769,761
Vehicles and equipment	1,054,059	915,699	138,360
Furniture and fixtures	870,646	524,336	346,310
Computer equipment	1,162,183	1,145,865	16,318
	\$ 25,256,817	\$ 12,133,774	\$ 13,123,043

	Cost	2004 Accumulated Amortization	Net
Land (note 2)	\$ 9,428	-	\$ 9,428
Buildings	14,190,660	\$ 6,117,316	8,073,344
Mechanical equipment	2,397,523	783,040	1,614,483
Gardens and natural area infrastructures	3,837,417	1,143,187	2,694,230
Roadways and parking lots	1,484,939	758,706	726,233
Vehicles and equipment	1,048,299	737,246	311,053
Furniture and fixtures	760,397	442,784	317,613
Computer equipment	1,149,060	1,077,110	71,950
	\$ 24,877,723	\$ 11,059,389	\$ 13,818,334

The change in net book value of capital assets was due to the following:

	2005	2004
Balance, beginning of year	\$ 13,818,334	\$ 14,047,781
Purchase of capital assets funded by deferred capital contributions	255,722	761,650
Purchase of capital assets internally funded	123,372	87,642
Amortization of capital assets	(1,074,385)	(1,078,739)
Balance, end of year	\$ 13,123,043	\$ 13,818,334

## 5. DEFERRED OPERATING CONTRIBUTIONS

The change in deferred operating contributions during the year consists of the following:

	2005	2004
Balance, beginning of year	\$ 2,786,385	\$ 3,131,618
Amount recognized as revenue during the year	(34,873)	(1,071,008)
Amount received related to subsequent year	188,375	642,690
Investment income allocation	155,054	83,085
Balance, end of year	\$ 3,094,941	\$ 2,786,385

Deferred operating contributions consist of the following:

	2005	2004
Externally restricted funds:		
Project Paradise (see below)	\$ 613,441	\$ 706,914
Dorothy Muriel Matson Fund	529,699	499,841
Dunington Grubb Fund	405,204	382,364
Barbara Laking Memorial	135,659	123,284
Stanley Smith Horticultural Fund	20,665	19,500
Anna Harvey Clematis Fund	10,932	10,316
Dr. Ronald Graham Fund	27,931	26,357
J. Douglas Watson Memorial	13,086	12,348
New World Species Fund	9,564	9,025
Dorothy Miller Fund	521,959	492,538
Mary Stedman	278,866	101,182
Ruth Stedman	41,195	20,000
Margaret Stedman	52,987	50,000
Deferred operating grants	336,919	231,330
Other amounts related to operations	96,834	101,386
	\$ 3,094,941	\$ 2,786,385

### Project Paradise

The restoration of Cootes Paradise as part of the Fish and Wildlife Habitat Restoration project in Cootes Paradise and Grindstone Creek and the Hamilton Remedial Action Plan is still in process. The Project Paradise fund has been established by various donors to support this process.

## 6. DEFERRED CAPITAL CONTRIBUTIONS

Deferred capital contributions consist of the following:

	2005	2004
Balance, beginning of year	\$ 20,295,625	\$ 21,810,409
Amortization of deferred capital contributions	(936,419)	(969,712)
Previously deferred amounts recognized as revenue during the year	(89,099)	(841,563)
Contributions received for capital purposes	148,442	96,611
Investment income on deferred capital contributions	267,521	199,880
Balance, end of year	\$ 19,686,070	\$ 20,295,625

Represented by:

Deferred capital contributions (note 8)	\$ 12,495,489	\$ 13,191,158
Unspent capital contributions	7,190,581	7,104,467
	\$ 19,686,070	\$ 20,295,625

Deferred capital contributions consist of the following:

	2005	2004
Deferred Capital Contributions	\$ 12,495,489	\$ 13,191,158
Higginson Building	448,442	300,000
Higginson Fund	3,168,966	3,133,020
Garfield Weston	3,573,173	3,433,296
H&S Capital	-	238,151
	\$ 19,686,070	\$ 20,295,625

## 7. REVENUE

	2005	2004
Investment income:		
Investment income earned during the year	\$ 563,948	\$ 341,893
Allocation to deferred capital contributions	(267,521)	(199,880)
Allocation to deferred operating contributions	(155,054)	(83,085)
Allocation to endowment contributions	(38,493)	(38,204)
	\$ 102,880	\$ 20,724

Membership fees and donations:

Membership fees	\$ 278,469	\$ 387,808
Donations	1,015,203	430,764
	\$ 1,293,672	\$ 818,572

User fees and other income:

Facility rentals and catering	\$ 488,457	\$ 490,789
Education	303,294	417,742
Other, including youth employment projects	247,820	1,060,883
Previously deferred amounts recognized as revenue during the year	1,066,132	1,071,008
	\$ 2,105,703	\$ 3,040,422

## 8. INVESTMENT IN CAPITAL ASSETS

The investment in capital assets consists of the following:

	2005	2004
Capital assets, net	\$ 13,123,044	\$ 13,818,334
Amounts financed by deferred capital contributions (note 6)	(12,495,489)	(13,191,158)
Balance, end of year	\$ 627,555	\$ 627,176



