The **"Niagara Rhodo"**

The Niagara Chapter, Rhododendron Society of Canada

April 2007 Newsletter

Website: *http://www.rhodoniagara.org*

Our Purpose

We are a non-profit organization whose aim is to promote, encourage and support interest in the genus *rhododendrons,* including *azaleas.* **Our goal is to encourage gardeners to grow and appreciate these plants, by providing educational meetings with knowledgeable speakers, access to topical publications and hosting joint meetings with other chapters.**

Inside This Month

Upcoming Events

Preview to Plant Sale

Get a head start for Saturday's Plant Sale -- plan your Rhodo and Azaleas purchases by attending Nick Yarmoshuk's talk!

April 18, 2007. Wednesday, 18:30 hrs - 20:00 hrs.
St.Catharines Public Library sponsored event at Grantham Plaza Library. Scott St near Vine.
Nick Yarmoshuk's talk, *Success with Rhododendrons in Niagara*, will describe his experiences in growing some 300 rhododendrons and azaleas on his city lot near downtown St.Catharines. He will show that rhodos and azaleas are easy to grow in our environment provided some very simple practices and procedures are followed. ***Descriptions of plants to be available at the April 21, 2007 plant sale of the Niagara Branch, Rhododendron Society of Canada, will be provided.***

Our Plant Sales

Tell all your friends about the great value obtained at our plant sale, of rhodos, azaleas and companion plants. Members, including local members, receive a 10% discount on their purchases. Invite your friends to come. Better yet, bring some of them to the sale.

April 21, 2007. Saturday morning, 10:00 hrs, former HRIO *(Guelph University)***, Victoria Avenue, Vineland Station. (For directions see map at** http://rhodoniagara.org/activities.htm)
The plants likely to be offered will be described on April 18 as noted in the description of the preceding event. Plant photos may be viewed on-line at our web site, http://www.rhodoniagara.org/plantsales.htm

May 13, 2007. Sunday afternoon, 1400 hrs. Special Plants for Members Sales. - 120+/- small rooted cuttings taken from members' gardens in St. Catharines, Niagara-on the-lake and Fonthill. Plants, not available elsewhere, grown two years in poly-house, are now available to members at very low prices. Rare varieties, available in small numbers, will be sold at auction.

Work Party – Saturday a.m., April 14, 2007, 1030 to 1230 hrs

As we did last year, we plan to offer small bags of chunky peat moss at the annual plant sale on April 21. Preparation of these bags will take place at the former HRIO experimental Station, Victoria Avenue, Vineland Station. Last year, 15 members did quick work of breaking apart 15 (6 cubic foot) bales of chunky peat moss to package 60 smaller bags to be offered for sale on the following Saturday. Come out for a fun filled late morning/early afternoon; share winter (rhododendron) and other experiences and enjoy Pizza and Wings at a local haunt after.

President's Report

Just as our gardens are reborn each spring, our organization has renewed itself with some fresh faces on the Board. We have the distinction of not only having 4 engineers on board -- Mike Little, Darshan Bhatia, Peter Phelps and Nick Yarmoshuk -- but also 3 dynamic entrepreneurs, two plant protection specialists and a business strategist.

Our Niagara College Project has moved on to the next phase, plant selection for the Rhododendron demonstration bed. At the March Board meeting, Michelle Purchase, Landscape Architect, professor at Niagara College and designer of the new rhododendron site, outlined her concept for the garden. This was followed by a meeting at the Looye's to obtain our members' input into the development of a master list of suggested plants. This list will be refined over the coming months as the hard landscaping is completed and the bed is prepared. The ultimate goal is for the plant installation to be done over the summer by Niagara College students, with a late August to mid September completion.

Our educational / social program continues to provide benefits to our members. The success of recent events demonstrates the relevance of these activities and the pleasure derived. These activities would not be possible without the enthusiasm of Board of Directors and the support of our members.

As you know, our plant sale is our major fund raiser. Please promote this event to your friends and acquaintances, including members of other garden clubs. Not only will they get the opportunity to buy some special rhodos, azaleas, and companion plants, they will get guidance to ensure growing success. What better way to share our gardening abundance with our friends.

