

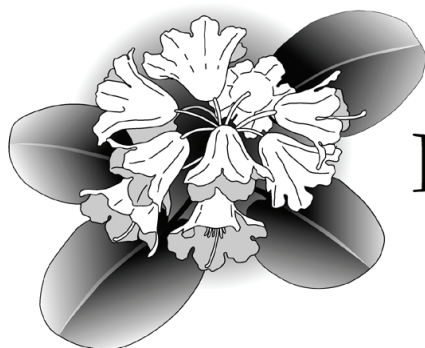
# AtlanticRhodo

[www.AtlanticRhodo.org](http://www.AtlanticRhodo.org)

Volume 33: Number 2

May 2009





# Atlantic Rhododendron & Horticultural Society

## Positions of Responsibility 2008 - 2009

<b>President</b>	Ruth Jackson	454-4681	<b>Director - Horticulture</b>	Audrey Fralic	683-2711
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<b>Director - Social</b>	Shirley McIntyre	835-3673	<b>May- Public Plant Sale</b>	Duff & Donna Evers	835-2586

## Membership (Please Note Changes)

### Atlantic Rhododendron & Horticultural Society.

Fees are \$20.00 from September 1, 2008 to August 31, 2009, due September 2008. Make cheques payable to Atlantic Rhododendron and Horticultural Society. ARHS is a chapter in District 12 of the American Rhododendron Society. For benefits see ARHS website [www.atlanticrhodo.org](http://www.atlanticrhodo.org)

### American Rhododendron Society

Combined ARHS and ARS membership cost is \$50.00. This may be changed in the future.  
For benefits see [www.rhododendron.org](http://www.rhododendron.org)

Cheques should be sent to ARHS Membership Secretary, **Jim Drysdale, 5 Little Point Road, Herring Cove, NS B3V1J7.**

Please include name, address with postal code, e-mail address and telephone number, for organizational purposes only.

**AtlanticRhodo** is the Newsletter of the Atlantic Rhododendron and Horticultural Society. We welcome your comments, suggestions, articles, photos and other material for publication. Send all material to the editor.

Published three times a year. February, May and October.

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Cover Photo: New Rhododendron stamps commemorating 'Mist Maiden' & 'Minas Maid' [Artwork Courtesy of Canada Post]



## Calendar of Events

All ARHS meetings are held on the first Tuesday of the month, from September to May, at 7:30 p.m. in the Nova Scotia Museum Auditorium, 1747 Summer St., Halifax, unless otherwise noted. Paid parking is available in the Museum lot. Friends, guests and anyone interested in rhododendrons, azaleas or companion plants are always welcome at meetings or events.

<b>Saturday April 25</b>	<b>Work party at Meagher Garden 9:30 a.m.</b> See Outreach article
<b>Saturday May 2</b>	<b>Pickup of pre-ordered plants. 10:00 a.m. to 2:00 p.m.</b> See Special Notices
<b>Tuesday May 5</b>	<b>May Meeting with Members' Plant Sale</b> See Special Notices
<b>Saturday May 9</b>	<b>Public Sale 1:00 to 3:30 p.m.</b> See Special notices
<b>Friday May 29</b>	<b>7:30 p.m. Malcolm McGregor: Room L298, St. Mary's University.</b> Alpine Gardening: Lessons from the Wild and slides of Tibetan plants, See Special Notices
<b>Saturday June 6</b>	<b>Garden Tours and Potluck 10:30 a.m. onwards</b> See Special Notices
<b>Saturday June 6</b>	<b>Work Party at Bayport 9:30 a.m.</b> See Outreach article
<b>Saturday May 23</b>	<b>Workshop at the Agricultural College in Truro. 10 a.m. to 4:00 p.m.</b> Further information to follow

**Please Note:** Some members, who have environmental sensitivities, are asking their fellow members please to use no perfumes, scented soaps, etc., on the days or evenings of ARHS events, in order to minimize the risk of allergic reactions.



A very warm welcome to our new and returning ARHS members who have joined since the February Newsletter.

Decker, Rosemary  
Hodder, Annette  
Horn, Nita  
Jaffurs, Alexa & Nina Newington  
Lugues, Daniel  
MacPhail, Bev  
MaGee, Gail  
Manchester, Carol  
Shelburne County Garden Club  
Yarmoshuk, Nicholas

Middle Sackville  
Lower Sackville  
Williamstown  
Middleton  
Halifax  
Middle Sackville  
Lower Sackville  
Fall River  
Shelburne  
St. Catherines, ON

# Special Notices

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## 2009 Garden Tours

### Members' Garden Tours and Potluck Saturday June 6, 2009.

#### 10:30 a.m. to 12:30 p.m., Tantallon and Mason's Point.

**Faye Brunet, Tantallon, 218 Windsor Drive.** See February 2009 Newsletter, p. 19 for a description of this garden. A woodland garden featuring plants grown in the shade.

**Directions:** Take Exit 5 on Highway 103. Turn left if coming from Bridgewater, right if from Halifax, onto the Hammonds Plains Road. At the lights turn right onto Flat Lake Drive, then turn right onto Windsor Drive.

**Cora Swinamer, Mason's Point. 390 Mason's Point Drive.** See October 2008 Newsletter, p. 14.

Cora's garden is on an oceanside slope, facing south with sandy soil. She has lots of plant variety and too many deer.

**Directions:** Approximately 10 km from Sobey's at the Tantallon Mall. Take Exit 5 off Hwy 103, turn towards the ocean to meet the old hwy. # 3, turn right towards, but before, Boutilliers' Point. There will be some sharp turns on the highway. You pass a brown Anglican church on the waterside, then a white church and Masonic Hall. Turn left onto Mason's Point Drive. Drive up the hill to the end (about 1 km). You will see Canada Post mailboxes. The pavement ends. Continue up the gravel lane and you will see # 390. You can park in Cora's driveway and just past her driveway in her neighbour's driveway.