The change in investment in capital assets is calculated as follows:

	2005	2004
Excess of expenses over revenue		
Amortization of deferred capital contributions	\$ 936,419	\$ 969,712
Amortization of self-funded capital assets	137,965	-
Amortization of capital assets	(1,074,385)	(1,078,739)
	(1)	(109,027)
<b>Net change in investment in capital assets</b>		
Purchase of capital assets	379,094	849,292
Amounts funded by deferred capital contributions	(255,721)	(796,377)
Purchases of self-funded capital assets	123,373	52,915
	123,372	(56,112)
Amortization of self-funded capital assets above:	(137,965)	-
Reclassification of self-funded assets	14,972	-
Increase (decrease) in investment in capital assets	\$ 379	\$ (56,112)

## 9. ENDOWMENTS

Contributions restricted for endowments consist of donations received by Royal Botanical Gardens where the endowment principal is required to remain intact. Accordingly, these amounts are classified as long-term investments.

The investment income generated from the endowments must be used in accordance with the purposes established by donors. A policy has been established by the Board whereby the endowment funds are preserved from inflation by allocation of investment income. The provision for the year 2005 was established at 2% (2004: 2%).

	2005	2004
General endowment	\$ 20,000	\$ 20,000
Woodland Garden Fund	609,197	597,252
Palmer Memorial Fund	182,769	179,186
Osborne Memorial Fund	67,861	66,531
Beth Parker Orchid Fund	29,770	29,187
Anne Elizabeth Powell Memorial	650,158	637,410
Albert Nind Scholarship Fund	27,149	26,616
A. Parker Orchid Lab	17,045	16,710
Dr. Robertson Medicinal Garden	53,060	52,020
Broman Land Trust	74,056	72,604
Elizabeth M. Lindley	252,072	247,128
	\$ 1,983,137	\$ 1,944,644

The statement of changes in net assets reflects a transfer of investment income in excess of the 2% inflationary adjustment interest from endowments to unrestricted to reflect the use of these funds in the current year in accordance with donor restrictions.

## 10. BOARD RESTRICTED FUNDS

Net assets subject to Board restrictions represent amounts received by Royal Botanical Gardens that have been restricted for specific purposes by the Board. Generally, the Board will restrict bequests, donations and interest earned on these monies. These restricted amounts are not available for other purposes without approval of the Board.

Board restricted funds at December 31 consist of the following:

	2005	2004
General	\$ 188,402	\$ 142,071
Organizational	14,746	14,746
	\$ 203,148	\$ 156,817

## 11. THE AUXILIARY OF ROYAL BOTANICAL GARDENS

The accounts of the Auxiliary are presented separately and are not consolidated in these financial statements.

Due to the nature of the operations, all of the net assets of the Auxiliary represent unrestricted funds. As at December 31, 2005, the balance of unrestricted funds of the Auxiliary was \$272,445 (2004: \$248,990).

During the year, the Auxiliary contributed the following amounts to Royal Botanical Gardens for the indicated purposes:

	2005	2004
Operations	\$ 37,000	\$ 159,922

In addition, Royal Botanical Gardens provides facilities to the Auxiliary at no cost.

## 12. ROYAL BOTANICAL GARDENS CROWN FOUNDATION

As at December 31, 2005, the Crown Foundation reported total assets of \$26,922 (2004: \$26,922). During the year, no funds were distributed from the Crown Foundation to Royal Botanical Gardens (2004: nil).

## 13. OTHER ASSETS

Royal Botanical Gardens is the owner and beneficiary of life insurance policies purchased by certain members. The total face value of these policies was \$115,000 at December 31, 2005 (2004: \$115,000). The cash surrender value of these policies of \$14,746 (2004: \$14,746) is included in other assets on the statement of financial position.

## 14. COMMITMENTS AND CONTINGENCIES

- (a) In the ordinary course of business, Royal Botanical Gardens may be contingently liable for litigation and claims with customers, suppliers and former employees. Management believes that adequate provisions have been recorded in the accounts where required. Although it is not possible to accurately estimate the extent of potential costs and losses, if any, management believes, but can provide no assurance, that the ultimate resolution of such contingencies would not have a material adverse effect on the financial position of Royal Botanical Gardens.
- (b) During the year Royal Botanical Gardens was named in a lawsuit claiming damages in the amount of \$3,000,000 for breach of contract. A counter claim has been filed with respect to this matter. As it is too early to determine the impact of these events no amounts have been recorded in the financial statements.

## THE AUXILIARY OF ROYAL BOTANICAL GARDENS

While 2005 was a challenging year for the Auxiliary of Royal Botanical Gardens, I am pleased to report that the changes undertaken during this transitional year have resulted in a positive, expanded relationship between the Board and staff of the Gardens and the Auxiliary. Together we faced a year of change, challenge and new vision. Through this transition stage, the Auxiliary continues to better align itself with the evolving structure and culture of Royal Botanical Gardens.