Also, volunteers are appreciated to help out at the sale on April 21. It does get hectic at times. Take advantage of this opportunity to greet your fellow members and to make some new friends. Friends are like rhodos-- you can't have too many! Contact Nick Yarmoshuk at (905) 684 4703 to offer your assistance.

This Past Month

The March 12 event with ***Sally and John Perkins*** speaking on Good-doers in New Hampshire and Companion Bulbs, Corms and Rhizomes was well attended with more than 50 participants. Plants provided courtesy of Rhodo Land Nursery were sold at a spirited auction conducted by Richard Birkett. Richard's enthusiasm as auctioneer is much appreciated by all.

The Niagara Chapter of the RSC was well represented at the ***Niagara College Open House***, March 23rd and March 24th. Winners of the Chapter's raffle and the plants that each selected are: Grace Pigeon *(English Roseum)*; Joan Boniferro *(Mist Maiden)*; Louise Marykuca *(Ginny Gee)*; Lil Haworth *(Millenium).* They each received their chosen plant on March 27th.

Winter Damage 2006-2007

Last week a member of our group called our editor, Nick Yarmoshuk, to say that a number of her rhodos looked rather brown and asked for help to try to understand what had happened to her plants.

He found three Vulcan (reds) on which everything above the snow line was brown and the stems were dead. There was no green cambium layer just below the brown bark on any of the tall branches. But, the leaves on branches below the snow line seemed to be a healthy green; buds appeared to be alive.

He had much the same experience with a number of plants in his own yard. Badly browned were top-most branches of Calsap, (Janet Blair x Odee Wright), Cunningham's white, and a half dozen other unidentified elepidotes. This is the first time that they have shown very bad sun (wind?) burn. A red elepidote and a couple of others obtained at the 1998 Convention sale, and which he can't identify at this time, also showed sun burn. This is the first time that these plants have shown this, although four plants of (Janet Blair x Odee Wright) frequently have lost 50% of their flower buds.

On the other hand the leaves on all his lepidotes growing in full sun, seem to have done well. he didn't see any dry brown leaves. Of course he can't say anything about the flower buds. That will have to wait until early May. That includes plants such as Dora Amateis, Pink Pom Pom, Tom Koenig, Martha Hitchcock, Anna Baldsiefin, Joe's Broom, Midnight Ruby, and Isola Bella. Sunsheen and Capistrano, yellows both look fine, but they were under snow during the worst of the bright cold weather and also in a very sun protected area under evergreens.

In full sun, Wyandanch Pink, Gigi, Blue Jay, Scintillation, Smirnowii, Spring Dawn, Janet Blair, and a couple of Iron clad elepidotes also show no wind (sun) burn. Vinemount, a large plant, has a little leaf burn. The leaves of a bicolor, received years ago from Weldon Delp, the one that has a super-complicated cross, did really well in full sun with no sun scald. Illam Violet, propagated for members one year, shows no sign of leaf damage. Angel Powder showed a little sun burn but is not bad.

Elepidotes planted on the south side of the property, which are also protected by an 7 foot fence and evergreens, are as green as ever. That includes (Vernus x Melrose Pink) and about 7 other unidentified elepidotes. He hasn't checked the buds on all of these. He'll wait for May to see what happened with the buds. In the meantime he recommends patience and will adopt a wait and see attitude until late May before he does any pruning.

Of course we recall that December and January were very mild, the snowdrops were showing white colour and daffodil leaves were 6 inches tall. February was very cold and very bright, but it never got below -8C around here. He has three mini-max thermometers at three different locations on the yard. Two showed -5C as the coldest minimum and one showed -8C as the lowest minimum and that was in the front of the house where, Gigi, Blue Jay and Wyandanch Pink are the dominant plants.

He concludes it was never cold enough for temperature to be a factor here, but, more likely, the warm January weather combined with the bright winter sun and the frozen soil in February probably accomplishing their nasty deed.

