

# AtlanticRhodo

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Volume 26: Number 2

May 2002



# Rhododendron Society of Canada - Atlantic Region

## Positions of Responsibility 2002 - 2003

<b>President</b>	Sheila Stevenson	479-3740	<b>Newsletter/ Website</b>	Tom Waters	429-3912
<b>Vice-President</b>	Anitra Laycock	852-2502	<b>Library</b>	Shirley McIntyre	835-3673
<b>R.S.C. (National) Rep.</b>	Ken Shannik	422-2413	<b>Archivist</b>	Open	
<b>Secretary</b>	Penny Gael	826-2440	<b>Seed Exchange</b>	Kathy Chute	354-3320
<b>Treasurer</b>	Dexter Kaulbach	453-0380	<b>Tissue Culture Sale</b>	Audrey Fralic	683-2711
<b>Membership</b>	Betty MacDonald	852-2779	<b>May Mini -Show</b>	Jenny Sandison	624-9013
<b>Past President</b>	Ken Shannik	422-2413	<b>May - Advance Plant Sale</b>	Ken Shannik	422-2413
<b>Director - Program</b>	Jenny Sandison	624-9013	<b>May- Public Plant Sale</b>	Duff & Donna Evers	835-2586
<b>Director - Communications</b>	Christine Curry	656-2513	<b>Flower Show</b>	Gwen Romanes	425-6323
<b>Director</b>	Sandy Brown	683-2615			



## Membership

ARS/RSC District 12 (National) Membership fees for 2002 were due on December 1 and 'Local' membership fees were due on January 1. If you have not renewed your membership please do so now. If you are not sure if you have renewed, please contact **Betty MacDonald** our **Membership Secretary**, (902) 852-2779. The current dues structures are as follows:

**1. R.S.C. - A.R.S. Membership** (which includes Atlantic membership) \$42.00 Canadian for individual membership. Please make your cheque payable to - "Rhododendron Society of Canada" and send to **National Treasurer, Mr. Robert Dickhout, R.S.C. District 12 A.R.S., 5200 Timothy Crescent, Niagara Falls, Ontario L2E 5G3. Be sure to specify Atlantic Region.**

**2. Atlantic Society only** (which includes all privileges, mailings and activities of R.S.C. Atlantic only) \$15.00 for individual or family membership. Please make your cheque payable to "R.S.C. Atlantic Region" and send to **Atlantic Membership Secretary, Betty MacDonald, 534 Prospect Bay Road, Prospect Bay, Nova Scotia, B3T1Z8.**

When renewing your membership please include your telephone number. This will be used for RSCAR purposes only (co-ordination of potluck suppers and other events) and will be kept strictly confidential. Thanks!

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

Published three times a year. October, February and May

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Cover Photo:

*Rhododendron viscosum* photographed on Tray Mountain, Georgia, USA by Don Craig.



## Calendar of Events

All R.S.C.A.R. 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. Parking is available in the Museum lot. Friends, guests and anyone interested in rhododendrons, azaleas or companion plants are always welcome at R.S.C.A.R. meetings or events.

- 2 April**                      **Meeting:** Michael Otis: "Woodlanders". Michael works at the Montreal Botanical Gardens and is an authority on these plants.  
Workshop: Ken Shannik: How to make a mist chamber.
- 13 April**                      **Spring Workshop:** A full Saturday's events are planned at Kingstech College in Kentville. Put this in your diary. Details will follow later. If anyone has any ideas or requests for workshops/presentations or names of resource people, please email them to Stephen Archibald: [stevenson.archibald@sympatico.ca](mailto:stevenson.archibald@sympatico.ca)
- 7 May**                         **Meeting:** John Weagle: "Planting and Maintenance of Rhododendrons". This will be a practical demonstration in the Museum Garden. Hope the weather cooperates!
- 8 June**                         Annual Pot Luck Supper, 5:00 p.m. Bring something for the buffet table and spend a pleasant late Spring evening in Chris Hopgood's garden and home at 21 Dingle Road, Halifax. Please let him know if you're planning to come: 479-0811 See more details in Special Notices, this Newsletter.
- June**                             Garden Visits. Bob Pettipas is organizing some interesting Garden Tours; more information to follow in a special mailing.
- 3 September**                 Meeting: Annual Meeting and Guest Speaker. 7:30 p.m., 1747 Summer Street, Nova Scotia Museum of Natural History. Speaker TBA.
- 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 RSCAR events, in order to minimize the risk of allergic reactions.



A very warm welcome to our new and returning R.S.C. Atlantic Region members who have joined since the February 2002 Newsletter:

Jeffrey Barton,  
Alan Campbell  
Ann Li Huestis  
Rosaleen McDonald  
Pamela Punch  
Brad Watt

St. John's, NFLD  
Shenanigan Lake BC  
Dartmouth NS  
Wolfville NS  
Halifax NS  
Hatchet Lake NS

## Special Notices

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### 2002 May Plant Sale

Nova Scotia Museum of Natural History - Auditorium - Lower Level  
1747 Summer Street, Halifax

Sunday, 19 May - 1:30 p.m. to 3:30 p.m.

This Sale is one of our major fund-raisers and it relies heavily on donations from our members. In addition to the nursery stock we bring in, we hope to have a good selection of tree and shrub seedlings and rooted cuttings, perennials, annuals, etc., donated by you. Please keep the Sale in mind this Spring when you are seed sowing, transplanting and dividing. Your donations are greatly appreciated. Members are requested to drop off any donations between 10:30 a.m. and 12:30 p.m.

Many varieties of rhodies which were not available in the advance Sale will be offered. They include: 'Anneke Plazek', 'Kick Off', 'Manitau', 'Mother Greer', 'Pink Pom Pom', 'Betty Hume', 'Casanova', 'Great Eastern', 'Pearce's American Beauty', 'Peter Tigerstedt', 'Rangoon', 'Rio', 'Scarlet Romance', 'Teddy Bear', yak 'Mist Maiden', kiusianum "Pink", Azalea 'Hino White Dwarf', and Azalea 'Vineland Dream'.

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!