#### 1:30 p.m. to 3:30 p.m.

**Appelbaum/Licht garden, 8598 Peggy's Cove Road.**

The oceanside former garden of Walter and Elaine Ostrom. This garden has been featured in many Canadian gardening books and magazines. It is a stunning mature garden featuring ericaceous shrubs, meconopsis, primulas and native plants. The new owners have graciously agreed to open the garden for our tour.

**Directions:** Please note: parking directions will be given in May. Do not drive into the property.

#### 3:00 p.m. to 5:00 p.m.

**Anita Jackson, East Dover, 149 Scott's Point Road**

Anita's garden is eight years old, with beds of acid loving evergreens, shrubs, perennials and bamboo nestled along curving lawns/paths carved out of native upland bog and white spruce forest.

**Directions:** Take Hwy 333 towards Peggy's Cove after leaving the last garden. Turn at the sign into East Dover. Follow the road till you reach the Y at the cemetery. Take Scott's Point Road up over the hill. Go past Zinck Road. It is the first house on the right-hand side of the road.

**Gwen Romanes, Prospect Bay, 442 Prospect Bay Road.**

An "It's there because I like it" garden with a collection of rhodos, trees and other "oh, that's lovely" plants, planted over 20 years.

**Directions:** Head east on #333 to Prospect/Prospect Bay Road, to your right. About 2 km along, on the left-hand side of the road (the water side) is 442.

**John and Donna Silver 283 Brennan's Road, Prospect Bay.**

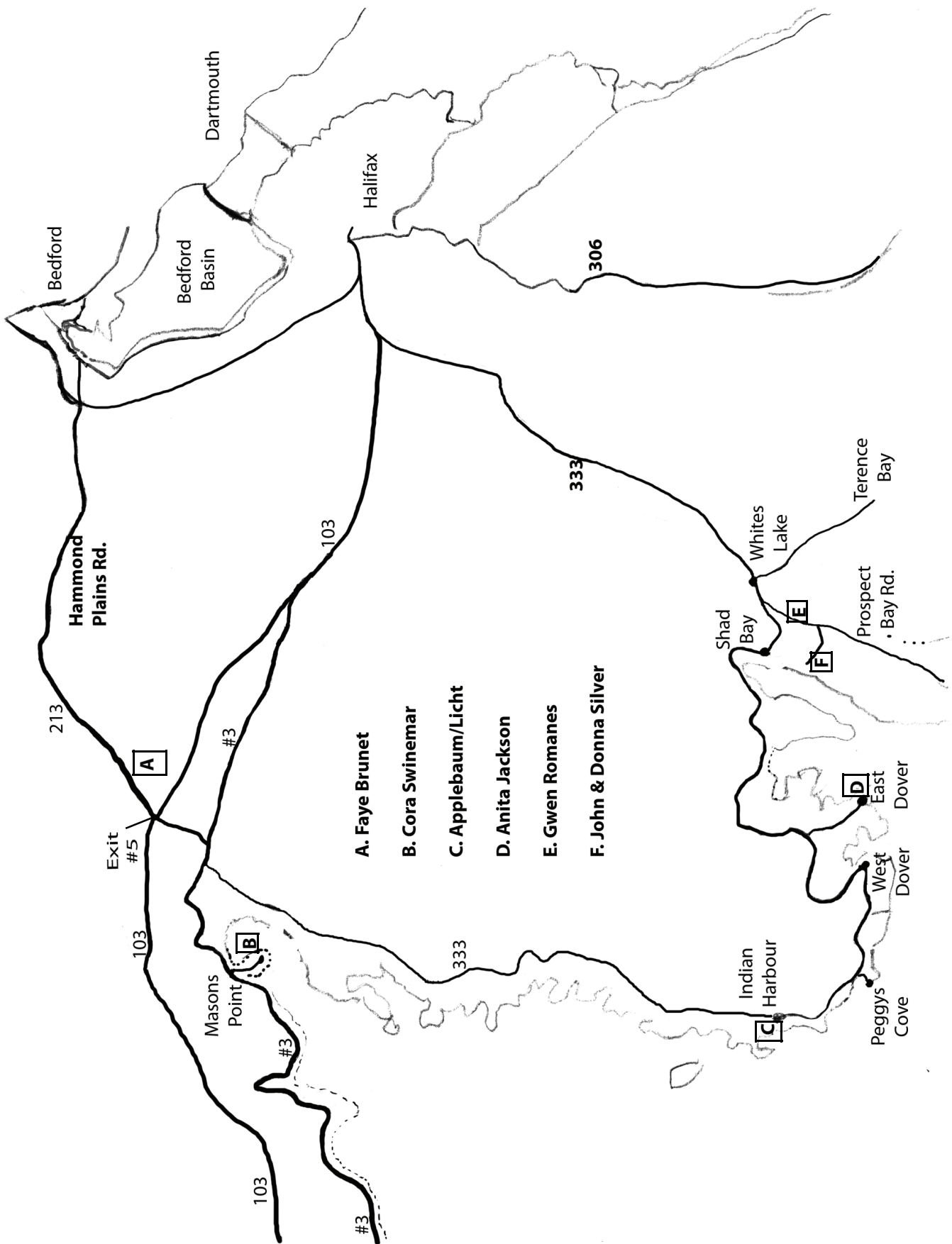
Bridges, ponds, walkways and roads meandering over approximately eight acres of relatively new (15 years) informal woodland garden are features that you will encounter on the Silver property.

**Directions:** Off Hwy 333 turn right onto Prospect/Prospect Bay Road, opposite the Legion, if following the garden tours. Turn right at the second street, Brennan's Road and continue on past the mailboxes. It turns into a private land off the pavement. #283 will be on your right.

