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- Newsletter of The Arboretum • Spring 2007

## **Arboretum Endowments** Grow to \$1,000,000

by Professor Alan Watson, Director

They say, "The first million dollars is the **I** hardest." In hindsight, the journey to The Arboretum's "first million dollars" endowments hasn't been too onerous because we've had so much help from you along the way.

In 1994, prior to The Arboretum's 25<sup>th</sup> Anniversary, we had only one endowment fund, The Frances Ball Rose Garden endowment valued at \$30,000. As I wrote in the Green Web, Summer 1995 "One of my goals as director has been to increase the endowments at The Arboretum." By 1995 we had put in place an additional three endowments: Gene Bank Endowment (funded by the Ontario Ministry of

Natural Resources); The Arboretum Endowment (funded by monies raised by The Arboretum Auxiliary's 25<sup>th</sup> Anniversary Gala Dinner and Auction); the David G. Porter Memorial Japanese Garden funded by Bobbi Porter. As reported in the Green Web, Winter 1997 the number of endowments had grown to five with the addition of the OAC '46 Native Tree Fund and the total capital in all endowments was \$168,000. By August 2004 The Arboretum had 15 endowments with a total capital of \$714,091 generating \$28,500 for activities related to the specific endowments.

Since 2004 our number of endowments has increased to 18 with a total capital of \$1,088,057. This capital will provide The Arboretum with over \$40,000 this year to develop and maintain The Arboretum in general and meet the objectives of the specific endowments.

The following is a list of The Arboretum's endowments:

**Anonymous Special Projects** Gene Bank Collection Frances Ball Rose Collection Arboretum General OAC '46 Native Tree Fund H. Louise Ruhnke

Henry Kock Tree Recovery Nature Reserve Robert H. "Bob" Keith Horticulture Education **Programs** 

Ethel and Roy Hammond Memorial Maples for the Millennium

David G. Porter Memorial Japanese Garden Dennis & Lina Venerus Endowment for the Italian Garden

OAC '56 Park in the Garden William G. Girling Environmental Education OAC 1952 Reflecting Pool The Stockton Family Trust Native Garden

We will continue to grow these endowments and also add new ones to the list. Anyone can donate money to a specific endowment; we would welcome that. Perhaps you would like to set up a new endowment to add to our list and set us on our way to our second million dollars?



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## REMEMBERING HENRY KOCK . . .

by Ric Jordan

January 2007! Where did 2006 go? I am sure we all asked that

question this past month at least once. When the staff met in December and looked at the coming year it was decided unanimously that a Green Web had to go out early in the New Year. There always seemed to be something else that took precedence in-house last year and we failed to make our newsletter a priority. So here it is! Of course the task of assigning the articles and writing them is always an interesting process and my hat is off to Chris Earley for keeping us on track this time although some may be coming in just over the deadline such as this one.

I am sure that all are aware Henry Kock passed away Christmas Day of 2005 after a 19 month battle against 'the beast' as he referred to it. A cancerous brain tumour, that just wouldn't succumb to all the surgery, medications, positive vibes and Henry's spirit, finally took its toll

that morning. To those that were close to Henry it has been a bit of a roller coaster ride with ups and downs since that time. A celebration of Henry's life was held at the River Run Centre in Guelph on January 4<sup>th</sup> with an attendance of over 600 people. The cross section of individuals from across the province and the city was a fine testament to the respect that Henry had gathered. individuals Many attendance had never met Henry but knew of him because of his presence in the city and his participation many environmental in causes.

In June a smaller gathering was held at the Arboretum Centre to honour his contributions to horticulture and The Arboretum with speakers from the horticultural/environmental

field and a tree dedication. Henry's involvement in the environmental movement was not an activity taken lightly but rather a true engagement of a philosophy he embraced in his own life. Whether it was concerns over transportation issues, land degradation, planning issues, species of trees to plant, human health or air quality Henry had a knack of being able to think outside of the box, so to speak, and tie it altogether so connections were made. Few left any of his presentations without some insight into the connectivity of our actions on this planet.