Plan to attend and bring your friends. This event is always popular and the line-up to get in is usually long. For the best selection we recommend that you plan to arrive earlier than the 1:30 p.m. opening time. While you are waiting, a handout with descriptions of the nursery stock will be available.

For more information contact, Duff & Donna Evers at (902) 835-2586 or [devers1@attcanada.ca](mailto:devers1@attcanada.ca)



'Goldflake' - A golden yellow azalea . [Photo Don Craig]



# Special Notices

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## 2002 Spring Mini-Show

**Nova Scotia Museum of Natural History - Main Level  
1747 Summer Street, Halifax**

**Saturday, 18 May - 10:00 a.m. to 4:00 p.m.  
Sunday, 19 May - 1:00 p.m. to 4:00 p.m.**

The May Mini-Show is a non-competitive exhibition of rhododendrons and other early-Spring blooming plants. It is held annually in conjunction with our May Sale. Thanks to the generosity of our members who bring in plant material, and especially the Show Chair, Jenny Sandison, the display is always spectacular. This Show is an important opportunity to educate the general public and always draws many inquisitive visitors.

Volunteers are needed to help supervise the display. You need not be an expert. If you have not already volunteered and can assist either with your time or by lending plant material, please contact Jenny Sandison at (902) 624-9013.

## Annual Pot Luck Supper

**Saturday, 8 June 2002  
5:00 p.m. - 9:00 p.m.**

**At the Residence of Chris Hopgood  
21 Dingle Road, Halifax, NS**

Off the Purcell's Cove Road. Past the Armdale Yacht Club, to Fleming Park, through the stone gates, bear left and it is half way down the road towards the Dingle Tower. There is no parking on Dingle Road, but there are a couple of spots off the Dingle Road (it says no parking but people do it all the time and no tickets are ever issued), and down by the Tower itself.

Bring something for the buffet table and spend a pleasant late Spring evening in Chris Hopgood's garden and home.

Please let Chris know if you're planning to come: 479-0811

## The Hopgood Garden

A garden in progress is the description given by the owner of this property. Built in four stages beginning in 1997, this garden has 10 areas with a little bit of everything for all to enjoy. A wide variety of rhododendrons, azaleas, magnolias and dogwood are the joy of his garden. An azalea walk is featured as a reminder of the home of the Masters golf tournament (you might guess that a golfer lives here).

The area by the road features rhododendrons, magnolias and groundcover. Around the upper parking area, you will find erica, and euonymus. In the back of the house, you will find a wide selection of shrubs and perennials including broombush, hosta, bamboo, iris and more, all placed in a natural setting. A part of the property is underwater at certain times of the year (Fall, Winter and Spring after heavy rains). This creates a bog, with many different plants that enjoy wet feet. The garden also features attractive stone walls, a beautiful driftwood bench and tasteful trellis work for clematis, euonymus and honeysuckle.

The garden looks even better after a few glasses of wine!

# Rhododendrons in 3D - Dreams, Dwarfs and Delusions

By John Weagle

The recent article *Hybridizing for Dwarfness* by the Andersons certainly had us sitting up to take notice. Over the last 50 years rhododendron breeding in Maritime Canada has produced some fine dwarfs although the mission at the outset was to simply produce good hardy plants for conditions in our area. Using plants considered to be the best bets - aureum, dwarf brachycarpum and catawbiense v. compactum - our pioneer hybridizers bred some good, compact slow-growers as an added bonus. It would seem that a brief summary of what's happened here in Nova Scotia since 1950 is long overdue. In this article we will look at dwarf elepidotes; the hot topic of what is "dwarf" will not concern us except to say a forrestii Repens Group hybrid 7cm tall x 2 m across and an elepidote hybrid 2m high in 40 years will both be considered dwarf, or slow growing. We will follow-up with a look at the new directions we have taken in the last 15 years.

## Part I

Climatically our situation on the Nova Scotian coast is very much different from eastern North America. Nova Scotia is windswept and foggy, a fair assessment. At 45° latitude it is a trying climate, and, stuck out in the North Atlantic as we are, the ocean influences every aspect of life. To the south, the Gulf Stream tempers the cold a bit and its closer cold water return, the Labrador Current, flowing west along our shores, cools and produces our famous persistent fogs. To our west, the Bay of Fundy moderates the scythic continental winter winds which accompany our worst cold. The Fundy rises and falls tidely an incredible 50 feet twice a day, thereby staying somewhat warmer than might be expected - and it's another fog producer. To our northeast, the Gulf of St Lawrence, the warmest summer saltwater north of Cape Hatteras, North Carolina, gives us comfortable summers and falls but delays our springs as it stays ice-packed as late as April or early May!

In winter, our coastal zone 6 is alternately very wet and very cold and snow cover is unreliable. The cold of January, February and early March can at times be brutally arctic-like and persistent. Winter temperature fluctuations are precipitous and Halifax, the capital city where I live, chalks up more freeze/thaw cycles than any other Canadian city. A local saying sums it up: "If you don't like the weather out the front door, look out the back door". Halifax also records a dizzying 100 days of fog per year. Multi-directional gale-force winds are

frequent and our thin acid mineral soils can stay frozen well beyond root depth into April and sometimes May. Plants in this frozen soil, while air temperatures still hover at or below freezing, can incinerate under the brutally intense March sun. With such a slow cold spring, damaging late frosts after early May are very rare, at least in my immediate area along the coastal mainland. Just a few kilometers inland bad frost can continue into late June and can start again in early September. On the plus side our cool summer nights, frequently foggy evenings, cool soil and brief warm period are big assets which help us to grow a surprising range of species and hybrids. Adaptability to these formidable climatic vagaries is our prime breeding goal.

### Craig-Swain

Fortunately, Nova Scotian rhododendron breeding and collecting started in earnest fifty years ago and we now have a wealth of dwarfing material at our disposal through the generosity of our foremost breeders. In the early 1950's Dr. Donald Craig and the late George Swain voluntarily started a breeding programme at the government's Kentville Research Station in Kentville, Nova Scotia. At this colder site, in the fertile Annapolis Valley, thousands of seedlings were field grown without protection. Only a handful were later named and registered. Dr. Craig, now in retirement, continues breeding at his colder inland garden.

