JOURNAL

American Rhododendron Society

Vol. 72 Number 2 SPRING 2018

R. prinophyllum
page 9

American Rhododendron Society
A GUIDE TO THE SOCIETY

President: Ann Mangels
Past President: Bob MacIntyre
Western Vice President: Ken Webb
Eastern Vice President: Steve Krebs
Treasurer: David Banks
Secretary: Linda Derkach
Office Administrator: Katherine Sterner

Journal Editor: Glen Jamieson Ph.D.
Journal Associate Editor: Donald Smart
Webmaster: Bob Weissman
Journal Technical Reviewers: Kenneth N. E. Cox, Harold E. Greer, Steve Hootman, Stephen Krebs Ph.D., G. David Lewis Ph.D., Erik T. Nilsen Ph.D., Registrar Michael Martin Mills, Bob Ramik, Mark Widrlechner Ph.D.

ARS Districts & Chapters

District Director Terms, starting in spring of years:
2018: District 5, District 8, District 9
2019: District 1, District 2, District 7, District 10
2020: District 3, District 4, District 6, District 11, District 12

Districts, District Directors, Chapter Chairpersons
DISTRICT 1
District Director: Chris Hodgson
Alternate: Chris Southwick
COWICHAN VALLEY CHAPTER - Barrie Agar
FRASER SOUTH CHAPTER - Evelyn Jensen
MT. ARROWSMITH CHAPTER - Glen Jamieson
NANAIMO CHAPTER - Allen McRae
NORTH ISLAND CHAPTER - Judith Murakami
VANCOUVER CHAPTER - Chris Hodgson
VICTORIA CHAPTER - Lois Blackmore
DISTRICT 2/3
District Director: Richard Fairfield
Alternate: Doug Keough
JUAN DE FUCA CHAPTER - Rosalie Preble
KITSAP CHAPTER - Kathleen Bullivant
OLYMPIA CHAPTER - Jack Horn
OLYMPIC PENINSULA CHAPTER - Billie Fitch
PENINSULA CHAPTER - Steve Johnson
PILCHUCK CHAPTER - Doug Keough
SEATTLE CHAPTER - Chip Muller and Jeanine Smith
SHELTON CHAPTER - Tom Noreen
TACOMA CHAPTER - Walt Brooks
WHIDBEY ISLAND CHAPTER - Don Lee
DISTRICT 4
District Director: Brenda Ziegler
Alternate: Anne Gross
EUGENE CHAPTER - Terry Henderson
PORTLAND CHAPTER - Dennis O'Malley
SIUSLAW CHAPTER - Mike Bones
SOUTHWESTERN OREGON CHAPTER - Candy Baumer
TUALATIN VALLEY CHAPTER - Kay Nakao
WILLAMETTE CHAPTER - Wallace Reed
DISTRICT 5
District Director: Tim Walsh
Alternate: Richard Jones
CALIFORNIA CHAPTER - Paul Anderson
DE ANZA CHAPTER - Bee Brown
EUREKA CHAPTER - Max Abrahamsen
HAWAII CHAPTER - Sherla Bertelmann
MONTEREY BAY CHAPTER - Jerry Harris
NOYO CHAPTER - Dennis McKiver
SOUTHERN CALIFORNIA CHAPTER - George Klump
DISTRICT 6
District Director: C.J. Patterson
Alternate: Barbara Gingras
CONNECTICUT CHAPTER - Tom Flanigan
MASSACHUSETTS CHAPTER - Joe Bruso
DISTRICT 7
District Director: Robert Warren
Alternate: vacant
NEW YORK CHAPTER - James Fry
PRINCETON CHAPTER - Lester Martin
TAPPAN ZEE CHAPTER - Gus Cerini
DISTRICT 8
District Director: Steve Henning
Alternate: Linda Hartnett
GREATER PHILADELPHIA CHAPTER - Craig Conover
LEHIGH VALLEY CHAPTER - Dale Howe
SUSQUEHANNA VALLEY CHAPTER - Lewis Brown
VALLEY FORGE CHAPTER - Jerry O'Dell
DISTRICT 9
District Director: Bill Meyers
Alternate: Richard Mohr
MASON DIXON CHAPTER - Kelly Bollinger
MIDDLE ATLANTIC CHAPTER - Jeanne Hammer
POTOMAC VALLEY CHAPTER - Ginny Mohr
DISTRICT 10
District Director: Hale Booth
Alternate: Jackson McCarter
AZALEA CHAPTER - Charles Andrews
SOUTHEASTERN CHAPTER - Ray Head
TENNESSEE VALLEY CHAPTER - Leslie Dulin
DISTRICT 11
District Director: John Golab
Alternate: vacant
GREAT LAKES CHAPTER - Eric Oesterling
MIDWEST CHAPTER - vacant
OZARK CHAPTER - Robert Stassen
DISTRICT 12
THE RHODODENDRON SOCIETY OF CANADA
District Director: John Brett
Alternate: Bob Howard
RSC ATLANTIC REGION CHAPTER - John Brett
RSC NIAGARA REGION CHAPTER - Sondra Meis
RSC TORONTO REGION CHAPTER - Laura Grant
CHAPTERS AT LARGE
Director: Paul Anderson, M.D.
Alternate: Carl Adam Lehmann
DANISH CHAPTER - Jens Holger Hansen
DUTCH CHAPTER - Henk Borsje
FINNISH CHAPTER - Kristian Theqvist
J. D. HOOKER CHAPTER - Sri Keshab C. Pradhan
SCOTTISH CHAPTER - John Hammond
SWEDISH CHAPTER - Torsten Bynke
NON CHAPTER MEMBERS - Contact Office Administrator

ARS Committees and Chairpersons

Archives: Sandra McDonald, Ph.D.
Azalea: James Fry
Budget & Finance: Dave Banks
Bylaws & Policies: Bruce Feller
Digital Publications: Bob Weissman
Editorial: Sandra McDonald, Ph.D.
Electronic Media: Bob Weissman
Electronic Newsletter: Dave Banks
Endowment: Bill Mangels
Fundraising: Don Smart
Honors: Dee Daneri
Long-range Planning: Paul Anderson, M.D.
Membership: June Walsh
Nominations: Bob MacIntyre
Plant Awards: Linda Derkach
Program Library: Linda & Marvin Fisher & Donald Hyatt
Public Education: Harold Greer
Registrar of Plant Names: Michael Martin Mills
Research Committee: Harold Sweetman, Ph.D.
Research Foundation: Karel Bernady
Research Foundation Treasurer: Perc Moser
Seed Exchange: Norman Beaudry
Shows & Judging: Bruce & Marianne Feller
Speakers Bureau: Don Smart
Test & Display Gardens: Nicholas Yarmoshuk

Society's Purpose

To encourage interest in and to disseminate knowledge about rhododendrons and azaleas. To provide a medium through which all persons interested in rhododendrons and azaleas may communicate and cooperate with others through education, meetings, publications, scientific studies, research, conservation and other similar activities.

Membership Benefits

- Chapter affiliation with scheduled meetings
- *Journal American Rhododendron Society* published quarterly
- Annual convention and regional conferences
- Seed exchange
- Listing of registration of names and descriptions of new rhododendron hybrids published in the Journal

To Join the Society

Membership categories:
(January 1 – December 31)

Student (include proof if over 18)	$10.00
Regular	$40.00
Commercial	$90.00
Sustaining	$75.00
Sponsoring	$150.00
Life single	$1,000.00
Life family	$1,500.00

You can join the ARS through your local ARS chapter (check the website www.rhododendron.org for chapter contact info) or by sending a check or money order directly to the Office Administrator of the American Rhododendron Society at the above address. Checks must be in US funds. Make checks payable to the "American Rhododendron Society." Membership includes one year (4 issues) of the *Journal American Rhododendron Society* and affiliation with the chapter of your choice.**To receive the winter issue of the Journal, renewals must be postmarked no later than Dec. 1.**



CONTENTS SPRING 2018

Features

SPRING 2018 VOLUME 72 NUMBER 2
Journal American Rhododendron Society (ISSN: 0745-7839) Copyright © 2018 by the American Rhododendron Society. Published quarterly Jan. 15, April 15, July 15, Oct. 15 by the American Rhododendron Society. Periodicals postage paid at Carnation, WA, and additional mailing offices.

CONTENTS SPRING 2018 continued

Society News

Publications

Cover Photo

R. prinopyllum. Photo by Charles Hunter.

ARS Digital Resources

Website: www.rhododendron.org

Office: www.arsoffice.org

***JARS* online:** www.arsoffice.org/protect/login.asp

***JARS* back issues**: http://scholar.lib.vt.edu/ejournals/JARS [to Vol. 62, 2008]

Archives: www.lib.virginia.edu/small

ARSStore: www.ARSStore.org

Blog: www.rhododendron.org/blog/default.asp

Plant Name Registration: www.rhododendron.org/plantregistry.htm

Rhododendron & Azalea News: www.rhododendron.org/news/newsindex.htm

From the President

Ann Mangels
Baltimore, Maryland

I'm sure everyone is happy to see the spring JARS in their mailbox and know that we will soon enjoy the fruit of our labors. We won't have to just look at pretty pictures, but rather see and experience our beautiful blooms and trusses.

The ARS seems to be in planning mode with many of our chapters and districts—from plant sales, flower shows and spring picnics to workshops, spring home and garden events and other garden projects. I've contacted the district directors to see what is going on in their areas, since many of you don't see the directors' reports which are used as agenda items for our BOD meetings. Here is a condensed summary.

Brenda Ziegler, District 4 Director, reports that they have formed partnerships between chapters and government entities, assuring best care for the future of some of their rhododendron gardens, including the Hinsdale Rhododendron Garden and Crystal Springs. C.J. Patterson, District 6 Director, noted that they have a new Facebook page and that they are testing a mock-up of their website.

Communication within districts and chapters (as well as the community we strive to attract) can take many forms. Joint participation between geographically close ARS chapters and ASA chapters in workshops and demonstrations has created interest and allows more sharing of programs. District 11 is participating in the ASA national meeting in Little Rock, Arkansas, and with the ASA in joint chapter meetings.

Another idea to enhance membership is to reach out to other horticulture organizations and to participate in home and garden shows. Local nurseries may be willing to sell plants from the "good rhododendron doers" lists that the ARS compiles annually, especially if plant tags with specific planting instructions, information about size, watering, fertilizing, and exposure, are made available to them.

Finally, I just want to mention briefly the forthcoming ARS conferences. The first is the International ARS Convention in Bremen, Germany, May 20 -27, 2018, which will have many opportunities to see famous gardens, meet interesting hybridizers, socialize with friends, and enjoy the hospitality of our German hosts. The fall ARS conference will be in Chattanooga, TN, from October 19–21, 2018, and the Middle Atlantic Chapter (MAC) will have its fall meeting there at the same time and will provide many interesting plants for the sale.

Next spring, the meeting will be in mid-May in Philadelphia, PA, where there will be another outstanding plant sale and tours of both private and renowned local gardens and arboreta. Finally, the fall 2019 meeting will be hosted by the Mount Arrowsmith Chapter in Parksville, Vancouver Island, British Columbia. More about all these meetings will be in forthcoming JARS issues.

From the Editor

Glen Jamieson
Parksville, BC
Canada

It is my pleasure to announce that Don Smart, past ARS president, will be taking over the position from Sonja Nelson as Associate JARS editor. It has taken him a bit longer than expected to acquire the appropriate hardware and software, so Sonja has stayed on to complete the spring JARS issue and will assist Don with the summer issue. I have worked with Don in the past when he was president, and I am confident that a productive, positive working relationship will result. Don will be taking over all the editorial and administrative responsibilities that Sonja currently has.

Readers will notice that I have created a new column in JARS titled "Rhododendrons for Beginners." My hope is that this will address a number of issues. Firstly, the ARS wants to encourage the retention of new members, and so it is imperative that we explain to them about the diversity that occurs within the genus and the terms used both to refer to and differentiate between the more common types of rhododendrons. Secondly, there is typically much more information in JARS about rhododendron cultivars than about rhododendron species, with the result that most ARS members do not appreciate the characteristics of the different taxonomic groupings of rhododendron species and their habitat needs. With the support of the Editorial Committee, I will thus be reviewing and detailing the characteristics of different taxonomic groupings of rhododendron species. The first article will be a general review of the terms rhododendron, azalea, maddenia and vireya, as these capture most of the types of rhododendrons people are familiar with and grow. The second article will be on deciduous azaleas, and the third on some of the lepidote groups.

Finally, I can't help but comment again on the crazy weather many of us have experienced this winter. It's now late February and in western North America, we are having record low temperatures for this time of year, down to -8 to -10° C (14-18° F) in the Vancouver, Seattle and Vancouver Island areas, which while not really cold to those from central and eastern North America, it has killed the flowers on many our early flowering species (e.g., *R. mucronulatum, R. moupinense)* and hybrids (e.g., 'Rosamundi', 'Lee's Scarlet', 'Olive' and 'Tabitha'). In contrast, parts of the east coast this week are experiencing record high temperatures (over 20° C (68° F)) from Boston to Washington, DC, because of warm air from the Gulf of Mexico flowing north! Our poor garden plants may be really confused, as while such events don't typically last too long, some may be damaged or begin to break dormancy! Let's hope that in all our gardens, any negative impacts will only be temporary!

Rhododendron Species for Southeastern Gardens

Charles Hunter
Smyrna, Georgia

Photos by author unless otherwise noted

I like to grow native plants. In fact, species are all that my wife Jana and I grow in the deciduous woodland behind our house. I also like rhododendrons, so mixed in with the native perennials and other smaller plants back there, are larger rhododendron species.

The largest part of the native plant garden is exclusively native American species, but one section contains only non-tropical species from Japan, Korea, China and Taiwan, including rhododendrons. The only hybrids in the garden are a few Georgia native azaleas that are natural crosses made by Mother Nature.

Through trial and error over many years (mostly error in the beginning), we have come a long way in determining which species work for us in suburban Atlanta, USDA climate zone 7b, at about 1000 feet (305 m) elevation, and which do not, as well as some things to look for and to avoid when trying new plants.

Aren't Species Harder to Grow?

Species are not harder to grow if the species planted come from a somewhat similar natural environment to where you are. In fact, once I learned how to avoid plants that don't like our garden location, I have found that species are easier and better doers for us than are a lot of "recommended" hybrids for our area.

Problems for Southern Gardens

The #1 challenge for particular rhododendron species in southeastern gardens is unquestionably our summer heat. While a lot of people in the northern states and Canada concern themselves with how cold hardy plants are, and worry about whether a cold snap or a bad winter will spell the end of a plant, we in the southeastern states rarely have that problem with non-tropical rhododendrons. Instead, it is the summer heat that tries to kill plants here. The rhododendron references that give hardiness

The author’s garden in Smyrna, Georgia.

Arisaema thunbergii subsp. *urashima* in the author's garden.

Trillium discolor and *T. luteum* in the author's garden.

ratings usually don't include much information about heat tolerance! Not only are summers hot in the south, but the greater heat tends to evaporate moisture more quickly and so gardeners need to watch for drought, with watering as necessary (or possible).

