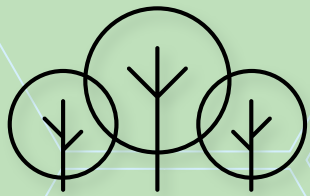


CELEBRATING OUR **40TH** YEAR



HUMBER
ARBORETUM
+ CENTRE FOR URBAN ECOLOGY



2017



1977



ANNUAL REPORT
2016/2017



A MESSAGE FROM THE DIRECTOR



It's been an exciting and transitional year at the Humber Arboretum and Centre for Urban Ecology. We've put renewed focus on increasing our profile, beautifying our grounds, streamlining our operations, and conserving and educating the public about our natural environment. For the first time in the Arboretum's history, the organization was re-structured within Humber College to become an independent department. This change has allowed us to serve the needs of a broader array of schools, programs, and departments. To assist us with our expanded responsibilities, we've brought on new staff to help us in event services, scheduling, and communications. We're so happy to have them onboard!

To reflect our organization's growth and development, we've created a new visual identity. The three trees in our new logo represent our tri-partnership; their overlapping canopies depict how **Humber College**, the **City of Toronto**, and **Toronto and Region Conservation (TRCA)** stand together as a forest, creating something much greater than they could individually. Collectively, our partners come together to support and enhance our broader ecosystem and community.

THIS YEAR OUR STAFF, PARTNERS, AND COLLABORATORS HAVE SUCCEEDED IN ACHIEVING THE PRIORITIES OF OUR 2016/17 BUSINESS PLAN.

THESE WERE TO:

- 1 Improve experiential learning, applied research, and academic sustainability at Humber College;
- 2 Protect, maintain, and restore our natural assets, living laboratories, and outdoor learning spaces;
- 3 Implement systems and structures to enable the longer-term development and prosperity of our organization; and
- 4 Increase the profile and visibility of this unique and successful tri-partnership as an integral resource for our stakeholders.

As always, we're grateful for the support and generosity of our many partners and advocates. It is the collective efforts of our Management Committee, our staff, and our partnerships that enables us to continue our work for our community, visitors, and natural environment.

I invite you to read on to learn about our accomplishments this year.

Alexandra Link

Director, Humber Arboretum and Centre for Urban Ecology

WHAT'S INSIDE


STUDENT LEARNING, RESEARCH & INNOVATION (PG. 4)

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EDUCATION, CAMPS, AND OUTREACH (PG. 13)

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GRAPHIC DESIGN: LAURA LASBY

This Booklet is printed on  FSC mixed paper

Long-eared owl (front cover)
Photo: Bernie Monette

HIGHLIGHTS

HOSTED

8,000

Community members at our events, camps & educational programs.

PLANTED

3,000

NATIVE TREES AND SHRUBS ON-SITE WITH OUR COMMUNITY AND PARTNERS.




WELCOMED

4,500+

Humber College students to our lands & learning facilities.

Launched a

CE Certificate in Sustainable Urban Beekeeping, which was filled to capacity in its first session.



CREATED A NEW ENTRANCE SCHOLARSHIP FOR HUMBER COLLEGE STUDENTS.



PLANTED

40,000

ANNUALS, VEGETABLES, AND HERBS IN OUR GARDENS.

SUPPORTED 2 APPLIED RESEARCH PROJECTS AND 3 CENTRE OF INNOVATION INITIATIVES THROUGH HUMBER COLLEGE



Sustainably harvested 26 L of MAPLE SYRUP and 37 L of HONEY.



COLLABORATED WITH 12 PARTNER ORGANIZATIONS.



RECEIVED

\$25,863

IN GRANTS AND DONATIONS.

EXCEEDED OUR OVERALL REVENUE TARGETS BY 21%.

21%



STUDENT LEARNING, RESEARCH, AND INNOVATION

CLASSES, PROJECTS, AND LABS



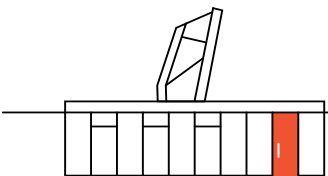
Aboriginal Resource Centre (ARC)

- The Arboretum is home to ARC's Medicine Wheel Garden (MWG). This year the MWG and Arboretum were used for a variety of teaching and learning purposes including the Indigenous Knowledge Certificate, ceremonies and the annual Indigenous Knowledge Gathering.