Craig has found some surprising sources of dwarfness in his programme. For him Shammarello's 'Besse Howells' has attributes worthy of consideration - hardiness, compactness and semi dwarfness. Out of 18 yak x 'Besse Howells' seedlings he has four selections. Similarly 13 of 95 seedlings of a cross of 'Minas Rose Dawn' x 'Besse Howells' are on trial including his best red to date. His 'Minas Rose Dawn' is ('Nova Zembla x yak) x ('Elizabeth' x yak) and .9m high and 2.75m wide in 28 years. SEL75-31, a 1971 cross of ('Red Head' x yak) x (catalglia x 'Elizabeth') has a nice compact truss, the colour of Nova Zembla, but measures only .9m high x 1.4m wide in 28 years; it will surely be of use.

His dwarf plants of note follow:

- (aureum x repens)F2 - .25m x .7m in nearly 35 yrs., rose red, a staminoid double but pollen can be found. A Hobbie cross at the Station, it still has uses in breeding for reds.
- brachycarpum, a creeping form under .3m has been at KRS for many years.
- catawbiense v. compactum x williamsianum (now Minas Grand Pré) - A KRS introduction. 1m in 20 years, pink, compact and a terrific performer. This is now available from Brigg's Nursery. I have crossed 'Minas Grand Pré' with its best sister seedling at KRS; as well I have put williamsianum pollen on 'Minas Grand Pré' and the reverse, 'Minas Grand Pré' pollen on williamsianum.

The results are all similar, though dwarfer and pinker than 'Minas Grand Pré' and closer to the delectable but decidedly tender williamsianum.

- ('Bellefontaine' x 'Goldsworth's Yellow') x degonianum (2 selections) - .5m h x 1.5m w at 20+ yrs., yellow and pink combo.

This last hybrid has produced some fine dwarfs when it was combined with Steele's best yellow BPT#80-5 - [('Bellefontaine' x 'Goldsworth's Yellow') x degonianum] x (aureum x 'Prelude') BPT#80-5. Several compact mounds sporting dark yellow flowers are now on trial.

### Captain Rhododendron

Cpt. Richard M. Steele is well known in the rhododendron world. A disciple of two rhododendron legends of the twentieth century, Joseph Gable and T. Hope Findlay, he started breeding and collecting in the 1950's and has now amassed a collection of thousands of plants covering more than 30 open and wooded acres at Bayport Plant Farm near Lunenburg, Nova Scotia. Steele's breeding work is of the greatest importance for the future. His work is so multi-faceted that it is well beyond the scope of this article. It will be no easy task to assess the countless plants on trial. Seed growers will recognize "Blwd" ("Boulderwood") and "BPT" ("Bayport") as well-known prefixes to his plants. A rich bank of dwarf material is available to local breeders including these important crosses:

- aureum x 'Binfield' - 1 m.+ in a fair amount of shade and a valuable source of yellow genes.

- aureum x 'Bosutch' - 1m. high x 1m wide in 35+ yrs, early whites & a few pinks.

- aureum x catalpa - 35 yrs +, 1 m high x 1.5m w, early whites and creams.

- aureum x lanigerum 'Roundwood' - one red dwarf, the rest ivory/cream, very low and early.

- aureum x 'Prelude' - 35 yrs +, 1.25 m h x 1.5 m wide, good early yellows, BPT#80-5 the best and yellowest and a

useful breeding plant. BPT#82-1 has a touch of orange in bud. BPT#78-1 is a good yellow and possibly the hardiest of the lot. BPT#78-3 is as the name suggests a creamy ivory with frilled edges. Several others grow at Bayport including a slightly tender, really strong yellow which should be sent to a milder climate for trial.

- 'Blue Peter' x chamaethomsonii - a bizarre cross, inexplicably bright red and very dwarf.

- brachycarpum (low form) - many nice old plants under a meter.

- (brachycarpum x wardii)F3 - 1m h x 1.5m w in 35+ yrs., various colours, one with narcissus- like flowers with fused stamens.

- (brachycarpum x williamsianum)F3 - 1m h x 1.5m w in 35+ yrs., whites & pinks, compact.

- yak x 'Moonstone' - 70cm h x 1 m. wide in 35+ yrs., pale yellow, one very tight plant.

- yak x (repens x 'Barclayi') - 20+ yrs. very dwarf and prostrate in full sun, quite red.

Cpt. Steele spent a good deal of time in the 50's with T. Hope Findlay at Windsor Great Park. Findlay was one of the legendary plantsman of the century and Steele says his advice was invaluable. One point Findlay stressed was one to be heeded by all hybridizers - "always go back to a hardy species when your hybridizing gets complex". This he reckoned would help stabilize the results and give a degree of predictability. The payoff is twofold - hardiness is more predictable and population requirements are indeed somewhat reduced. Steele follows this principle and I too try to avoid using complicated hybrids on both sides of my crosses - often a difficult thing to do.

Steele at 86 is having great fun with the new possibilities. A recent cross of ['Elviira' x (calophytum x repens)] has produced plants with both large and small leaves. It is believed the bushy little plants that are now being propagated will remain dwarf. His

very good yellow (aureum x 'Prelude') BPT #80-5 has been crossed with Kentville's (aureum x repens)F2, the youngsters are just at bud stage and everyone is holding their breath. During every visit we find plants or a line of breeding completely unknown to us. As far as objectives go Steele sums his up thus "Although I personally greatly enjoy all aspects of the bloom and new growth each year, our prime target is stud potential in the future: Hardiness, Durability, Beauty and Longevity." A study group is now assessing this great legacy.