The altitude that a plant grows in its native range can give a good idea of the climate conditions it experiences in the wild. For example, if a rhododendron is native to the Himalayan Mountains of western China at an elevation of 11,000—14,000 ft (3350-4260 m), like *R. roxianum* with its beautiful long and thin leaves, then it grows in an environment that never experiences any substantial heat, even at southern latitudes. These plants (including the *R. roxianum* I killed years ago) generally do poorly in the non-mountainous areas of the southeastern states and usually will not survive for even a single summer.

The south Asian island nation of Taiwan is tropical at sea level but much colder at its highest elevations, where *R. pachysanthum* grows at 10,000 ft (3048 m). I have killed that species more than once years ago and no longer attempt it. No doubt summers in north Georgia are much hotter than anywhere at 10,000 ft in Asia. On the other hand, one of the best Asian evergreen rhododendron species in our garden comes from lower elevations on Taiwan—more on this below.

American Azaleas

The azaleas native to North America are all deciduous and with a couple of exceptions, all do well in our garden and should be good candidates for other southeastern gardens. We grow *R. alabamense, arborescens, atlanticum, austrinum, cumberlandense, calendulaceum, canescens, colemanii*, *eastmanii, flammeum, periclymenoides, prinophyllum, prunifolium, vaseyi* and *viscosum* (the latter including the very late blooming, most southern form, formerly known as *R. serrrulatum)*. Gardeners in northern states report that even the very deep south coastal plain plants like *R. austrinum* and *R. prunifolium* do well far north of their native range.

R. arborescens var. *georgiana*.

R. calendulaceum.

People wanting to grow the May blooming South Carolina native *R. eastmanii* should remember that this plant grows in deeper shade and on soils less acidic than most azalea soils. Limestone might need to be added to the soil mix for this species.

R. arborescens, normally a spring blooming mountain plant, has small disjunct populations in west-central Georgia into adjacent Alabama and they bloom in the summer. These late bloomers have been called *R. arborescens* var. *georgiana,* although this varietal status is not presently systematically recognized. Nevertheless, the "georgiana" plants bloom with *R. prunifolium,* long after all mountain *R. arborescens* are done, and should be utilized more in gardens to provide more very late blooms.

The deep pink *R. prinophyllum* that is commonly seen along the Blue Ridge Parkway

in Virginia blooms for us, but struggles a little bit in the heat. Gardeners in the deep south might want to try plants of this species that are sourced from western Arkansas.

Omitted from the list is *R. canadense,* the Rhodora, which grows in specific wet conditions from Atlantic Canada down into New England. It is difficult to duplicate those conditions in a southern garden and this species will likely not survive there.

The other omission is *R. occidentale*, the only azalea native to the west coast. For reasons that have yet to be completely understood, a lot of western plant species, including rhododendrons, do poorly in the east, particularly the southeast. This species is quite difficult to grow there and probably should be avoided, at least outside of a high elevation environment.

R. canescens.

R. prinophyllum.

R. flammeum.

Late *R. viscosum* (previously *R. serrulatum).*

American Evergreen Rhododendrons

Outside of Alaska, the four major garden worthy species of North American evergreen rhododendrons are *R. maximum, R. minus, R. catawbiense* and *R. macrophyllum*. A couple of years ago, Jana and I had the pleasure of driving down the Oregon coast with pink blooming *R. macrophyllum* growing on both sides of the road. What great wildflowers they were! Live east of the Mississippi River? Fuggedaboutit! Like the western native azalea, this plant is difficult in most eastern gardens and is next to impossible to grow in the southeast.

R. maximum is a common plant in the Appalachian Mountains and foothills from one county north of us (Cherokee) up into New England. In the wild, these plants like to grow near creek banks and in moist ravines where they get quite large. The late blooms are not large, but this species is a dependable bloomer in shady environments. South of the mountains, it probably should be grown in fairly deep shade. It is a good plant for us, and blooms every year, but I am not sure how well this mountain plant would do in the coastal plain of the deep south. For areas north of Macon, Georgia, plant several of these in a group in a shady area for a nice look.

R. minus is a "lumper" species name for the eastern small leafed evergreen rhododendron. "Splitters" will refer to the rare plants from north Florida that have twisted/cuneate leaves as *R. chapmanii*, mountain plants as *R. carolinianum* and everything in between as *R. minus*. While there is not universal agreement, the present ARS accepted species designations for this group divides it into just two varieties: *R. minus* var. *chapmanii* for the Florida plants and *R. minus* var. *minus* for everything else. Ron Miller (2013) did what I believe is an excellent and detailed treatment of these

R. minus var. *chapmanii.*

R. catawbiense so-called var. *insularis.* Cherokee County, Georgia.

plants in a JARS article in which he identified very high mountain plants in the Great Smoky Mountain National Park near Clingman's Dome as a distinct species or *R. minus* variety that he whimsically called "smokianum." Ron has seen a lot of wild plants and I think his article is "must reading" for people interested in these plants. Here in north Georgia, we can grow all of the *R. minus* group, except maybe for "smokianum," which I have not tried (and probably won't). The small leaves of *R. minus* give it a different look in the garden, and these plants will do great in most southeastern gardens.

Arguably the showiest of the North American evergreen rhododendrons is *R. catawbiense*. Normally a high elevation shrub of the Appalachian Mountain chain, these mountain plants do not like the hot summers of lower elevations in the southeast, although they do better in other parts of North America. A mountain *R. catawbiense* will usually not survive even one summer in the metro Atlanta area, much less bloom. Fortunately there are disjunct remnant populations of this species that grow wild at distinctly lower elevations, usually on northerly facing slopes, and these are better for lower elevation southeastern gardens. These have been called "*R. catawbiense* var. *insularis"* in the past, and I continue to use that designation, although the ARS no longer recognizes varieties within *R. catawbiense*. They are rare plants known from a few scattered locations in northern Georgia, Alabama, North Carolina and Virginia. As far as I can tell the "*insularis*" plants look the same as the high mountain rhododendrons, with similar blooms and bloom times. They are not easy to find for sale. There is also a white blooming form in the trade called "Ken's Find" from a very low elevation at Flower Hill Nature Preserve in central North Carolina. The biggest concentration of low elevation *R. catawbiense* I have seen is at Cloudland Canyon State Park in northwest Georgia. *R. catawbiense* needs a bit more sun than other rhododendrons to bloom and certainly more than *R. maximum*.

Japan and Korea

Anybody who has done any driving in the rural southeastern U.S.A. no doubt has driven by large stands of kudzu (*Pueraria*), "the plant that ate the south." It grows very fast, covering tall trees, blocking the sunlight, and eventually killing them. Introduced in an ill-fated attempt at erosion control in the 1940s, this Japanese native vine allegedly grows better in the southeastern U.S.A. than in its native country. With help of an herbicide, I think it is eliminated from our property. The smaller Japanese honeysuckle vine (*Lonicera japonica*) is another invasive climber that persists in eastern woodlands.

The point is, most Japanese plants thrive in the southeastern U.S.A., and Japanese rhododendrons and azaleas are no exception. Only a few high mountain or southern tropical island species present any culture difficulty.

Of the evergreen rhododendrons from Japan, *R. degronianum* subsp. *yakushimanum* (sometimes referred to as *R. yakushimanum* or even *"*yak*"* for simplicity) is the best known and is a good plant for a southeastern garden. It is often used in hybridization

R. degronianum subsp. *yakushimanum* in foreground with *R. amagianum* blooming in back.

R. makinoi. Photo by by Rinus Manders, Hirsutum.

but I think it is hard to improve on this species. Great foliage, flowers and plant form, it survives Georgia summers without problems, needing only a little watering in case of an extended hot weather drought. Native to tiny Yakushima Island just south of the larger Japanese islands, it usually opens with white buds blushed pink fading to white trusses. It blooms well in part shade for us. There are several named cultivars, of which 'Yaku Angel' is my favorite.

After the short blooming season is over, you get to look at a rhododendron's foliage

for the rest of the year. That is definitely a plus for the yak's relative *R. makinoi,* native to a central mountain area on Japan's biggest island of Honshu. The "roxianum-like" long and narrow leaves are very distinctive, quite attractive, and are unlike other evergreen rhododendrons. Also, unlike *R. roxianum*, it blooms pink in the spring and then survives the hot summer that follows in partly shaded southern gardens. If you do not already grow this beautiful plant, get one!

Another nice evergreen with attractive and distinctive foliage is *R. brachycarpum*, native to Japan and Korea, blooming for us every year in part shade.

There are evergreen azaleas native to Japan, many of which are the parents to the numerous hybrid evergreen azaleas commonly seen as front yard landscape plants all over the southeast. My favorite evergreen is the Wild Thyme Azalea, *R. serpyllifolium*, with its tiny leaves and numerous single small flowers in the early spring. We grow both the rose-pink flowered form and a white one, which are easy to grow for us and quite unusual. We have one about 25 years old that is around five feet (1.5 m) tall.

However, for me the Japanese azalea "stars of the show" for southeastern gardens are the deciduous "three-leaved" azaleas. Not easy to find for sale, these rhododendrons are some of the very few Asian ones that actually grow better in the southeast than the Pacific northwest, although they can be grown there also (seems like they can grow everything!). We grow the following, all of which bloom in part shade: *R. dilatatum, R. kiyosumense, R. reticulatum* (white and purple forms), *R. viscistylum, R. wadanum*, and *R. weyrichii*, as well as the closely related and late blooming *R. amagianum* and *R. sanctum*. It should be noted that there is a disagreement as to whether some of the "three-leaved" azalea species designations should be eliminated with the number of species reduced to just a few—maybe three to five. Cox and Cox (1997) stated: "The Japanese species of this subsection perform well in areas of high summer temperatures which ripen the wood and set flower buds. In areas with cool summers they are rather shy flowering and lacking in vigor."

These "three-leaved" azaleas do great and grow tall in our garden. In fact, our tallest rhododendron of all is a *R. weyrichii* that we have had for many years. The leaves on these azaleas are held in pseudo-whorls of three at branch tips. They are rhomboid shaped and look quite different from those of our North American native azaleas. If you can find any one of these for sale, get it. They are uncommon to see in any American gardens. I am not aware that any hybridization work has been done for these azaleas.

R. amagianum flower.

R. mucronulatum is a very early

R. viscistylum.

R. hyperythrum.

blooming deciduous rhododendron native to Korea (and several adjoining countries). It usually starts the blooming season for us, and as such is a special addition to a southern garden where the March blooms are less likely to be hammered by a freeze than they would be in a more northern environment. We grow the most common cultivar 'Cornell Pink', as well as 'Mahogany Red' and a white blooming one. There is also a short growing variety from Jeju Island, Korea.

Taiwan

If I had to pick just one Asian evergreen rhododendron for the garden, I think it would be the Taiwanese species *R. hyperythrum*. Beautiful white spring blooms, great foliage and plant form and it's practically bullet proof. Several years ago, several of us in the Azalea Chapter lost evergreen rhododendrons due to an extreme summer drought. Our garden was not an exception and several succumbed that year, including a *R. makinoi* and a couple of "yaks," but we didn't lose a single *R. hyperythrum* nor did even one suffer any visible damage. This plant is only found wild at 3000–4000 ft (915–1220 m) in forested areas of northern Taiwan. We have several mature ones we raised from seed years ago.

A nice evergreen azalea native only to Taiwan, where it is common at a range of altitudes, is *R. oldhamii*, with red blooms and very unusual fuzzy leaves. It can grow to about nine feet (2.75 m) tall.

R. latoucheae.

China

By far, the highest number of rhododendron species on the planet are from the huge nation of China. Most are high elevation mountain plants from western Chinese provinces, and these are generally not suitable for our southeastern climate. However, there are a few lower elevation rhododendrons, usually from eastern and southern China, that do well for us.

R. fortunei subsp. *fortunei* grows at 2000–5000 ft (610–1525 m) in a wide area across southern China. That is at an altitude range and latitude that means the plants can tolerate a little heat, and so these do well for us. Its pink spring flowers are fragrant.

The related *R. hemsleyanum* (3600–6500 ft (1100–1980 m)) grows well here also, although ours has not bloomed yet. It's known only from one location in Sichuan Province.

R. adenopodum grows in central China at altitudes of from 5000–7000 ft (1525–2135 m), an altitude that is on the high side for our garden, but this plant has grown large and blooms every year in part shade, close to the *R. hemsleyanum* that is from a lower elevation.

Probably my favorite Chinese species is *R. latoucheae*, a small-leafed evergreen shrub

R. rufohirtum. Photo by Peter Norris, Hirsutum.

that grows up to 22 feet (6.7 m), although ours is probably half that height. Prolific early spring pink flowers are held at branch tips singly or in pairs. It grows in southeastern China and the southern Ryukyu Islands of Japan from 1600–6000 ft (490–1825 m).

Closely related to *R. latoucheae* is *R. stamineum* with its dark green small leaves and white flowers, blotched yellow. The plant form of ours is much leggier than is *R. latoucheae.*

Recent acquisitions in our garden from the Rhododendron Species Botanical Garden (RSBG), Federal Way, Washington, are from Steve Hootman's recent trips to lower elevation habitats in southern and eastern China. They include two unknown evergreen azalea species of the subgenus *Tsutsusi,* as well as *R. lilacinum* and *R. rufohirtum*, azaleas that were not previously in cultivation. The jury is still out on these azaleas here, but so far so good. Only *R. rufohirtum* has bloomed so far, just this past year.

The new species that we are most excited about, also introduced to cultivation by the RSBG, is *R. faitheae*. Related to *R. fortunei*, it is a rare plant from only a few locations in the south China provinces of Guanxi and Gaungdong. While it grows in mountains, its elevation is relatively low, being about 3500 ft (1060 m). I killed our first one, but we have two more that have survived several years now and I hope to live long enough to see them bloom. It becomes a large shrub with big leaves and white fragrant trusses. Likely it will be used in future hybridization.

Research References for Species

We have several reference books, including the four volume Davidian set, but I generally look at only two:

1) Cox and Cox's (1997) *The Encyclopedia of Rhododendron Species* is very easy to use and has photographs of every species. It is oriented towards gardens in Scotland, where the authors live. If a description in it describes a species as "too tender," remember that it means for Scotland, and it just might be suitable for a garden in the American south. The book is excellent, and gives locations, habitats and elevation ranges for almost all species listed.

2) Less expensive is the softbound book *Greer's Guidebook to Available Rhododendrons & Azaleas, Species & Hybrids* by Harold Greer (1996). Although it is now out of print, a quick check of Amazon.com at the time of this writing showed several for sale at low cost. Harold also still has some copies of his latest edition for sale. The first part of this publication has alphabetic listings and short descriptions of each species and also includes the location and range of altitudes where the plant grows wild. In a separate section covering hybrids, the parentage of a hybrid is given, allowing one to look at a hybrid listing and then flip back to the species section to see if one of its ancestors is from a high elevation in western China or not, making research on hybrids for the southeastern U.S.A. easier. It lacks photos of most species, but is easy to use. I reference it a lot, often in conjunction with the Cox and Cox (1997) book.

Because of the years they were published, neither book lists the most recently discovered species.

