Niagara Rhodo

Newsletter of the Niagara Region Chapter

Rhododendron Society of Eastern Canada, District 12, American Rhdodendron Society

Our Purpose:

We are a non-profit organization whose aim is to promote, encourage and support interest in the genus *rhododendron.* 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.

In this Edition:

A Message from the President

Sondra Meis, Chapter President, has taken a less active role in the last number of months; however, she has continued to assist behind the scenes. We miss her, wish her well, and expect her hiatus to be over in the coming New Year.

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On Behalf of Sondra:-

As we share treasured seasonal celebrations virtually and in the seclusion of our homes, this will be a Holiday season like no other. All the more reason to make as much as possible of your festivities and to keep in touch with one another via any means other than in-person, where that is not an option.

All the more reason to tune in to Chapter notices and offerings. We have kept lock-step with the demands, and opportunities, of virtual connections. Many Chapters across the ARS are freely sharing their speaker sessions and their websites and newsletters are accessible for interesting reading and new ideas: http://www.rhododendron.org/locations.htm We have expanded the number of our own Newsletter editions. Most of all, we have mastered the art of ZOOM and YouTube which expands our Speaker Program and allows us to "see" one another. Here's your chance to get On Board and enjoy a variety of topics unavailable to us through in-person meetings. Upcoming programs include:

December on: see http://rhodoniagara.org/events/ for previous talks (C.Ryan and S.Hootman)
January 24th : Todd Boland, The Dunedin Botanical Garden of NZ
February 7th: Glen Jamieson, Botanizing in Yunnan, China 2005
Before long, we'll be talking Plant Sale!

Stay safe and healthy, and may 2021 be kinder to us all!

Christina Woodward, Interim Editor
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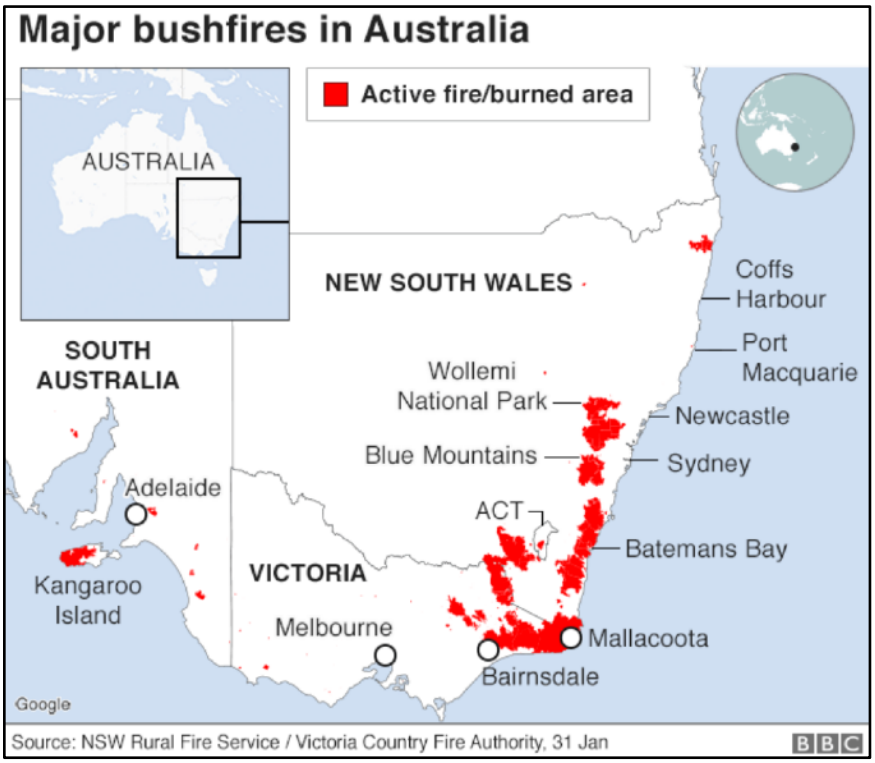
Recovery from Australian Wildfires

The 2019–2020 Australian bushfire season, which stretched from June 2019 to March 2020, devastated some 186,000 km² of the country's forests, bush and grassland, with the worst-affected areas in the southeast of the country. According to World Wildlife Fund research, the fires killed almost 3 billion animals (143 million mammals, 2.46 billion reptiles, 180 million birds and 51 million frogs). At least 30,000 koalas were lost, including perhaps 25,000 on Kangaroo Island alone. The Kangaroo Island dunnart and glossy black cockatoo, endangered and endemic to Kangaroo Island also had both their numbers and habitats severely affected. It is also uncertain if enough of the microbes, fungi, seeds and insects needed for the Kangaroo Island to recover survived temperatures that reached nearly 1,500° F in places.