**Potluck.** The potluck is at the Silvers' at 6 p.m. but plan to arrive earlier to allow enough time to roam over their large garden. Bring a lawn chair and be prepared if the fog rolls in. Bring ready to eat food, such as appetizers, salads, cold dishes, desserts. Wine is provided by the Society. ☐



# 2009 Garden Tours



# Special Notices

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## **Plant Pickup for Advance Sale for Members Saturday May 2**

Plants are to be picked up at 5 Sime Court, Halifax, on Saturday, May 2, between 10:00 a.m. and 2:00 p.m. Sime Court is in the Kingswood subdivision off the Hammonds Plains Rd. Take Kingswood Drive (between Kearney Lake Rd and Farmer Clem's) to Brenda Drive (the first street on the right) and follow it to the first left which is Sime Court. Plants are to be paid for when they are picked up. Any plants not picked up on this date will be offered for sale at the Public Sale.

## **May Meeting, Members' Plant Sale Tuesday May 5 7:30 p.m.**

LeMarchant-St. Thomas School, 6141 Watt Street, Halifax. Our annual event which always causes a lot of buzz. Remember if you are selling or buying you must be a paid up member and plants should be unusual or difficult to obtain. Please donate any of the more common varieties to the Public Sale.

## **Public May Plant Sale Saturday, May 9- 1:00 to 3:30 PM**

As one of the largest events that the ARHS holds yearly to raise money to carry on the work of the society, we also rely heavily on donations from our members. We hope our members will donate a good selection of tree and shrub seedlings, as well as rooted cuttings, perennials, annuals, etc. So members, please keep the sale in mind this spring when you are seed sowing, transplanting and dividing. Your donations are always greatly appreciated. Members are requested to drop off any donations between 11:00 AM and 12 noon.

This year the annual sale the society will have a wonderful variety of nursery grown rhododendrons and azaleas as well as many other nursery grown shrubs and perennials. Many of the varieties brought in for this sale are not available in the advance sale. We depend upon the dedication of society members to help spread the word to the many enthusiastic gardeners who are looking for unusual varieties of plant material. This year's event will take place at **Le Marchant – St. Thomas School** gymnasium on **6141 Watt Street**, Halifax, N. S. on Saturday, **May 9, 2009 from 1:00 – 3:30 PM**. As in other years, this sale takes place the day before Mother's Day and what better gift is there for your mother, wife, daughter, sister or favorite aunt!

A point to be noted is that donors and sale volunteers will be able to select two plants prior to the sale opening. This will *not* include nursery grown stock. Plants must be selected, paid for and taken to your vehicle a minimum of one hour prior to the sale opening. This rule will be strictly enforced! No exceptions!

So plan to attend and bring your friends and family. This is always a very popular event and the line-up to get in is usually long. For the best selection we recommend that you plan to arrive earlier than the 1:00 p.m. opening time. While you are waiting, a handout with descriptions of the nursery stock will be available.

For more information contact Duff and Donna Evers at (902) 835-2506 or [devers@eastlink.ca](mailto:devers@eastlink.ca).

## **Alpine Gardening, Lessons from the Wild, by Malcolm McGregor, Friday, May 29, 7:30 p.m.**

This talk will be held at St. Mary's University, **Room L298** and will include some slides from Malcolm's trips to Tibet. He is a former editor of the Scottish Rock Garden Club Journal and the Saxifrage Society's Journal. His book on saxifrages was published in 2008 and has been highly praised. He has led many botanical tours and has travelled widely as a speaker. He will also be speaking to the Nova Scotia Rock Garden Club on saxifrages.

## **Rhododendron Society of Canada—Toronto Region**

We have been invited to attend the meetings of this sister society. They are held at the Toronto Botanical Gardens.  
June 9, picnic at 322 Gloucester Ave., Oakville

September 27

November 29.



## ARHS Outreach Spring 2009

By Chris Hopgood

Are you ready? The Atlantic spring, not the calendar spring, will soon be here and with spring comes Outreach. We need four to six volunteers to work at the Meagher garden at Regatta Point, Halifax. Audrey Fralic of Tissue Culture fame is donating a few rhodies and they need to be planted. Also a bit of cleanup will be necessary. So if you are interested, the date is April 25<sup>th</sup> at 9:30 a.m. on Spinnaker Drive, Regatta Point, off Purcell's Cove road, Halifax. It is not expected to take a lot of time, probably two hours give or take a bit. Please email Christopher Hopgood at [cpher@eastlink.ca](mailto:cpher@eastlink.ca) if you plan to take part.

Also we are planning a work day at the Bayport Plant farm in Bayport, Lunenburg county. The purpose of this project is to clear the forest away from the rhododendrons and magnolias, etc., on the property as well as other pruning work. There will be a mix of heavy and light work. The heavy work will require the use of saws and heavy duty pruners, the lighter work will consist of pruning and deadheading to encourage bushier plants and permanent labelling of the plants.