Finally, look at the descriptions of plants listed in the Rhododendron Species Botanical Garden online catalog. While by no means does it come close to listing all or even most species, even the ones that exist at the garden, the ones listed for sale include descriptions that often indicate if a particular plant is likely to be heat tolerant.

Finding Rhododendron Species for Sale

Unquestionably the best source for most species rhododendrons is the Rhododendron Species Botanical Garden in Washington. Although I have been a member for many years, membership is not required to order from them. Although some species are always available in their latest catalog, there are always new plants listed, some of which have been growing at the garden for years, but are not always offered for sale. Steve Hootman, the director and curator, undertakes plant hunting trips to Asia periodically and always seems to bring back something new, or at least new to cultivation. *R. faitheae*, recently introduced by them into cultivation, is usually available in their catalog. In spite of growing species for many years, we are always ordering something new from them.

There are also specialty nurseries that offer some species, although nursery owners sometimes say that the demand for species is too low to justify carrying a lot of them. *R. degronianum* subsp. *yakushimanum* is fairly widely available. Google the plant names to find others. Woodlander's Nursery in Aiken, South Carolina, sells a lot of eastern native azaleas, plus the sometimes hard to find Taiwanese species, *R. oldhamii*.

For the Japanese "three-leaved" azaleas, look first at the latest catalog of the RSBG where often one or more of these are listed. For example, in the Spring 2018 catalog (https://rhodygarden.org/cms/current-catalog/), they offer *R. wadanum* for sale.

Finally, look at the ARS and Chapter seed exchanges, which include species. I have seen low elevation *R. catawbiense* seed offered on the ARS exchange before. While this means a longer wait for a mature plant, sometimes you can find seed when you cannot

find particular plants for sale elsewhere.

The ARS website includes a page for "Where to Buy Rhododendrons & Azaleas" (https://www.rhododendron.org/nurseryintro.htm), but you should screen the location of a nursery, unless you are pretty sure a particular plant they offer will grow in the southeast. Some listed nurseries offer few or no species.

Summary

For our southeastern garden, we generally do not attempt a plant that grows wild above 6000 ft (1830 m), and usually prefer plants from an elevation of 4500 ft (1375 m) or lower. Adjust these elevations for more northerly and or higher elevation locations, and avoid plant species native to the west coast of North America.

Remember that foliage and plant form DO matter and most hybrids are bred for flowers. Plants are in your garden for twelve months, not just for their short blooming season. If you want to get a "What is THAT?" from visitors to your garden, grow a *R. makinoi* and a *R. serpyllifolium* with their very unusual leaves, and if you like having plants that are different and seldom seen in other gardens in your area, several of the species mentioned above, including the "three-leaved" Japanese deciduous azaleas, fill the bill.

I hope this article inspires gardeners from our area to try a new plant species or two, including those of you who grow mostly hybrids.

References

Cox, P.A., and K.N.E. Cox. 1997, *The Encyclopedia of Rhododendron Species*, Glendoick Publishing, Glencarse, Perth, Scotland: 396 pp.

Greer, Harold E. 1996, *Greer's Guidebook to Available Rhododendrons, Species & Hybrids, third edition,* Offshoot Publications, Eugene, Oregon USA: 227 pp.

Miller, R. 2013. Stalking the Wild Lepidote: Rhododendron minus Revisited, *J. American Rhodo. Soc*., 67(2): 63-68, 78-83.

Charles Hunter is a retired civil litigation attorney and a member of the Azalea Chapter. The Hunter native plant garden includes not only species rhododendrons but also extensive collections of American trillium species and both American and Asian arisaemas.

The Word: Bract

Bruce Palmer
Cutten, California

Photos by the auhor

Recently, while photographing plants in my yard, I came across some stems of *Rhododendron falconeri* subsp. *eximium* whose bracts had persisted for some time while the leaves were extending and even after they were fully extended (Fig. 1). So, the term bract (Latin: *Bractae*, a thin iron sheet) seems like a good word to explore here.

Fig. 1. Bracts on *Rhododendron falconeri* subsp. *eximium*.

Fig. 2. Single dogwood flower.

The loose flower pieces we remove to display our rhodies at the annual flower show are bracts. They are not trash but are there to protect the leaves or inflorescence from the time they first developed shortly after the last bloom through the winter until it came time to flower or put on new growth. Bracts are modified leaves, though they often do not appear to be. Johann Wolfgang von Goethe (author of the famous epic poem *Faust*) was among the first to understand this when he wrote in 1790 "Everything is leaf, and through this simplicity the greatest diversity becomes possible" (Goethe 1989). In botany, a bract is a modified or specialized leaf, especially one associated with a reproductive structure such as a flower, inflorescence axis, or cone scale. Bracts are often (but not always) different from foliage leaves. They may be smaller, larger, or of a different color, shape, or texture.

Bracts serve as protective structures in flowering plants. Typically they drop off as the leaves or flowers develop, but not always. In grasses they persist and are the obvious features around nearly invisible flowering parts and around the seeds of grains before they are winnowed.

A number of flowering plants use brightly colored bracts as attractants for pollinators and landing platforms for pollinating birds. The poinsettia (*Euphorbia pulcherrima*) is a good example. The striking red structures are modified leaves called bracts that serve

Fig. 3. Buds on *Rhododendron liliiflorum*.

to attract humming birds and furnish them a landing spot. The actual flowers are tiny separate female and male structures at the center of what looks like a red flower. The poinsettia was introduced from its native Mexico to the Southeastern United States by Joel Poinsett, a little known but historically important figure sent by President James Madison to Latin America to monitor the revolutions there in the early 1800s.

The bracts many of us are perhaps most familiar with are found around dogwood inflorescences. They range in color from the white we are most familiar with through green, yellow and pink. Fig. 2 shows exceptionally large white bracts surrounding an inflorescence on a Pacific, or mountain, dogwood (*Cornus nuttallii*) in Yosemite Valley. That population of dogwoods is one of the lesser known but more spectacular sights in Yosemite in early spring.

Rhododendron inflorescences (trusses) have their protective bracts arranged in a whorl-like spiral around the base and interspersed among the individual flowers (Fig. 3). This configuration is called an involucre (Latin, *involucrum*, a wrapper). A small bract is called a bracteole or bractlet. Technically this is any bract that arises on a pedicel instead of subtending it. However, with rhododendrons, with the bracts gone, two tiny thread-like structures on the stalk of each flower may be visible. These are also called bracteoles or bractlets and are important in the classification of some rhododendrons

(Cullen 2005). In almost all species, the bracts and bracteoles fall off as the bud opens, and so are not available in herbarium specimens.

Together, all of the petals of a flower are called a corolla, and the petals are usually accompanied by another set of special leaves called sepals, that collectively form the calyx and lie just beneath the corolla. In most plants, the calyx protects the more delicate parts of the flower but in rhododendrons, this protection is largely taken over by bracts. Most rhododendrons thus do not have a significant calyx and if they have a calyx, it is usually reduced to a small swelling at the base of the flower. Occasionally a hybrid appears where the calyx is well-developed and colorful. That can be desirable to horticulturists, who often call that configuration "hose in hose." A good example of this is the hybrid 'Apricot Fantasy', an especially attractive plant that many of us have in our gardens.

The next time you are cleaning the bracts and bracteoles from your trusses for your chapter's flower show, take a minute to appreciate this "chaff." The bracts often have interesting structures and are definitely not trash before the trusses open.

References

Cullen, J. 2005. *Hardy Rhododendron Species: A Guide to Identification*. Portland OR. Timber Press. 496 pp.

Goethe, J. W. von. 1989. *Goethe's Botanical Writings*. [English translation] Ox Bow Press, New Haven: 258 pp.

Gardening is about enjoying the smell of things growing in the soil, getting dirty without feeling guilty, and generally taking the time to soak up a little peace and serenity.

Lindley Karstens, noproblemgarden.com

The Challenge in Moving Large Rhododendrons

Glen Jamieson
Parksville, BC, Canada
and
Art Lightburn
Nanoose Bay, BC, Canada

With the financial and volunteer support of ARS chapters on Vancouver Island, British Columbia (BC), Canada, a rhododendron species garden is being established at Milner Gardens and Woodland in the town of Qualicum Beach, BC. The ARS Endowment Fund has also contributed to this endeavour, and a more comprehensive article about the process and challenges encountered in this initiative will be the basis of a future JARS article.

The site was prepared in early 2017 in the winter, and during the spring, rhododendrons planting began. While many of the spring plantings were simple as they involved only potted plants, with the onset of the fall rains, large rhododendrons with the right provenance, i.e., properly identified plants of known source obtained from the Rhododendron Species Foundation and that had been established in local gardens for many years became available for planting. In this article, we describe the process that was adopted to dig them up, move them, and then plant them, as it was quite imaginative and worked very smoothly.

Digging the Large Rhododendrons Up

Among shrubs, large rhododendrons are relatively easy to dig up in preparation for moving, as they have a relatively shallow root system. Most of the roots of even large rhodos seldom go deeper that about 25 cm (one foot), and there are no tap roots. When digging up a rhodo, though, it is necessary to start digging near the drip line of the plant (the outer extent of the width of the plant) for two reasons; firstly, you want to get as many of the plant's roots as possible and secondly, plants are often so bushy that to get closer to the trunk would mean damaging many of the lower branches. For a large rhododendron, i.e., one 2–2.5 m (6–8 ft) high and wide, this can result is a substantial root ball, with a weight of up to about 140 kg (308 lb). To dig up and move something this large was challenging, and required some imaginative solutions, and those presented here were developed by Art Lightburn. Firstly, because this would

take time, he and his wife Susan decided to do the digging themselves, as being retired, they had the time and felt that involving their friends would mean people just standing around, as only a few people are required to do the digging of any one plant. The procedure they thus adopted was as follows:

1) Dig a trench around the rhodo to a depth of about 25 cm (one foot), and then push the shovel under the rhodo as far as possible all around the rhodo to loosen the soil.

2) Prepare three long planks (in this case, 5x25 cm (2 x 10 in) pointed at one end (Fig. 1)); the planks can be capped with metal to prevent them from splitting. With a sledgehammer, drive them in under the rhodo as far as possible. The The planks should be equidistant from each other, or about 120 degrees apart, and place under each a small log section or block as a fulcrum (Fig. 2).

3) Put five gal (19 l) buckets on the planks and fill them with water. Each full bucket weighs about 19 kg (about 40 lb), and with up to three full buckets on each plank, this pried even the largest rhodos up out of the ground (Fig. 3).

4) Slide nylon wrap (in this case, that obtained free from a building supply store that was used to wrap bundles of framing lumber for shipping) under the root ball (cut so that it extended about 50 cm (two feet) beyond each side of the root ball), and then lower the root ball down onto the wrap.

The root ball can then sit in its hole until it is ready to be moved, for weeks if necessary, but make [illegible] Art did the

Fig. 1. The three 2x10 inch boards used to pry the rhododendrons from the ground. Photo by Susan Lightburn.

following:

1). Cut short lengths of PVC pipe and tie cord around them to use as handles to attach to the wrap (see Fig. 4). These handles can be quickly attached and removed, so only about six are needed even for moving a large number of plants.

2) Depending on the weight of the rootball, get four to six people to lift up the rootball onto a wheeled cart using the above handles attached to the wrapping, and move (carry or slide) it to a pallet located near a roadway for later lifting onto a truck (Fig. 5).

3) When on the pallet, curve the wrap up over the root ball and tie it snugly in place with cord going from one side of the wrap to the other side.

4) In this case, Art had about 20 large rhodos to move, so he arranged to have a flatbed truck with an arm with straps (provided pro bono by a local building supply business) lift up all the rhodos onto the truck (Fig. 6), and then deliver them to the new garden, in our case about 20 km (13 miles) away, where they were offloaded, still on their pallets (Fig. 7). For us,

Figs. 2 and 3. Rhodos being pried from the ground with boards on a fulcrum weighted with buckets of water. Photos by Susan Lightburn.

Fig. 4. The home-made handles which were attached to the plastic tarp under the rhodos to help in their lifting. Photo by Susan Lightburn.

Fig. 5. Lifting a large, tarped rhodo from the wagon used to move it to a pallet. Photo by Susan Lightburn.

Fig. 6. Lifting a large rhodo on a pallet onto a flatbed truck. Photo by Susan Lightburn.

Fig. 7. The many large rhodos on their pallets prior to planting. Photo by Glen Jamieson.

Fig. 8. Moving a rhodo to beside its planting site with a Bobcat. Photo by Glen Jamieson.

Fig. 9. Sliding a tarped rhodo into the excavation where it will be planted. Photo by Glen Jamieson.

this took two trips.

The next task was to move them to their planting locations within the new garden, unwrap them and plant them. This involved the following:

1) A Bobcat with a forklift and with tank tracks rather than wheels to minimise garden impact, was rented for a few hours to move the heavy rhodos on their pallets (Fig. 8).

2) Rhodos were placed adjacent to their planting excavations, which were only about

Fig. 10. A linoleum knife tied to a staff was used to cut the tarp in half to facilitate its removal during planting. Photo by Susan Lightburn.

Fig. 11. Cutting the tarp beneath a tipped, properly placed rhodo. Photo by Glen Jamieson.

12 cm (six inches) deep (Fig. 8). Using the same handles described above attached to the wrap, lift the rootball (4-6 men for the biggest rootballs) and slide it into the excavation (Fig. 9).

3) Tip the rootball up, and then using a short linoleum knife tied to a pole (Fig. 10), reach under the rootball and cut the wrap in half (Fig. 11). Each wrap half can then be easily pulled out from under the rhodo (Fig. 12), leaving the rhodo centred in the excavation.

4) Put soil around the rootball to make it flush with the ground (Fig. 13), cover it with 10-15 cm (4-6 in) of bark much, and then water it.

If the desire is simply to move the rhodo to another location within the same garden, and there is a flat grassy area leading to the new location, a rootball resting on plastic can often be dragged (slid) over the grass to the new location, with often minimal lifting involved (Knight 2010). The only lifting or tipping required is to get the plastic

under the rootball in the first place and to slide it off the plastic. Another way to do this is the same way as how nurses change sheets in a hospital bed while the patient is still in it. The person is rolled on their side (rootball tipped up), the sheets are slipped under halfway, with the other half rolled up and placed adjacent to the person (rootball). The person (rootball) is then rolled or tipped on to their other side, thereby exposing the rolled sheet (plastic) on the other side of the person (rootball), which is then unrolled and straightened out, completing the task. Once on the plastic, one or two people can easily drag even a heavy rootball, particularly if the grass is wet to make it more slippery.

In summary, using the above procedures, just a few people can move and plant even large rhododendrons relatively easily and safely, even over great distances.

Reference

Knight, R. 2010. How to move giant rhododendrons. *J. American Rhodo. Soc.* 64: 75–76.

Glen Jamieson is the current president of the Mount Arrowsmith Chapter and the editor of JARS. Art Lightburn is the past president of the Nanaimo Chapter.

Fig. 12. Pulling the cut tarp halves out from under the properly placed rhodo. Photo by Glen Jamieson.

Fig. 13. A planted rhodo, with soil back-filled around the rootball, prior to the placement of bark mulch over the rootball to minimise weed growth and retain moisture. Photo by Glen Jamieson.