Culinary programs

- 196 students across three courses visited the Arboretum's edible garden to identify and gather herbs, vegetables, and edible flowers.
- Honey from the Arboretum's apiary and maple syrup from the Arboretum's sugar bush were used in course labs and the Humber Room's menu.





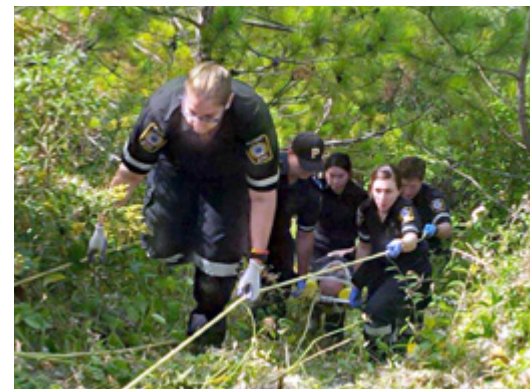
Early Childhood Education (ECE) program and Child Development Centre

- Over 850 class visits were made to the Arboretum across five courses.
- The Arboretum, ECE, and Child Development Centre have a partnership called the Nature Education Group which is focused on supporting and fostering Humber student learning connected to nature.
- The Forest Nature Program (FNP) is based in the Arboretum. Thirty two children from Humber's Child Development Centre visit the Arboretum on an ongoing basis. The FNP is incorporated into ECE courses and student practicum placements.



Arborist Apprenticeship, Landscape Technician, and Horticultural Technician Apprenticeship programs

- 150 Arborist students used the Arboretum's plant collections for tree identification curriculum, training exercises, and practical exams.
- 75 Landscape Technician students across 9 courses used the Arboretum for plant identification, surveying, and built landscape construction projects.
- 50 Horticultural Technician Apprenticeship students used the Arboretum for learning their practical plant identification requirements.



Paramedic Studies program

- 55 students used the Arboretum grounds to simulate outdoor rescue scenarios for their Rescue Procedures course.



Journalism programs

- Humber Arboretum staff provided 22 interviews for student articles. The Arboretum's natural environment is regularly used as a backdrop for journalism student videos.



Fitness and Health Promotion program

- Students organized the 11th annual Sophie's Run/Walk fundraiser for colorectal cancer, held in the Arboretum. Over 500 people participated.



Photography programs

- 90 students from the Portrait Photography class used the Arboretum's natural environment to practice their photography skills.

APPLIED RESEARCH PROJECTS

Arboretum staff helped launch and support two applied research projects this year:



- 1. **The effects of selected targeted non-chemical, manual control methods on the growth of the invasive grass *Phragmites australis***
 - **Research Lead:** Lynn Short, Faculty, School of Applied Technology.
 - **Partners:** City of Toronto Parks, Forestry & Recreation, TRCA Restoration and Infrastructure Division, and The Ontario *Phragmites* Working Group.
 - **Role of Arboretum:** Provided use of our site for the research, facilitated a connection to the City of Toronto as a research partner, and provided equipment, supplies, advising, and project coordination assistance.



- 2. **The effect of fertilizers, salts and cover crops on the establishment of native pollinator plants.**
 - **Research Lead:** Iginio Teolis, Faculty, School of Applied Technology. **Research Support:** Lynn Short, Faculty, School of Applied Technology.
 - **Partner:** TRCA provided a tractor and tiller as well as staff resources to prepare the research area.
 - **Role of Arboretum:** Facilitated connection to the TRCA as a research partner, provided and maintained a fenced research area, and provided equipment, supplies, advising, and project coordination assistance.



CENTRE OF INNOVATION IN HEALTH AND WELLNESS

As part of the Steering Committee of Humber College's new Centre of Innovation in Health and Wellness, the Arboretum contributed to the following initiatives:

- 1. **Project X: Hacking Wellbeing**

The launch of the **Centre of Innovation in Health and Wellness** featured an Interdisciplinary Innovation Showcase demonstrating how Humber College and the Humber Arboretum contribute to the wellbeing of individuals and communities through inter-disciplinary collaboration.
- 2. **Healthy Kids Change Maker Challenge**

In partnership with the Rexdale Community Health Centre (CHC), the Challenge brought students together in multidisciplinary teams to develop project concepts focused on promoting healthy eating for children in the community. The Humber Arboretum provided active mentoring support to the students throughout the process.
- 3. **Healthy Child & Youth Development Forum**

Held at the Centre for Urban Ecology in the Arboretum, this event brought together faculty, staff, students, and industry and community partners to foster connection and share knowledge on healthy child and youth development.