### Ostrom

Walter Ostrom has gardened for 30 years in the windy fog belt near Peggy's Cove, N.S. He has collected and bred a few plants of interest to us. His (maximum x aureum) F2 from Dean Barber, formerly of Contoocook, New Hampshire, is a tight compact plant, lavender pink, extremely bushy and under .5m in 20+ years - an invaluable lesson for anxious hybridizers in the merits of going to the F2 generation. Granted this is not a finished plant, the truss is loose and the colour poor but these faults can easily be remedied - we have many plans for this plant including hitting it with insigne. This past spring (2000) it was crossed with rex, fulvum (Sinclair's pink), lanigerum Cox (red), (smirnowii x fictolactum), macabeanum 'Lord Stairs' and alutaceum v. russotinctum. Some interesting foliage and flowers are expected but possibly no dwarfs. Walter has a reliable aureum which is both prostrate and the darkest yellow we have seen. Evelyn (Jack) Weejes gave this plant to Walter and says it was probably one she grew from seed. Here we know it as aureum 'Miss Jack', a tribute to this phenomenal plantswoman who opened our eyes to the possibilities of lepidote species here - a major turning point for rhododendron culture in Nova Scotia. An Ostrom cross of brachycarpum x aureum is cream, under 25cm. and with good hardiness genes, it has been crossed with some of our better oranges and yellows. His exciting new cross [(brachycarpum x aureum) x



caloxanthum] bloomed recently and is an emphatic yellow with large open-faced flowers and perfectly compact. It is a very cheery little thing and we trust this cross will stimulate him to return to breeding. Its pollen was used on 'Elviira', 'Vinecrest', 'Yellow Gate' and on another delightful new Ostrom hybrid with orangey/yellow bells (williamsianum x caloxanthum). Seed of these will appear in the 2001 ARS Seed Exchange. In the garden are some very beautiful, dwarf yaks from Serbin's collected wild seed including a form which stays compact and buds reliably in dense shade - aptly nicknamed 'Shady Lady'. These yaks, most regrettably, we have neglected in our breeding to date.

### Brueckner

The late Dr. Joe Brueckner did pioneering work in the 1960's and 1970's in very much colder Saint John, New Brunswick using *R. brachycarpum* Tigerstedtii Group, *R. dauricum* v. *sempervirens* from Lake Baikal and a tall form of *R. lapponicum* from Great Slave Lake. He continued his work in retirement in Mississauga, Ontario where summers are very much warmer. Because

Brueckner's work was largely ignored in New Brunswick he has become somewhat of an adopted son here in Nova Scotia as well as Ontario and so is included in this story. These are but a few of the promising dwarfs from the Brueckner programme:

- aureum x campylocarpum - .3 m h x 2m wide.
- (aureum x nikkomontanum) x williamsianum - dwarf.
- 'Catawbiense Album' x aureum - dwarf.
- 'Lionel's Red Shield' - ('America' x 'Carmen') - 25cm h x .8 m w, red but a tad tender.
- nikkomontanum x repens prostrate red and also one emphatically variegated plant.
- various brachycarpum x sanguineum hybrids (using chiefly Rödhätte) - under .75m all with magnificent dark, clean and very distinctive foliage.
- many hardy williamsianum hybrids with brachycarpum Tigerstedtii, catawbiense and maximum. The latter maximum x williamsianum gave a few sturdy williamsianum look-alikes.

Brueckner's intense focus was on hardiness; he had battled the brutal winters of New Brunswick and so zeroed in on brachycarpum and aureum. This was a sound plan and indeed visionary. His plants now give us an incredible tool to produce hybrids with greatly improved foliage and a wider colour range for the north. Our study group based in Nova Scotia will begin testing almost 500 Brueckner hybrids for quality and adaptability thanks to the goodwill of his wife Marta. Many of these will be combined with our Nova Scotia hybrids and some, eventually, released by the Brueckner family for commercial distribution.

Our thrust since 1985, in Maritime Canada, has been to introduce fresh species and "new generation" material from other collectors and hybridizers into this rich bank of local material. Progress has been slow but steady, as you will see in Part Two. □

### To be continued.

*Reprinted from the Journal of the American Rhododendron Society, Vol. 55 No. 1, Winter 2001.*



*R. catawbiense album.* [Photo Don Craig]



# Ericas For Atlantic Canada

By Jamie Ellison

The Atlantic Region of Canada with its relatively cool summers, moderate winters and acid soils, is home to many wonderful species of native plants. One of our most important and diverse plant families common throughout the region is *Ericaceae*, the **Heath** family. This rich and varied Family includes our favourite genus *Rhododendron*, as well as Heaths (*Erica*) and Heathers (*Calluna*). These plants prefer our acid soils and cool, short growing season. It therefore makes perfect sense to include ornamental genera from this varied family in our gardens.

The genus *Erica* is an enormous group of plants with approximately 800 species. The *Ericas* are correctly termed Heaths though they are sometimes confused with, and often included in, the heathers (*Calluna*). There are 700 heaths native to South Africa alone. In Atlantic Canada we are restricted to growing only the hardiest species.

*Ericas* offer plenty of year round interest with their variety of foliage and flower colours. While many of the species can be shrubby, even the size of small trees, varieties suitable for Atlantic Canada tend to be entirely ground hugging species. The list that follows outlines varieties that have proven successful in plant zones 5-6b

## Spring Heath - *Erica carnea*

This *Erica* is native to Europe and is one of the hardiest heaths for gardeners in Atlantic Canada. It is a low spreading species that flowers in late winter and early spring in Atlantic Canada. Plants rarely exceed 20cm in height but can spread 50-60cm. Spring Heath grows in the same conditions as *Calluna vulgaris* but can tolerate light shade. Once established, *Erica carnea* can survive brief periods of drought. Flower buds form in late August and start to show colour in early winter. Some selections can begin to bloom early as November and continue through out the winter. Bloom usually peaks in late April and May in Nova Scotia.

The following cultivars are grown in Atlantic Canada.

### The Springwood Series

#### *Erica carnea* 'Springwood Pink'

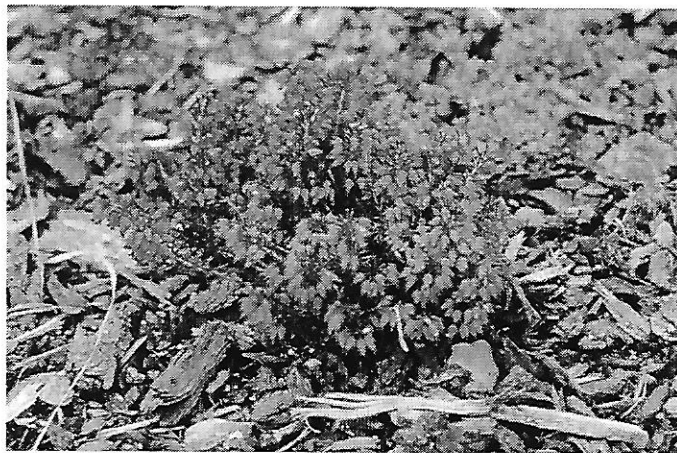
A great performer, reliable with a nice, clean, pink flower. Very hardy. Worth trying in Zone 4b with protection.