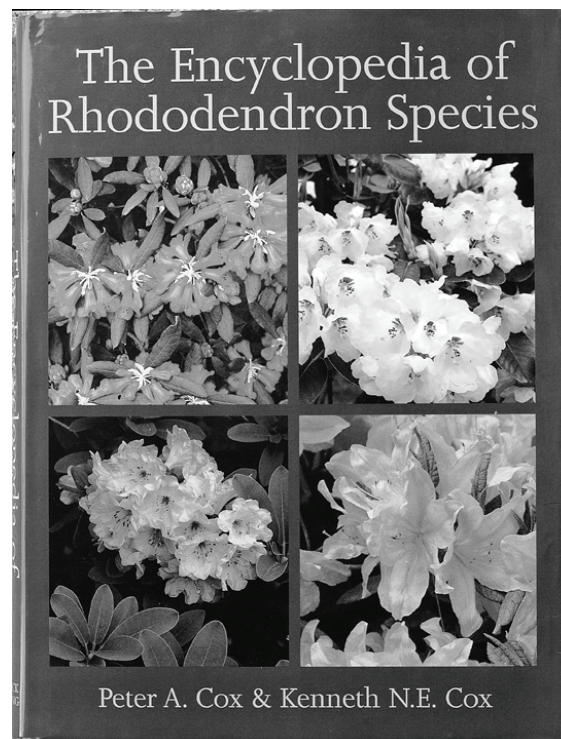
The anticipate date for this project in June 6<sup>th</sup>\*. To meet at the site for 9:30 a.m. Probably six to eight people would be needed for this work day, and again if you are interested please email Chris Hopgood.

As you may recall over the past few years ARHS has had a field day at the Kentville Research Station working on the rhodo and azalea plantings there. This has been a successful project and we expect to return to Kentville in the spring of 2010.

\* Date pending. Contact Chris Hopgood for details. ☐

## Missing Book

Whoever has *Encyclopedia of Rhododendron Species* by Peter and Kenneth Cox please return it to the ARHS library. No questions asked! It has been missing for two years and was never signed out.



# Plant Portrait

## The Tibetan Hellebore

By Mary Helleiner

The hellebores that most of us grow are forms of *Helleborus orientalis (hybridus)*, the Lenten rose, and *H. niger*, the Christmas rose. These have been known and grown in gardens for centuries. They are part of the main body of the genus *helleborus*, found across Europe, into Russia and the Balkans.

*H. thibetanus* is quite distinct from the rest of the genus. It is native to China (not Tibet) and was discovered in the 19<sup>th</sup> century by Père David in Sichuan, but was not introduced to western gardens until 1991 and was not readily available for some time after that. It is deciduous and disappears soon after it blooms in early spring. Overall, it just looks different from the other hellebores that we grow..

Two years ago I found one Canadian nursery that carried this hellebore. The first year in our garden it put up only one leaf before it died down. However, it came through the winter well and bloomed with half a dozen flowers the following year. The texture of the leaf is softer than that of the evergreen hellebores and the green is paler. The flowers on our plant could best be described as cream with a pink flush but in photographs of *thibetanus* that I have seen the flowers are sometimes a quite strong pink. It is entirely deciduous and disappears early in the summer.

We grow it in a half shady part of the garden; it was planted in a humusy compost mix with some perlite added. It probably had some fertilizer when I fertilized the rest of the border. Over the winter it was covered with fir boughs, but this may not have been at all necessary.

This hellebore is said to come relatively easily from seed, and in fact to seed itself in some gardens. We hope! I saved seed from last year's bloom but since it is supposed to take two years to germinate it is too soon to tell the result. I would not dare to divide it.

*Thibetanus* was hybridized with *H. niger* to produce *H. 'Pink Ice'*, introduced in England in 2001. In its pictures it is a silvery pink with pink veining. As far as I know 'Pink Ice' has not yet been produced by tissue culture.

Two books present more information about the Tibetan hellebore, and about hellebores in general: *The Gardener's Guide to Growing Hellebores* by Rice and Strangman, which is in the ARHS library, and *Hellebores, a Comprehensive Guide* by Burrell and Tyler, reviewed in this issue. □

## Rhododendron Stamp Launch



Canada Post recently released two new Rhododendron stamps at the Kentville Research Station. Sandy Brown and Dr. Don Craig are shown with the commemorative artwork which will be displayed at the station. One of the plants depicted, Minas Maid, is from Don Craig's breeding program at the Kentville Facility. [Photos Anitra Laycock]

# Mapping Plant hardiness Zones

By Ruth Jackson

The ARHS Role in Improving Plant Hardiness zones .

There is a Canadian initiative underway to improve the plant hardiness zone mapping of North America. The Canadian Department of Natural Resources (NRCan) needs input from gardeners. An article has been published in the American Rhododendron Society (ARS) *Journal* soliciting input and is reprinted below. The Atlantic Rhododendron and Horticultural Society (ARHS) is uniquely positioned to help with this project because we have an accurate list of 1000 plants that have been distributed locally by our society. Many of our members keep records of their plants and their efforts could now be shared and value added to their data bases by increasing their extent. This is also an opportunity for the ARHS to determine which of the plants that have been brought in over the years have thrived.

The effort involved in organizing this information for the club is the first step in building a geographic information system (GIS). A GIS database links information to a specific location. The ARS article points out that although the scientists need to know accurately the position of your garden, the maps that are publicly available are plotted at a scale that is too coarse for the public to locate your garden.

The uses of the geographically referenced data are many. For example, an experienced gardener may find they have the only surviving member of a particular plant introduction and perhaps this plant has properties that mean it should be propagated. New gardeners would get detailed information on their gardens' hardiness zones and would be able to choose plants with best chance of success. Once the GIS framework is established for our club more information could be added such as bloom times, the distribution of pests and diseases both spatially and temporally.

In order to automate the procedure so that our club, NRCan and the public benefits from the information, there must be modifications made to our website that will involve getting outside technical support. The more members that are willing to sign on to a modified website and take the time to indicate the plants that they have in their gardens the greater the likelihood that we can get funds to do this project. The membership will be polled to determine how many members would be willing to participate in this project. The ARHS executive would like to pursue the project; we first need to determine your willingness to participate. Please read the following reprinted ARS article and determine if you are willing to contribute your time. ☐

## Mapping Rhododendron Planting Zones Across North America—You Can Help!

Willem Morsink<sup>1</sup>

Toronto, Ontario, Canada

Dan McKenney, Ph.D.<sup>2</sup>

Sault Ste. Marie, Ontario, Canada

Dear Members:

Hundreds of ARS members are or have been involved over the years with establishing a continent-wide treasure trove of information on the culture of the genus *Rhododendron*. This includes the ARS district-wide lists of numerous "Proven Performers" ([http://www.rhododendron.org/performers\\_intro.htm](http://www.rhododendron.org/performers_intro.htm)). The experience of ARS members is invaluable and can now be further captured to help develop more refined potential planting or growing zone range maps across all of North America.