How Did Your Plants Do This Past Winter? – Good-Doers

Jack Looye has suggested that we should try to prepare a new "good-doers" list for Niagara. Many members have acquired new plants over the years and the collective experience of this group of enthusiasts is not being used and indeed some would say is being wasted. Jack and your editor propose a very simple method of collecting information. Next May, at the height of the blooming season in your garden, prepare a list of your plants, using, (1) rhododendron's or azalea's name (if you have it) or simply a description as to type, (2) indicate the colour of the leaves, (3) the colour of its flower (when it last bloomed), (4) whether or not it is blooming this year and (5) with your name and location call in the information to Nick Yarmoshuk at (905) 684 4703. Or, if you have a long list, send the information to postmaster@rhodoniagara.org. Call Nick if you need his postal mailing address.

What is Hardiness?

The following article presents some well considered views on hardiness written by a person who grows rhododendrons and azaleas in an area of inland New Hampshire similar to our own.

Editor's Note: *This is an abridged version of Sally Perkins' original article that appeared in the Rosebay, Volume XXVI Spring 1999. Permission granted by Sally Perkins to use this version. All rights to the original article and to this version are reserved by Sally Perkins. Sally Perkins is a trained Botanist with Bachelor and Master degrees in Botany and Plant Physiology. With John Perkins she gardens in Salem New Hampshire and writes and speaks on various topics dealing with Rhododendrons, Azaleas and companion plants. The full article may be seen on the following www address: http://www.rosebay.org/chapterweb/rosebay/what_is_hardiness.html*

Most rhododendron books define hardiness on the minimal temperature that a plant can endure and fully bloom. This definition works just fine if all one cares about is the bloom. The plant has to look pretty darn impressive in bloom for that to be the only reason to keep it in my garden.

I consider plant hardiness as coming through the winter with healthy foliage and healthy roots. Cold hardiness requires that the plants have acclimated properly through the natural process of lengthening nights and cool temperatures to become dormant. This is an active metabolic process requiring adequate moisture and proper nutritional balance. Much more critical temperatures occur in spring after the ground has thawed and buds have swollen. At that point forward, the dormant temperature ratings are not relevant anymore. The temperature that a plant can endure without injury rises sharply. Even the hardiest *R.dauricum* will lose flower buds when a cold blast of Arctic air briefly descends in April. The wise plant knows to hold back from the urge to grow.

We have plants that are flower bud hardy for our winters and not foliage hardy. The Hobbie hybrids have lovely red tubular flowers. If only the foliage came through winter looking attractive. 'Baden Baden' is the only one we have kept. If we had reliable snow cover I am sure it would be different.

On the other hand, we have plants that have never flowered and not only do we not care if they ever flower but we might even be disappointed if they do. For example, many of the selections of *R. yakushimanum* x *bureavii*, such as 'Hatch's Small Clone' and 'B.L. Silver', have such lovely foliage and new growth that the flowers just seem to get in the way. Their foliage comes through winter like a champ without damage from snow loads or ice. *R.williamsianum* is a species listed in most books at -5°F but 2 different clones have flowered for us below -10°F since 1992. Try the *R. yakushimanum* x *williamsianum* hybrids for a similar look with later bloom time.

Our tiny property borders on a lake and is on a slope so there is good drainage both in soil and air: great for disease prevention, bad during drought. Mature white pines and hemlocks provide partial shade and natural mulch but also root competition. The winters are colder than the surrounding area when the ice covers the lake from mid-December to late March, but the summers are cooler, too. The January thaw rarely reopens enough of the lake to nudge plants out of dormancy. The spring-fed lake water modulates the temperatures so that late spring frosts and early autumn frosts are unusual. But spring doesn't start until the ice goes out and even then the spring is often downright cold. In contrast, the autumn is long and warm. It is difficult to generalize from my property to another about hardiness. We sit near the line for USDA zone 5b/6a just 30 miles north of Boston and 17 miles west of the cold Atlantic Ocean. The rain/snow line often falls just north or just south of us which means the weatherman's guess is as good as mine and the snow cover is pretty unreliable. Our winter lows are normally -10° to -15°F.