Joe-Pye Weed with Swallowtail Butterfly.
Photo: John Markowski

WORK-STUDY AND PRACTICUM PROGRAMS

The Arboretum employed 30 Humber College and University of Guelph–Humber students in work-study and practicum positions this year. This included two curriculum–connected student employment programs:

Jr. Nature Interpreter Program

This program provides students from Humber’s Early Childhood Education (ECE) and Child and Youth Care Worker program with real-life experience working with children and youth in the outdoor environment of the Humber Arboretum.

“As an employee at the Humber Arboretum, you develop new skills and abilities, that as a student, you would think are impossible. The way everyone there is able to make the environment inclusive and supportive towards the children’s growth, development, and safety is astounding”.

-Ranjit, Humber Arboretum camp counselor and Humber College ECE student

Jr. Horticulturalist program

This program provides students in Humber’s landscape and horticulture programs with hands-on experience in their fields of study as they help construct, plant, and maintain the Arboretum grounds.



SCHOLARSHIP

We launched our first scholarship, the Humber Arboretum Frances Ethel Thompson Entrance Scholarship, available to students involved in extracurricular activities that show a dedication to:

- Protecting or restoring the natural environment and/or
- Connecting people to the natural environment in a way that supports environmental sustainability, human health and/or wellbeing.

CONTINUING EDUCATION: SUSTAINABLE URBAN BEEKEEPING

The Arboretum ventured for the first time into the realm of continuing education this year, launching a Certificate of Participation in Sustainable Urban Beekeeping. Our core courses were so popular that we offered second intakes of each, and the experiential bee yard component is filled to capacity for the season!



NATURAL ENVIRONMENT, LANDSCAPE, AND HORTICULTURE



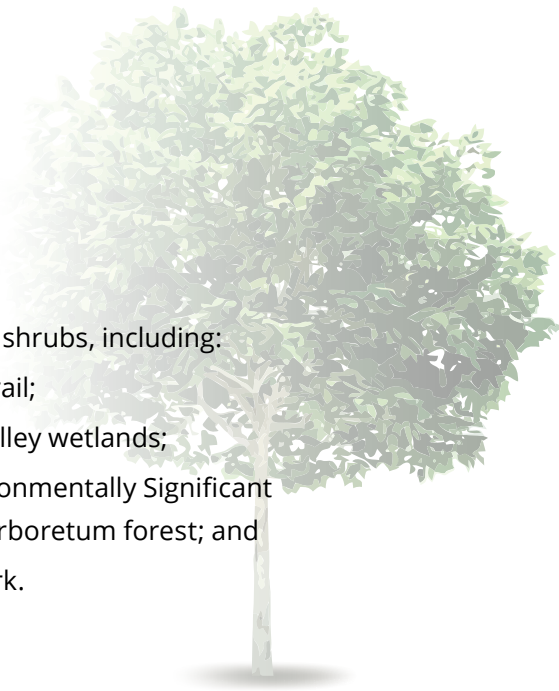
Horticulture and edibles

- Planted 40,000 annuals, vegetables, and herbs;
- Harvested 26 L of maple syrup and 37 L of honey;
- Added over 77 trees and shrubs to our plant collection.



Tree planting

- Planted over 3,000 native trees and shrubs, including:
 - > 2,000 along the West Humber Trail;
 - > 660 alongside the Arboretum valley wetlands;
 - > 400 in the city-designated Environmentally Significant Area (ESA) which is part of the Arboretum forest; and
 - > 100 at Colonel Samuel Smith Park.



Invasive species management

Managed dog-strangling vine (*Cynanchum rossicum*), garlic mustard (*Alliaria petiolate*), goutweed (*Aegopodium podagraria*), European black alder (*Alnus glutinosa*), common reed (*Phragmites australis*), hornwort (*Ceratophyllum demersum*), and purple loosestrife (*Lythrum salicaria*) in our woodland, ESA, garden beds, and/or man-made ponds.

Garlic Mustard plant.
Photo: Ken Towle,
Ganaraska Region Conservation Authority



Restoration and habitat enhancement

- Built and placed 3 wood duck/screech owl boxes and 4 Eastern bluebird nest boxes;
- Planted 96 varieties of bird-friendly plants with Bird Studies Canada in our new Tranquility Bird Garden (funded by the Weston/Trillium Foundation).