A wildlife study commissioned by WWF Australia found a 90% reduction in ground-dwelling animals in parts of New South Wales surveyed in early March 2020. Animals considered less vulnerable, like the platypus and a small eucalypt-dwelling marsupial called the greater glider, are now endangered due to habitat loss. In Western Australia, fires burned the habitat of one of the last mainland populations of quokkas. Many thousand of kangaroos and wallabies died but most of the species are too numerous for survival to be at risk. Endangered species such as the Brush-tailed Rock Wallaby were severely affected by the fires in NSW and are now the focus of food and water drops to help them recover.

The Australian Government is investing $200 million to help native wildlife and their habitats recover from the devastating impacts of the 2019-20 bushfires, which will help secure the future of treasured native animals from the Koala to the Kangaroo Island Dunnart and the Northern Corroboree Frog, as well as unique plants such as the Wollemi Pine, Monga Waratah and Gippsland Bottlebrush. A prioritisation report released in October 2020 includes 486 plant species as requiring immediate action to assess impacts and support recovery. These span a variety of vegetation types, including rainforest trees and shrubs. like Monga Waratah (*Telopea mongaensis*) and plants from subalpine vegetation, such as the nationally listed Critically Endangered Bredbo Gentian (*Gentiana bredboensis*).

A provisional list of 119 animal species (17 birds, 20 mammals, 23 reptiles, 16 frogs, 5 invertebrates, 22 crayfish and 16 fishes) for high priority management intervention, was released on 24th March 2020. Since that date, four bird, one mammal and three reptile species have been added to the high priority list, plus one each of fish and frog species. The list is based on the extent to which the range of each species has potentially been burnt, how imperiled they were

before the fires, and the physical, behavioural and ecological traits which influence their vulnerability to fire.
Climate change is making Australia's fire seasons longer and more severe. With fire frequency also increasing, even fire-adapted species are finding it harder to bounce back. Alpine ash forests are being transformed to an attenuated, scrubbier and more flammable forest. This season's fires have also burned in rainforests, marshes and wet eucalypt forests that never usually burn and have little fire tolerance. Many of Australia's most threatened species in these habitats have few individuals and very restricted ranges, making them highly vulnerable. Nightcap National Park in northern NSW is home to many relict Gondwanan species, including the critically-endangered Nightcap oak that have been threatened by this season's fires.

The continent's trees have evolved strategies to handle intermittent fire seasons. Even before the heavy rains that fell in some areas in mid-January, Eucalypt trees began growing tufts of emergency foliage called epicormic leaves from buds on their blackened trunks, which provides a boost of photosynthesis until their canopy leaves grow back. The sprouts show that under the burnt bark, the trees are still alive. But because the fires were so severe, it's likely that they need a break in order to fully recover. Clumps of grass, with roots protected by a layer of soil, also began re-greening. Other plant species recover quickly through regeneration from heat-resistant seeds, with ample light from the reduced canopy and nutrients released from ash. However, the high temperatures reached in this season's fires, the large areas affected and the nation-wide drought may cause high plant mortality or slow regeneration.

The well-known Campbell Rhododendron Gardens (elevation 1,024 m) at Blackheath NSW in the Blue Mountains west of Sydney have Azaleas and Rhododendrons planted amongst the native eucalypts and bushland. In December 2019, the Grose Valley fire burned about 35% of the 18.3 ha site. The Gardens developed a 5-point recovery plan that included pruning of damaged plants, installation of drip-lines and the planting of 400 new rhodos. By June 2020, the bushland was beginning to regenerate and four of the original seven White Pearl Rhododendrons that were planted in 1972 survived. In October 2020, the Gardens were blooming spectacularly again and the following rhodo pictures are from the Campbell Rhododendron Gardens website gallery.