#### *Erica carnea* 'Springwood White'

Another great performer from this group. White flowers, lime green foliage. Same performance as above.

#### *Erica carnea* 'Porter's Red'

Beautiful ruby flowers with dark bronzy foliage. Very striking in bloom.



*Erica carnea* 'Vivellii'. [Photo Jamie Ellison]

#### *Erica carnea* 'Vivellii'

Similar to 'Porter's Red' but more magenta in the flower. A bit tender in 5b. Slow growing.

#### *Erica carnea* 'Aurea'

Copper-orange foliage turning gold in Summer. Flowers are pink. Compact.

#### *Erica carnea* 'Foxhollow Fairy'

An interesting bi-colour effect to the flowers having white corolla and a pink calyx. Mid green foliage.

#### *Erica carnea* 'Golden Starlet'

A very bright yellow foliage form from Germany. Foliage is bright yellow in summer and lime green in winter. White flowers are produced in April-May. Slow growing.

#### *Erica carnea* 'King George'

A great selection with pink flowers, dark foliage and a compact habit. Reliable.

#### *Erica carnea* 'Myrtoun Ruby'

Similar to 'Porter's Red'. Less vigorous.

#### *Erica carnea* 'Pirbright Rose'

One of the earliest cultivars to come in bloom. This *Erica* can show colour in Atlantic Canada in November. Flowers are heliotrope. A great performer.

### Mediterranean Heath - *Erica X Darleyensis*

A hybrid between *Erica carnea* and *Erica erigena* was found in a nursery in Darley Dale, Derbyshire, England. It is often confused with the *Erica carnea* group and sold as a hardy spring heath. Unfortunately this beautiful hybrid is

tender in zone 5b –6 and often gets damaged in 6b. It can be grown in sheltered areas in 6b and also where there is reliable snow cover. It's generally seen and sold under the Mediterranean series usually as Mediterranean Pink and Mediterranean White (Med Pink and Med White).

**Balkan Heath - *Erica spiculifolia*  
Syn. *Bruckenthalia spiculifolia***

An evergreen shrub native to, sub-alpine regions of Romania and the Balkan Peninsula. It has been recently moved to the genus *Erica*. A lovely species that flowers after the Spring Heaths but before *Calluna* and Summer heaths. Spikes of pink flowers appear in terminal clusters. Very hardy. Zone 4b. A couple of selections exist.

***Erica spiculifolia* 'Alba'**

White form.

***Erica spiculifolia* 'Balkan Rose'**

A wine coloured selection from Barry Starling' in Exeter, Devon.

***Erica x Stuartii***

A naturally occurring hybrid between *Erica mackaiana* and *Erica tetralix* native to Connemara and Donegal in Ireland. This has proven to be surprisingly hardy with little or no damage in zone 6. May be worth trying in 5b or lower with protection. Large bright pink flowers are produced in terminal clusters. It flowers non-stop for most of the summer. The following cultivars are available.

***Erica x Stuartii* 'Irish Lemon'**

The new growth has bright yellow tips.

***Erica x Stuartii* 'Irish Orange'**

Orange-copper new growth.



*Erica spiculifolia* (Bruckenthalia) [Photo Jamie Ellison]

**Cross-Leaved Heath - *Erica tetralix***

A widespread species found across Europe and north. Grey green pubescent foliage is arranged in a cross configuration hence the common name. Pink inflated, urn-shaped flowers are produced in early summer on new wood. Although rated at zone 4 hardiness, the plant is prone to bark split in zone 6-6b. and is easily damaged by snow. However, it will bounce back and flower profusely in one season. There are many cultivars available. The following are growing in Atlantic Canada.



Ericas can make great combinations with other plants in our gardens. (Left) *E. 'Springwood White'* with *R. mucronulatum* provides a stunning Spring display. [Photo John Weagle] (Right) A combination of *Erica*, *Calluna* and *Chamacecyparis* create year-round interest at Bayport Plant Farm. [Photo Jamie Ellison]

### ***Erica tetralix* 'Alba Mollis'**

Very grey, almost silver, white foliage with clusters of white flowers. Very nice cultivar.

### ***Erica tetralix* 'Con Underwood'**

Grey green foliage with magenta flowers.

### ***Erica tetralix* 'Ken Underwood'**

Salmon flowers with dark green foliage.

The following are a few species that are growing with protection in the milder parts of Nova Scotia and Newfoundland. They are growing in approximately plant zone 6b.

### ***Erica vagans***

Growing with protection in Zone 6b. Dark green needle-like foliage. Flowers are in long terminal racemes. Pink-white depending on the cultivar.

### ***Erica mackiana***

Native to Ireland and Northern Spain. Dark green foliage with white undersides. Intense pink urn-shaped flowers. Zone 6b.

### ***Erica ciliaris* 'Corf Castle'**

Native to Northern Spain and Portugal. Tender in Zone 6b. Grey-green foliage with striking pink flowers.

## **Care and Culture**

Most grow in the same conditions Calluna require. Some of the tender varieties will require winter protection and proper siting to grow successfully in Atlantic Canada. Spring flowering heaths and related varieties should be pruned after they finish flowering in Spring. The summer flowering selections, respond to early season clipping.

## **Guide To Selection**

When selecting Ericas, it is important to know your climate and soil type. Be aware of maximum and minimum temperatures and look for microclimates on your site.