The Stumpery at the Rhododendron Species Botanical Garden, Federal Way, WA, USA. Photo by Steve Hootman.

Some of the World's Greatest Woodland Gardens

Kenneth Cox
Glendoick,
Scotland

Photos by author unless noted

What is a Woodland Garden?

Most rhododendron gardens are woodland gardens. For the purposes of my book *Woodland Gardening* (Cox 2018) and this article, a woodland garden is probably what most ARS members have. Such gardens are usually situated in a broadly "maritime temperate" or "oceanic'" climate (the Pacific Northwest, coastal New England, UK, France, Norway, Germany, New Zealand and so on) and filled with acid-loving subjects, planted in or at the edge of woodland or trees in a broadly informal or "naturalistic arrangement." A woodland garden usually consists of three layers: the canopy and backdrop of trees, the shrubs and the understory or woodland floor layer of perennials and bulbs. Plants used are predominantly exotic and include rhododendrons, azaleas, camellias, magnolias, and hydrangeas, under-planted with woodland perennials, ferns and bulbs. Many of the characteristics of maritime climates are shared by regions where woodland garden plants are found wild, i.e., in the richly forested parts of the Himalaya and those of the mountains of Japan, southwest China, north Vietnam and Korea. In this article, I describe some of the finest and most inspiring gardens listed in my book *Woodland Gardening,* published in the spring 2018.

Rhododendron pemakoense at the Rhododendron Species Botanic Garden. Photo by Steve Hootman.

The purple and yellow garden at the VanDusen Botanic Garden, Vancouver, Canada.

As so many woodland garden plants are found in Asia, let's start there. Japan's most impressive of several woodland gardens which have been created there, is perhaps Akagi Nature Park, operated by the Seibu Saison Group, located on the lower slopes of Mt. Akagi in Gunma Prefecture, north of Tokyo. It opened in 2010 after 30 years of planning and planting and has attracted more than 300,000 visitors in total since. The part of the park currently open (approximately 60 ha (148 acres)) is divided into three separate areas, each with different flora and fauna, which gives each its own unique characteristics. Many garden designers were involved in the planning of each section, and one of the gardens with mainly rhododendrons and azaleas was planned with help from English designer James Russell and much influenced by Exbury gardens in England. This is a Japanese interpretation of the classic European woodland gardening style. It has a wide variety of rhododendrons and azaleas, fine magnolias, spectacular autumn colour and extensive perennial and bulb plantings, which include *Erythronium* and *Epimedium*, providing long seasonal interest.

North American Woodland Gardens

British Columbia, Canada, has one of the best climates for woodland gardening, not too hot and with ample rainfall most of the time. I rate highly the VanDusen Botanic Garden on 22 ha (55 acres) in the centre of the city of Vancouver. It is a constantly evolving garden, partly woodland, and with great structural layout and planting, originally the work in the 1970s and 1980s of Bill Livingston, Alleyne Cook and Roy Forster. The garden began with a significant collection of rhododendrons from the Grieg Nursery at Royston on Vancouver Island. I admired the colour planning

in the rhododendron plantings, the enviable understory of trilliums and other native woodlanders, and the outrageous yellow and purple garden.

Rhododendrons are tramps and trollops, and in gardens they tend to hybridise with one other at will and at random, which means that if you grow rhododendrons from garden seed, you tend to get mongrels. You may know the mother plant, but you have no idea where the pollinating bees were previously, so the father remains a mystery. The Rhododendron Species Foundation (RSF) began life as a protest movement. Unfortunately for North American gardeners in the 1950s, 60s and 70s, many rhododendron "species" were being grown by American nurseries and gardens from open pollinated garden seed from the UK mailed to them by UK gardeners. The consequence of all this was that a group of frustrated American rhododendron enthusiasts under the leadership of Dr. Milton Walker decided to take action. To establish an American reference collection from which to cultivate authenticated rhododendrons, they identified authenticated rhododendron species to be propagated from cuttings and grafts exported to the USA and Canada from the UK. This began to take shape in British Columbia, Canada, with the expert propagation skills of Evelyn Jack at the University of British Columbia who in her retirement with her husband Nick Weesjes created one of the finest Canadian private woodland gardens at Towner Crest near Sidney on Vancouver Island. In the late 1970s, the Rhododendron Species Foundation collection moved to its current site of 8.9 ha (22 acres) in the city of Federal Way, near Tacoma, Washington, and it is now one of the most complete collections of rhododendron species in the world, displaying over 700 of the more than 1000 species found in the wilds of North America, Europe, and Asia, as well as the tropical regions of southeast Asia and northern Australia.

The Federal Way site has not always proven ideal for rhododendron growing though, and the Tacoma area is becoming increasingly hot in summer, can suffer from ice storms and its shade conifers have in some areas outgrown their space, requiring their careful removal. The RSF, or Rhododendron Species Botanic Garden (RSBG) as it is now known, has played a key role in the conservation of rhododendron species and the promotion of woodland gardening throughout North America. The garden is now a valuable repository of knowledge on how to grow rhododendron and azalea species. Its Executive Director and Curator Steve Hootman is an expert plantsman of very wide interests and an evangelist for many woodland genera from *Magnolia* to *Schefflera,* as well as *Rhododendron*. Steve and his team have incorporated a huge range of other woodland plants, including ferns in a well-designed stumpery, perennials, bulbs, ground covers, native plants, trees and shrubs, to create a very aesthetically pleasing display that gives year-round interest.

On the east coast, Pennsylvania's 18.6 ha (46 acre) Jenkins Arboretum is a mainly wooded garden containing a world-class collection of azaleas and one of the east coast's best selection of rhododendron species, numerous deciduous and evergreen azaleas,

Jenkins Arboreum, azaleas and *Tiarella*. Photo by Harold Sweetman.

Kalmia, blueberries (*Vaccinium*), viburnums and *Enkianthus*. The ground layer is richly filled with bulbs, spring ephemerals such as bloodroot (*Sanguinaria canadensis*), *Trillium* and *Erythronium,* and a collection of native ferns. The garden has benefitted from family continuity, as its first director Leonard Sweetman was succeeded by his son Dr. Harold Sweetman in 1986. Wildlife in the garden includes herons, kingfishers, owls, red-tail hawks and a much less desirable urban deer population that causes destruction in the whole area. A striking sculpture titled "Revolve" or "Wind through the Trees," inspired by autumn colour leaves, hangs over the pond.

Woodland Gardens on a Smaller Scale

When covering the history of woodland gardening in Europe and North America, much of it is a tale of aristocrats and industrialists with huge estates, but it is important to stress that size isn't everything. Indeed, many of the finest woodland gardens are relatively small, often looked after by the owner with little or no outside help. Scandinavia and the American Pacific Northwest have many small, semi-suburban woodland gardens on standard-sized housing lots, backed by the borrowed landscape of native forest, making them seem larger than they actually are. Warren Berg's Hood Canal garden in Washington State is one of the finest examples, created in a mature native

conifer woodland. Warren resisted the temptation to keep increasing the garden's size and concentrated his efforts on growing plants he particularly liked or had hybridised himself, and in so doing, he evolved from a rhododendron collector to a great gardener and designer.

The late Warren Berg's garden on the Hood Canal, WA, USA, a plantsman's collection, expertly gardened.

Branklyn, Perth Scotland. All the features of a woodland garden in one ha (2.5 acres).

Only 13 km (eight miles) from our garden in Glendoick, Perth, Scotland, the one hectare (two acres) Branklyn Garden was created in the 1940s and 50s from old orchard fields by John and Dorothy Renton, with plants grown from seed collections from plant hunters such as Ludlow and Sherriff. Branklyn's woodland effect is provided by a combination of the surrounding borrowed landscape and the mature trees in the garden and is a masterclass in perennial underplanting. It has a good collection of rhododendrons and other shrubs with jealousy-causing carpets of woodland bulbs and perennials such as *Erythronium, Trillium, Epimedium, Meconopsis, Primula, Anemone*

and lots more, which reach a flowering climax in early May most years. The winding paths and undulating beds packed with plants make the space seem larger than it is, and of all the gardens on this sort of scale, Branklyn best illustrates how the precepts of woodland gardening can work wonderfully well on a relatively modest sized property. This is the best woodland garden of its size that I know of.

Another striking woodland garden in an even more confined space is the Four Seasons Garden (www.fourseasonsgarden.co.uk.) in Walsall in the English Midlands. When Tony and Marie Newton bought their home, it was a hard patch of clay soil, into which they worked gravel and large quantities of bark mulch. The garden measures only around 1000 m^2 (1/4 acre) and it is intensively gardened. The Newtons found that acid-loving evergreens, deciduous azaleas and Japanese maples liked these conditions, so these form the major plantings. The property is divided into three areas: the upper garden, the part featured most frequently in the press, with its azaleas, maples and conifers; the middle garden with "the jungle," pagoda and a small stream; and the lower garden with woodland features, perennials and a 17 m (56 ft) stream. Controlling growth has proved to be important to avoid that crowded leggy jungle that tends to happen when too many plants are crowded into a small space.

The Four Seasons Garden, Walsall, England, in the spring. Photo by Tony & Marie Newton.

> We knew the real test of our gardening skills would be not the creation but the maintenance of the garden. We found that selective pruning of all plants is a way of keeping the plants looking nice and in proportion with one another and strive to keep plants tidy and pleasing even after pruning.
>
> Visitors to our garden… often have the impression that it is larger than it is… One reason is that our rear garden blends well on all sides into the surrounding neighbouring landscape. Tony and Marie Newton

This garden has the structure, water, light and shade, and the great plant collection that any classic woodland garden should have to create year-round interest. On such a small property, the effect is astonishing!

Southern Hemisphere Gardens

I have been lucky enough to be invited to lecture in both Australia and New Zealand and to tour many of their greatest woodland gardens. While Pukeiti and Olinda are probably the most famous and are both well worth visiting, I have chosen two lesser known and more recently created gardens in this article.

The Emu Valley Rhododendron Garden, Burnie, Tasmania, is the perhaps the most ambitious woodland garden/rhododendron garden created by a group of hard working volunteers in the last 40 years. The site is an east-facing, steep-sided amphitheatre which had been logged, leaving some scrubby regrowth and lots of weeds that first needed to be cleared. Under the guidance of curator Maurie Kupsch, the flat area at the base of

Emu Valley Rhododendron Garden, the Japanese section, Burnie, Tasmania, Australia.

Maple Glen, New Zealand. Photo by Hartwig Schepker.

the site was sculpted into a series of ponds, islands and bridges, with contour paths on the steep sides. The decision was taken to plant rhododendron species in geographic groupings with associated conifers, deciduous trees, shrubs and perennials. In this way, for example, Japanese rhododendron species are accompanied by an extensive variety of Japanese maples and flowering cherries.

Northern Tasmania has an exceptional gardening climate with cool summers and mild winters that allows virtually all the 1000+ rhododendron species from the alpine to the sub-tropical to be grown outdoors, perhaps the only place in the world that can do this. The collection now extends to 450+ species of temperate rhododendrons

and a large collection of vireyas that rather incongruously had bluebells (*Hyacinthoides non-scripta*) flowering beneath them. They could certainly grow most magnolia and camellia species here too. This garden is a great achievement!

The Irish immigrants Bob Davison and his wife Muriel bought their 81 ha (200 acre) farm at Maple Glen, Southland, New Zealand, in 1966, and the garden is now run by their son Rob. Despite being packed with plants, this private garden's layout is open and its topography and water features ensure that there are views through and over the garden everywhere you walk. More recent plantings in the property's second and third valleys show an increasingly confident design with bold blocks and banks of grasses and perennials such as *Astilbe, Knifophia,* and *Ligularia*. The garden is full of trees that form a backdrop to everything, but overhead, the garden is open and most plants thrive in full sun. This garden demonstrates excellent use of conifers in the landscape, which can be appreciated from vantage points on the valley slopes. Its landscape features include the curlicued metal bridges designed by Rob Davison and the homestead perched at the top of the slope overlooking the garden, which provides a stern white focal point.

Maple Glen was the most popular New Zealand garden for many of the visitors to the 2014 New Zealand Rhododendron Association conference, for its setting, topography and diversity of planting. It is an out-of-the-way gem, well worth making a detour for.

Woodland Gardens in Great Britain and Ireland

You can hardly fail to be captivated by Mount Usher, a lauded Irish garden which lines a river, with streams crossed by several foot bridges and punctuated by a series of weirs that create reflecting pools. This is one of the best designed woodland gardens, with excellent integration of formal elements including the azalea and palm walks that cut through the woodland areas with views back towards Mt. Usher House. As well as having extensive collections of magnolias and rhododendrons, the garden has important collections of southern hemisphere trees, including *Nothofagus, Eucryphia* and *Eucalyptus*. This is one of my favourite gardens for its situation, riverside setting, bridges and weirs and its mix of formal and informal design elements. However, while it is still an inspiring garden to visit, its long-term status is on the cusp, as it needs extensive maintenance. Drastic action in felling, pruning and replanting is needed immediately and into the future for Mount Usher to remain a jewel of Irish Gardens.

Scotland, where I live, is one of the key countries in the story of woodland gardening. Its cool damp climate is also ideally suited to rhododendrons, *Meconopsis* and many other woodland plants. Scotland's many woodland gardens range from 200-year-old pinetums, contemporary family-run gardens and nurseries and recent restorations of woodlands run by the National Trust for Scotland. Some of them are in excellent shape, others in decline, but most have something to offer and the settings are often as good as you'll find anywhere. Scotland's woodland gardens include Inverewe, Glendoick, Dawyck, Castle Kennedy, Arduaine, Brodick, Crarae, Ardkinglas, Benmore and

Mount Usher, Ireland, showing the series of reflecting pools created by building weirs on the River Vartrey.

Glenarn. Corsock House, Galloway, in southwest Scotland is an eight hectare (20 acre) garden containing a collection of fine mature trees and rhododendrons, planted by three families: the Dunlops in the nineteenth century, the McEwans in the early twentieth century and the Ingalls since 1951. The top of the garden is bounded by a 16 ha (40 acre) Corsock Loch created by damming the Urr river which runs down through the curving wooded valley. A burn (large stream), which flows down a series of waterfalls, meanders through the valley to a water garden of several ponds and a fountain, surrounded by azaleas and Japanese maples and a trellis pagoda focal point. Along the river are classical statues and follies and an unusual *trompe l'oeil* bridge which disguises the retaining wall of a dam. The fact that the plants are not allowed to obscure Corsock's design is a key element of its success. My brother Ray Cox considers it the most photogenic woodland garden in Scotland and I agree; anyone looking for inspiration should visit. As well as

Glendoick house with deciduous azaleas and hybrid rhododendrons in May, Scotland.

Glendoick from the air in May.

Caerhays, Cornwall, showing the typical mix of magnolia, rhododendron and other plants.

the spring flowering displays, Corsock has particularly good autumn colour. Every time I show pictures of the garden in lectures, it seems to stir something in the audience.