Every year in the late fall we take mental notes on the plants that are not doing well. The ones that will have a "rough go of it" through the long New England winter. For if a plant is not healthy going into winter it is a bad omen on it coming out alive. Often I think it is the unseen root system that is the problem. Rhododendrons can lose half their delicate fibrous root system over the winter. Freezing and thawing and the resultant heaving will wreak havoc on smaller plants. This will happen almost anywhere in the garden but is most likely in the sunnier locations or if the soil preparation has too much peat. An autumn drought is a dangerous precursor to winter stress. During the shortening days of the year a plant's vegetative and floral buds are triggered to go dormant and as long as there is moisture in the soil and the ground remains unfrozen the roots will continue to grow. Drought will put a stop to this all too important root growth at a critical time. Only the following spring will the destructive evidence of an autumn drought appear, as apparently healthy plants will fail to push growth. Did the roots die last fall? Did the plant fail to go dormant? Did the plant go dormant too early and desiccate over the long winter? Was it really not cold hardy?

We have a rule that a plant is not declared dead until June 22nd at which point a postmortem is performed. The "scratch test" of scraping the bark away with the fingernail to expose a healthy green cambium layer usually fails. The plant is then dug and roots are examined as well as the bark. Figuring out why a plant died can be helpful on correcting cultural conditions. Last year a mature 'Canary Island' looked wonderful coming out of winter but never put on any growth and died by summer. The deep roots were probably dead before the winter ever happened. On post-mortem, we were sure we would find signs of *Phytophera* but alas, it was just dead roots. There were no telling tale signs of red or brown streaks in the stem or in the main roots. The plant, growing in my neighbor's yard, was a victim of light watering rather than deep infrequent watering.

If a young plant dies in its first winter it is often due to "bark split". This may be the result of freezing at the cambium layer which happens when the ground is not frozen either early in winter or early in spring when a sudden cold snap descends upon us. We have seen it only on small plants that have not established a thick or mature bark layer. Similarly, grafted plants are most prone to graft failure under the conditions that foster bark split. Sometimes we will see girdling by mice or voles that find the delicate cambium layer a tasty morsel. It amazes me how long a plant can look nice in the spring completely girdled. Obviously, protecting young plants throughout their first year or two helps to reduce losses.

Plants that are marginally cold hardy come out of winter looking pretty sad and struggle to bloom or to put on new growth. If they bloom heavily they may exhibit signs of drought stress from insufficient roots or may flag quickly during a growth flush. Assuming a decent growing season they will look best by the fall when they have reestablished a good root system.

Plants that are marginally heat tolerant, the alpine species in particular, will look great coming out of winter and start to look a little peaked by July and be truly ugly by September 1st. Heat tolerance is not as much of a problem here on the lake as summer highs rarely reach into the 90's.

I think heat tolerance may also be more a matter of roots. Alpine rhododendrons often are described as being found where there is cool soil, excellent drainage, reliable soil moisture and bright light but not necessarily direct sunlight. This is a demanding condition to match. Soil temperatures can build up with the dark bark mulch that we use extensively. Even the north side of my house gets direct sun in the long days of summer. Ground covers such as *Cornus canadensis*, *Tiarella cordifolia,* and *Phlox stolonifera* actually keep the soil temperatures lower by the air cooling properties of transpiration but only as long as the soil remains moist enough to satisfy the needs of the ground cover as well as the rhododendrons. In alpine gardens the use of white or light colored stone as mulch does a fine job of reflecting light and heat, slowly warming up during the day and slowly giving off heat during the night. Surface layers of stones effectively preserve the moisture underneath. Larger stones buried in the ground may be a hindrance to growing corn in New England but not to growing alpines as the roots may grow under the stone into its cool moist environment.

Worse case scenarios are the marginally cold hardy plants that are not heat tolerant. They are usually dead by September 1st or it would be a blessing if they were.

So what would I recommend trying in areas such as mine? Here are a few of my favourites.

Lepidotes:
'April White' clear white and *R. mucronulatum* 'Cornell Pink' clear pink, are a lovely combination for early bloom with good contrasting fall color, too. 'Manitou' with its interesting color change from bud to full bloom has a better habit than 'Windbeam.' Of course I love lots of different variations of *R. minus* hybrids like 'Pioneer Silvery Pink,' 'Weston's Pink Diamond,' 'Milestone',' 'April Snow,' and 'Veesprite' which are all tough reliable performers. The species itself *R. minus* Carolinianum Group 'Epoch' or 'Gable's Album' are tough plants for sun and good drainage. The pale yellow-flowered dwarfs *R. keiskei* 'Yaku Fairy' and form *cordifolia* want a little shade. The *R. keiskei* hybrid 'Southland' with is salmon pink flowers and compact habit can fit into most any garden along with 'Ginny Gee.' And how can you go wrong with any of those charming *R.keiskei* x *racemosum* hybrids?