Volunteer members continued with their successful annual fundraising events, starting with the Plant Sale in early May, followed by the Christmas Sale and Design Workshops in November. Combined sales from these three events generated \$168,000 in revenue. The majority of these funds, after expenses, are donated to Royal Botanical Gardens for specified projects.

When volunteers are not fundraising, they support Royal Botanical Gardens with their services in areas such as archives, garden maintenance, children's programs, tour guiding, information services, gardening information, Gardens' gift shop, library, trails observation, aquatic ecology, herbarium, membership sales, and special events. During 2005, the combined commitment of 350 individual Auxiliary members contributed 39,000 volunteer hours to the Gardens.

During the past summer, the Auxiliary undertook an exciting publishing project — a book authored by Dr. Leslie Laking, Director Emeritus, Royal Botanical Gardens, titled *Love, sweat and soil: A history of Royal Botanical Gardens from 1930 to 1981*. The book is the account of Royal Botanical Gardens' history originally released serially in *Pappus*, (the Gardens' magazine published from 1981 to 2004) in the early 1990s. Dr. Leslie Laking was Director of Royal Botanical Gardens from 1954 to 1981 and is the honorary president of the Auxiliary. With much pride, the Auxiliary is hosting a Leslie Laking Tribute Luncheon and book launch in 2006.



Lesley Reid  
Auxiliary President, 2006



28th-annual Spring Plant Sale.



Volunteers tending the garden.

American Ginseng, *Panax quinquefolius*

JULIE AUBIN

Photo: Issac Applebaum

## 2005 DONOR LIST

We are most grateful to everyone who supports Royal Botanical Gardens. Your generous contributions make possible the ongoing operation of this national treasure. Every effort has been made to ensure the accuracy of this list and we apologize for any errors or omissions. Please call 905-527-1158, ext. 295 with any corrections. We also express our appreciation to those supporters who names do not appear as they have chosen to remain anonymous.

### FELLOW FOR LIFE

Bessie Mifflin  
Nora Rigo  
Norman Radforth  
Elizabeth Jarvis

### LIFE MEMBER

Margaret W. Barnes  
Albert and Evelyn Butwick  
S. M. Chapman  
Mr. and Mrs. C. Russell Elman  
J. R. and Marion Fair  
Dr. and Mrs. John E.P. Fawcett  
C. P. Fell  
Beth Frost  
Ralph and Carol Hanson  
Marion Harrison  
Dr. and Mrs. W.W. Judd  
E. M. Jackson  
Edith M. Kamermans  
Leslie Laking  
Elisabeth Langille  
Lois Lister  
Ray Lowes  
Garth Mailman  
Mr. and Mrs. G. G. Mills  
Mr. and Mrs. Michael Ng

A. F. Phillips  
Robert and Lenita Schellenberg  
Glenys Schwenger  
Marion Sims  
Robert W. Smith  
Mrs. Harry G. Thode  
Mrs. Vernon L. Tidey  
Nancy Walker  
Jack and Joanne Waters

### Donations have been received in memory of the following:

Barbara Anders  
Patrick Colgan  
June Cormick  
Margaret Dipper  
Bodine Dunbar  
Ida M. East  
Ruth Gardner Hammill  
Ruth Lenz  
Marjory Lewis  
John B. McLean  
Patricia Ann Robbins  
Norman Sweetlove  
Joanne Turple

### BEQUESTS

Estate of Margaret Elizabeth Cummings  
Estate of Margaret Dipper  
Estate of Ruth Mary Hammill  
Estate of Zilla M. McFarlane  
Laura J. Scott  
Estate of Rose Lynne Scott  
Estate of Mary B. Stedman

### DONOR MEMBERS

#### Patrons of Paradise

ROYAL CIRCLE  
David Braley  
Barbara Havard  
Turkstra Lumber Company Ltd.

BOTANICAL CIRCLE  
Ruth K. Stedman  
Margaret E. Stedman  
GARDENS CIRCLE  
Robert and Ann Glass  
Dean and Lori Mosca  
Ora Douglas

### GUARDIANS OF NATURE

Joyce Burnell  
Gordon and Mary Dean  
Douglas A. Flett  
David and Judith Goodings  
Dan Kislenko and Deborah Scollard  
Dr. and Mrs. Ian McQuistan  
Margaret Morison  
John and Anne North  
John and Lyn Robinson  
Leah F. Schwenger  
George and Mary Ann Simpson  
Mary B. Stedman  
Stan and Betty Yeo

### CONSERVATORS OF THE COLLECTIONS

Thomas Atkinson  
H. Douglas and P. June Barber  
F.A. Bianchi  
Clare Bryja  
Frank Carpenter  
Catherine Copp  
Sondra Cornett  
Donna Crago  
Anne Fabok  
Donald and Marilyn Farrington  
H. and Geraldine Frost  
Peter George  
Lorne Haley  
Ross and Barbara Hallett  
Timothy and Rosemary Hayhurst-France  
Frank Hewer  
Roger and Elise Hollingworth  
C. Chipman and Helen Holton