We are asking for your experiences to be input to the "Going Beyond the Zones" website (<http://planthardiness.gc.ca>; McKenney et al, 2007a). Presently there are very few observations and maps for rhododendrons. These maps/models will provide higher resolution maps of potential growing zones than the broad-scale district designations currently available. Your participation as ARS rhododendron experts and gardeners will provide the observations needed to generate climatic profiles and hence maps. Your input will be a permanent contribution that will be kept forever by the system and will help provide a stronger scientific basis to our understanding of climatic tolerances and range potential of rhododendrons for North America.

How Does It Work?

The general aim of the Plant Hardiness project is to develop potential range maps for individual species of trees, shrubs and perennial flowers. To date this project has compiled about 2,000,000 location-specific observations for thousands of species across the United States and Canada. The location coordinates are linked to new climate models that allow for a climate profile to be generated. Climatic profiles can now be mapped much more rigorously than previously possible thus giving a better indication of the possible range of individual species.



The climate profile for a species, variety, or the hybrid/cultivar is basically the *distribution of climate values* taken from all locations where the plant is known to occur and survive. By compiling many locations a set of climate values can be estimated (e.g., things like annual mean temperature, precipitation, etc.). As these values are accumulated a better understanding of the climate-tolerance-survival profile is generated and mapped for each species.

#### Species and Hybrids Suggested for Input

Which rhododendrons to be input to the plant hardiness mapping system is a difficult issue given the huge number of possible species and hybrids. A balance is required between a reasonably comprehensive list and practicality. Experience suggests a wide range of potential users including expert horticulturalists, academics, gardeners and even government agencies interested in examining potential distributions of hosts for alien species. After considerable discussion we are suggesting input from four rhododendron subgenera:

- Elepidotes-(large-leaf): Subgenus *Hymenantes* rhododendrons
- Lepidote (medium/small-leaf): Subgenus *Rhododendron* rhododendrons
- Deciduous azaleas: Subgenus *Pentanthera* and other deciduous rhododendrons
- Evergreen azaleas : Subgenus *Tsutsutsi* rhododendrons

These names have been added to the plant hardiness web site. They are primarily based on the “Proven Performer” Lists for ARS Districts 1-12. Others names may be added in the future.

#### How Can You Help?

To generate these profiles and maps for rhododendrons we need participation from ARS members from all over North America. It is actually quite a simple process—contributors need only to identify which rhododendron species and/or hybrids have survived at least 3-5 years at their location. Once about 30-50 observations are entered the potential range maps are generated. These models are continually updated as more data are submitted. So the project is very much a work in progress. If you want to help by entering data, please register for an account at <http://planthardiness.gc.ca>. Once you are registered, log into your account to enter data (you may enter non-rhododendron observations as well!). You do not have to be a registered user to view maps. Simply select a genus and then a species and/or hybrid from the list and view. If you would prefer to enter your data into a computer spreadsheet and then email your file, contact Dan McKenney, at: [dan.mckenney@nrca.gc.ca](mailto:dan.mckenney@nrca.gc.ca). If you prefer to work with pen and paper you can also send your data, including rhododendrons not currently listed on the plant hardiness site, by post mail to (Bill) Morsink, 37 Holcolm Rd., Toronto, Ontario, M2N 2C8 Canada, or ask for the species/hybrid input list by email: [wagmor@look.ca](mailto:wagmor@look.ca). Maps will be generated once 30 to 50 locations have been received.

#### Determining Your Location Coordinates

Besides accurate species' identifications the models require specific locations to be provided—this means the longitude and latitude coordinates (in decimal degrees) of where each species are known to survive. The usual locations are house lots, special purpose gardens such as an arboretum, parks and so on. For example: “The Botanical Gardens at Ashville, North Carolina, ten-acre site, at 151 W.T. Weaver Boulevard, has coordinates 82.550 longitude and / 35.600 latitude.” This location may have a list of a dozen or more rhododendron species, as well as many other plant species. The more precise the locations the better because the climate estimates will be more accurate—at least 3 decimal places is preferred. All locations are kept confidential and coarsened so it is impossible to trace any locations down to an actual location on the ground.

You can use a global positioning device or get coordinates from topographic maps showing coordinates, or through the [www. Maporama.com](http://www.Maporama.com) website. When you are creating your coordinates from Maporama please choose the “decimal degrees” option, e.g., the Ashville Botanical Gardens Maporama data shows 35.61(35\*56i)/ Lat. 82.56(82\*33i) long.

#### Thinking About Climate Change and Rhododendrons

Climate change is predicted to strongly impact plant distributions (McKenney et al 2007b). The Plant Hardiness project also models where the climate habitat for that species could be expected to move under several climate change scenarios. The climate change scenarios have been developed using the Intergovernmental Panel on Climate Change climate change scenarios and represent different possible greenhouse gas emission paths this century. At the website you can view results based on several climate change scenarios and for different time periods in the coming century. No one knows what scenario will actually happen because much depends on the path of future greenhouse gas emissions. Nevertheless the models give a general indication of where some species might be suited in the future.

We hope you find the opportunity to contribute to this project exciting and useful. Your participation can help provide much needed scientific data and provide a mechanism to put rhododendrons even more on the “map”!

#### References

McKenney, D.W., Pedlar, J., Lawrence, K., Campbell, K., Hutchinson, M. 2007a. Beyond traditional hardiness zones: using climate envelopes to map plant range limits. *Bioscience*. 57:929-938.