Ericas can provide an exciting addition to any landscape. They are useful in Heather gardens and great companions for Rhododendrons, other Ericaceous shrubs and Conifers. □

# **Something About Taxonomy**

**By S. O. Kemmler**

The world is a large and complex place. To make sense of it we have organized it so it is manageable and we can find our way around in it. Taxonomy, in a nutshell, is the science of the systematic ordering of nature. I have long wondered and often been confused by all those big words, such as kingdom, genus, species, sub-this and the other, and so on. What does it all mean? Being generally opposed to ignorance, I did some research and found out how it works.

The area of particular interest to us who grow things is the classification, or taxonomy, of plants.

Basically, things are organized to reflect their evolutionary relationships. Those of us who are a bit past our prime will remember from early school days that everything alive was divided into two kingdoms, the plant kingdom, and the animal kingdom: roughly, everything that was mobile was an animal, everything else had to be a plant. Well, things have changed a bit

since then. Technical and scientific advances and innovations, such as electron microscopy, biochemistry, nuclear biology and genetic research, have brought great advances - and a quite different and expanded taxonomy from the one of fifty years ago.

Most scientists now agree to divide the world of living things into five kingdoms, usually in order of increasing complexity. This really is arbitrary; the important thing is not to confuse complexity with hierarchy. Nor can more complex be equated with better, or higher. The long, and in some quarters still dearly held belief, that 'nature is a mighty maze, but not without a plan', based on the revealed truth that 'whatever is, is right', since we are on top of the heap anyway and can more or less do as we please, is not only wrong, but it directly contradicts evolution - which is not metaphysics, but science. Come to think of it, "kingdoms" is a very unfortunate name for the primary divisions of nature anyway, since it implies hierarchy. But

we must remember that when the systematic investigation of nature (a.k. a. as science) began in earnest, kings ruled on Earth and God was in his heaven. Perhaps 'domains' would have been a better word, but as it is, we are stuck with our kingdoms, which is not a problem, so long as we remember that there are no hierarchies created in nature. The kingdoms of nature have no rulers. Here then are the first taxonomic divisions, the five kingdoms.

1. **Monerans.** The members of this kingdom are the bacteria and all other microorganisms without a distinct cell nucleus.

2. **Protists.** This includes algae, slime molds and all other microorganisms with a distinct cell nucleus.

3. **Fungi**

4. **Plants**

5. **Animals**



The kingdoms are then further divided. The kingdom of interest to us is, of course, number four, the kingdom of plants. Its subdivisions are 1) **division** (this is only for the plant kingdom, the other kingdoms name the first division **phylum**; but botanists now accept and use phylum, which I will use throughout), 2) **class**, 3) **order**, 4) **family**, 5) **genus**, and 6) **species**. (To avoid confusion: species stands for both singular and plural; the plural of phylum is phyla; the plural of genus is genera or genuses.) There are ten phyla in the plant kingdom. The rhododendrons belong to the last of them, the phylum of the angiosperms (magnoliophytes) - in plain English, the flowering plants.

To summarize: Life on Earth is divided into five kingdoms, which are again divided. The kingdom of plants is divided into phyla, classes, orders, families, genera, and species. Rhododendrons are a genus in the phylum of angiosperms (flowering plants) in the kingdom of plants. Frequently, these divisions are subdivided again.

So far, we have located the continent and the country, but we want to know much more; we need a roadmap to find a certain town, a particular street, a specific house; we also want to find out all we can about the people who live in it, their ethnic background, colour, and habits. It is plain we need more detail - we have to divide again. But before we do that, here are the remaining nine phyla of the plant kingdom, or to stick with the analogy, the rest of the countries on our continent.

1. Bryophytes
  - a. Mosses
  - b. Liverworts
  - c. Hornworts
2. Psilotophytes, or whisk ferns
3. Lycophytes (club mosses and allies this one sounds outright dangerous!))
4. Sphenophytes, or horse tails
5. Filicophytes, or ferns

6. Conifers
7. Ginkgos
8. Cycads
9. Gnetophytes

And next and last (#10) is the phylum of Angiosperms, which has two subdivisions, to one of which belong our rhododendrons.

Angiosperms, or flowering plants, have been around for a while - about 130 million years. Until about 100 million years ago they were primitive and few in number, but then over only a few million years - a minuscule interval in geological time - they conquered the planet, influencing and speeding the evolution of life, particularly the evolution of insects, birds, and mammals. Come to think of it, it is quite unlikely that we would be here today were it not for the flowering plants.

Opinions differ, but studies of the present distribution of primitive angiosperms show that they probably originated somewhere in tropical Southeast Asia - which is no surprise to rhododendron lovers; so many of our favourite species hail from that part of the world. Among the divisions, or phyla, of plants, the phylum of the angiosperms contains the largest number of species, an estimated 250,000 - the flowering plants are the dominant vegetation on Earth today.

The angiosperms are divided into two classes, the **Magnoliopsida**, and the **Liliopsida**. These in turn are divided into several subclasses. As the name suggests, the magnolia is the typical form of the class magnoliopsida. One can guess what the typical form of the liliopsida class is. Rhododendrons are members of the class magnoliopsida, which makes sense, considering that magnolia are morphologically so similar that novices such as myself can easily mistake their foliage for that of rhododendrons. By the way, 'morphology' just means similarity in form and structure. And just so things

are not too easy, magnoliopsida in turn has seven subclasses. Rhododendrons belong to the subclass **Dilleniidae**, which is composed of 17 orders.

Many of the most beautiful and prized plants, particularly ornamentals, are members of the order Ericales; among them - and again we expect no less - are the rhododendrons. But ericales is still a pretty big place, housing ten large families, including about 135 genera and 2,700 species. Nearly 1,900 of those species belong to the family **Ericaceae**, the heaths.

**Approximately 1,000, or more than half of the species in the ericaceae family, compose the genus rhododendron.** I think this is amazing. It also shows that in the struggle for life beauty counts, a lot!

The **genus rhododendron** is composed of eight subgenera and thirteen sections; it includes all rhododendrons and azaleas. A **species** is a group of organisms that share common characteristics, are able to inter-breed, and are reproductively isolated from all other species. A **hybrid** has genetically different parents, usually of different species, often of a different genus, rarely from a different family. While hybrids also occur naturally, most are the result of human intervention to create products we desire, such as heavier fleece on sheep, grains which have high yields while putting minimum energy into foliage - or beautiful rhododendrons.