Two English gardens, 1.6 km (one mile) apart, the more intensely gardened 14.2 ha (35 acre) Savill Garden and the wilder 89 ha (220 acre) Valley Garden, make up the woodland gardens at Windsor Great Park. The structure of these two public gardens was laid out under the guidance and vision of Eric Savill, both before and after the Second World War, encouraged by King George VI and Queen Elizabeth, later The Queen Mother, who was a life-long rhododendron fan. The Valley Garden began as a section of undulating woodland where two valleys intersect. The mixed woodland of oaks, beech, chestnut, birch and Scots pines, cedar and larch was thinned and irrigation pipes were laid along the main paths and drives. Most importantly, "grass rides" were established with the intention that they'd always remain mown, open and free of obstruction, and plantings only with spring bulbs, which maintain vistas down to Virginia Water, distant monuments and the wider landscape.

Collections of flowering cherries, rowans, camellias, magnolias, oaks, maples, crab apples, *Halesia, Styrax, Hydrangea, Stewartia*, *Enkianthus* and many more were planted on a grand scale. Colour groupings were created: bright colours together (red, orange bright pink) and groupings of pastels (pale pinks, creams and yellows). Asiatic magnolias were planted at the bases of slopes so that they could be appreciated from above or at eye level at maturity. Perhaps Windsor's most famous feature is the "punch bowl," a semi-circular amphitheatre at the bottom of a steep slope, planted with Kurume

azaleas, which was inspired by the massed flowers on Japanese hillsides. J.B. Stevenson was the "go-to" amateur rhododendron expert of the interwar years and the author/editor of *The Species of Rhododendron* (Stevenson 1930), the major work on the subject at that time. He and his wife Roza assembled what was then probably most extensive collection of rhododendron species in the world in their garden at Tower Court, near Ascot from 1919-1950. When J.B. Stevenson died in 1950, King George VI and Eric Savill bought the whole rhododendron collection, which was transplanted to a 12.1 ha (30 acre) site at Windsor with ample room to grow for the next 70 years.

The Savill garden is a more compact and varied garden with formal elements such as the new rose garden and the herbaceous plantings coupled with parkland and woodland plantings of a wide range of trees and shrubs, underplanted with perennials. The theme of pink runs through this woodland garden in the spring, in shades ranging from deepest magenta to subtle pastels, the colour from the azaleas, rhododendrons and trees such as maples that were selected for their pink young growth.

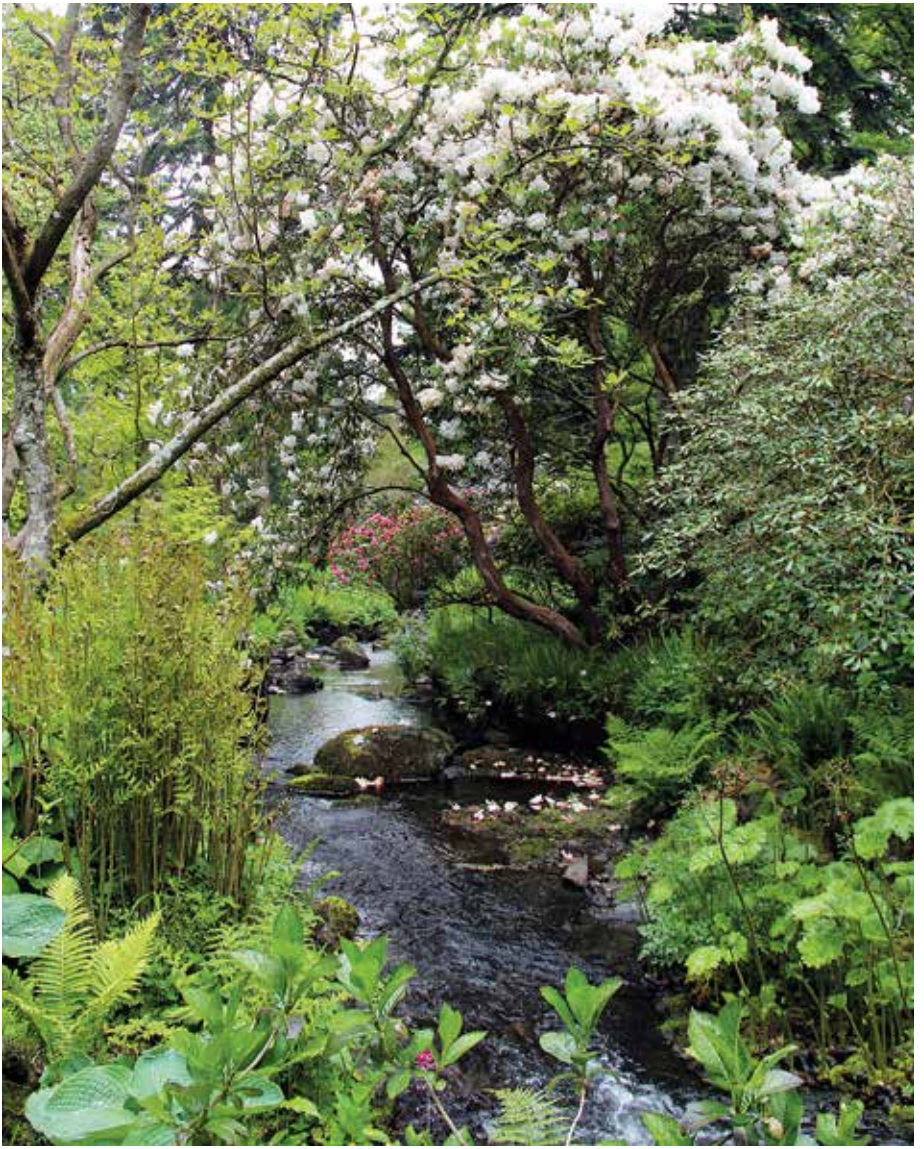
Sir George Taylor, director of RBG Kew wrote in 1958:

> …Brilliant use has been make of the natural features of the park- woodland, heaths, hillsides, streams and lakes—and today the remarkable collections…harmoniously arranged, are a national asset.

The Woodland garden at Bodnant, North Wales, contains a collection of conifers, rhododendrons, azaleas and magnolias forming in a display which has evolved over almost 150 years, the work of generations of owners, gardeners and plant hunters who between them have created one of Britain's finest gardens, with its views out towards the mountains of Snowdonia, often capped with fresh snowfall in the spring.

Bodnant's founder, Henry Davis Pochin was a Victorian who purchased the estate on the banks of the Conwy river in 1874 and immediately set about transforming the landscape from rough farmland, then used for grazing cattle and sheep, to a woodland garden. Pochin's daughter Laura McLaren and her son Henry, the 2nd Lord Aberconway continued to develop the garden in the early 20th century, and planted the latest discoveries of rhododendrons, camellias and other woodland plants.

Below the house, a series of formal terraces are flanked by and look out over camellias, rhododendrons and magnolias. A series of iconic buildings act as eye catchers in the garden: the famous 17th century Pin Mill, the neo-gothic Poem Mausoleum of the McLaren family on a cliff side and the old mill in the valley bottom. Bodnant is the garden that lays to rest the idea that woodland gardens are unplanned and formless. The routes of the paths, the vistas and vantage points, the construction of buildings and seats, ponds and bridges, have all been thought through to make the best of the topography and to "improve" the landscape with buildings, bridges and weirs. Repeat plantings give cohesion to the scale of the place, such as more than 50 'Loderi' and a recently replanted avenue of 'Penjerrick'.



Bodnant, North Wales.

Le Vasterival, in spring, showing the "transparence" which Princess Sturdza practiced. Photo by Didier Willery, Le Vasterival.

The wide deep valley affords views and vantage points to enjoy, and the magical combination of environment, topography, a world-class plant collection and more than a century of expert gardening skills, come together to make this North Wales garden what it is. If you have any interest in woodland gardening, there is simply nothing to match Bodnant in April and May.

References

Cox, K. 2018. *Woodland Gardening.* Glendoick Publishing, Glendoick: 400 pp.

Stevenson, J.B. 1930. *The Species of Rhododendron*. The Rhododendron Society, Ascot: 861 pp.

Kenneth Cox's latest book Woodland Gardening *was published in May 2018. Available from Glendoick Gardens for European customers and from the Rhododendron Species Botanic Garden in North America, its 400 pages and over 500 colour photos make it the first book to describe the history, design, maintenance and the huge range of plants which feature in woodland gardens worldwide. Rhododendrons feature throughout and gardens described*

Bloedel Reserve, WA, USA, an extraodinary Pacific Northwest woodland garden created by Prentice and Virginia Bloedel.

include the Rhododendron Species Botanical Garden, Federal Way, Washington State; the National Arboretum, Washington, DC; Longwood Gardens, Kennett Square, Pennsylvania; the Bloedel Reserve, Bainbridge Island, Washington State, and many other gardens in America, Europe, Asia and Australasia. Kenneth Cox from Glendoick is the author of twelve books, many of which are on rhododendrons, and is a member of the Scottish ARS Chapter.

Gardening is learning, learning, learning. That's the fun of them. You're always learning.

Chinese Proverb

Society News

Awards

RSC NIAGARA REGION CHAPTER

Bronze Medal: Peter Phelps

Peter's expertise with valuing cost and financial outcomes has guided much of the Chapter's short and long-range planning. We have indeed been fortunate that he transferred his professional skills and insights from his highly successful Home Design and Community Development Business to the needs and priorities of the Chapter. His shrewd attention to every element of a project's design, including the all-important intricacies of work flow, contributed to the efficiency of the complex series of tours he organized as Chair of Tours for the 1998 Convention. For years after, conventioneers were still asking, unsolicited, as to how this was achieved. For over 20 years with the Chapter such proficiencies have served him in various roles including Finance Director, and in his dedicated leadership on organizational details for, notably, the Annual Plant Sale. Peter's great sense of humor generates laughter and camaraderie among board members, which contributes to lively meetings and sound decision-making. Peter's wisdom and experience have enriched the Chapter and we are delighted to recognize his contribution with the Society`s Bronze Medal, the highest award that it is within the Chapter's reach to award independently.

Bronze Medal: Lillie Haworth

Lil's analytical and highly organized efficiency have been the mainstay of our Chapter's smooth functioning. We have relied on her exacting approach to financial matters and record keeping for over 20 years. These attributes, combined with her clear thinking and problem solving skills, contributed enormously to the financial success of the 1998 ARS Convention, of which she was Co-chair. She has been the key driver behind the Pre-order of Plants Option for the Spring Sale, our key fund raiser, which enjoys ongoing popularity and success. Lil's wicked sense of humour is matched by her generous welcome to her home, which for years has served as the meeting venue for the Chapter's Board of Directors, as well as for the open-houses, pot luck picnics/ dinners, and tours of her fabulous garden. She has won many awards for her plant and flower creations, and was once involved in Chapter flower shows to increase the awareness of Niagara hardy hybrids. We are delighted to present Lillie Haworth with this long overdue Bronze Medal, the highest award that it is within the Chapter's reach to award independently.

Recognition: Lillie Haworth & Peter Phelps

It has been 20 years since the RSC Niagara Region Chapter hosted the 53rd Annual Convention of the American Rhododendron Society. A scant five years after the Rhododendron Society of Canada joined the ARS as its District 12, the RSC Niagara Region Chapter undertook the responsibility to organize and hold the convention at Niagara Falls, Canada. Lillie Haworth, as a Co-chair and Treasurer, and Peter Phelps, as the Organizer of Tours, were instrumental in the success of the Convention and have been key members of the Board of Directors of the RSC Niagara Region Chapter since that time.

Awards continued

NORTH ISLAND CHAPTER

Bronze Medal: Wolfgang Hoefgen

It was with great pleasure that President Judi Murakami presented the American Rhododendron Society Bronze Medal to Wolfgang Hoefgen on June 17, 2017. The ARS Bronze Medal is awarded for outstanding contributions to a Chapter and is the highest commendation awarded by a local Chapter in the Society. Wolfgang joined the NIRS in November 2013 and immediately took an active role in club activities.

Wolfgang became the Chair of the Comox Valley Rhododendron Garden in June of 2014. He has been instrumental in maintaining and enhancing this show garden and keeping the work party teams productive and happy. With his years of experience as a nurseryman, Wolfgang was a natural fit for our newly formed Propagation Group. Wolfgang has been an excellent leader for the group, planning learning opportunities and making sure everyone has a chance to participate. Through his knowledge and gentle guidance he has been a key contributor to the success of this venture.

Wolfgang is very well organized and has worked many hours behind the scenes to make sure that both the Rhodo Garden and Propagation Group run smoothly. Despite his skill and extensive knowledge, Wolfgang is very modest about his contributions and encourages others to take center stage. Wolfgang continues to propagate at home and has a particular interest in conifers and companion plants. To the delight of both the public and our members, he has shared these as a vendor at our Rhodo Truss Show and Sale.

Wolfgang and Wilma have opened their beautiful garden to the public for our Mother's Day Garden Tour and hosted our members to small and large group tours. In continued support of the club Wolfgang became a Director on the NIRS executive board in May 2016.

It was with great pleasure that we thanked Wolfgang for his contributions to the club and congratulated him on being awarded the ARS Bronze Medal by the North Island Rhododendron Society.

Bronze Medal: Helena Stewart Zukowski

It was with great pleasure that President Judi Murakami presented the American Rhododendron Society Bronze Medal to Helen Stewart Zukowski on December 12, 2017. The ARS Bronze Medal is awarded for outstanding contributions to a Chapter and is the highest commendation awarded by a local Chapter in the Society.

Helena joined the NIRS in January 2010 and was soon an active participant, showing interest in and curiosity about the club and its workings. With a background in writing and publishing, the membership was delighted when Helena agreed to become the Publicity Chair in September 2010, a position she has held since that time. In this role Helena has been the liaison with the public and has ably promoted our club in the local media. Newspaper submissions about upcoming speakers have been so engaging that the club has welcomed new people to our meetings, many of whom have became

Awards continued on next page

Awards continued

club members. Helena's engaging articles promoting our Spring Rhododendron Sale and our Annual Mother's Day Garden Tour have been very well received by the public and contributed greatly to the success of our two main fundraisers. In addition, Helena has submitted many interesting, well researched, and often humorous articles for our club newsletter, *The Rhodoteller.* A thoughtful and reflective person, Helena has been a valuable resource on the Executive.

Helena and Roy hosted our June picnic in their beautiful garden and Helena continues to share her garden and home whenever needed. Helena held the NIRS Propagation Group's initial meeting in January 2015, and remains an active member of the group. Participating fully in meetings, activities, and events, Helena continues to be a significant asset and valued member of the club.

It is with great pleasure that we thank Helena for her contributions to the club and congratulate her on being awarded the ARS Bronze Medal by the North Island Rhododendron Society.

Society News

ARS District Directors Election

In accordance with Article IX Section E, of the Bylaws, the chapter presidents in ARS Districts 5, 8 and 9 are to serve as their Districts' nominating committees for District Directors and Alternates for a 3-year term beginning in 2018 at the end of the spring annual ARS board meeting. These committees have proposed the following nominees. The nominees are automatically certified as having been elected.