McKenney, D.W., Pedlar, J., Hutchinson, M., Lawrence, K., Campbell, K. 2007b. Potential impacts of climate change on the distribution of North American trees. *Bioscience*. 57: 939-948.

Additional useful references for the classification and identification of rhododendrons.

Chamberlain, David, Roger Hyam, George Argent, Gillian Fairweather and Kerry S. Walter, 1996. *The Genus Rhododendron, Its classification & synonymy*. Edinburgh: Royal Botanic Garden, Edinburgh.

Galle, Fred C, 1987. *Azaleas*: revised and enlarged edition. Timber Press, Portland OR. 519 p.

Greer H.E. 1996. *Greer's Guidebook to Available Rhododendrons-Species and Hybrids*. Printed in Thailand, Eastern Printing, 3<sup>rd</sup> Edition, 227 p

Leach, D.G., 1961. *Rhododendrons of the world*. Charles Scribner's Sons, NY.

Willem Morsink

37 Holcolm Rd, Toronto, Ont., M2N 2C8, Canada, email: wagmor@look.ca

Willem Morsink is a member of the ARS and past president of the RSC Toronto Chapter, ARS District 12.

Dan McKenney, Ph.D.<sup>2</sup>

Natural Resources Canada, Canadian Forest Service, 1219 Queen St. East, Sault Ste. Marie, ON, P6A 2E5. Fax 705-5415700, email: dan.mckenney@nrcan.gc.ca ☐

## Book Review

### An Encyclopedia of Shade Perennials

By W. George Schmid

Timber Press, 2002, 374 pages, List price \$60.50 Canadian, \$43.16 from Amazon

Many of us are faced with the problem of gardening in a situation with more shade than we want. Here is a book by a keen gardener who relishes shade, scorning the wide-open gardens and lawns of recently built suburban developments. His own garden, Hosta Hill, is in Georgia, but as he says, "I write for gardeners in all types of climates, relying on reports from all over and the collective wisdom of experts."

Schmid begins with four introductory chapters, in which he makes the point that all plants require light. We should think of plants for shady gardens as shade-tolerant rather than shade-loving. He is guided by his observations of wild plants growing in the woods around his garden. Various factors contribute to the kind of shade in a garden: The geographical latitude (how high the sun gets in the summer – nothing we can do about that), the time of day the garden is sunny or shaded, what kinds of plants provide shade (deciduous trees or evergreens), and the overall density of the shade. All this, as well as the soil and temperature will determine what plants will thrive under our conditions. The author's garden is subject to intense summer heat and drought, and he had to add porous soil to cover hard-baked clay. Fortunately, these are not the kinds of problems we have to deal with.

Of course we all like to see flowers. However, the flowers of shade-tolerant plants are often not very showy, and almost always not very long-lasting. The author repeatedly makes the point that the structures and colours of the leafy parts of the plants should be considered of primary importance in designing a shady garden. (This is also an important consideration for those of us particularly interested in rhododendrons).

The bulk of the book is a list of plants suitable for shady gardens, arranged alphabetically by genus names. A generous section of pictures, similarly arranged, is keyed to the descriptions of the plants. Understandably, there is a lot on hostas: 19 pages, and 25 pictures. In addition to the descriptions of the various genera, there is advice on suitable soils (including pH preferences), heat and cold tolerance, longevity in the garden and general suitability. Many sections also include references to specialized publications on the genus being considered. Schmid has some warnings about plants that can become invasive. With respect to the genus *Viola*, he says "with few exceptions they are obnoxious weeds." As in our garden, he finds *Corydalis lutea* a bit of a problem. And surely he might have foreseen what would happen when he brought in *Pteridium* (Bracken fern)!

Browsing this encyclopedia, I was repeatedly side-tracked. I would try to look up something, find something interesting on the way, and forget what I was looking for. Serendipity: a joyful experience. The kind of book I could wander around in for day after day. ☐

- Chris Helleiner

# The Nova Scotia Agricultural College Rock Garden

By John Proctor [Photos by the author]



After some 30 years as a provincial naturalist for Newfoundland and working for the Memorial University of Newfoundland Botanical Garden to create their rock garden, Bernard S. Jackson and his wife retired to a quieter life in Truro. Bernard's wife enjoys golf but since Bernard does not, he found retirement a little too quiet. Looking for something to do, Bernard became involved with the Friends of the Nova Scotia Agricultural College (NSAC) Gardens, who then maintained a number of gardens around the campus, including the Alumni Garden. Carol Goodwin, an Associate Professor in the Department of Environmental Sciences at NSAC, had the idea of creating a rock garden on campus for the benefit of students, and she recognized that Bernard was the right person for the project. A south-west sloping 3/4 acre area of turf was selected between the Collins horticulture building and the Cummings administrative building. With approval to proceed, Bernard soon had the bit between his teeth and was working on the rock garden up to 5 days a week.

Truro's soil is pure sand. An agreement was struck for granite from a quarry in Kempton. They could have the rock free if they (the Friends) paid for trucking. Over 500 tons of granite has been hauled to the site, with many large rocks positioned one by one to ensure stability and naturalistic placement. The terrain has been sculpted to make steep ridges, dry stream beds, scree beds and a dry stacked wall. One of the dry stream beds has running water during spring snow-melt and during heavy rains. An in-ground sprinkler system allows irrigation with separate controls for each area.

The North American Rock Garden Society provided a development grant for the trough court, which covered the cost of the paving stone in that area. Projects were created for college woodworking and landscaping classes to build the wood-rail fence and the bridges, with the Friends paying for the materials. The sandstone blocks used for the troughs in the trough court were from a heritage building in Truro. Heather Lawson of Raspberry Bay Stone carved the troughs out of the solid blocks, again paid for by the Friends. Bernard is quite proud that no government money has been spent on the garden.