At the time of his death Henry was working on two major projects. One was a publication on seed germination techniques for native plants. Three of his close friends, Paul Aird, John Ambrose and Gerry Waldron, have taken over the task of completing this manual and it is hoped that it will be published late in 2007. The working title is 'Trees & Seeds', however that will probably change as completion nears. The second, more long term project, is the Elm Recovery Project which continues on

under the capable hands of Sean Fox. At the June gathering Alan Watson, Arboretum Director, announced that in honour of Henry's efforts with the elms and his desires to expand the program to other species 'The Henry Kock Tree Recovery Endowment' was being created. This would incorporate funds already donated towards the Elm Recovery Program and any future donations for other species. (See http://www.uoguelph.ca/arboretum/ SpProjects/Elm Recover1.htm) That endowment fund is now over \$100,000 and growing with approximately \$25,000 coming in as a memorial to Henry.

A favourite poem of Henry's is one by Tom Bender entitled 'Wisdom'. Within the poem are three lines 'And when death finally comes, Leaving the place not impoverished But richer and gentler for your being there' which can be said of Henry's life and contributions. If you wish to assist us in following up on Henry's vision, please contact Alan Watson or myself at The Arboretum.



## Creature Feature: Spring Peeper (Pseudacris crucifer)

by Chris Earley

neep...Peep...Peep. Yup, that's spring for sure! The sound of a Spring Peeper in the distance really means spring is on its way. There still may be a snowstorm or two, but winter is losing its hold. But how do these little frogs make such a big noise? They are so LOUD. I was in the midst of a spring pond that was full of spring peepers one evening. They had stopped calling as I entered the pond, but as I stayed still, one or two started calling. Then a few more. Then a whole bunch. Then all of them...and I was in pain. Really. They were all so loud that it actually hurt and I had to cover my ears. And no wonder. A spring peeper peep is at the sound level of 110- 120 decibels; that's the same level as an airport runway! naturalist calculated that if a spring peeper was the same size as us and it peeped in Toronto, you would hear it in The peepers fill their Montreal. expandable throats with air and then use this as an amplifier to increase the intensity of the sound made by their vocal cords. The sound can be heard almost 2 kilometres away. Pretty good for a frog that's only 2-3 centimetres long.

Another Spring Peeper quandary is how the little frogs handle the freezing spring weather? They are often calling when there is still ice on the ponds. Being cold-blooded makes this quite an amazing feat. In fact, the mystery is even more incredible than tolerating cold water. Spring Peepers, along with Wood Frogs, Gray Tree

Frogs and Chorus Frogs, c a n actually survive being frozen solid. Yup, like an ice cube. These frogs don't bury themselves in mud like other hibernating hoppers Instead, they find a good spot in the leaf litter and freeze. They can survive this because while up to 65% of their total body water (in the most-studied Wood Frogs anyway) freezes, none of the moisture inside the frogs' cells freeze. crystal formation in a cell would be a disaster because the sharp edges of the crystal would puncture

the cell wall, thus killing the cell.

Among other chemicals, the frog's body

uses glycerol (an alcohol) to protect the cell membranes and glucose (a sugar) to stop the formation of ice inside the cells. This is similar to what insects do in the winter, but while insects prepare in advance for the cold, the frogs don't. They make the change within 24 hours. When the frog's skin begins to freeze, that's their body's signal to prep for winter...NOW! Glucose is produced by the liver and sent to the cells and some water is drawn from the cells to make the sugar concentration even higher. And special proteins in the space outside the cells help the first ice crystals to start forming there.

> The frog can survive freezing temperatures down to about -8C. And even though temperatures get much colder than that, it usually doesn't get that cold in the leaf litter under the snow. While frozen, the Spring Peeper, by some definitions, is actually dead. There is no heartbeat, no brain activity, no breathing. But come March, the newly-thawed frogs will fill our ears, and our hearts, with the hope that winter will soon be giving

way to spring.

## **Staffing Changes**

Barb Watson-Ash went on maternity leave in February 2006. Sarah Beth was born on March 7, 2006 at 8 lb. 12 oz. Mother, daughter and sister Stephanie, now 3 ½ years old, are all enjoying their time at home together. Since February, Caroline Graham has taken over as Marketing and Bookings Coordinator. She's enjoying her days at The Arboretum, organizing dinner theatre and room bookings, as well as coordinating our recent Guelph Storm Hockey fund-raising venture. Barb is due to return to The Arboretum this March.

Ric Jordan is now Manager of The Arboretum and Sean Fox is Assistant Manager. Lig Taurins joins us as Gardener. This is a reflection of the continued growth of The Arboretum as outlined in the Operational Plan of 2006.