Landscape and built environment

- Created the unique Tree of Hope mosaic at our front entrance;
- Designed, built, and installed 6 new stone benches; and
- Built a new deck and a new lookout with a bench and planters at Pond 1.



EDUCATION, CAMPS, AND OUTREACH

- Over 400 children attended our summer, winter, and March Break camps;
- More than 6,700 students from 95 different schools took part in our educational programs; and
- Over 1,000 participants attended 24 community events.

We developed and provided five new curriculum-connected programs:

1. **Art and Ecology:** This hands-on program engages students in active learning as they use natural materials to creatively explore their environment.
2. **Wonders of Wondering:** In this open-ended version of a nature walk, students are encouraged to allow their own curiosity to guide them, while interpreters focus on answering student-generated questions.
3. **Population Dynamics:** Designed for secondary school students, this introduction to population growth cycles and the factors that influence them uses dynamic activities and an analysis of several Arboretum species to explain broader, real world data.
4. **Plant Evolution:** With labelled specimens from all over the world, the Arboretum is a great place to learn the basics of taxonomy, phylogeny and evolution. Students practice plant identification skills and explore themes related to the fields of horticulture, forestry, farming and botany in general.
5. **People and the Humber:** This program looks into the rich local history of the Humber River, the only designated Heritage River in the GTA. Activities such as a portage challenge and fur trading game are designed to enhance student understanding of Canada's history and geography.



COMMUNITY EVENTS



7th Annual Spring Bird Festival at Colonel Sam Smith Park

- Nature education staff provided hands-on activities for visitors to this annual event which helps create greater awareness of the importance of bird habitats. The festival also featured hourly guided bird walks, educational booths and displays with live birds, reptiles and amphibians.



Jane's Walk at Colonel Sam Smith Park

- Nature education staff led a beachcombing tour and community planting event in partnership with the City of Toronto.



COMMUNITY EVENTS



Gardens for Nature Community Event with Bird Studies Canada

- A community planting event helped create the Humber Arboretum’s new bird garden while providing information about how to garden for nature at home.



Adventure Tales — Halloween edition

A fall-themed story led parents/caregivers and preschoolers from the Rexdale community on an interactive walk along the Arboretum’s trails.



Eco-Garden Community Workshop series

Held in partnership with the Etobicoke Master Gardeners, topics for this series included:

- Good bug, bad bug
- Pollinator/ bird friendly gardening
- Pruning
- Getting your garden ready for spring

COMMUNITY EVENTS



Winter Bird Count for Kids

For the first time the Humber Arboretum took part in this annual, international event which mixes expert birders with families and young people for a fun, free day of citizen science.



Stewardship Events with TRCA

- As part of the Great Canadian Shoreline Cleanup, removed litter from the shore of the Humber River with Humber College students.
- Offered free “Greening Your Grounds” Lunch ‘n Learns at the Centre for Urban Ecology for the community.



COMMUNITY EVENTS



Nature Play Master Class

- This evening event featured a keynote by internationally renowned Outdoor Play and Learning pioneer Claire Warden.
- Showcased Humber College's ECE program to professionals across the GTA.



The Great (and Mindful) Backyard Bird Count

- Hosted in partnership with Bird Studies Canada, a natural mindfulness session on snowshoes was followed by the Great Backyard Bird Count, a citizen science project which counted recorded birds found by community members.