The initial strategy was to fill the garden with whatever reasonably suitable plant material could be obtained, partly to provide quick results and colour to foster support in the college top offices. (Politics can be important in the garden too.) Bernard even moved most of his own rock garden plants to the NSAC rock garden. The longer term goal is to improve the plant selection.

Most of the plants in the rock garden are species rather than named varieties or cultivars. After all, rock garden plants are essentially wild plants. The *Houstonia caerulea* specimens were dug from a Truro ditch by Carol Goodwyn; they are vigorous, forming the largest *Houstonia* mats I have seen. If you are lucky to visit at the right time, you might see fabulous *Gentiana acaulis*, *Iris pumila*, *Bolax gummifera*, *Viola pedata* (*pedatafida*?), *Genista delphinensis*, *Primula marginata*, and *Primula auricula* hybrids. The crevice beds in the trough court are a favourite of mine, with a wonderful array of plants such as *Allium albidum*, *Phyteuma sieberi*, *Phlox kelsyi*, *Salix reticulata*, *Globularia punctata*, *Asarina procumbens*, *Dryas octopetala*, *Dianthus*, and a host of other gems.

Some of the plant material has proven to be too successful. The *Pulsatilla vulgaris* are fabulous in bloom and in seed, but are spreading more than is appreciated. It is unfortunate they do not transplant well. Another vigorous spreader is the *Eryngium* known as Miss. Wilmot's Ghost. *Pseudofumaria lutea* (*Corydalis lutea*) and *Pseudofumaria alba* (*Corydalis ochroleuca*) also self seed abundantly but are easily pulled and provide welcome colour well into fall.

A propagation area has sand beds in cold frames, with pots of seedlings and cuttings plunged in the sand. Since these cold frames are surrounded by a six foot barbed wire-topped fence and most of the Friends have been female, this area has been dubbed P4W.

The Friends work in the garden weekly, doing a great deal of the weeding, deadheading, fall leaf removal, and helping with plants in the propagation area. One challenge is that workers need to know the plants or else they require close supervision. It is all too easy when weeding amongst widely varied plants to suddenly find yourself holding a nice plant. Bernard is continually advising not to touch any plant you are not certain of.

Complementing the Friends' role with the rock garden, the Rock Garden Club provides plant material, help with propagating and sustaining important plants, identification, and promotion of the garden and rock gardening in general. Through the college, the Rock Garden Club is in the process of setting up a charitable fund for special rock garden projects, which could include labels for the garden, significant additions to the plant collection, or an alpine house.

For college students, members of the landscape trade, and gardeners, the rock garden demonstrates an alternative to the common Nova Scotia gardens, and a substitute for water, fertilizer and pesticide-hungry turf grass. During pleasant weather, students are often seen reading on the benches and the garden has become popular with Truro residents. To date, the rock garden has been a fairly well kept secret. That's unfortunate since the rock garden is worth visiting a number of times between late April and October. □



Limestone Troughs at the NSAGC Rock Garden. [Photos Sterling Levy]

## Garden Basics

*The survey our members completed in May 2008 showed that many of you wanted basic gardening information. This is the second article of a series that we hope will fulfil that need.*

### The Soil Beneath our Feet

By Jenny Sandison

#### Part 2: pH

I expect we all remember pH from basic science: a scale by which we measure acidity versus alkalinity. In Nova Scotia we are advised that the soil is generally quite acidic. You may remember that on the scale 7 is the neutral point, and 0 - 6.9 is the acidic side (sour) getting ever more acidic the lower the number. Above the neutral point 7.1 - 14 indicates ever more alkaline (sweet) the higher the number.

Why is this important in soil? Well, we are told that most plants will do well in a pH between 6.2 and 6.8. Again it depends where the wild plant has found a niche for itself and the conditions there which are the conditions it requires to perform well. On the Scottish moors, peat laden soils have a very low pH and heather is adapted to perform well in that quite acidic soil. On chalk hillsides, with a pH above 7, the wildflowers include harebells, poppies and field scabious. Each unique environment is a home to plants that are adapted to thrive there.

When I first came to Nova Scotia and bought the property here close to Mahone Bay I did a soil test. I used one of the cheap DIY kits and it showed my pH here was 6.8. Now my neighbour, whose original home was in Bedford, was telling me that Nova Scotian soils can easily be around 4 or 5. (Areas of high rainfall tend to be acidic as the rain leaches out alkaline compounds.) I thought my soil kit must have been faulty and I paid \$15.00 and sent a soil sample away to the Agricultural College. The results came back as 6.8. Eventually I discovered that although most Nova Scotian soils are quite acidic there are the Windsor Loams which contain gypsum which are alkaline. The geological map shows this area located around Windsor where you can see the white gypsum clearly in some of the cliffs. There also happens to be a small area on the South Shore (the Oakland-Indian Point Peninsula where I live), which also shows these characteristics.

#### Soil tests

Doing a soil pH test is probably a good thing but generally speaking if plants in your garden and in the gardens around you are growing well-enough you may not need it. As I understand it pH affects the availability of plant nutrients. Phosphorus is a nutrient plants require in some quantity but as the pH drops below 6 the phosphorus becomes bound up with other minerals becoming less available to plants. Some nutrients such as iron, zinc, copper, manganese and aluminum become ever more abundant as the pH drops.

As we are a Society focused on the beauty of Rhododendrons and other ericaceous (acid-loving) plants you might think pH would be vital to the health of our plants. Well, I find plants are fairly tolerant and even here the Rhodies grow extremely well. The leaves of my plants tend to be a quite light green, which is a result of a deficiency of iron in the soil. If the pH were lower this would be more available, but they grow and bloom very well.