William and Lynn Hryniuk  
Gerald and Janet Hutton  
J.D. and M.L. Ketcheson  
Georgina Langs  
Alastair MacDonald and Patti Parke  
Julia Masterson and Jeff Weitz  
Paul and Carolyn Milne  
Alexander S. Mitchell  
Verna I. Neil  
Emil and Dorothy Nenniger  
Rudy and Frances Neufeld  
E.E. Palmer  
Evelyn M. Rahilly  
Nancy Schwenger  
J.B. Simpson  
Robert S. Stipe  
M.E. Vallance  
Rogan and Sharon Vleming  
William and Amy Wadley  
Jacqueline G. Wakefield  
Wm. Warrender and E. Ramsdale

### FRIENDS OF THE GARDENS

J. Nelson and Iris Helena Allan  
Helen Anderson  
Shirley Arberg  
E. John and June Ashworth  
Nicholas and Elizabeth Avery  
Kathryn Ball and Steven Waters  
Patricia G. Barton  
S.T. and B.E. Bayley  
James and Margaret Beale  
Patti Beamsley  
Byron and Katherine Beeler  
Grant Belyea  
Bernice Bennett  
Beverley C. Billes  
Margaret and David Black  
Kevin and Sherrie Blozowski  
Susan Blue  
Peter and Marie Bonfield  
Dorothy Borsi and Marta Heinrich  
Gordon and Helen Bowbly  
Walter and Christine Boyd  
Maryon Brechin  
Clyde and Shirley Brooker  
William and Shirley Brookes  
Lee and Carol Brooks  
Douglas and Barbara Brown  
Linda and Brian Brownlee  
Margaret Buchanan  
David and Irene Buckley  
Robert and Edith Buie  
Philip and Mary Linda Burgess  
Anthony and Margaret Butler  
E. Mary Buzzell  
Everett and Donna Cairns  
Gordon and Pat Cameron  
Alan and Norma Candy  
William and Barbara Cannon  
David H. and Gabriella Carr  
Donald E. Chappel  
Hugh and Marjorie Clark  
Jim Clarkson  
William Collins  
Margaret Cook  
Denis E. and L. Joan Creighton  
David and Jane Croft  
Pearl Cromwell  
Robert and Elizabeth Cross  
Jean and Cameron Crowe  
Ralph and Betty Crowther  
Wayne Cruickshanks  
Joan Cunnington  
Yvonne and John Cunnington  
George Cuthill  
Nancy Davidson  
Evelyn and Leslie Davis  
Douglas and Irene Dean  
Mr. and Mrs. Dennehy  
Myrna and Pauline Dolovich  
Elizabeth Donison and William Ascenuik  
Judith Douglas  
Gordon and Wendy Downing  
Anne L. Dubas  
Keith and Gay Edwards

Lois and Mary Edwards  
Floyd and Esther Elder  
Elizabeth Eldridge  
Karen Elliott and Deborah Riddiough  
Mary Jane and Sarah Farrar  
Diane Farrelly  
Grant and Jill Farrow  
Douglas Fearman and Terry Smith-Fearman  
Jim and Bonnie Feeny  
Jeff Fenwick and Linda Williams  
Charles Figueiredo  
Beth Fischer  
Jane Fogal  
John P.H. and Yvonne Ford  
Douglas and Lucille Forsyth  
Michaelene and Helen Galan  
Geoff and Antje George  
Muriel Gibow  
Steve Glover  
D. R. and Glynis Granger  
Monica Grantham  
Jean Griffin  
Robin and Marnie Griffin  
John and June Guenther  
Mr. and Mrs. Peter Hampson  
Alix and Frederick Hargreave  
G. M. and Pamela Harper  
Stephen Hawkins and Hilda Michel  
Mary Henderson  
Leslie and Thomas Hickey  
John and E. Shirley Higham  
Luther and Lindsay Holton  
Michael and Ruth Hood  
Bonnie Horne  
Elizabeth Howard  
Taqdir and Sandra Husain  
Louise Ingham  
Ian and Pamela Inglis  
Laird and Jean Jennings  
Mr. and Mrs. N. L. Jones  
Anthony and Carol Kerigan  
Rolph King and Michelle Tew  
M.R. Kirkpatrick

Larry Krutz and Tina Echersley  
Germaine Sophie Kruk  
Zahava Lambert  
Gordon and Peggy Lawson  
Alvin Lee  
Ruth and Denis Lee  
Georgie Lefroy  
J.S. Legree  
Sandra and Richard Levy  
Miss A. Elizabeth LeWarne  
Norma Lounsbury  
Alexander and Thelma Lowe  
David and Alena Lumley  
Shirley MacDougall  
Edmond and Elizabeth MacFarlane  
Margaret (Eleanor)  
and Margaret MacMillan  
Gwen Manchester  
D.C. and Hilda Marrs  
Jessie Martin  
Peter Mascher and Doris Stevanovic  
William and Doreen Mather  
Elizabeth Maus  
Trevor and Eileen McAnuff  
Graham and Diana McCallum  
David and Inez McCamus  
C. Leslie and Miriam McCarthy  
Judith McCulloch  
James and Edna McEdwards  
W.A. and Olga McNeill  
Gordon and Elsie Mepham  
Barbara L. Michasiw  
Warren Mills and Betsy McColl  
Reta V. Minchin  
Mr. and Mrs. Mishell  
I.S.M. and Martha Mitchell  
Ingrida Mitton  
Michael and L. Mollinga  
Patrick and Valerie Moore  
Walter Mulkewich  
Anne Neill  
Elizabeth Newman  
Janet M. Norris