District 5:
District Director: Tim Walsh
District Director Alternate: Dick Jones

Distict 8:
District Director: Steve Henning
District Director Alternate: pending

District 9:
District Director: Bill Meyers
District Director Alternate. Richard Mohr

Save the Date!
ARS Fall Conference, Chattanooga, Tennessee
October 19-21, 2018

Chattanooga, Tennessee, the home of Moon Pies, Little Debbie snack cakes, VW's, the Tennessee Aquarium, Civil War battlefields, art galleries and great outdoor opportunities, invites you to come visit us next fall. The ARS fall board conference will start Friday, October 19, 2018, at the Holiday Inn Chattanooga, Hamilton Place. This will be followed Friday night by a banquet and speakers who will be discussing exceptional garden plants with a center of diversity in our Southern Appalachian region. Saturday will be a bus excursion to public and private gardens in the Chattanooga area, ending with a catered garden barbeque dinner in an ARS member's mountaintop garden which overlooks Chattanooga and the Tennessee River Gorge. On Sunday, local Tennessee Valley Chapter members will open their gardens to host drop-by visits on your own or you may wish on your own to visit some of the many attractions in the Chattanooga area. The meeting registration form and more details will be in the summer issue of the Journal.

Hale Booth

Society News

How to Access the Online JARS

Go to www.arsoffice.org. Under the "Members" column, click on the first box: "Journal American Rhododendron Society Electronic Edition."

Two windows will open. One—use your password, two—set up your password. If you do not have a password yet, you will have to set it up once only. Enter your information including your membership number, We find many members do not remember their membership number, so we print the membership number on the mailing label. The membership chairs of each chapter have the membership numbers and can always supply them to members who need them.

Our webmaster keeps the information on current members, supplied by our office. If the members do not renew their membership of next year, their password will not work any more. When they renew the membership, their membership number stays the same, but they have to set up a new password since the old one is no longer valid.

To stop the paper copy just inform your membership chair and he/she will let the ARS office know.

Rhododendron Calendar

2018 Scottish Rhododendron Society tour of Welsh gardens. April 22-29. Search: SRS 2018 Welsh GardenTour

2018 ARS Annual Convention, Bremen, Germany. Board Meeting on May 21st. Convention May 7–31 (including pre-convention and post-convention tours). Website: ars2018.org

2018 ARS Fall Conference, Chattanooga, Tennesee. Board Meeting. Oct. 19—21.

2019 ARS Annual Convention, Malvern, Pennsylvania. Board Meeting. May 16-19.

2019 ARS Fall Conference, Parksville, BC, Canada. Board Meeting. Sept. 27-29.

2020 ARS 75th Anniversary Convention, Vancouver, Washington. Board meeting. April 30-May 3.

2021 ARS Annual Convention, Montreal, Canada. Board Meeting. Dates to be announced.

A Perspective on the Local Marketing of the ARS

Ian E. Efford
Duncan, BC, Canada

Photos by the author

Much has been said recently about the decline in membership in ARS chapters and in fact, in many garden clubs world-wide. Identified causes include an ageing population, two-job couples, the interest of younger generations in more electronic-based activities, greater urbanisation and a shift towards smaller gardens. All these may well be factors. Our chapter executives have discussed how we can best stimulate the interests of our members in order to keep them from drifting away, but has there been sufficient discussion about our marketing opportunities to the general public for the acquisition of new members? Are we paying enough attention to making sure that the public knows what the opportunities are with rhododendrons in the garden and what we as a rhododendron society do?

Before I joined our local chapter, my background included directing a national scientific research project, being a federal public servant, and being president of a number of different garden clubs. In all these roles, I discovered the need to have a split personality. On the one hand, one had to focus internally on managing the project or club, but on the other hand, it was always necessary to explain to anyone who would listen the reason behind the particular club's activities and why these activities mattered to those in authority and to the public at large. Many people, and scientists in particular, tend to fail at this latter marketing aspect, feeling that the work itself is self-explanatory, which in most cases it is not! Outward marketing can bring significant public support, recognition, new members and often funding.

In this article, I review the various marketing activities of my chapter, the Cowichan Valley Rhododendron Society (CVRS), on Vancouver Island, BC, Canada, and identify one opportunity that we are not pursuing.

I would like to use the analogy of automobile marketing. When a car model's sales drop, the company either discontinues the model or expands marketing. The new car dealerships must firstly make sure the brand is advertised widely, secondly attract potential buyers to the showroom and finally close the sale. I will deal with the overall

Cowichan Valley Garden Fair 2017.

advertising and attraction of individuals to our "showrooms." The closing of sales take place when individuals attend their first meeting and decide whether or not to join.

ADVERTISING

The Plant Sale

When I moved to the Cowichan valley, I joined the local rhododendron society and soon volunteered to run the annual public plant sale. The first year was quite a shock to me, as it was held in an open-ended livestock barn on our local exhibition grounds. It was a cold and windy spring and participating was more conducive to catching pneumonia that to selling rhododendrons. This led me to make a series of location changes over the next few years. Firstly, a move indoors was made and secondly, we moved to a series of increasingly larger halls. The last one used was a very nice school gymnasium. However, each year, we were out-growing the space being used, as we are attracting more and more customers. That year, we had a long line-up before opening and our cashiers were overwhelmed by the crowds. Obviously, the public wanted to see a good selection of plants at reasonable prices and they had learned by word-of-mouth that our annual sale was the best place to do so. We were generating a significant presence in the community with a four-hour sale once a year. Unfortunately, the size of the hall and its layout, particularly the size of the exit doors, were again inadequate.

When I became chapter president, the sale coordination role was taken over by Bill Dumont. Between us, we agreed that the hall had to be larger, but we were uncertain as to how large it should be. By that time, the Cowichan Exhibition Grounds had been

moved and a new hall constructed. We took a jump into the unknown—from a school gymnasium of 300 m^2 (3000 ft^2) to a large hall of 1400 m^2 (15,000 ft^2). We felt rather apprehensive walking around the new hall when it was empty, as we could imagine it bare of vendors except for a few sales tables at one end!

We changed the sale name to the "Cowichan Valley Garden Fair" and welcomed the participation of any individual or company involved in marketing to the home gardener. We acted as the cashier for all the plant growers and nurseries, taking a fee of 20% of their gross sales. Most of Vancouver Island's rhododendron growers take part, along with some from the mainland. Non-plant vendors collected their own payments and paid a flat rate for a booth plus a rental fee for tables. Vendors were asked to include the Garden Fair in their own advertising, such as "Come see us at the Garden Fair." A premium "gold sponsor" fee was charged to vendors wanting large central locations down the middle of the hall. The higher fee granted them a profile on both the Garden Fair and the CVRS's websites prior to the Fair and in the planning of the next year's Fair.

We also invited non-profit garden and nature clubs to have small free booths so that they could promote their activities. By their involvement, they promote the Garden Fair to their members, giving us more advertising.

To encourage attendance, we publicize the availability of free coffee and doughnuts while people wait for the doors to open. As they wait, they are able to view our truss

Allen and Liz Murray tending the truss show at the Cowichan Valley Garden Fair.

Carrie Nelson, President of CVRS (on right), is delivering $500 worth of rhododendrons to Providence Farm, a therapeutic community. The head gardener, Teresa Dupont, is helped by three of the Farm's clients.

show behind the coffee and doughnut tables. The public is invited to take part in a "People's Choice" selection from entries in the truss show and our members are available to direct individuals to nurseries that might sell the plants that they admired among the trusses. In addition, a free plant is given to the first 100 plant buyers. These free plant types vary, and may be rhododendrons, lilies, heathers, etc., donated by a nursery or grown by our members.

In 2011, our first year, we almost filled the hall much to everyone's relief, and it has been full every year since. Our operating costs are largely covered by the vendor's fees. In 2016, gross revenue from both plant sales and booth and gold sponsors' fees was $23,000, all this achieved in only four hours! A significant increase in sales can be attributed to customers being able to pay by credit card using SQUARE technology, i.e., a Square® Free Card Reader, and funds are automatically credited to the CVRS account. The application software ("app") supports manually entering the card details, swiping the card through the audio jack-connected Square Reader, or inserting or tapping the card using the Bluetooth LE-connected Square Chip and Contactless Reader. On the iPad version of the Square Register app, the interface resembles a traditional cash register. After paying expenses and plant vendors, our profit is relatively low, approximately 10%–13% of all income. Other than janitorial staff, volunteers do the organizing and execution of the sale.

Besides targeted paid advertising, cost-free promotion is done by writing articles for local papers and magazines, inclusion of the Fair in "coming events" lists through

garden clubs, and spreading the word on-line. The result is a decent contribution to branch coffers, but perhaps most importantly, an increased club profile in the general community that attracts new members, and a win-win relationship with growers and nurseries since we provide a venue to raise their profiles and increase their sales.

A membership table at the Fair, staffed by knowledgeable CVRS members, has also proved most effective at recruiting new members. This could be extended to any number of other events, such as community events and public markets, providing volunteers are available.

The Victoria Rhododendron Society, 50 km (30 miles) south of us, gains similar public attention by holding their plant sales in shopping centres. This might be a less expensive approach, as no hall rental is involved, and reaches more people, and the shopping centres appear to welcome their presence. However, not everyone in the shopping centre is interested in gardening, whereas all coming to our Fair are. Unfortunately, such an approach may not work outside of larger urban areas because of a lack of shopping centres.

Donating Plants to Public Locations

Another way we have raised the profile of the CVRS has been to donate $500 worth of rhododendrons to a local public location each year. The idea is to give the plants to organizations that will maintain the plants, including guarantee of a watering regime. Of the seven or eight donations made to date, only one organization failed to follow through with their commitment, even though at that location we installed the watering system for free. Otherwise, we have had considerable success, in particular in the nearby town of Chemainus, where the "Chemainus in Bloom" Committee is very active and is working with the local council to landscape public sites throughout the town. This town has received two donations from us to date and the plants remain in excellent health, in part because of their volunteer support but also because the municipality has well-trained parks department staff to look after the plants. We have learned that we must apply due diligence in selecting the recipient each year if we want to see permanent public rhododendron displays throughout our valley. Each donation is excellent advertising for the plants themselves and for our chapter as each donation is accompanied by local press coverage with photographs.

USING THE WEB

The decline of newspaper readership among younger generations has led most ARS chapters and garden clubs to create websites. The CVRS maintains two websites, one for the club (http://cowichanrhodos.ca/) and one for the Garden Fair (cowichanvalleygardenfair.com). The CVRS site links directly to the Garden Fair and vice versa. Any Garden Fair "gold sponsor" organization's website is also linked from both the CVRS and the Garden Fair sites, and this exposure on our website is

particularly attractive to our gold sponsors. Both the CVRS and Garden Fair websites are not password protected, which ensures a wider network of exposure.

In 2016 we used free social media forums such as Twitter, Craigslist, radio, local TV, and various coming events websites to promote the Garden Fair. These venues could certainly be used to promote the local club activity as well. Members also share info via email or Facebook.

Social Media

Social Media presence is critical if the ARS is to attract younger members and get its message broadcast widely to prospective members. I suggest each ARS chapter, the ARS itself, needs a Facebook page and should have a designated executive member responsible to posting chapter news, events and sending out the occasional tweet.

ATTRACTING INDIVIDUALS TO MEETINGS

Interacting with Other Garden Clubs

By far the best source of new society members is the local population of gardeners, many of whom may also be members of other general garden clubs in the area. This means attracting them to attend our meetings as guests. If we have a special speaker, we invite all other garden club members to attend at no charge. We have also offered rhododendron propagation workshops to other garden club members at no charge. These workshops take place in a CVRS member's garden and the participants leave with either a pot of cuttings of their own or one of the host's plants, with instructions for its care.

Almost all garden clubs have a raffle at their monthly meetings. The items raffled are either plants and gardening items donated by local businesses, plants donated by members, or plants purchased by the club, typically at a reduced price. Usually, ARS chapters have plenty of rhododendron plants and consideration should be given to donating some to other local garden clubs for their raffles. If these are nice, well-labelled plants, the new owners may be stimulated to become more interested in the genus *Rhododendron* and some might even join the local ARS chapter.

By providing potential speakers for other garden clubs, writing newspaper articles, and appearing for press interviews, we have spread the word and established our presence in the community, especially among those who are already interested in gardening.

Garden Tours

CVRS organizes annual member garden tours, and if space is available, which is often the case, we invite other garden club members to come along as well. Other chapters do the same and may charge a small fee to non-chapter participants to attend. This is an opportunity to promote the mandate of a local chapter as well as the ARS.

United Kingdom tour group, Blenheim Palace, 2015.

Bus Tours

CVRS's bus tours have attracted considerable attention from outside the valley. If seats are available, we have always filled them in the buses with non-CVRS members. We began by touring to the various places on Vancouver Island and neighbouring islands in British Columbia. In subsequent years, these tours expanded geographically and included some of the lovely gardens on the mainland in Vancouver and the Fraser Valley, and then south to northern Washington State. Under Bill Dumont's leadership, the most recent tours have covered the whole of the west coast as far south as San Francisco. Finally, a tour of the gardens of Cornwall and southern England launched our international activities in 2015. With each new area, the number of individuals that were not chapter members expanded, with people coming from as far away as Chicago, IL. All effort was made to make these tours less expensive than commercial tours, while at the same time providing a source of income for the chapter. After expenses, over the years more than $40,000 has been raised for the CVRS from our bus tours.

As the tour budget grew to nearly a quarter of a million dollars, the angst of the CVRS executive also grew, even though insurance and other risks were well managed. The issue of financial liability for an otherwise small chapter led the executive to determine in 2016 that the risk was simply too great to continue with international tours. The fall 2016 tour of rhododendron gardens in New Zealand was then assumed personally by Bill Dumont under the umbrella of a travel agency, not the CVRS. Collaborating with other chapters and/or the ARS, and sharing the risk and benefits with a partner is a possible future consideration.

Newsletters

Most chapters have a monthly newsletter distributed to members and other ARS chapters. These newsletters are a key communication between the executive and its membership, and many contain useful information on rhododendrons and their culture. A suggestion is that newsletters could be used to entice new members to the club through a solid presence of an edited version on various Social media platforms such as Facebook, and even make it available to members of other local garden clubs to whet their appetite for possibly joining the chapter.

PUBLIC EDUCATION PROGRAMMES IN THE GARDEN

I think that the most effective means of attracting new members lies unused. Every district has at least one private or public garden that might be used to offer free introductory workshops to the public. At this time, there are members of the public looking for different intellectual activities and who may be interested in attending workshops or short training sessions on a wide range of subjects. Vancouver Island is blessed with more than 25 public gardens with rhododendrons (Efford 2015, 2018) but neither we nor any of the other four ARS chapters on the island use their locations to teach our own members about the genus or to offer rhododendron workshops in these gardens to the general public.

Over the last ten years in the Pacific Northwest, there have been specialized workshops on rhododendrons at the University of British Columbia Botanic Garden in Vancouver, BC; at the home of Ken and Madeleine Webb in Victoria, BC; and at the Rhododendron Species Botanic Garden in Federal Way, WA. However, all these events have been only for ARS members. If we wish to attract new members to ARS, I suggest that free two-hour workshops during the rhododendron flowering season be offered at public or private gardens, with an invitation to both the general public and to ARS members, and in particular, to new members of our chapters. Workshop topics such as an introduction to rhododendrons and appropriate species and hybrids for that area could be very popular and attract potential ARS members. The introductory workshops could focus on a general description of the genus and its various forms as well as how best to cultivate the various types. A two-hour workshop with one or two expert volunteers from the chapters should be manageable. Such programmes would also be attractive to our own members as many struggle to grasp an overall understanding of the genus. I suggest each District try offering three workshops next year and keep a record of how many participants eventually become members. Sharing content and approaches amongst chapters would be a side benefit. Given the trend to smaller gardens, particularly in urban areas, a change in programming to promote alpines and smaller rhododendrons may attract new members.