RH Wedding Gown

RH Prince Camille de Rohan

RH Sappho

RH Homebush

Also featuring in the gardens are many Waratah (Telopea) plants, an Australian-endemic genus of five species of large shrubs or small trees, native to the southeastern parts of Australia (New South Wales, Victoria and Tasmania). The best-known species in this genus is the NSW state emblem, Telopea *speciosissima*, with bright red flowers.

White waratah

Waratah – Telopea speciossima (2019)

Martin J. Taylor
P.Geo, B.Sc Geology

Connor Ryan, 80 Years of Rhododendrons at Holden Forests and Gardens

3-in-1 Review: Revisiting an Old Friend - The David G. Leach Research Station

Connor Ryan's talk on Sunday, November 8, 2020, about the past, present and future of the rhododendron collection at Holden Forests and Gardens, described an arboretum which not only is a repository of the results of a century of hybridizing of this genus but also a monument to those lovers of the genus who worked independently to develop many of the cultivars cherished by many, locally in Niagara and elsewhere in eastern North America. Connor has taken on the position of Rhododendron Collections Manager at the Holden Arboretum's David G. Leach Research Station

To some of us, this talk was much more than a description of a repository of beautiful plants in the 12th largest garden in the United States; it also was an opportunity to reflect on discussions and meetings dating back to the 1960's and acquiring newly developed cultivars from those who developed them simply for the love of the results that they produced, and who shared their progeny with an appreciative audience. The site has a massive collection of plants from some of the developers of modern rhododendron hybridizing in the Eastern United States: Charles Dexter, Tony Shammarello, Peter Girard, Weldon Delp, Orlando (Lanny) Pride.

Located east of Cleveland, Ohio, the David G. Leach Research Station has 60 acres dedicated to its rhododendron collections and displays. The collections include 1,870 rhododendrons, of which there are 754 unique types and 54 rhododendron species.

The area has a rich history in rhododendron hybridization. In the mid-1900s several local hybridizers and nurseries worked on developing cold-hardy rhododendrons that were suited to the region. Many of the plants produced during this time are growing in the collections at Holden today.

The rhododendron collection had its beginnings in 1940 when Charles Dexter of Massachusetts sent 250 of his rhododendron hybrids to the Arboretum. The intention was to have these plants grown and evaluated for future consideration. The best of these hybrids were then named. Dexter used R. fortunei in many of his crosses and 'Scintillation', is one of his best-known hybrids.

At that time, Dexter also collaborated with Paul Bosley at his local Ohio nursery. Together they created cold-hardy hybrids known as the Bosley-Dexter rhododendrons. 'Edith Bosley' is a result of some of this work.

Tony Shammarello, at another local nursery, also worked on developing cold-hardy rhododendrons using crosses with plants that had already been proven to be tough. He named about 29 large-leafed rhododendrons such as 'Holden' and 'Yaku Prince' and some evergreen azaleas like 'Hino-Red' and 'Elsie Lee.'

Another contributing nursery in the area was Girard Nurseries. Peter Girard was well known for his work with evergreen and deciduous azaleas. Some of his plants are 'Mount Saint Helens', 'Girard's Fuchsia', 'Girard's Rose' and 'Renee Michelle.'

In 1970 David Leach moved to the area, bringing his collection of plants to a property just south of Lake Erie. Leach did extensive work to hybridize cold-hardy rhododendrons using such species as R. catawbiense and R. maximum. Over the years, he created many hybrids in a wide range of colours, such as 'Janet Blair', 'Mist Maiden' and 'Bravo!'. 'Holden's Solar Flair' is a recent introduction from Leach's successor, Steve Krebs. Leach also worked on creating a series of late-blooming deciduous azaleas using R. prunifolium. In 1986 David Leach donated his land, his collection of rhododendrons including 122 unique hybrids, and his breeding program, to Holden.

Today the focus of the rhododendron collection at Holden is on research, conservation, education and display.

The Rhododendron Discovery Garden was installed in 2013 to promote the learning experience of visitors to the garden.