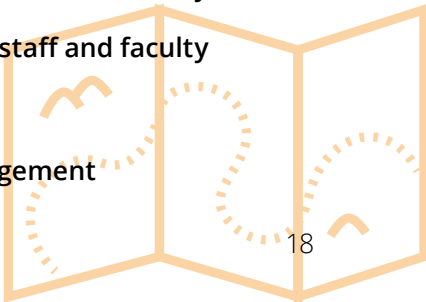
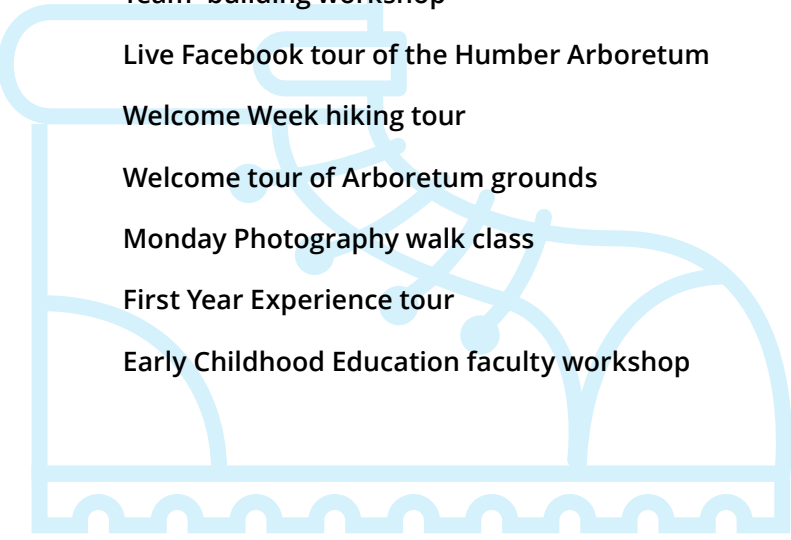
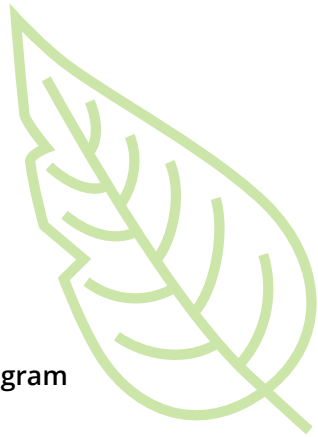
TOURS, EVENTS, AND WORKSHOPS WITH HUMBER COLLEGE

TOURS AND WORKSHOPS SCHOOL/DEPARTMENT

- Indigenous squash ceremony in Medicine Wheel Garden
- Tour for University College Zealand (Denmark) representatives
- Early Childhood Advanced Studies teambuilding activities
- Hosted the Urban Sugar Shack fundraiser
- Showcase workshops: "Not all Classrooms have Four Walls: Bringing the Natural World into the Teaching & Learning Experience" and "Exploring Humber's Wild Side, A Tour of Colonel Sam Smith Park"
- Stressbusting Extravaganza presentation
- Hosted Humber's 11th Annual 5km Fun Run/Walk
- Delivered Artist Walks: Cultures of Ecology (Culture Days)
- Student Ambassador tour
- Dual Credit high school teachers tour
- Ministry of Transportation staff tour
- Evergreen Brickworks staff tour
- Team-building workshop
- Live Facebook tour of the Humber Arboretum
- Welcome Week hiking tour
- Welcome tour of Arboretum grounds
- Monday Photography walk class
- First Year Experience tour
- Early Childhood Education faculty workshop

SCHOOL/DEPARTMENT

- Aboriginal Resource Centre
- Humber International Centre and School of Health Sciences
- School of Health Sciences Early Childhood Education program
- Event Management students
- College-wide
- Humber Libraries
- Fitness and Health Promotion Program
- Humber Galleries
- Student Success & Engagement: Orientation
- Student Success and Engagement
- School of Hospitality, Recreation, and Tourism
- School of Health Sciences
- Applied Research and Innovation
- Marketing & Communications
- Student Success & Engagement: Orientation
- School of Health Sciences staff and faculty
- School of Health Sciences staff and faculty
- Humber North fitness
- Student Success and Engagement



BUSINESS AND OPERATIONS

- Upgraded the CUE with new paint, GREENGUARD blinds, and bird-friendly window film;
- Developed a General Use Policy (under Executive review) and 14 corresponding risk management documents; and
- Wedding ceremony and rental profits grew by 171% compared to last year.



Bird-friendly film

Bird-friendly window film was installed on key sections of the CUE windows to help drastically reduce or potentially eliminate future window strikes, which can be deadly for birds. Bird-friendly film uses a repeating pattern to visually break up the glass so birds can recognize it for the barrier — and danger — that it is.