You can change the pH of your soil. Liming the grass is a common maritime practice. Grass grows better if the pH is up around 6.5 when there would be a lot of bacterial action causing the decay of organic material and the release of nutrients. Generally you are advised to lime a lawn in the Fall as it takes a long time to work its magic. Alternately you can apply sulphur to lower the pH. One spring, when I seemed to have some time, I did apply Miracid to my Rhodies, and was rewarded with a wonderful dark-green colour to the foliage, but I haven't repeated the experiment! Compost is another soil sweetener, both the municipal kind and the garden kind. Remember the bark from conifer trees is quite acidic so every time you re-mulch your garden with bark mulch you are making the soil ever more acidic. Putting a layer of compost on the soil before you re-mulch is a good practice.

#### Inorganic Fertilizers and Compost

Although chemicals are getting a bad press the numbers on a bag of granular general-purpose fertilizer are useful. 5-10-5 was the one I grew up with. The numbers refer to the chemicals Nitrogen-Phosphorus-Potassium and the ratio between them. Fertilizers for your lawn will be high in Nitrogen which produces lush green growth, (20-1-1). General purpose fertilizers have more Phosphorous which builds strong roots and stems and helps promote flowers and fruit, while Potassium is important for general health and resistance to disease. If you spent some time building soil initially and



continue to add compost you won't need to use inorganic fertilizers much. Compost contains all the chemicals and nutrients that plants need, albeit in small amounts. It more importantly improves soil texture due to the addition of humus with all its water-retentive qualities.

I do try to sprinkle a small handful of 5-10-5 over the roots of my shrubs and trees as that is all the help they get. I know if I plant a lot of annuals, which have high demands of food, that I would have had to add a lot of aged manure or compost to the area. I also find my containers, (where I use a soil-less potting mix) need a water soluble fertilizer added to their irrigation water every week.

### **Mulching**

Finally a word on mulch. We are blessed that our forest industries woke up to the fact that they can take a waste product of their industry, grind it up and sell it to gardeners and landscapers at a good price. It sure looks good when all the beds are covered with that uniform, dark, fine-textured, warm brown mulch. The lawn is nicely defined and the plants are really set off splendidly. Aside from the aesthetics it is beneficial too. Mulch really suppresses the growth of weeds, helps to prevent the soil below from drying out quickly and over time adds some humus to the soil. As pointed out before, if done too regularly it can lower the pH too much and affect your plants ability to absorb the nutrients they need. Also you need to resist using mulch to cover things up. If the ground is infested with perennial weeds they will re-emerge. If the initial soil preparation was not done the plants will not thrive. But here I am talking about unscrupulous contractors and not members of the Atlantic Rhododendron and Horticultural Society! ☐

## **Book Review**

### **Hellebores, A Comprehensive Guide**

**By C. Colston Burrell and Judith Knott Tyler**

**Timber Press, 2006, 256 pages, \$34.95 US, \$36.23 Canadian from Amazon**

Many members of our Society have been growing hellebores for some time, since Ken Shannik has been bringing in six-packs of seedlings for sale. Here is a fine book to help us understand and appreciate these remarkable plants. The authors both have nurseries and large plantations of hellebores in Virginia. They have travelled extensively to see and photograph hellebores in their native habitats in Europe (mainly in the Balkans), as well as in the gardens and nurseries of breeders in Britain, Germany and the Netherlands. One species, *Helleborus thibetanus*, is native in China, the only hellebore outside Europe and the eastern Mediterranean. It has recently become available in commerce, and has been used to produce an interesting new hybrid, *H. Pink Ice*. The authors and their photographer have produced an outstanding collection of pictures of hellebores in all their variety, beautifully presented in generous sizes.

When one reads the section on wild hellebores, it soon becomes evident that the concept of species is difficult to apply here. The book lists and shows pictures of seventeen species, but not only is each species extremely variable, but many intermediate forms (probably natural hybrids) are there too. Even the distinctions between stemless and stemmed forms are sometimes hazy. The hellebore we most frequently grow in our gardens is the Lenten Rose, now called *Helleborus X hybridus* (formerly *H. orientalis*.) According to the authors of this book, the complex ancestry of these plants includes contributions from most or all of the species in their list. The variety of colours and forms is astounding – small wonder!

Garden hellebores are almost always grown from seed. Division is tedious and slow, and micropropagation (tissue culture) is still in the early stages of development, though a few clones are now commercially available. Therefore this book provides detailed instructions on germination of the seed and care of the seedlings. Fresh seed usually germinates within a year, and under ideal conditions, the first flowers appear two years after germination. But of course the resulting plants are not uniform. What the breeders have been trying to do is generate seed strains of improved quality and reasonably predictable colours and forms. They do this by line breeding – repeatedly using the most desirable plants as parents generation after generation. It is a slow process, but some strains now come true to colour from seed about 95% of the time. The results are superb. When you buy an unflowered seedling it is still a gamble, but a pretty good one.

The book concludes with a chapter on using Lenten Roses in garden design. In the Southern US, the Pacific North-West, and in the milder parts of Europe, these plants make an excellent contribution to the garden in winter. For us they bloom in early spring, about the same time as the daffodils. But the flowers are long-lasting, and the leaves remain attractive until they are beaten down by the snow. ☐

**-Chris Helleiner**



## Photo Album



*Helleborus thibetanus*. [Photo Chris Helleiner]



*Helleborus niger*. [Photo Sterling Levy]



'Babylon'. [Photo Bob Pettipas]



'Goldfort'. [Photo Sterling Levy]



'Janet Blair'. [Photo Sterling Levy]



'Augie Kehr'. [Photo Bob Pettipas]



'Barbara Hall'. [Photo Bob Pettipas]



'Minas Maid' [Photo Bob Pettipas]