The breeding program started by Leach is still active today and is working towards improving root rot resistance as well as cold hardiness in rhododendrons. One focus of Holden's breeding program is to produce hybrids that will appeal to and perform well for home gardeners. In the near future, they will release 3 new hybrids from Ingrid Mehlquist x Rio crosses to the retail market.

The breeding program has also continued the work started by Steve Krebs, to produce root rot resistant plants by grafting cuttings onto the rootstock of plants that have shown resistance. They have had success with grafted cuttings of 'Capistrano' onto English Roseum rootstock. These have proven to perform better than the cuttings of 'Capistrano'.

And finally, Holden has also been focusing on building its collection for future research and conservation. They are actively seeking to conserve rhododendron species, such as R. groenlandicum, also known as Ledum or Labrador Tea, and many species that are on the Red List of Rhododendrons.

The David G. Leach Research Station may also be described as the floral home of the Great Lakes Chapter (GLC) of the American Rhododendron Society. The Niagara Chapter has a long history of association with the GLC. On occasion, joint meetings would be held at the former Horticultural Research institute of Ontario and some Niagara members continue to held memberships in the GLC. Over many years the leadership of the Leach Station has been very generous in supporting the interests of Niagara Chapter members by providing cuttings, offering interesting cultivars for our sales and helping with delivery and protection of rooted cuttings in transit from Van Veen Nursery.

You can view Connor's talk from the Chapter website: http://rhodoniagara.org/img/cryan.mp4

or follow him on Instagram at *connorfryan* or at cryan@holdenfg.org

Nicholas Yarmoshuk
NRC Special Advisor,
Director Emeritus

Stacey Silvestri
Park Services
City of Mississauga

Stephanie Jocius
Recent NPSH graduate
now working in BC

Vineland Azaleas - Preserving a Heritage

For many years members of the Niagara Region Chapter had been extolling the virtues of the Vineland Azaleas developed by Al Smith during his tenure of the rhododendron hybridizer's post at the former Horticultural Research institute of Ontario, now the Vineland Research and Innovation Centre. The azaleas are reputed to be cold hardy, and resistant to powdery mildew.

Hybridizing rhododendrons at the HRIO reached its peak under Al Smith but was terminated with his retirement. Today, individual plants, remnants of important research on cold-hardy rhododendrons exist across the campus in the form of individual plants, but the only significant remnant of the azalea project is the bed of azaleas directly in front of Rittenhouse Hall.

5 years ago I took on the project of resurrecting interest in the Vineland Estates. There was one stand of them at the original, now defunct HRIO site (Photo below). These plants had never been propagated in any numbers, had never been made available for general sale, and appeared to be forgotten, except by those who had been close to Al Smith; they were in danger of disappearing. Peter Phelps had been a huge advocate of saving this heritage. Clearly, this was a project worthy of the American Rhododendron Society's Test and Display Garden Committee's mandate. The project, to propagate these plants, to test them for their alledged resistance to powdery mildew, and to make them available in the commercial market was launched with support from the ARS treasury and Niagara Region Chapter's members.

Photo by William Warkentin

Earl Sommerville a member of the American Rhododendron Society working in Georgia, offered to propagate the azaleas via tissue culture.

We found about one-third of the existing mother plants were labelled with their registered names. Of course, we had registration information for each cultivar introduced by HRIO and registered with the Royal Horticultural Society databank. We attached unique numbers to each of the unlabelled plants. We intended to identify the cultivars when they bloomed.

After 2 years of sending cuttings to Earl, we had a collection of all but one of the cultivars propagated and growing in substantial numbers. The named plants were grown to 4-inch-pot size by Planeview Nursery in Rhode Island; and these 4-inch pots were then delivered to Blue sky Nursery to grow to 2-gallon size. Some were available to home gardeners in 2020 and others will be available in 2021 through the retail trade and the Niagara Region Chapter.