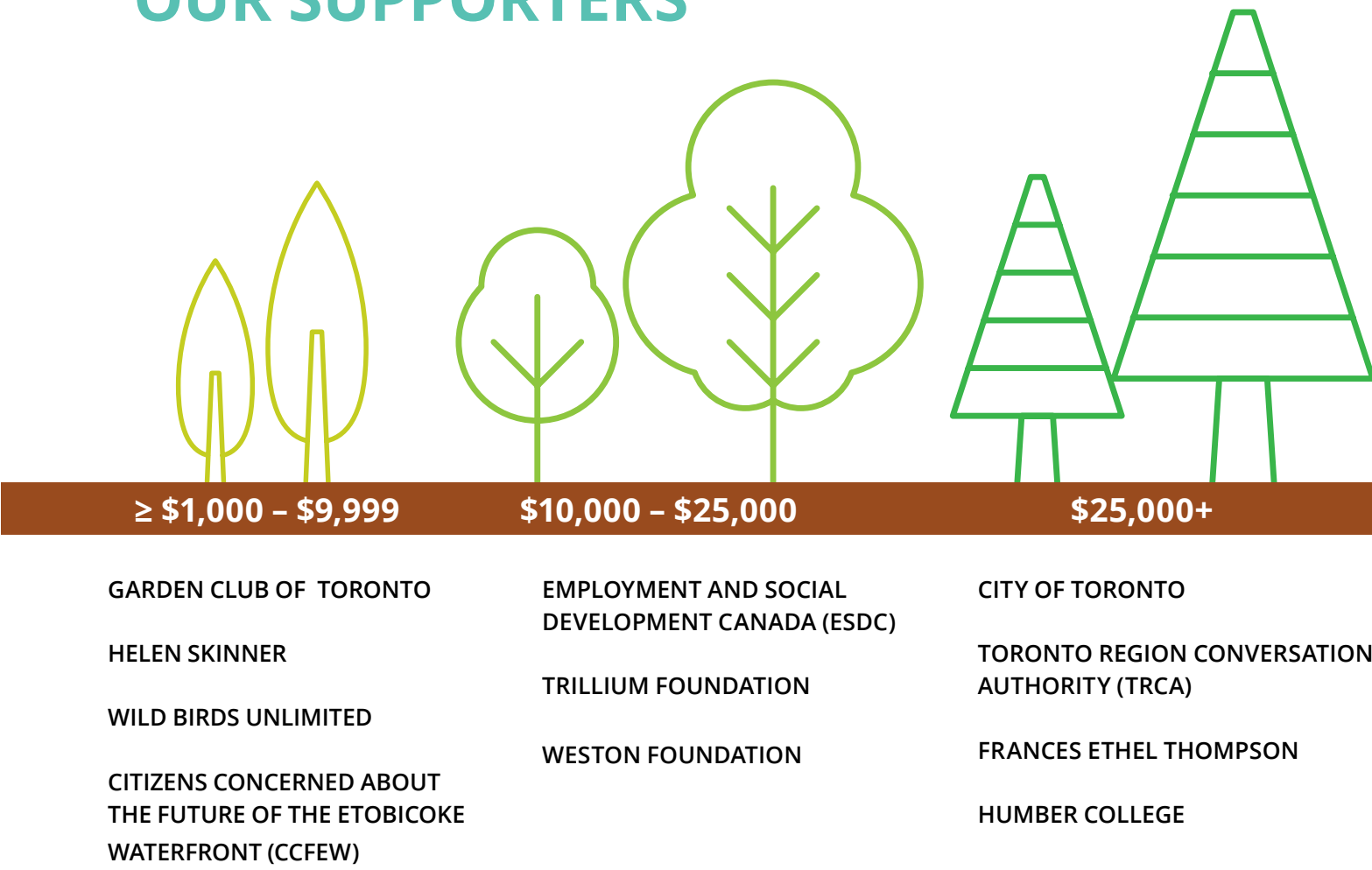
GREENGUARD blinds

The new blinds installed at Centre for Urban Ecology (CUE) are now GREENGUARD Gold certified for low chemical emissions. GREENGUARD Certification is the basis for achieving the LEED® (Leadership in Energy and Environmental Design) credit for low emitting furniture.