The system in use to name organisms was first introduced by Carolus Linnaeus. (By the way, can someone tell me why his name is Latinized in the English-speaking world? The great Swedish biologist's name is actually Carl von Linné.) The Linnean system uses Latin and is binominal, where the first name depicts the genus, the second a specific epithet. Together they are known as the species. The genus name is capitalized, the epithet not. The names of species are Latinized and printed in italics, those of hybrids plain language and plain type; the names of hybrids are usually



set in single quotation marks, indicating that there are several genetically different parents. So *R. williamsianum* is a species, while *R. Bow Bells* is hybrid, both belonging to the genus *rhododendron*, the genus usually not spelled out but abbreviated to simply *R.* The parents of the hybrid can be hybrids themselves, or species, or a combination thereof (even threesomes and moresomes' are not unheard of). For example, 'Bow Bells' has the hybrid *Corona* and the species *williamsianum* as parents (i.e. '*Corona*' x *williamsianum*; the x indicates "crossed with", the result is a hybrid, here named 'Bow Bells').

Having followed the taxonomic trail to this Cockney neighbourhood, I leave a more detailed exploration of the intricacies of *rhododendron* nomenclature to one of our experts in the field; but before I close, a few words about the history of taxonomy.

More than 2,300 years ago Aristotle tried to bring some order into the complex world of living things. He ordered animals and plants primarily by their appearance, or morphology, ranking them from simple to complex. He already knew that whales and dolphins had mammalian characteristics, hence, they belonged to a different class of vertebrates from the fishes. The two distinctive features of morphology - what a thing looks like, its form, and how it is put together, inside and out, its structure - were Aristotle's guidelines. A very important aspect of the Aristotelean system was that it was based on the analysis of living organisms. This

method of classification dominated until the 19th century.

During the Renaissance some progress was made: in 1543 Andreas Versalius produced a treatise on human anatomy. The first university botanic garden was founded in Padua in 1545; systematic work in botany and zoology began to flourish. Toward the end of the 17<sup>th</sup> century the English botanist John Ray summarized and classified all available botanical knowledge. In the 18th century Carolus Linnaeus, the founder of modern taxonomy, made up rules for biological classification and introduced the binomial nomenclature we are now familiar.. He also introduced the standard hierarchy of class, order, genus, and species. For his own time his shining success was in providing workable keys for biological classification, such as the smaller parts of flowers, for example. Unfortunately, his system was essentially Aristotelean, i.e. based on morphology and logic, not nature. Moreover, Linnaeus' classifications were less accurate than those of Aristotle.

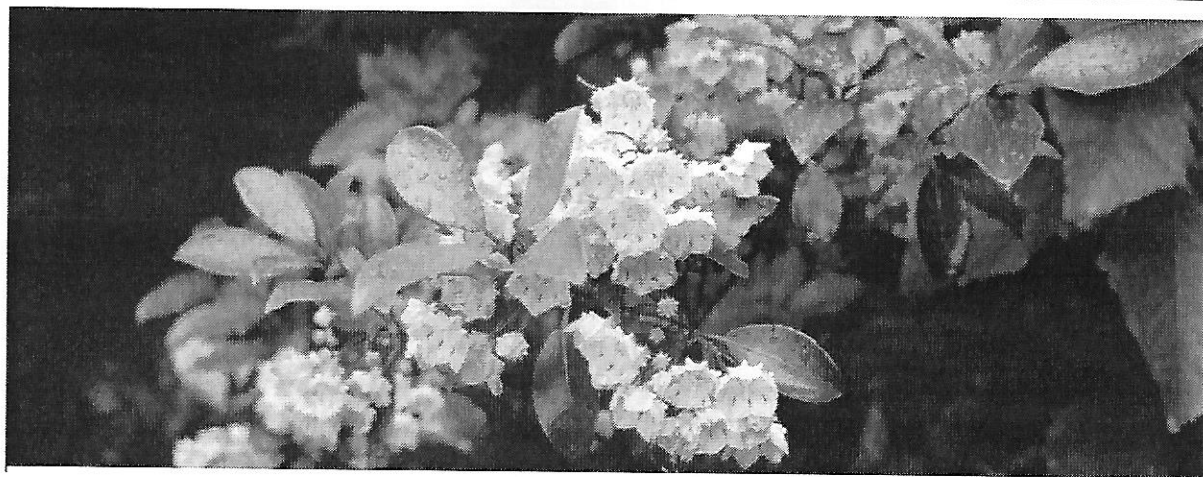
Taxonomy since Linnaeus has benefited much from discovery and now approaches a natural system. For example, when the life history of barnacles was discovered it became apparent that they could no longer be associated with mollusks, since barnacles are joint-legged, arthropods, hence related to crabs and insects (Darwin specialized in barnacles - which shows that one had to be a

patient man to recognize evolution). Only in 1898 were viruses discovered.

The phylum of the beard worms (I spare you the Latin tongue breaker) was only recognized in the 20<sup>th</sup> century. This ongoing clarification of relationships continues to this day.

While not immediately or universally embraced by scientists and taxonomists, Darwinian evolution did lead to the recognition that what had been described as natural affinity was really evolution at work; affinities were the products of evolutionary descend. But, as always with us humans, we tend to go overboard. Reclassifications began where nothing should be reclassified, either because there was not enough data (for example) a missing fossil record), or because of unwarranted method (for example by taking evolution toward more complexity for granted). - Sometimes it works the other way. But these are just bumps in the road, continuously smoothed as science advances. The most important impact of Darwinian evolution, by far, is that it is becoming increasingly clear that life can not be seen as a set of distinct classes, but represents a bush with many branches, showing how species descend from common ancestors, some branches alive and sprouting, others wilting, and some long dead. Taxonomy today is firmly based on this premise of evolutionary descend.