## TEREE TO SEE: Sweetgum (Liquidambar styraciflua)

by Sean Fox

The Arboretum displays unique plants from many parts of the world in its various plant collections. According to the Canadian Plant Hardiness Zones Map, Guelph sits in zone 5A, and theoretically we should only be able to cultivate plants with an estimated hardiness rating of 5A or less. A large array of trees from the temperate areas of the globe will endure this climate, but there are still some limitations with what we can successfully cultivate here.

The Sweetgum, Liquidambar styraciflua, is a wonderful 'Tree To See', but if I were to tell you to go take a look at one, I'd normally suggest you head south, as it is too cold for these trees to survive in Guelph. This seems like a reasonable assumption to make as the Sweetgum is generally classified as being hardy to zone 7A. That's two full zones warmer than Guelph. However, this fact didn't deter Henry Kock from giving this species a try during his early days at The Arboretum as Plant Propagator.

Sweetgum is a very interesting tree with star-shaped leaves, corky-ridged bark and some very distinct spiny ball-shaped

fruit. Needless to say, this eastern U.S. native and member of the Hamamelidaceae (Witchhazel) family would be a very unique addition to our collections, and Henry decided he would try to make it happen.

He began his project by collecting seeds from some wild Sweetgum in Ohio, as well as another batch from some cultivated trees growing at the cemetery in Port Dover, Ontario. Dover sits along the north shore of Lake Erie and while much warmer the winter than Guelph, it was still considered to be at the northern limit of the cold-hardiness range for Sweetgum. Henry estimated that about 1000 seedlings germinated from these two lots of seeds back in the early 1980s. The seedlings were put to the test in the protected environment of the nursery for several years until only 10 young sweetgums remained. The cold was too much for the large majority of the seedlings, but these standouts were able to tough it out. This occurrence shows strong evidence to support the idea of genetic variation within a tree species. It was once thought that all individual trees within a species were genetically identical, but now we understand that there is genetic variation for things such cold-tolerance and diseasesusceptibility within not only the natural range of the plant, but also the offspring of an individual tree. Just like you and me, trees are all born a little different!

After a couple more growing seasons in this climate only three trees proved hardy and they were moved into the World of Trees collection where they still stand to this day. That's about 0.3% of the seedlings from the original two seed lots that had the genetic traits to tolerate our climate. How's that for being unique? The trees were initially offered

protection in the winter in the form of a burlap wrap until four years ago when it was decided that they had reached the size that they needed to tough it out on their own. While two of the trees, from the Port Dover seed lot, have suffered some die-back in the past three years, the third seedling, and only survivor from the Ohio seed-lot, is still gaining size every year.

While this is an amazing survival story, I'm not sure I've convinced you to come see these trees yet. What if I were to tell you that Sweetgum provides one of the most spectacular displays of fall colour at The Arboretum - would that help sway you?

The Sweetgum has been known to have colour ranging from yellow to dark purple in the autumn, sometimes even with several colours on the same tree. In October I liken our trees to the appearance of a gumball machine. Imagine the star-shaped leaves in various shades pink, purple, red, orange, yellow, and green simultaneously scattered throughout the tree, and you'll have a reasonable vision of how these sweetgums shine in the fall. Quite incredible!



## FROM THE GARDEN: Canadian Columbine

(Aquilegia canadensis)

by Sean Fox

Columbines, Aquilegia sp., have always been favourite plants of mine ever since I began gardening. This love for columbines came about during my youth while working with my first small, shady patch of land.

They were always a durable plant that would provide me with the feeling of success as they bloomed when all of those sun-lovers would not. It was also during my youth, and as my plant knowledge grew, that I was able to start seeing some of the similarities between different species of plants. Eventually I starting taking notice of how similar the leaves and little red and yellow flowers of a familiar wild plant looked compared to columbines in my garden. This native plant, that I would always delightfully

find growing out of rocky crevices during my camping excursions, had delicate, lobed leaflets as part of its trifoliate leaves, in addition to a very unique and delicate bloom. Each funnelshaped flower nodded towards the ground and had little 'spurs' on the end of each of the five petals. The flowers

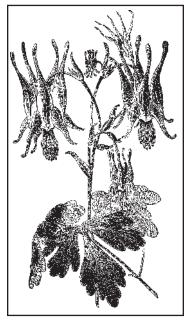
were a rich, scarlet colour with a yellow centre. I flipped through the pages of my field guide and found out that this plant was a columbine too, and Ontario's very own. I had a new favourite plant!