Kristin O'Connor and Mike Johnston  
Findlay and Evalyn Orr  
Roland and Louise Packer  
Christopher Palin and Susan Middleton  
Charles and Florence Parish  
Heljo Parkma  
Ray Partridge  
Betty Paterson  
Reginald and Eileen Paterson  
Eunice and George Paul  
Catherine Pead and Robert Thompson  
Gwen Peer  
Harry and Goldie Penny  
M. G. Phenix  
Gwen Phinney and Vicki Hartley  
Deborah Pichocki and Donna Griffin  
Anne Pigott  
Frank and Mary Jean Potter  
Amy B. Pottruff  
Stella Preda  
Nancy Price-Munn and Barry Munn  
Andrew M. Pruss  
Janet Purvis  
Florence M. Quigley  
Leonard Rak and J.L. Condie  
Val Ramsay  
Herbert Rawding and Victoria Lindsay  
Jane and Paul Reble  
Doug Reddon  
Ian and Barbara Reid  
Garry L. Rempel  
Kathy Renwald and Robert Finlay  
Jerry Roberts and B.H. Keller  
Nora Robinson  
Peter and Susan Robinson-Gray  
Gordon Robison and David Grant  
Bruce Rush  
H.W. and Beth Rutledge  
René Schmitz  
Sheila Scott  
Joy M. Seller  
Catherine Semple and Klaus Walma  
Angelo Serafini

Nancy Sherwin  
S. Polly Shimizu and William Naruse  
H. A. and Mona Short  
William and Margaret Simon  
Adele Smith  
Elinor Smith  
R. G. and Freda Smith  
Ron and Mary Smithson  
Halliwell and Dorcas Soule  
Margaret T. Spence  
Carl and Ann Stager  
J. G. Stapleton  
Ted and Velma Stark  
Bill Stathakos  
Roland and Christine Staub  
Rick and Carol Stonehouse  
John and Marion Sweetman  
Vicky Chen Tam  
John and Claire Taylor  
Koon K. Teo and Pearlie Chan  
Betty and David Thomas  
Wayne and Heather Thorpe  
Mary M. Toplack  
E. John Toth  
Irene Tuttle  
Cornelis and Jantina Van Staalduinen  
W. and Bobbie Vaughan  
Martine and David Vaz  
David and Barbara Waddell  
Ray and Lorna Walker  
Shirley Walker  
Mark and Laurie Walters  
William H. and Marie Wardrope  
Ray and Wilhelmiens Waters  
Joanne Watson  
Linda Waugh  
Sylvia and Paul Wentworth  
Dave Wenzel  
Ross and Gwen Wilby  
Barbara Wilkins  
Peter and Brenda Williams  
S. Willis and P. Schieman  
Patricia Wilson

Roy and Maxine Wilson  
Michael Winward and Belinda Zylstra  
William Wittig and Elaina Stewart-Wittig  
Wendy Woodworth  
Diane Woolfe and Mark Salutin  
Muriel Woolston  
William and Shirley Wright  
Jan Yaffe  
F. Joyce Young  
David and Shirley Zaporzon  
Isik Zeytinoglu

#### **INDIVIDUAL DONORS**

##### **\$20,000 and more**

Ruth K. Stedman  
Margaret E. Stedman  
Mary B. Stedman

##### **\$10,000 and more**

Anonymous

##### **\$5,000 and more**

Barbara Havard  
Alec Kelly

##### **\$1,000 and more**

Alan and Marlies Clark  
John Thode  
Annie Kirkaldy  
Christopher J. Cudmore  
Terry and Brenda Yates  
Michael and Jane Schwenger  
Paul and Carolyn Milne

##### **\$500 and more**

Douglas A. Flett  
Jane Davies  
Patricia Bradshaw  
Dr. and Mrs. Ian McQuistan  
John and Yvonne Cunnington



### **\$250 and more**

Sheila M. McDougall  
C. Van Staaldouin  
Tyler Milne

### **\$100 and more**

Judith Adams  
Patricia Barton  
William and Margaret Bell  
Sandra Black  
Mr. and Mrs. John Borthwick  
John and Bridget Callanan  
Robert and Madeleine Challis  
Marcia Sweet  
George Fountain  
Susan T. Garossino  
Robert Glass  
Ken and Elaine Harris  
Rudolf and Margaret Hogervorst  
James and Barbara Hollands  
Archie Horn  
George and Ruth Hutchinson  
John and Lynne Hyatt  
John Hymers  
Norman and Helen Jarvis  
Mark L. Johnston  
Peter and Gwyn Knight  
Mr. and Mrs. John Leask  
A. Elizabeth LeWarne  
Ann and Don McLeod  
Nancy McMaster  
Robert McNaught  
J.J. and Anne Mueller  
Barbara and Paul Pickett  
Maurice Pigeon  
Roger and May Pocock  
Alan Procter  
Brian and Leona Roberts  
John and Gloria Sagodi  
R. Jean Stollard  
Aubyn and Grace Tavender  
William and Janis Thatcher