*Reprinted from Victoria Rhododendron Society Newsletters May and June 2001.*



*Kalmia latifolia* on Tray Mountain, Georgia, USA. [Photo Don Craig]

# Growing Rhododendrons from Seed

By John K. Weagle

*(This article was specially written for our website [www.AtlanticRhodo.org](http://www.AtlanticRhodo.org). On its way there, we decided to print it in the Newsletter - Ed.)*

Rhododendrons are easily grown from seed. The seeds will remain viable for more than a year if they are stored cool and dry in glassine envelopes. In most cases they can be expected to germinate close to one hundred percent. Choose hybrid seed or open-pollinated seed of hybrids or species with great care. Many years can be wasted growing worthless seedlings whose merits could have been determined with a little research before sowing. Do not hesitate to ask any of our more experienced members which reasonable choices to make from our local seed exchange.

First and foremost you must label things properly and keep the labels with the seedlings throughout their lifetime. With no records you will be unable to use your unknown plant sensibly in future breeding.

The following methods are ones that work for me. I am certain there are better methods. Seeds started in October may be put out the following May or June.

To sow the seeds, I prefer 3 and 1/2" wide x 4 and 1/2" deep square pots. Drainage is very important and the deeper the pot the better the drainage. There are two sowing methods that I use. Method #1 or #2 can be used for any rhodo seeds. Method #2, I use as a back-up method for the more difficult species and hybrid crosses. With less free time, I find I am using this method more often as it allows me to skip one transplanting step.

## Method #1

1. Collect fresh green sphagnum moss growing at the surface of a bog; the type found in the woods is unsuitable.
2. This moss can be chopped rather fine with scissors or a clever or left whole. It seems easier to disengage the fine rhododendron roots later on if the sphagnum has been chopped.
3. Pack the sphagnum tightly in the pots or flats and soak thoroughly.
4. Allow to drain until all excess water has drained.

N.B. This method usually requires the seedlings to be transplanted into the mix in method #2 when they have 2 true leaves.

## Method #2

1. Mix 60% very good quality long-fibre peat moss (and this is hard to find) with approximately 40% high grade fine bark mulch (southern pine is best as opposed to our local bulk bark mulch).
2. Mix these thoroughly with a pinch of gypsum or lime and 1/2 teaspoon ground superphosphate (0-20-0, NOT treble superphosphate, which is too strong) for every cubic foot of mix.
3. Sterilize the dampened mix in a zip-lock bag in the microwave (no metal twist-ties in the microwave!) for 10 minutes on high until the damped mix reaches 180°F.
4. Allow to cool.
5. Fill pots almost to the brim with the mixture.

6. Topdress the pots with 1/4 inch plus of straight peat moss similarly sterilized. This medium is extremely difficult to wet and extremely thirsty. Dry mix can only be wetted with very hot water or with water containing a surfactant; (the Society sells surfactant.)

7. Set pots in a tray and water. If hot water has been used, allow the medium to cool to room temperature for at least 3 hours or cool it off with another liberal watering of cold water. Drain thoroughly.

8. I do not recommend the use of 'No Damp.'

## Sowing - Transplanting Hardening Off - Moving Out

A. Whichever method you use, the seeds are now ready to be thinly surface sown.

B. Once sown, the seedlings should never dry out. They should also not be over-watered! Sprinkle your seeds thinly and evenly on the surface. Do not cover the seed.

C. Using a fine mist, moisten the seeds so they make good contact with the moss. Be careful not to blow the seeds away when misting!

D. Put the pots in a plastic bag and place them under fluorescent lights (preferably one 'cool white' and one 'warm white') - approximately 8-10" below the tubes.

E. Mist occasionally if the surface appears at all dry as this is fatal. The seeds require light to germinate and will usually appear at 21 days. Temperature should be around 18-21°C. Cooler temperatures will slow germination. Too much heat can be detrimental. If you have no fluorescent lights, a bright window with absolutely no direct sunlight would be a

decidedly poor alternative. Direct sunlight on the enclosed containers will quickly cook the youngster.

**F.** As seedlings sprout, you will first notice two opposite seedling leaves (cotyledons) followed shortly thereafter by single consecutive true leaves. Seedlings may stay in the mix of Method #1 for a very long time but it is better to move them on at the second true leaf stage.

**G.** To accelerate growth, they can be pricked out just after the second true leaf has finished developing, as a very short dormant period follows this stage. (If you have sown your seed in the peat and bark medium you need not transplant them at this time.) Delicately tease the seedlings apart and pot on into soil mix similar to that used in Method #2, omitting the peat top-dressing. Similar sterilization procedures are required. Seedlings can go into single pots or flats.

**H.** Move (a hatpin, dental probe or lobster fork will come in handy) without letting the roots dry. Keep the seedlings misted until they go back under domes or into plastic bags. The roots can be quite seriously torn apart and reduced without much harm at this point. Moving into a mist unit as described in Bruce Clyburn's article (RSCAR Newsletter, May 1995) at this point can accelerate growth and rehabilitate damaged and rootless transplants within a few weeks.

**I.** As the seedlings resume growth, they must be hardened off very gradually by cutting a small hole initially and

increasingly larger holes in the plastic bags until the seedlings are growing without cover with no sign of wilting. Do not be alarmed if the seedlings lean to one side and touch the soil as they grow; they will right themselves and seem all the more stable by doing so. In time the bend will be indiscernible.

**J.** Fertilize every 3-4 weeks with an appropriate water soluble fertilizer at ¼ strength. I use Peters Rhodo Fertilizer, 3/4 tsp. to 1 Imperial Gallon of water.

**K.** Shift outside to a protected cold frame shaded with lathe or 50% shade cloth after all danger of frost is past (tomato time). Initially more shade will be required. If planted directly in prepared soil, mulch lightly with pine bark mulch. Protect from wind, birds, cats, rabbits and slugs. If the seedlings were not directly planted in a frame, sink the pots in wood chips to keep the roots cool.

**L.** Keep evenly moist throughout the first growing season - a little drying between waterings later in the season helps develop a better root system.

**M.** Tightly cover the frame in late November with white (not clear) polyethylene. Slit the ends in mid to late March to allow excess heat to escape. Remove the polyethylene during a foggy period. This procedure can be skipped if you want to weed out tender ones.

**N.** Move on to wider spacing as required. □



*Magnolia x loebneri* 'Jennifer Robinson'. [Photo John Weagle]