Canadian columbine, Aquilegia canadensis, can be found growing throughout much of Ontario, usually in the filtered sunlight of rocky forest clearings. This is one of those plants that you might find squeezing out of the

tiniest cracks in the rock. 'Aquilegia' is derived from the Latin word for 'eagle' due to the resemblance of the spurred flowers to the talons of an eagle. This member of the Buttercup family can grow from 20 to 70 cm in height with 4 cm long flowers appearing from April to July. As you can imagine by the appearance of the flowers, they are great at attracting insects and hummingbirds to feed on the nectar.

Canadian columbine's range extends naturally from Nova Scotia to Saskatchewan and south to Texas. While adapted to growing in dry shade, these plants will become more vigorous if given more sunlight and moisture while under cultivation. Their ability to tolerate dry conditions also makes them a great choice for xeriscaping purposes.

You can find Canadian columbine growing at The Arboretum in the Gosling Wildlife Gardens, as well as in The Arboretum's natural areas, such as Victoria Woods. I hope someday you might find a spot for this wonderful native plant in your garden as well!



## **Theatre in the Trees - Dinner Theatre's New Show**



Meg Owens is in the middle of moving into her new apartment and out of her old marriage. All she has to do is to have Tom, her husband, sign the final papers and then she can start her new life. However, signing the final papers becomes increasingly difficult, and her new life, represented by an amorous landlord and a fast talking divorce expert, is already underway. This situation, together with a drinking contest by her three suitors, forms the basis for Theatre in the Trees' latest show.

This romantic comedy called <u>Broken Up</u> opened on Saturday, February 3<sup>rd</sup> and continues every Saturday through April (except for the Easter weekend).

These dinner theatre productions have been one of The Arboretum's major fund-raisers for the past 20 years. If you haven't yet experienced this unique combination of live theatre and scrumptious buffet dining nestled in the Arboretum Centre, now is the time. There is a vegetarian option and a cash bar. Gift certificates are available. We can accommodate private parties, and offer discounts for groups of 50 or more. For more information or for tickets, check out our website <a href="www.uoguelph.ca/arboretum">www.uoguelph.ca/arboretum</a> or call 519 824-4120 x54110.





## Lilacs at The University of Guelph Arboretum

by Sean Fox

The woody plant collections at The Arboretum are arranged by botanical family with lilacs

(Syringa sp.) being represented in the Oleaceae (Olive family) collection. While a few specimens of Syringa are included in this collection, along with related kin such as Forsythia, Chionanthus and Forestiera, it was decided that to fully display the diversity within the lilac genus a separate collection would be required. This led to the implementation of the Lilac Collection at the present location in 1985.

While there are over 250 lilac plants being cultivated in various parts of The Arboretum, the Lilac Collection itself contains 110 lilacs with representation from 60 unique taxa (species, cultivars and varieties). The aim of this collection is to display representatives of the different hybrid groups and species of *Syringa*, with the range of colour, floret structure and bloom time being emphasized. This allows visitors to grasp the diversity of the genus in comparison to the naturalized *Syringa vulgaris* that is found commonly in several parts of Ontario.

The site for the Lilac Collection was strategically placed on the side of a drumlin in an area that receives heavy visitor traffic. This location was chosen not only to benefit the plants with full sun, good drainage and ample air circulation, but also to allow visitors to stand back and view the collection as a whole while they peer up the hill. This especially inspires awe during the height of the spring blooming season.

Bloom time itself ranges from the first few days of May for *Syringa* x *hyacinthiflora* 'Assessippi', to mid-July for *Syringa pekinensis*.

Some of the average bloom periods for selected *Syringa* taxa at The Arboretum are as follows:

#### May - Early June:

Syringa x hyacinthiflora 'Assessippi' Syringa oblata var. dilatata 'Cheyenne' Syringa vulgaris 'cvs.'

#### **Early June - Mid June:**

Syringa x nanceiana 'Floreal' Syringa meyeri 'Palibin' Syringa x prestoniae 'cvs.'

#### Mid June - Late June:

Syringa x josiflexa 'Royalty' Syringa patula 'Miss Kim' Syringa villosa Syringa x swegiflexa Syringa reticulata

**Late June - Early July:** Syringa pekinensis

In addition to the Lilac Collection, The Arboretum also exhibits lilacs in several display gardens, the synoptic World of Trees collection and the Hospice Wellington Memorial Lilac Garden. This garden was developed in 1995 in partnership with the county's local Hospice group to celebrate the lives of loved-ones lost during each respective year. A new lilac is dedicated during a ceremony each spring. There are currently 35 plants taking root in this garden.