Identification of the numbered varieties was first attempted 2 years ago. Weather conditions at the time made identification impossible. In Spring 2020 a second attempt was made with 4 people working independently with old photographs, and registration descriptions while viewing actual numbered plants in bloom. The awkward geographical location, 20 - 60 miles from our team members' homes made it difficult to reach the flowering plants at propitious times to examine the flowers and compare them to the detailed descriptions. COVID-19 did not help either. Evaluations from 4 independent evaluators were obtained and then compared. There was disagreement on the identification of all but 3 cultivars. The task seems to be impossible. A further attempt is planned for 2021

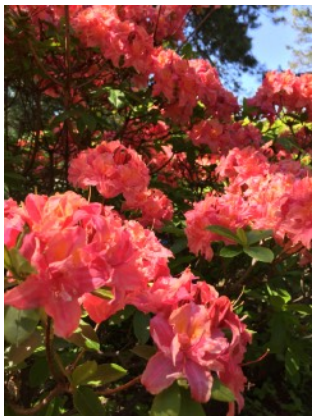
Last July, one of each of the 13 numbered plants was planted in a test bed in my back yard in St. Catharines. These are two-year-old budded plants growing in 2-gallon pots. Our thinking is that with the plants within easy access to 3/4 of the assessment team, it might be easier to get some consensus on what we see. I am hoping for a complete ID for spring 2021.

By fall, one piece of evidence appeared. 2 of the cultivars are not mildew resistant. Whether this is a Chelsea Reach cross has yet to be determined. But they each show a different range of fall colours.

Finally. Rick Bauer of the ASA encourages us to run a controlled test of these numbered and named plants in locations south of the border where humidity and heat are more severe than in Ontario. 6 locations in 5 southern US states have been identified as potential research sites. A research grant proposal has been developed to permit testing for tolerance to powdery mildew and growth quality under southern heat and high humidity conditions.

We have identified 6 locations in 5 southern states ready to plant these cultivars. Covid is making it difficult to plan how the plants can be distributed efficiently. We will see what happens when April and May 2021 arrive.

Nicholas Yarmoshuk
NRC Special Advisor,
Director Emeritus



The chat group for rhododendron enthusiasts https://groups.io/g/Rhodo , is available for anyone who wishes to subscribe. Through email communication members exchange information, questions, support and fabulous photos. The following "article" was derived from two email messages sent to the group by Diane Kehoe, with her permission. Diane's step-by-step method for propagating with seeds, is so fully and clearly communicated, I thought it would be useful for those of you who like to experiment, and possibly as a technique for students in horticultural programs.

Sharp Sand and Seed

PART 1

I used to raise a lot of species rhododendron seed from the [ARS] seed exchange and I combined information that I received from many people in order to come up with a method for raising rhododendron seedlings that was pretty 'fool-proof'. It certainly helped me and I wrote it down in case it could help someone else start growing rhododendrons from seed.

Most of my seed was planted in recycled 4" plastic pots that had fairly large drainage holes in the bottom of each pot. I washed and rinsed the pots carefully so that I didn't contaminate my new soil and seedlings with anything that had been in the pots previously. I put a ¾ " layer of medium perlite dampened with warm water in the bottom of each pot. The perlite was slightly damp but not dripping or soggy, and the perlite was warm, not hot.

From Don Hyatt, with permission

I made a 3 part potting mixture: one part ofmedium-fine peat slightly dampened with warm water; one part of clean sharp sand; and one part of medium perlite. Sharp sand feels like it could cut the palms of your hands if you rubbed your sandy hands together.

The sharp edges on a grain of sand that has remained in one place for centuries encourages roots to divide and develop a strong root ball. Sand that has been moved by wind and water becomes smooth over the years as one grain rubs its edges off against another. Roots grown in smooth sand don't have to grow as vigorously.

Mix the peat, sand and perlite together and add the mixture to the 4" pots you have partially filled with perlite until each pot is just a little bit more than 1/2 full of your potting soil. Put each of the filled pots into a re-used medium-sized plastic bag after checking that the bag has no 'extra holes' in them. You could use new plastic bags but I always re-use plastic bags that I've washed, rinsed, and allowed to dry. Put a 4" pot in the bottom of the plastic bag and leave the top of the bag open. I use bags that are about 6" taller than the 4" pots. When I start a new bunch of seed I close the bags with an elastic band. Once the seedlings start to grow I gradually open the bags up and roll the bags down until they sit around the mouth of the seed pots. When I water, the bags catch the water that isn't used and recycled by the plants and it keeps the air around the plants moist with a minimum of work.