John Thornton  
Barbara and Rans Vrooman  
Alexander and Lorraine Wallace  
Dorothy Waugh  
Jean Wheeler  
Thomas and Rose Marie Wood  
Catherine Yates  
Stan and Betty Yeo

### **CORPORATIONS, FOUNDATIONS AND ORGANIZATIONS**

#### **CORPORATIONS**

#### **\$20,000 and more**

Nemar Limited  
c/o McCay Duff and Company  
TD Bank Financial Group

#### **\$10,000 and more**

Davey Tree Expert Company Ltd.

#### **\$5,000 and more**

Meadowlands of Ancaster

#### **\$1,000 and more**

Meglin Holdings Inc.  
Shell Canada Limited

#### **\$500 and more**

Bay Gardens Cremation Funeral  
and Memorial Centre Inc.  
The Potting Shed Garden Emporium  
Wilmot Horticultural Society

#### **FOUNDATIONS**

#### **\$2,000 and more**

The Malloch Foundation  
The Martin Foundation  
James N. Allan Family Foundation

### **ORGANIZATIONAL MEMBERS**

Ancaster Horticultural Society  
Auxiliary of Royal Botanical Gardens  
Bleecker Street Co-op Homes  
Four-Day Evening Walk Committee  
Garden Club Of Ancaster  
Garden Club Of Burlington  
Garden Club of Hamilton  
Garden Club Of Kitchener-Waterloo  
Georgian Bay Garden Club  
Grimsby Garden Club  
Hamilton Amateur Radio Club  
Hamilton Burlington Rose Society  
Hilltop Garden Club  
Ikenobo Ikebana Society of Hamilton  
London Horticultural Society  
Lynden Horticultural Society  
McMaster University Biology Society  
Milton Horticultural Society  
Oakville Horticultural Society  
Ontario Regional Lily Society  
Ridgeway and District Garden Club  
St.Marys Horticultural Society  
Stratford and District Horticultural Society  
W.E.C. International  
Winona Horticultural Society



Pitcher's Thistle, *Cirsium pitcheri*  
DARLENE BENNER  
Photo: Sheila Clennell

## **2005 GRANTS AND AWARDS**

(awarded or tenable in 2005, cash and in-kind)

### **CORPORATIONS, FOUNDATIONS AND ORGANIZATIONS**

#### **\$100,000 and more**

Botanic Gardens Conservation International (BGCI)  
Canadian Heritage  
Environment Canada  
Human Resources and Skills Development Canada

#### **\$50,000 and more**

Ontario Ministry of Natural Resources  
Ontario Trillium Foundation

#### **\$20,000 and more**

Bertram Foundation  
City of Hamilton  
Hamilton Harbour Remedial Action Plan Office  
Nemar Foundation  
Ontario Ministry of the Environment

#### **\$10,000 and more**

Canadian National Railway (CN)  
Fisheries and Oceans Canada  
Burlington YMCA — Career Development & Learning Centre

#### **\$5,000 and more**

Bay Area Restoration Council  
Canadian National Sportsmen's Show  
Helen McCrea Peacock Foundation  
Shell Canada

#### **\$1,000 and more**

Canadian Museums Association  
Canadian Tree Fund  
Hamilton Community Foundation  
Martin Foundation  
Sunoco

#### **Up to \$1000**

Hamilton Conservation Authority

## PUBLISHING AND PUBLICATIONS

In 2005 Royal Botanical Gardens staff contributed to new knowledge and professional practice through 22 publications outside the regular newsletter, *Now @ The Gardens*. Topics ranged widely and included updates on new breeds of lilacs, reviews of the contributions of botanical gardens and zoos to research, significant new records of plants in the natural lands, and even scientific studies of the behaviour of fish. Included here are contributions by Royal Botanical Gardens staff (in capitals) and those of Freek Vrugtman, Curator Emeritus.



Bearded Owl-clover, *Triphysaria versicolor* ssp. *versicolor*

DARLENE BENNER  
Photo: Sheila Clennell

Sigal Balshine\*, A. Verma, V. Chant and TYS THEYSMEYER  
*Competitive Interactions Between Round Gobies and Logperch*  
Journal of Great Lakes Research 31: 68–77.

DAVID GALBRAITH and Katherine Kennedy  
*The Development of a Strategic Plan for a Regional Network of Botanic Gardens for Conservation: The North American Experience*  
B.G. Journal 3(1): 8-10.

DAVID GALBRAITH and William A. Rapley  
*Research at Canadian Zoos and Botanical Gardens*  
Museum Management and Curatorship 20: 313–331.

JENNIFER KÖVECSÉS  
*A Fisheries Management Plan for Hamilton Harbour and Its Watershed*  
Wood Duck 58: 164.

BARBARA McKEAN  
*Education Planning for Financial Survival*  
Roots 2(2): 27–30.