CLOSING THE DEAL: SIGNING UP MEMBERS

Closing the deal involves making sure the person who attends a chapter's meeting for the first time is welcomed, included in the activities, spoken to and enjoys the experience. Sometimes, we have visitors who feel excluded by the technical terminology or the fact that existing members do not make the effort to speak to them. Individuals who join the CVRS are given a free plant and last year, the CVRS gave a copy of both my book (Efford 2015) on our island's public gardens and, while supplies lasted, a copy of Harold Greer's (1996) book. Albeit a nice gesture, this practice was found to be too expensive for the club and we have since gone back to now giving new members only a free plant. I am sure other branches approach this issue in different ways. For example, a club "greeter" and/or a buddy system is used by some societies as another way to help new members feel welcome. Otherwise, at their first meeting, new members are often announced and welcomed by the chapter's president, and a more informal process then often unfolds during the social part of the meeting. The membership secretary is the person who knows the new members, but they are often too busy to act as a greeter.

I am sure that there are many other aspects of "closing the sale" and it would be useful to hear how other chapters utilize various approaches, so that all chapters can have access to our collective ideas.

CONCLUSION

A loss of membership should not be a call simply to bemoan the fact but rather an opportunity to re-examine the marketing policies of the chapter. In an increasingly diverse world, the public is bombarded with ideas and information about the many various ways in which they can spend their money and their time. Gardening clubs must all compete and use the same techniques that are being utilised by commercial enterprises both to gain members and to increase awareness of what they offer. They must make sure that the public first knows they exist, and then conduct activities to attract individuals either to drop in to a meeting or to accept an invitation from a member to visit. At that point, the chapters must try to "complete the deal" by signing them as members and then make sure that the internal activities of the club are such so as keep them interested is staying as members.

If car dealers can be successful, so can we! We can increase our chapter memberships, but it will require thought, planning and action.

References

Efford, I.E. 2015. *The Public Rhododendron Gardens of Vancouver Island.* pp 120.

Efford, I.E. 2018. The Origins of Publicly Accessible Rhododendron Gardens on Vancouver Island, British Columbia. *J. American Rhodod. Soc.* 72: 7-13.

Greer, H.E. 1996. *Greer's Guidebook to available Rhododendrons: Species and Hybrids.* 3rd Ed.: Offshoot Publ, Eugene, OR: pp 228.

Tips for Beginners: Vireya Pruning

Sherla Bertelmann
Keaau, Hawaii

There is a saying "A Picture is Worth a Thousand Words." Here are two pictures to back up the importance of heavy pruning. There will be a time when your vireya, or indeed any rhododendron, will benefit from a heavy pruning. Whether it is a compact grower or a small tree variety, pruning will need to be done at some point to remove dead wood or to induce fuller growth. Remember, the more branching, the more blooms.

On the left shows the new growth on V80 after a heavy pruning about a month ago. Note all the new breaks not only on the tips but also down the trunk. The photo on the right shows the other half of the same shrub that received heavy pruning about three months ago. Remember to take down only a part of your plant at a time and to be patient till the new growth comes out before doing more pruning. It does seem to help the formation of new growth to give the plant extra water if no rain falls.

Vireya rhododendron one month after pruning. Photo by the author.

Vireya rhododendron three months after pruning. Photo by the author.

Rhododendrons For Beginners

Rhododendrons, Azaleas, Maddenias and Vireyas – their differences and latest systematics

Glen Jamieson
Parksville, BC,
Canada

Photos by the author

New members to the ARS are sometimes confused and perhaps even intimidated by the different plant names encountered when reading about the amazing genus *Rhododendron*. Here, I briefly explain what some of these terms mean and how they are related.

The genus *Rhododendron* is in the heath family Ericaceae, which also includes its namesakes, the heathers and heaths, plus blueberries, cranberries, mountain laurels and a variety of other generally lesser-known plants. It is one of the largest plant genera, with about 1000 species in it, and new species are still regularly being discovered.

Rhododendron is a genus (a group of plants with shared characteristics) and azaleas are a group within that genus, rather than forming a genus of their own. Azaleas may be deciduous or evergreen and other rhododendrons are, with only a few exceptions, all evergreen. Thus, all azaleas are rhododendrons but not all rhododendrons are azaleas.

Linnaeus established the genus *Rhodo-dendron* in 1753. Linnaeus' naming system established "*Azalea*" as a separate genus but it was soon pointed out by other scientists that azaleas should be considered a subset of *Rhododendron* rather than being a genus unto itself. So if you read the scientific name of an azalea (on a plant label at the nursery, for example), you may also see the word *Rhododendron*. The word "azalea" has essentially simply become the common name for a group of plants within the genus *Rhododendron*.

There are no clear-cut lines for distinguishing all azaleas from all other rhododendrons but here are a few characteristics to look for:

1. True rhododendrons (Fig. 1) have ten or more stamens, that is two per petal lobe. Azaleas (Fig. 2) usually have five stamens or one per petal lobe. All rhododendrons and azaleas have five petals in each flower.

Fig. 1. The rhododendron hybrid 'Patricia Marie'.

Fig. 2. The species azalea *R. occidentale*.

2. Azaleas tend to have appressed hairs, i.e., hair parallel to the surface of the leaf. This is particularly true along the midrib on the underside of the leaf (Fig. 3) and is easily seen in "evergreen" azaleas. True rhododendrons instead of hair are often scaly or have small "dots" on the under side of the leaf (Fig. 4). Azalea leaves are never dotted with scales and are frequently pubescent (hairy).

Fig. 3. Appressed hairs on the underside of an azalea leaf.

3. Many azaleas are deciduous. True rhododendrons are usually evergreen with the exceptions of *R. mucronulatum* and most *R. dauricum* (as dwarf form of *dauricum* is evergreen).

4. On average (but there are exceptions), rhododendrons are larger shrubs than are azalea plants, and they have larger leaves.

Fig. 4: The underside of a lepidote (*R. nuttallii*) rhododendron leaf.

5. Rhododendron flowers are more bell-shaped and are borne in clusters of blooms called trusses that appear almost spherical, whereas individual azalea blooms are looser, more funnel-shaped or elongated and tubular and most flower clusters are not in trusses.

In recent years "rhododendron" has come to be used by gardeners essentially as a common name for plants in the genus *Rhododendron* that have large, leathery, evergreen leaves. The leaves on azalea plants tend to be smaller in comparison. Within the rhododendrons themselves, leaf-size comparisons are used to make a further division, namely between large-leaf and small-leaf types.

Genus *Rhododendron* Systematics
(systematics is the science of naming and organizing organisms based on their perceived common ancestry (= evolutionary relatedness)

With over a 1000 species in the genus *Rhododendron,* the challenge has been trying to develop an organizational structure that showed how the different species were related to each other. Some early attempts used physical similarities of plant physical structure (morphological features), especially flowers; geographical and altitudinal distributions; or habitat preference, but recent advances in genomics (DNA structure) has shown that many earlier classifications were not accurate. For example, there are cases of convergent evolution, where a similar characteristic has evolved independently in different species either over time or in
different geographical areas, whereas in other cases, some widely separated species are actually closely related because historically, they had a common ancestor that was wide-ranging. The relationships presented here are the most recent understanding of how rhododendron species are related, but may not be the final word as studies are still on-going.

To summarise the terms for the different species categories presently recognised within a genus, species are divided into different "subgenera," which in turn may contain different "sections," and these may contain different "subsections"! To make it more confusing, in any one of these subgroupings, different subgroups may be grouped into "clades," which indicate they are derived from a now lost common ancestor that the other subgroups may not have had. All this breakdown and grouping is simply an effort to ascertain which relatively small groups of species are most closely related and to group them into a category that can easily be referred to. Thus, the breakdown of *Rhododendron* into its subgenera clades is:

Clade A
(Cladistics (also known as phylogenetic systematics) is the systematic classification of groups of organisms into clades on the basis of shared characteristics thought to derive from a common ancestor.)

- Subgenus *Rhododendron*: Small leaf or lepidotes (with scales on the underside of the leaves) (Fig. 5a,b) Five sections, about 400 species.

Fig. 5a. The hybrid lepidote 'Bob's Blue'.

Fig. 5b. The lepidote species *R. edgeworthii.*

- Subgenus *Choniastrum*: Eleven species.

Clade B

- Subgenus *Hymenanthes:* Large leaf or elepidotes (Fig. 6b, without scales), including deciduous azaleas (Fig. 6a). Two sections, with about 157 species.

Fig. 6a. The species azalea *R. luteum.*

Fig. 6b. 'From L to R, rhododendron hybrids 'Maureen', Clayoquot Warrior" and 'Muncaster Mist'.

Fig. 7a. The evergreen azalea 'Hino-crimson'.

Fig. 7b. The evergreen azalea 'Hino-crimson'.

Clade C

• Subgenus *Azaleastrum*: Evergreen azaleas (Fig. 7). Three sections, about 120 species.

Sister taxon (denotes the closest relatives of another unit in an evolutionary tree.)

• Subgenus *Therorhodion*: two species (*R. camtschaticum* and *R. redowskianun*).

Now that we have looked at the broad clade view, let's look in more detail at the subgenus *Rhododendron*.

Rhododendron subgenus *Rhododendron* has around 400 species, making it the largest of the now five subgenera, containing nearly half of all known species of *Rhododendron* and all of the lepidote species, the latter having scales on the underside of their leaves.

The subgenus *Rhododendron* includes three sections:

• *Rhododendron* sect. *Pogonanthum*. Six species; Himalayas and adjacent mountains.

• *Rhododendron* sect. *Rhododendron.* 120 - 149 species in 25 subsections; temperate to subarctic Northern Hemisphere (includes subsection *Maddenia*).

•*Rhododendron* sect. *Schistanthe* (previously *Vireya*). About 300 species in four (previously seven) subsections; tropical southeast Asia, Australasia.

Maddenias and Vireyas

As a group, rhododendrons are cool growing plants, with those that grow in the tropics being confined to higher elevations on mountains where temperatures are cooler. While most can tolerate freezing conditions, two groups of common garden rhododendrons, the maddenias (Fig. 8) and vireyas (Fig. 9), are more tender and generally do not tolerate

Lepidotes vs Elepidote Rhododendrons

Two descriptive terms that are often used to group rhododendrons are lepidote and elepidote, which are important to understand since they to some extent describe the growing conditions which many rhododendrons prefer. Also, it is very difficult, if not impossible, to hybridize plants between these two groups, so even hybrids are either lepidote or elepidote.

Lepidote rhododendrons have scales on the underside of their leaves that protect the plant's stomata (leaf pores) through which oxygen, carbon dioxide, and water vapour pass. The scales have evolved to regulate moisture exchange, to help keep water in the cells in dry times, and help shed it in times of abundance. This allowed plants evolving in the tropics to live in the quick-drying forest duff on the very thin soils of the tropics, or even epiphytically on rocks or tree trunks.

Cold brings many of the same demands as do the tropics on a plant, such as desiccating it with dry winds, and scales have evolved to become adept at dealing with either harsh cold or heat. As a result, lepidote rhododendrons have adapted and spread to nearly all environments, from tropical jungles and Siberian woodlands to mountain meadows and alpine tundra. Because of this wide tolerance of soils, temperatures and exposures, they are often especially useful to gardeners in more extreme environmental habitats.

Other lepidote adaptations, such as fast regrowth after predation from grazing animals, and early bloom to deal with a short growing season in cold climates, give us a plant that is easily pruned to shape and that flowers early to take advantage of a short growing season, again traits advantageous to northern gardeners.

Some Lepidote Rhododendron Species

A. North American species

e.g., R. groenlandicum (circumpolar) and *R. minus.*

B. Asian species

*e.g., R. impeditum, R. cinnabarinum, R. edgeworthii, R. rubiginosum, R. augustinii, R. keisk*ei, and all vireyas and maddenia.

Elepidote rhododendrons on the other hand, are without scales to cover their stomata, and this group includes many of the large, leathery, evergreen leaf plants that most of us think of as rhododendrons.

Some Elepidote Rhododendron Species

A. North American species

e.g., *R. catawbiense, R. macrophyllum,* and all North American azaleas

B. Asian species

e.g., *R. williamsianum, R. calophytum, R. arboreum. R. bureavii, R. decorum, R. rex, R. yunnanense, R. quinquefolium*, and azalea species such as *R. kiusianum, R. schlippenbachii,* and *R. stenopetalum* 'Linearifolium'.

freezing. The maddenias (section *Rhododendron*), which naturally occur in mainland southeast Asia (e.g., China, Myanmar, India) at mid-elevations on mountains, are:

- Medium to large growing,
- Grown in soil,
- Many species have very fragrant flowers, which are mostly white or light-coloured,
- Relatively few flower shapes and sizes,
- Their leaves are lightly scaled, and
- Many tolerate temperatures to -3° to -5° C (27° to 23° F).

In contrast, vireyas (section *Schistanthe*), which largely occur at elevation on mountains in south-east Asian tropical areas (e.g., New Guinea, Borneo, Sumatra, Malaysian Peninsula, etc.), are:

- Small to large growing,
- Grown in fast draining bark and peat/coir mixes, as many are epiphytic in nature,
- Some species are fragrant, and their flowers occur in many colours,
- Have many flower shapes and sizes,
- Leaves are scaly, and are thus often quite attractive, and
- Most only tolerate temperatures above freezing, but some tolerate to -2° C (28° F).

Fig. 8. The maddenia hybrid 'Patricia Marie'.

Fig. 9. The vireya species *R. armitii.*

In North America, maddenias are grown outside without some winter protection mostly in northern California, southern Oregon, and in some Hawaiian locations, while vireyas are only grown outside year round from central California to the Los Angeles area, in southern Florida, and at cooler, moister locations in Hawaii, primarily on the Big Island. With vireyas, the most critical issue for success is the culture

medium, with rain frequency and humidity next. On the mainland USA, vireyas are thus primarily either grown in pots or in amended natural soil.

[**Author's note:** Like many keen gardeners, I like to push the envelope and so grow plants that I know are too tender to survive outside year round in all years on Vancouver Island, British Columbia, Canada. Thus, I grow both maddenias and vireyas in pots to facilitate their movement into sheltered locations when freezing conditions occur. The 13-15 maddenii (1-1.2 m (3.3 -4 ft) high) are in large containers outside year round, except when the temperature goes below -2° C (28° F), during which time the pots are moved into an enclosed garage where the temperature stays above just above freezing. In below freezing conditions, dessication seems to be a main concern!

Because I have hundreds of vireyas in relatively small pots, it is more time-consuming to move them, so they are all moved into greenhouses in early November and then back outside in late March, as even with our relatively mild climate, potential freezing conditions can occur during the winter months. The greenhouses are heated, with the thermostats set at about 3° C (37° F), so they never go below freezing. On sunny winter days, the temperatures in them can increase up to 20+° C (70+° F).]