Elepidotes:
R. degronianum ssp. *yakushimanum* named forms such as 'Phetteplace,' 'Mist Maiden,' 'Ken Janeck,' 'Yaku Angel,' and 'King's dwarf' are excellent foliage plants in order of plant size. 'Scarlet Romance' Mehlquist's strong red is good for its reliable bloom, dark foliage and contrasting brown buds. 'Henry's Red' will give you a big sprawling plant with that unusually deep red color but "nothing special" foliage. 'Hello Dolly,' 'Percy Wiseman,' and 'Vinecrest' are in decreasing order of interesting flower and foliage in the yellow/orange category.

R. degronianum var. *tsukushimanium* has the most wonderful pink flowers on top of dark green shiny leaves complete with a shiny brown indumentum on the showy underside. One can't go wrong with named smir-yaks like 'Dorothy Swift,' 'Ruth Davis,' 'Crete' and 'Today and Tomorrow' for great indumented foliage, habit, and reliable bloom. *R. bureavii* 'Lem's Form' and most *R. bureavii* hybrids do not need to bloom to earn their place in my garden with their rich brown indumentum but would like to stay out of sun or they become chlorotic

Evergreen Azaleas:
I do not avidly collect evergreen azaleas so my recommendations are limited. Not all the North Tisbury azaleas perform well but 'Michael Hill' blooms cascades down a hillside. *R. yeodense* var. *poukhanense* and named forms—This species has been used extensively to develop hardier evergreen azaleas but it is nice in its own right. *R. kiusianum*—I have had no problem with hardiness in any of the 7 different cultivars I grow. 'Beni Suzume'—A late double orange-red Satsuki azalea that should not be hardy but it didn't read the book. *R. nakaharae*—Both Polly Hill's low growing 'Mt. Seven Stars" and the taller 'Bovee Form' have strong orange-red color in June. The Schroeder azaleas 'Holly's Late Pink,' 'Dr. James Dipple,' and 'Hoosier Peach' seem to have enough hardiness to bloom reliably for me.

Deciduous Azaleas:
These can have problems with green worms, azalea borer, rust and powdery mildew but the following are my recommendations.

'My Mary'—The multicolor orange and yellow flowers in a tall good foliaged upright shrub looks like the species *R. austrinum*. 'Marydel'—Very fragrant with a low stoloniferous growth habit makes this one of my favorite recommendations. 'Golden Lights'—My favorite Northern Lights azalea but recently I have been impressed with 'Mandarin Lights' healthy fall color. 'Weston's Innocence', 'Lollipop' and other fragrant Weston's introductions are perfect for summer at the lake. *R. cumberlandense* 'Camp's Red'— Hard to beat for July color and I would recommend hybrids of the species too. *R. vaseyi* —If you only have room for one deciduous azalea choose this one for its airy pink bloom or 'White Find' for pure white. Both have incredible multicolor fall foliage and are free of any of the insect or disease problems. If late spring frost is not a problem, *R.schlippenbachii* will reward you with even larger flowers but site it away from the afternoon sun.

From the Past: Blue Clay with Diamonds

Abridged from *Bulletin of the Rhododendron Society of Canada. 1972, V1, No1 from an original article by R.R.Forster. Space does not allow reprinting of the full article. Readers may enjoy the good humour in the original to be found at* ***http://www.rhodoniagara.org/pdf.htm***

Forster's recommendation for growing Rhododendrons based on his experiences in "Blue Clay are:

1. Provide good drainage.
2. Excavate at least 12 inches deep.
3. 50/50 coarse peat and acid sandy loam.
4. Bed raised 3" to 4" above grade.
5. Regular application of Ferrous Sulphate (Iron Sulphate) to ensure acidity.
6. Ammonium Sulphate as source of nitrogen.
7. Deep mulch after freezing.
8. Never allow plants to wilt from drought.