JAMES S. PRINGLE  
*Gypsophila*  
Flora of North America North of Mexico (Flora of North America Editorial Committee, eds.). New York and Oxford: Oxford University Press 5: 153–156.

JAMES S. PRINGLE and T. Witsell  
*A New Species of Sabatia (Gentianaceae) from Saline County, Arkansas*  
Sida 21: 1249–1262.

CARL ROTHFELS  
*Significant Plant Records from the Herbarium of Royal Botanical Gardens (HAM): 2003*  
Field Botanists of Ontario Newsletter 17(2): 7–12.

*Botanical Diversions: The Latin Name Game*  
Field Botanists of Ontario Newsletter 17(4): 12.

*A Brown Widow (Lactrodectus geometricus) Arrives in Burlington*  
Wood Duck 59(4): 98.

*The Second Annual Hamilton Odonate Count*  
Wood Duck 59(3): 53–55.

*American Columbo (Frasera caroliniensis) in the Cartwright Nature Sanctuary*  
Wood Duck 59(1): 3–4.

*Significant 2004 Hamilton Study Area Plant Records from the Royal Botanical Gardens Herbarium (HAM) Part I: Alphabetical Families Aceraceae to Lamiaceae*  
Wood Duck 58(8): 187–192.

*Significant 2004 Hamilton Study Area Plant Records from the Royal Botanical Gardens Herbarium (HAM) Part II: Alphabetical Families Lardizabalaceae to Vitaceae*  
Wood Duck 58(9): 219–223.

CARL ROTHFELS and P.M. Catling  
*Notes: Major Dragonfly Migration at Hamilton, Ontario Odonata, Volume 6.*  
Toronto: The Toronto Entomologists' Association. 40 pp.

TYLER SMITH\*\*  
*Checklist of the Vascular Flora of Royal Botanical Gardens.* (Print Edition) Hamilton: Royal Botanical Gardens. 64 pp.

FREEK VRUGTMAN\*\*\*  
*Syringa reticulata subsp. pekinensis 'Jin Yuan', a New Cultivar from China*  
Lilacs — Quarterly Journal. 34(1): 12–13.

*Lilac Cultivar Name Registrations 2003*  
Lilacs — Quarterly Journal. 34(1): 13–15 (reprinted from HortScience 39(6): 1524.)

*News Flash (Lilac Blooming Dates in Moscow and Finland)*  
Lilacs - Quarterly Journal. 34(3): 72–73.

*John Wister's Lilacs for America*  
Lilacs - Quarterly Journal 34(4): 105.

*Lilac Alert*  
Lilacs - Quarterly Journal 34(4): 106.

*Cultivar Name Registration 2004*  
HortScience 40(6): 1597.

### NOTES:

\* Dr. Sigal Balshine of McMaster University is also a Royal Botanical Gardens research associate

\*\* Tyler Smith was Royal Botanical Gardens' field botanist and herbarium keeper until 2002. *Checklist of the Vascular Flora of Royal Botanical Gardens*, updating the first checklist from 1968 authored by Dr. Jim Pringle, was completed after he left Royal Botanical Gardens and was published in 2005.

\*\*\* Freek Vrugtman is Royal Botanical Gardens' curator emeritus, having retired in 1992, and continues to serve as the International Lilac Registrar.

# ROYAL BOTANICAL GARDENS STAFF 2005

## Senior Management

Acting COO  
**Stephen Oliver** (to October)  
Acting Executive Director  
**Mark Runciman** (from October)  
Executive Assistant  
**Mary Alice Peck** (to March)

## FINANCIAL AND ADMINISTRATIVE SERVICES

Director, Financial and Administrative Services  
**Henry Krukowski** (to November)  
Accounts Payable/  
General Ledger Assistant  
**Lynn Gallant**  
Accounts Receivable Assistant  
**Georgia Beck**  
Payroll and Benefit Administrator  
**Nancy Wills**  
Finance/Membership Clerk  
**Pat Dyack**  
Associate Director  
for Policy and Planning  
**Louise Notley** (from September  
to December)  
Head of Grants and  
Research Initiatives  
**Catherine Arlein** (from April)

## HUMAN RESOURCES

Human Resources Generalist  
**Michael Tombolini**  
Ground Maintenance/Health  
and Safety Manager  
**Sidney Gratton**  
Senior Development Associate  
**Sylvia Cino** (to October)

## Corporate Projects

Director, Corporate Projects  
**Mark Runciman** (to October)

## OPERATIONS

Director, Horticultural Services/  
Facilities and Fleet  
**Peter Booker**  
Coordinator of Horticultural Services  
**Rose Marie Schut** (to October)  
Gardens Supervisor  
**Daniel Rose**  
Horticulturist  
**Dennis Eveleigh** (to May)  
Horticulturist/Garden Designer  
**Harry Jongerden** (from July)  
**Lenore Ross** (from July)  
Plant Documentation/  
GIS Coordinator (part-time)  
**Margaret Walton**