Once I have prepared the pot and soil for planting I take the envelope of seed I received from the seed exchange and sprinkle the seed over the top of the peat as evenly as I can. If there is a lot of seed in the envelope, I prepare several seedling pots. Seedlings seem to do best when they are seeded evenly but not too thinly over the soil in the pot. While you don't want the pot to be so

crowded that seedlings are trying to grow on top of each other, you also don't want them seeded too far apart. The rhododendron seedlings seem to do best when the whole surface of the pot is quite thoroughly seeded. The seedlings seem to support one another both in the air and in the potting medium.

When a rhododendron seed first starts to grow it sends a single thin root straight down into the soil. Soon the main root stem develops a little 'bud' just under the surface of the soil and it soon grows into root that looks like a "flying buttress" that was built to support the wall of a Gothic cathedral. Once that second root has developed it is a sign that you can begin to transplant seedlings if you want to get an early start in growing your plants in individual pots. The seedlings are strong enough and well supported so they don't fall over when they are transplanted.

Another reason for seeding the whole surface of the potting medium has to do with watering. No matter how hard you try to water a pot evenly you will find that different areas in the soil will contain different levels of moisture. The centre of the pot tends to be the place where the potting medium is the dampest and the potting soil closest to the sides of the pot will often (but not always) be the driest place in the pot. Pots watered from the top can be quite wet along their sides.

The difference in available moisture in various areas of your potting medium can actually be of great benefit when you are growing seedlings. The seed of different species and even in slightly divergent populations of the same species seem to do best with varying levels of available water. The only way that I have found to discover what a plant likes best is to give it a variety of growing conditions and see what works.

I also have a 'heat table' in my basement that encourages all kinds of seedlings to grow well. Under the table there is a heating wire that loops back and forth to keep a steady level of heat rising towards the roots of the growing plants. Above the plants there are four fluorescent tubes that can be adjusted so they can be kept about 4 inches above the tops of thegrowing plants. A timer on the lights allows me to adjust the hours that they are on each day so the plants get the light they need to grow well. It is a simple 'set-up' but works well and costs less than $20 a year to operate.

This is a similar version, from Don Hyatt, with permission

I hope this information is helpful to anyone who is thinking of growing rhododendrons from seed.

PART 2

Here's bit more on 'potting on' species Rhododendron seedlings:

Good sharp sand can be hard to find in some areas but if there is a natural 'sand pit' anywhere nearby, you should find 'sharp sand' in it because those sands were often deposited in quantity in the days when the continents were forming and much of North America was still under the sea.

Sometimes the best way to find good sharp sand is to call one of the trucking companies who transport the sand used to 'pre-load' building sites. Most of that sand was originally taken from a local 'sand pit' and will be found to be relatively 'sharp' if you test it between your hands. Some garden centres that sell sand have a source that provides them with good sharp sand – but always

test the sand yourself before you buy it. Pick up a sample of sand and rub it between the palms of your hands. If it feels 'sharp', it probably is!

Check sources of sand that are beside a river as the sand was often deposited there when the river changed direction over the years. The 'sharpness' depends on how long the sand was propelled down the river, grinding off its edges and 'sharp bits'. Natural ocean beaches will probably have smoother sand that has been ground back and forth with the tides and winds.

'Un-natural beaches', (the ones that have had sand added to them so that there is a nice clean surface where people can lay down their towels), might have sharp sand if it was hauled there from a sand pit. I can remember that when I first visited the English Bay Beach in Vancouver, BC, Canada, some time in the early 1950s, there was mostly a bunch of fine gravel and rocks where the beach is today. The ocean didn't suddenly 'change its mind' and unload tons of sand on the beach. The sand arrived in trucks some time later in the 1950s.

I seem to remember that some of this information was originally printed (with photographs of the results) in the ARS Journal a long time ago – possibly between 1983 and 1990. Seedlings planted in 'sharp sand" showed really impressive root growth when compared to the ones planted in 'soft or smooth sand' that had grown significantly smaller root balls. I know that I got better results in raising healthy rhododendron seedlings when I found good sharp sand to buy and use in my potting mix.