A full list of the lilacs at the University of Guelph Arboretum is listed below:

Syringa x chinensis 'Saugeana' Syringa emodi Syringa x henryi Syringa x hyacinthiflora 'Assessippi' Syringa x josiflexa 'James McFarlane' Syringa x josiflexa 'Royalty' Syringa josikaea Syringa josikaea 'Pallida' Syringa komarowii Syringa meyeri Syringa meyeri 'Palibin' Syringa x nanceiana 'Floreal' Syringa oblata Syringa oblata var. dilatata 'Cheyenne' Syringa oblata var. giraldii Syringa patula Syringa patula 'Miss Kim'

Syringa patula var. kamibayashii

Syringa pekinensis Syringa pekinensis f. pendula Syringa x persica *Syringa x prestoniae* 'Coral' Syringa x prestoniae 'Dawn' Syringa x prestoniae 'Desdemona' Syringa x prestoniae 'Hiawatha' Syringa x prestoniae 'Isabella' Syringa x prestoniae 'Jessica' Syringa x prestoniae 'Miss Canada' Syringa x prestoniae 'Nocturne' Syringa reflexa Syringa reticulata 'Ivory Silk' Syringa reticulata var. mandshurica Syringa reticulata var. reticulata Syringa rhodopea Syringa x swegiflexa Syringa tomentella Syringa villosa Syringa vulgaris Syringa vulgaris 'Alphonse Lavalle' Syringa vulgaris 'Ami Schott' Syringa vulgaris 'Andenken An Ludwig Spath' Syringa vulgaris 'Andre Csizek' Syringa vulgaris 'Belle De Nancy' Syringa vulgaris 'Charles Joly' Syringa vulgaris 'Congo' Syringa vulgaris 'Edith Cavell' Syringa vulgaris 'Firmament' Syringa vulgaris 'Katherine Havemeyer' Syringa vulgaris 'Krasavitsa Moskvy' Syringa vulgaris 'Lucie Baltet' Syringa vulgaris 'Miss Ellen Willmott' Syringa vulgaris 'Mme. Antoine Buchner' Syringa vulgaris 'Mme. Lemoine' Syringa vulgaris 'Monge' Syringa vulgaris 'Mrs. Harry Bickle' Syringa vulgaris 'Nadezhda' Syringa vulgaris 'Paul Thirion' Syringa vulgaris 'Primrose' Syringa vulgaris 'Prodige' Syringa vulgaris 'Sensation' Syringa vulgaris 'Vestale' Syringa vulgaris 'Viviand Morel' Syringa vulgaris 'Woodland Blue' Syringa wolfii Syringa wolfii var. hirsuta

For donation and dedication opportunities in the Lilac Collection, please contact Arboretum Director Alan Watson at 519 824-4120, ext. 52356.

Syringa yunnanensis 'Rosea'

## Valuable Volunteers

by Rob Guthrie

"Volunteers coach, read, cook, mentor and train. They donate, give, chair, befriend and lend a helping hand. They plant, feed, soothe, visit, sew, plan, coordinate, paint, clean, sort and prepare. They are the young and the old and the in-between. And they are everywhere across this nation."

The above statement comes from a poster that graces the wall in my office at The Arboretum Centre. It was sent to me several months ago, from Volunteer Canada, a nation-wide organization that acts as a voice for volunteerism in Canada. As I sat down to write this, lost in thought about how to begin, I began reading this poster over and over. After about the tenth time, it dawned on me - members of The Arboretum Auxiliary have been involved in every single task listed on that poster! Every one. Even the sewing part! That really is an amazing feat, and the more I think about it, the more amazing it becomes.

We are very fortunate to have such a diverse group of volunteers here at The Arboretum. We have, at any particular time, about 100 active members on our team - our share of the 12 million Canadians that volunteer each year. Without the Auxiliary, all those tasks listed on that poster (and a whole bunch more) wouldn't be completed. As many other organizations across the country realize, we simply wouldn't be able to do what we do without the commitment of those who volunteer their time with us.