## GARDENERS:

Mediterranean Garden  
**Barry MacDonald**  
**Karen Schut**  
Hendrie Park Gardens  
**James Koegler**  
**Tim Schwenker**  
**George Weston Jr.**  
Laking Garden  
**Wayne Staley**  
**Robert Kruizinga**  
Nursery  
**Sharon Duncan**  
**Lyall Rudderham**  
Parklands  
**Richard Maslanka**  
**Kirk Bell**

Rock Garden  
**Michael Hall**  
**Peter Wickett**  
Pest Management  
**William Szenasi**  
Equipment Operators/Handymen  
**John DeZoete**  
**Michael Spence**  
**Gerald Maloney**  
**William Kolomas**

Manager, Physical Plant  
and Operations/Facilities and Fleet  
**Josef Baumgartner**  
Lead Hand  
**Ken Fowler**  
Buildings Maintenance Technician  
**Brian Forester** (to March)  
**Timothy Mountain** (from July)  
Building Maintenance/Service Man  
**Denis Pearson**  
Small Engines Mechanic  
**Michael Thomson**  
Custodians  
**Ken Laidman**  
**Olga Bilechuk**  
**Jason Gordon**

## RESEARCH AND NATURAL LANDS

Senior Manager, Science and  
Research Services  
**Louise Notley** (to August)  
Head of Scientific Development  
**Dr. David Galbraith, PhD**  
Canadian Botanic Gardens  
Education Coordinator  
**Laurel Mclvor** (to March)

Plant Taxonomist  
**Dr. James S. Pringle, PhD**  
Acting Natural Lands Steward, Field  
Botanist and Herbarium Curator  
**Carl Rothfels** (to October)  
Aquatic Ecologist  
**Tys Theysmeyer**  
Aquatic Ecologist Intern  
**Brian Reich** (to March)  
**Jennifer MacNeil** (from July)  
Indigenous Ethnobotany Intern  
**Patricia Hess** (to March)  
Biologist-Hamilton Harbour Fisheries  
Management Plan  
**Jennifer Kovacs** (to October)  
**Kellie McCormack** (from October)

## ENTERPRISE INITIATIVES

Director, Enterprise Initiatives  
**Mia Wilkinson**  
Manager, Enterprise Initiatives  
**Angie van der Zalm**  
Special Event Supervisor  
**Simone Babineau** (to October)  
Senior Special Events Planner  
**Natalie Faria** (from April)  
Special Events Coordinator  
**Jennifer Lyall** (to Feb)  
Wedding Coordinator  
**Claudia Logan** (from June)  
Rentals Coordinator  
**Kerry Alldritt**  
Visitor Services Manager  
**Vicki De Nardis**  
Manager, Education  
**Barbara McKean**  
Education Course Administrator  
**Louise Pigeau** (from July)

Booking Agent/Receptionist  
**Cindy Bailey**  
Public Programs and Horticultural  
Therapy Coordinator  
**Nancy Lee-Colibaba**  
Nature Centre Manager  
**Ian Hendry**  
Interpreter  
**Andrew Wannamaker**  
Geocaching Program Coordinator  
**Amy Rutgers Kelly** (from June)  
Gift Shop Supervisor  
**Bonnie Collins**  
Graphic Designer  
**Irene Feddema** (to September)

## ROYAL BOTANICAL GARDENS RESEARCH ASSOCIATES

**Dr. Sigal Balshine**, Psychology  
Department, McMaster University  
  
**Dr. Susan Dudley**, Biology  
Department, McMaster University  
  
**Dr. James S. Pringle**,  
Plant Taxonomist,  
Royal Botanical Gardens  
  
**Dr. Thomas J. Schlereth**,  
Departments of History  
and American Studies,  
University of Notre Dame  
  
**Dr. David Smith**, Department  
of Anthropology, University  
of Toronto at Mississauga  
  
**Mr. Freek Vrugtman**, Curator  
Emeritus and Lilac Registrar,  
Royal Botanical Gardens



680 Plains Road West, Burlington, Ontario L7T 4H4  
P.O. Box 399, Hamilton Ontario L8N 3H8  
Telephone: 905-527-1158, Fax: 905-577-0375

CHARITABLE REGISTRATION NUMBER:  
13350 0850 RR0001

#### ANNUAL REPORT PRODUCTION

COORDINATION/WRITING:  
Lisa Dodd, CFRE, Director of Development

CONTRIBUTORS:  
Catherine Arlein, Head of Grants and Research Initiatives  
Dr. David Galbraith, Head of Scientific Development  
Harry Jongerden, Interim Director of Horticulture  
Barbara McKean, Manager of Education  
Marie Minaker, Royal Botanical Gardens Archivist (volunteer)  
Dr. Jim Pringle, Plant Taxonomist  
Carl Rothfels, Acting Natural Lands Steward, Field Botanist and Herbarium Curator  
Tys Theysmeyer, Aquatic Ecologist

Photos: Royal Botanical Gardens unless otherwise indicated  
Illustration of Queen Mary 2: Cunard Line

Design: IF design Inc.  
Printing: Continental Press  
Paper: Domtar Feltweave, acid-free, recycled (30% post consumer)