OUR COMMUNITY PARTNERS

- *ACER/ClimateSake*
- *Bird Studies Canada*
- *Citizens Concerned About the Future of the Etobicoke Waterfront (CCFEW)*
- *Friends of Sam Smith Park*
- *Humberwood Community Centre and Library*
- *The Etobicoke Master Gardeners*
- *Humberwood Downs Academy*
- *Rexdale Community Health Centre*
- *Holy Child School*
- *Humber College*
- *Toronto and Region Conservation*
- *City of Toronto Parks, Forestry and Recreation*

OUR SUPPORTERS



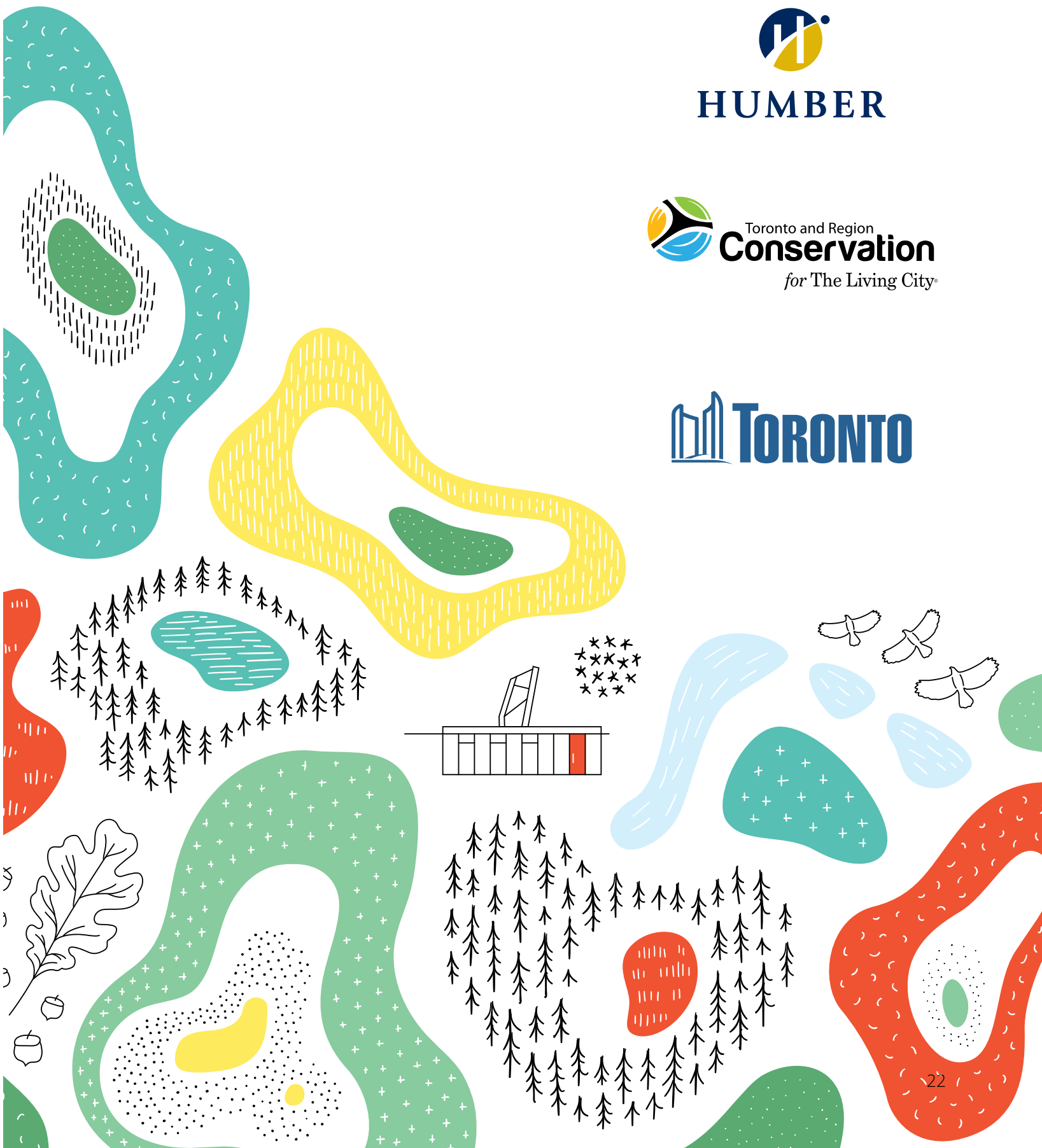
HUMBER ARBORETUM STAFF

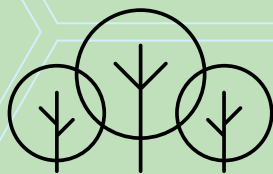
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This work is made possible through the support and collaboration of our three founding partners — Humber College, Toronto and Region Conservation (TRCA), and the City of Toronto.





**HUMBER
ARBORETUM**
+ CENTRE FOR URBAN ECOLOGY

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