Volunteerism takes many forms. The Volunteer Centre of Guelph-Wellington lists 87 different member agencies on its web site, including The Arboretum. Many of our volunteers also volunteer at other organizations, or have volunteered at other organizations in the past. As the importance of volunteerism continues to grow, administrative guidelines are developed and updated in order to ensure a positive experience for both volunteers and the organizations who utilize their efforts. Believe it or not, for volunteer co-ordinators, there is even a "Universal Declaration on the Profession" (if you happen to find this sort of thing interesting, visit the web for a good read at www.volunteer.ca). Of course, the reason for all of this is that volunteerism is extremely vital to the success of society as a whole. Pure and simple. The folks at Volunteer Canada define volunteering as "the most fundamental act of citizenship and philanthropy in our society." That definition suits me just fine.

And so, I'll leave you with a final versethis time from a poster that was on display outside my old office at the Hilton Centre. It was given to me a few years back by long-time auxiliary member Ann Estill. The author isn't known, but it surely must have been written by someone who volunteers.

#### Being a Volunteer

It's not for money, it's not for fame, It's not for any personal gain. It's just for love of fellow (wo)man It's just to lend a helping hand. It's just to give a tithe of self, That's something you can't buy with wealth.

It's not for medals won with pride, It's for that feeling deep inside. It's that reward down in your heart, It's that feeling that you've been a part Of helping others far and near That makes you be a volunteer!



Some members of The Arboretum volunteer grounds crew

## To Honour the Memory of Bruce Monro

Bruce was a long-time auxiliary member, remembered by all of us for his positive outlook on life, and for his wonderful ability to tackle almost any task with grace and good humour.

After Bruce's passing in December 2005, many donations were received by The Arboretum in his memory. This money will be used to dedicate a tree on the grounds of The Arboretum in Bruce's name. In addition, at the suggestion of another long-time auxiliary member, Gord Graham, we'd also like to announce that an annual "Tribute to Bruce Monro" will be awarded to a randomly chosen member of The Arboretum Auxiliary who has been active during the preceding year. We are planning to announce the recipient of this tribute (in the form of a small gift) at our annual volunteer appreciation Pancake Breakfast.



## **Arboretum Operational Plan**

by Professor Alan Watson, Director

The next step following the publication of the Arboretum

Master Plan (AMP) (see *Green Web Spring 2005*, p. 8) was to write an Operational Plan that would "... establish a framework for the implementation of key findings from the ... master planning process." (Arboretum Master Plan, p. 60).

The process began in the fall of 2005 with the forming of the Operational Plan Committee with the following members:

#### **Robin-Lee Norris** (Chair)

Physical Resources and Property Committee, member of the Board of Governors

#### **Anne Arrell**

**External Community Member** 

#### **Stephen Bodsworth**

Associate Dean, Humber College; Director, Humber Arboretum

#### **Chris Earley**

Education Coordinator; Interpretive Biologist, The Arboretum

#### **Pam Healey**

Assistant Vice-President (Development) Alumni Affairs & Development

#### Ric Jordon

Manager, The Arboretum

#### **Steve Newmaster**

Director, University of Guelph Herbarium, professor, Integrative Biology

#### **Craig Pearson**

Dean, OAC

#### **Larry Peterson**

Retired faculty, Integrative Biology

#### **Chris Pickard**

Director, Planning, Engineering & Construction

#### **Bobbi Porter**

External Community Member

#### Jill Robertson

Graduate student representative (landscape architecture)

#### Jim Taylor

Retired faculty, School of Landscape Architecture

#### **Alan Watson**

Director, The Arboretum, professor, Department of Environmental Biology

#### Alan Wildeman

Vice-President (Research)

Completed in May of 2006 the Arboretum Operational Plan (AOP) was written with the AMP forming the template. As such, the AOP is designed to be read as an integrated document with a number of cross-linkages to the AMP throughout.

The AMP developed eight (8) objectives that offer direction to The Arboretum as an "outdoor learning resource," a "living laboratory" and a community resource.

- 1. Provide information resources for teaching, learning, research and outreach.
- 2. Promote and further develop the facilities and programs that are available.
- 3. Promote the unique plant collections available for teaching, research and outreach.
- 4. Participate in teaching, research and outreach, including course and program development both within and outside the University.
- 5. Provide critical support for the University's strategic research directions.
- 6. Assume a leadership role in the management of natural heritage lands as models of restoration and sustainability.
- 7. Partner with other institutions and associations to expand the influence and reputation of The Arboretum.
- 8. Promote volunteer programs and community involvement in The Arboretum.

Key outcomes and potential performance measures are listed for each objective enabling ongoing assessment of progress on the strategies and actions. These may be modified when the Arboretum Operational Plan, as stated in the Arboretum Master Plan, is regularly updated.