Another advantage was that having the right kind of sand in my potting mix made it easier for me to separate the seedlings that grew in the 'seed pots'. Because the plants rooted in my potting soil pulled apart more easily when I separated the seedlings to get them ready for 'potting on' into individual pots, both the bigger seedlings that I had chosen to 'pot on' and those that needed a little more time to grow larger benefitted.

Once I had removed the largest seedlings for potting on, I put the left-over clumps of smaller seedlings back in a small pot of potting soil and those seedlings would continue to grow well. Some 'seedling pots' went through this process two or three times before I finished emptying them completely into individual pots.

Sorry to beat this subject to death, but I know how much trouble rhododendron species lovers will go to get good seed. I always hated to waste a single tiny seed that a collector had brought home from the mountain sides in China and I am sure there are many other 'rhodo-lovers' who are as crazy as I am.

Diane Kehoe

Diane's Nursery, Riverbank, in Ladner, BC
specialized in azaleas and rhododendrons for bonsai.
Diane was very active with the former Vancouver
Rhododendron Society,
acting as its President from 1992-1993.

The supplemental Newsletter of the ARS, **Rhododendron and Azalea News**, dormant since 2011, is being revived as a digital publication that will feature selected articles from Chapter newsletters not suitable for JARS, photos and links to additional information.

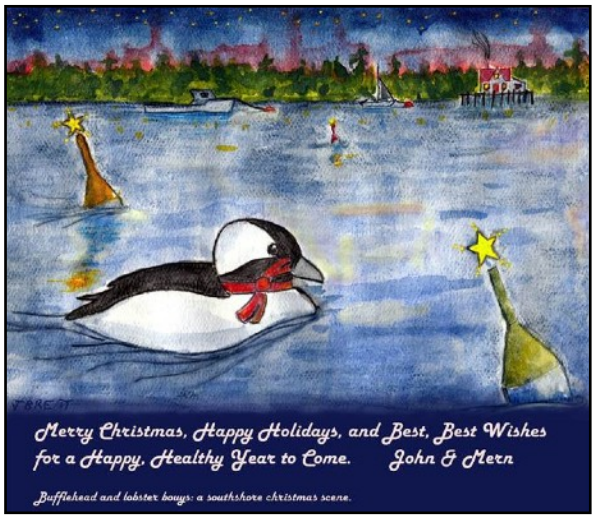
The new R&A News will be sent electronically to all members; in the event you have not received the Nov-Dec 2020 issue, please let me know. CW

I'd like to share this fun Christmas card and message sent by Atlantic Region in response to my recent communication sent as District (12) Director:

Your support for our efforts, our chapter activities and the work of the 2021 convention, are very much appreciated. Your letter sets a warm, collegial tone that inspires me to think that, as a chapter and a district of the ARS, we have a lot to look forward to in the years to come.
I am copying our board and Bob Howard on this email for their reference.
Regards and best wishes for a joyous holiday season and a happy, healthy 2021.

John Brett
President, ARHS

PS The combination of buffleheads (sans red ribbon) and lobster buoys along the coast is very typical for this time of year, particularly in sheltered bays.



On behalf of the Niagara Region Board of Directors,

Merry Christmas, Seasonal good wishes!
Health, Happiness, and good Humour as the months of 2021 unfold.

This is the Readers' Page.

We love your photographs. Let us post them here. Contact canadacaw@yahoo.ca

James Phipps sent this photo of ***Cotinus coggyria cv. Flame,*** "Smokebush."

This large, over 40 year old bush, is by far the most brilliant large object on the property today. That was in November! when the weather was superb, un-usually so, a high 20 C. My plant is also beautiful any time of year even when leafless.
Ailsa Craig ON about 10 mi SE of Grand Bend

Lil Haworth is enjoying this lovely Helleborus in her garden. Early December. Grimsby ON

Gathered from the garden in late November, including lepidotes in flower.
CW. Mississauga ON

A Word of Caution

By becoming a successful grower, the reader will be exposed to a contagion for which there is no cure. Once infected wtih an appreciation of rhododendrons and azaleas most gardeners spend a lifetime collecting the most beautiful of all plants.

H. Edward Reiley