Each of these objectives is presented in the AOP with the strategies and actions developed to enable The Arboretum to achieve the objectives and thereby the vision of the master plan. There is also a timeframe for each of the strategies:

Ongoing: Strategic actions may commence at any time through the life of the Plan though many require regular activity, monitoring or review. Priorities for aspects of these strategic actions may be necessary, with these priority tasks identified as part of the annual business planning process.

**Short Term**: High Priority or required to be completed as part of a sequence of task – or as a discrete action within 1-2 years.

**Medium Term**: Medium Priority, commence on completion of high priorities – within 2-3 years. Elements of actions may be commenced earlier.

**Long Term:** Actions are expected to commence during the fourth or fifth year of the Plan. The timeframe may be dependent on completion of other actions or the actions may be lower in priority.

The Operational Plan guides the implementation of detailed objectives for education, research and outreach that were identified by the Arboretum Master Plan Steering Committee during the consultation process. This Operational Plan also contains a strategic and financial framework for the physical development and future operations of The Arboretum.

In September 2006, the Physical Resources and Property Committee of the Board of Governors approved the Arboretum Operational Plan. As a requirement of the approval, The Arboretum will be reporting back to the Committee annually on the progress being made with the Operational Plan.

The Arboretum Operational Plan is posted on The Arboretum's website: www.uoguelph.ca/arboretum.





## The Arboretum Gratefully Acknowledges

#### LIFE TIME FRIENDS

1991 - Present

#### **Founders**

Nancy Caspers
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The following donations were made in the time period of **January 1, 2005** - **December 31, 2006**.

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Frank and Gerry Michael Bernacsek

bench

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**Brian Ostrow** 

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R. Douglas Freudeman tree

Lorna Freudeman

Bill Graf tree and bench

Ruth Wall

James Holdsworth bench

Henry & Annabel Sissons

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Dupont Canada Inc.

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Heather Griffith

Bruce Monro bench

Doreen Monro

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Roman Retman tree

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Christopher Brown

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Renate Amstutz

Matthew Walsh bench

Tanva Amaral

Gillian Cambridge

Lorrie Dixon

Kara Easton

Peggy Gill

Christine Hentschel

Susan Howlett

Nicole Kenton

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Mr. & Mrs. Y.S. Wong bench

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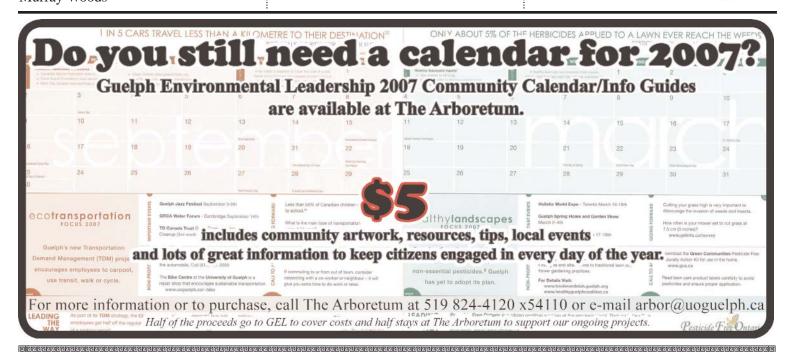
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Every effort has been made to acknowledge each donation. If you find that your name is missing, kindly inform us and the oversight will be corrected in the next issue of *The Green Web*. Thanks for your support.



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## **University of Guelph Arboretum Staff**

Chris Earley - Interpretive
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Sean Fox - Assistant Manager

Caroline Graham - Marketing and Bookings Coordinator (contract till March 16/07)

**Rob Guthrie** - Manager of Computing Services and Volunteer Coordinator

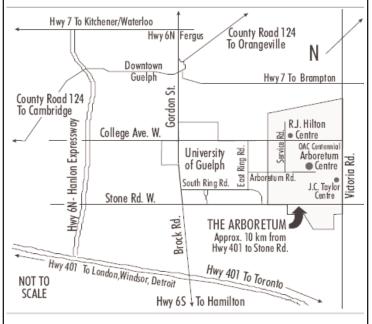
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The Green Web is published as a service for the FRIENDS and volunteers of The Arboretum, University of Guelph, Guelph, Ontario, N1G 2W1.

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#### **HOURS**

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For more information call 519 824-4120, ext 52113