Acknowledgements

Thanks to Steve Hootman for his constructive comments.

Glen Jamieson, a member and current President of the Mount Arrowsmith Chapter, is the editor of the Journal American Rhododendron Society.

The next part of "Rhododendrons for Beginners" will cover the deciduous azaleas of *Rhododendron* subgenus *Hymenanthes*.

2018 Rhododendron of the Year Plant Descriptions

Linda Derkach and Bob Weissman
ARS Plant Awards Committee

L. Derkach

B. Weissman

GREAT LAKES USA REGION

Elepidote Rhododendron: 'Presque Isle': Flower inside moderate purplish pink with many discrete yellowish green spots on upper lobe, outside deep purplish pink, broadly funnel-shaped to saucer shaped, very wavy edges, 4½" across. Conical-shaped truss has 16 or more flowers. Blooms late midseason. Leaves elliptic, down-curved edges, broadly acute apex, rounded base, 7" long, semi-glossy, olive green. Intermediate plant habit. Grows to a typical height of 5 ft. in 10 years. Plant and bud cold hardy to -23°F (-31°C). Hybridized by Leach.

'Presque Isle'. Photo by S. Krebbs.

Lepidote Rhododendron: 'Blue Silver': Flower purple, unmarked, funnel-shaped, 1" - 1⅜" across. Loose truss has 5-7 flowers. Blooms midseason. Leaves oblong, acute apex, cuneate base, up to 1½" long, silvery green. Spreading, open plant habit. Grows to a typical height of 2 ft. in 10 years. Hardy to -10°F (-23°C). Form of *R. hippophaeoides* selected and named by Hobbie.

'Blue Silver'. Photo by H. Greer.

Evergreen Azalea: 'Mangetsu': Flower white with purple margins, broadly funnel-shaped, single, about 1½" across. Inflorescence 1-2 flowered. Long blooming period: April - May. Leaves elliptic, acute apex, cuneate base, about 1½" long, dark green. Compact, densely branched, tiered plant habit. Grows to a height of about 1 ft. in 10 years. Hardy to -10°F (-23°C). Introduced by Nuccio's Nursery.

R. kiusianum. 'Mangetsu'. Photo by H. Greer

Deciduous Azalea: 'Golden Comet': Flower vivid yellow with a darker vivid yellow throat and edge on upper lobe, tubular funnel-shaped, wavy edges, 2½" across, fragrant. Dome-shaped truss has 30 flowers. Blooms early to midseason. Leaves narrowly elliptic to oblanceolate, wavy edges, acute apex, cuneate base, 4" long, flat, moderate yellow-green, hairy above and below, deciduous. Rounded habit. Typical height: 4 ft. in 10 yrs. Cold hardy to -20° F (-29° C). Raised by Rhododendron Species Foundation.

R. luteum 'Golden Comet'. Photo by H. Greer.

MID-ATLANTIC USA REGION

Elepidote Rhododendron: 'Arthur Bedford': Flower pale mauve tube, darker lobes with a brownish-red blotch, openly funnel-shaped, 3½" across, fragrant. Held in dome-shaped trusses of 11 to 16 flowers. Blooms late midseason. Leaves oblong-elliptic, thick, up to 6½" long, glossy, dark green with reddish-purple stems, retained 1 year. Open, upright plant habit. Sun tolerant. Height: 6 ft. in 10 yrs. Plant is hardy to -5°F (-21°C). Selected by Lowinsky. Received the Award of Merit and the First Class Certificate from the Royal Horticultural Society.

'Arthur Bedford'. Photo by H. Greer.

Lepidote Rhododendron: '24 Karat': Flower inside and outside pale greenish yellow with deep greenish yellow spots and throat below dorsal lobe, funnel-shaped, 1½" across, minutely frilly margins. Flat truss has 8-10 flowers. Blooms early midseason. Leaves elliptic, acute apex, rounded base, 2" long, slightly convex, depressed midrib, moderate yellow green, retained 2 years. Grows to a typical height of 1 - 1½ ft. in 10 years. Intermediate plant habit. Plant and bud hardy to at least 0°F (-18°C). Hybridized by Haag.

'24 Karat'. Photo courtesy Hirsutum.

Evergreen Azalea: 'Dreamsicle': Flower strong pink inside and out, the interior with a white dorsal blotch and white markings at tips of all lobes, broadly funnel-shaped, wavy-edges, 2½" across. Inflorescence holds 2 to 4 flowers. Blooms midseason. Leaves elliptic,

Dreamsicle'. Photo by S. McDonald.

cuneate base, acute apex, flat, 1¾" long, semi-glossy, strong yellow green. Intermediate plant habit. Grows to a typical height of about 2 ft. in 10 years. Plant and bud hardy to at least 0°F (-18°C). Hybridized by McDonald.

Deciduous Azalea: *R. arborescens:* Flower white, often tinged pink, may have a yellow blotch, with reddish-purple style and stamens, tubular shaped, fragrant. Inflorescence 3-7 flowered. Blooms late to very late. Leaves ovate or obovate to elliptic, up to 4" long, glossy, deciduous. Tall shrub or small tree. Grows to 6 ft. tall in 10 years. Cold hardy to -15°F (-26°C). Native species found in the eastern United States from Pennsylvania to Georgia and westward to Alabama.

R. arborescens. Photo by H. Greer.

R. brachycarpum subsp. *brachycarpum.* Photo by H. Greer.

NORTHEAST USA REGION

Elepidote Rhododendron: *R. brachycarpum* subsp. *brachycarpum:* Flower white to pink, spotted brown to green, broadly funnel-shaped, about 1" long. Blooms late. Leaves oblong to obovate, up to 6" long, thin, compacted grayish to fawn indumentum. Compact growing shrub with a round habit. Grows to a typical height of 3 ft. in 10 yrs. Cold hardy to -20°F (-29°C). Native to Japan and Korea.

R. mucronulatum 'Cornell Pink'. Photo by H. Greer.

Lepidote Rhododendron: *mucronulatum* 'Cornell Pink': Flower pink with faint orange dorsal spots, broadly funnel-shaped, 1½" across. Inflorescence 2-3 flowered. Blooms very early. Leaf is lanceolate, 2" to 2¼" long, dark green, deciduous. Open, twiggy growth habit. Typical height: 5 ft. in 10 yrs. Plant is cold hardy to -20°F (-29°C). Raised by Skinner.

Evergreen Azalea: 'Texas Pink': Flower deep purplish pink, unmarked, funnel-shaped, 1" across. Flat truss has 5 flowers. Blooms midseason. Leaves elliptic, flat, broadly acute apex, cuneate base, 0.8" long, glossy, mid green. Leaves turn bronze in cold

'Texas Pink'. Photo by H. Greer.

weather. Dense plant habit. Low growing to only 1 ft. in 10 yrs. Cold hardy to -10°F (-23°C). Hybridized by Mezitt.

Deciduous Azalea: R. *viscosum:* Flower white, occasionally tinged pink, funnel-shaped with long slender tube, fragrant. Truss holds 3-12 flowers. Blooms very late. Leaves ovate or obovate to elliptic, up to 3" long, deciduous. Variable plant habit, sometimes a stoloniferous shrub. Plant grows to about 5 ft. tall in 10 years. Hardy to -20°F (-29°C). Royal Horticultural Society Award of Garden Merit - 1993. Native species: New England to Florida to southeast Texas.

R. viscosum. Photo by H. Greer.

R. hodgsonii. Photo by H. Greer.

NORTHWEST USA REGION

Elepidote Rhododendron: *R. hodgsonii:* Flower pink, purple or red, sometimes blotched, tubular-campanulate, 1⅛"-1⅔" across. Ball-shaped truss has 15-25 flowers. Blooms early to early midseason. Leaves thick, obovate, oblanceolate or elliptic, prominent midrib, up to 15" long, silver to cinnamon-colored indumentum. Large shrub to small tree, 5-10 feet high in 10 years. Cold hardy to 0°F (-18°C). Species found growing in the wild in Nepal, India (Sikkim, Bengal, Arunachal Pradesh), Bhutan, and China (S. Tibet).

'Mary Fleming'. Photo by J. Bouchard.

Lepidote Rhododendron: 'Mary Fleming': Flower cream colored, flushed strong to light purplish pink, with a darker pink blotch in throat, campanulate-shaped, wavy edges, about 1" across. Buds hold 2 or 3 flowers. Blooms early midseason. Leaves approximately 2" long, dull, dark green. Leaves are bronze when new and in the winter. Plant is sun and heat tolerant. Typical height: 2 ft. in 10 years. Plant is cold hardy to -15°F (-26°C). Prefers some shade for best performance. Hybridized by Nearing.

'Ben Morrison'. Photo by D. Hyatt.

Evergreen Azalea: 'Ben Morrison': Flower deep yellowish-pink with red spotting and irregular white margins, openly funnel-shaped, wavy edges, 2¾"

across. Blooms midseason. Leaves elliptic, flat, acute apex, cuneate base, 1¾" long, discrete, colorless hairs above and below on midribs and at margins. Spreading, dense habit. Grows twice as wide as tall. Grows to a typical height of about 2 ft. in 10 years. Hardy to 0°F (-18°C). Hybridized by Morrison.

Evergreen Azalea: 'Rosy Lights': Flower deep purplish pink with vivid reddish orange spotting on dorsal lobe, openly funnel-campanulate, wavy dorsal lobe, 2⅜" across. Dome-shaped truss with 8 flowers. Blooms late midseason. Leaves oblanceolate to narrowly elliptic, acute apex, cuneate base, 2¾" long, flat, bullate, moderate yellowish green. Upright, well-branched shrub. Typical height: 4-5 ft. in 10 years. Very cold hardy to -35°F (-37°C). Hybridized by Pellett.

'Rosy Lights'. Photo by D. Hyatt.

R. smirnowii. Photo by H. Greer.

Olga Mezitt. Photo by R. Billings.

SOUTH CENTRAL USA REGION

Elepidote Rhododendron: *R. smirnowii:* Flower pink to rose-purple, spotted yellow to brown, funnel-campanulate shaped. Truss holds 6-15 flowers. Blooms late midseason. Leaves oblanceolate to elliptic, up to 7" long, margins re-curved, pale fawn to pale brown indumentum. Compact bush, more upright when growing in shade. Typical height: 4 ft. in 10 years. Plant is cold hardy to -15°F (-26°C). Native species found in Europe in northeastern Turkey and adjacent Georgia. In the Caucasus Mountains it is found growing at 1500 - 2300 m., often at the edge of spruce forests or just above the tree line.

Lepidote Rhododendron: 'Olga Mezitt': Flower light purplish pink with inconspicuous gold green blotch that ages to reddish brown, openly to tubular funnel-shaped, wavy lobes, 1½" across. Dome-shaped trusses hold about 12 flowers. Blooms early midseason. Leaves lanceolate shaped with acute apex and cuneate base, convex, 2" long, yellow-green. Leaves turn mahogany color in winter. Upright growth habit. Reaches an approximate height of 3 ft. in 10 years.

Cold hardy to -15ºF (-26ºC). Hybridized by Mezitt.

Evergreen Azalea: 'Mildred Mae': Flower moderate purplish-pink with a dark red blotch, single, 2½" to 3" across, fragrant. Inflorescence 2 flowered. Blooms early midseason. Leaves elliptic, acute apex and cuneate base, 2" long, light green. Spreading, low plant habit. Grows to a typical height of 3 ft. in 10 years. Cold hardy to -5°F (-21°C). Raised to first flower by Gable.

'Mildred Mae'. Photo courtesy Carlson's Gardens.

Deciduous Azalea: *R. austrinum:* Known variously as the Flame azalea, Florida azalea, or the Florida Flame azalea. Flower in shades of yellow, gold, and orange, narrowly funnel-shaped, very fragrant. Blooms early midseason. Leaves ovate or obovate to elliptic, up to 4" long, deciduous. Reaches up to 10 ft. in the wild, but will often remain smaller in the garden, with a spread about half its height. One of the easiest of the native azaleas to grow. Cold hardy to -15°F (-26°C). Very heat tolerant. Native species found in the Florida panhandle and nearby areas of Georgia, Alabama and Mississippi.

R. austrinum. Photo by P. Tuthill.

SOUTH EAST USA REGION

Elepidote Rhododendron: 'Charles Loomis': Flower pink in bud, opening white inside and outside, unmarked, openly funnel-shaped with wavy-edged lobes, about 2" across. Ball-shaped truss has 10 flowers. Blooms early midseason. Leaves oblong, obtuse apex, rounded base, down-curved margins, 5" long, dark green, retained 3 years. Round plant habit. Grows to a height of about 6 ft. in 10 yrs. Plant is cold hardy to -15°F (-26°C). Introduced by Abbey View Farm.

'Charles Loomis'. Photo courtesy RareFind Nursery.

Lepidote Rhododendron: 'Abbey's Re-View': Flower pinkish lavender with darker blotch, openly funnel-shaped, wavy edges, about 1½" across, fragrant. Flower similar to the cultivar P.J.M., with the added advantage of being very heat resistant. Blooms twice a year: early season and again late. Leaves elliptic, acute apex, cuneate base, glossy, dark green. Pest and disease

'Abbey's Re-View'. Photo courtesy of Wayside Gardens.

resistant. Dense plant habit. Grows to a typical height of 6-8 ft. in 10 years. Plant and bud hardy to -15°F (-26°C). Selected by Flotta.

Evergreen Azalea: 'Autumn Embers': Flower vivid red, with strong red spotting, openly funnel-shaped, semi-double, wavy-edged, 2½"-2¾" across. Domed truss has 1-3 buds with 2-3 flowers per bud. Blooms early and again late season. Leaves elliptic, acute apex, cuneate base, about 2" long, dull, moderate olive green. Dense plant habit. Grows to a typical height of 3 ft. in 10 years. Cold hardy to -5°F (-21°C). Hybridized by Lee.

'Autumn Embers'. Photo by H. Greer.

Deciduous Azalea: *R. cumberlandense:* Flower orange to red, sometimes yellow, funnel-shaped, fragrant. Inflorescence 3-7 flowered. Blooms late to very late. Leaves ovate or obovate to elliptic, up to 3" long, deciduous. Shrub grows to 4 ft. or more in 10 years. Hardy to at least -15°F (-26°C). Native species found growing in eastern North America from Kentucky to Georgia.

R. cumberlandense. Photo by K. Bernardy.

SOUTH WEST USA REGION

Elepidote Rhododendron: 'Point Defiance': Flower white in center, edged purplish red on all lobes, fading in time to nearly pure white, of heavy substance, widely funnel-shaped, 4½" across. Buds are colored strong red. Held in trusses with 15 to 17 flowers. Blooms midseason. Leaves elliptic, mucronate apex, rounded base, 7¼" long, re-curved edges, leathery, impressed mid-rib, dark green. Upright plant habit. Grows to a typical height of 6 ft. in 10 years. Cold hardy to -5°F (-21°C). Hybridized by Lem.

'Point Defiance'. Photo by D. Wallace.

Lepidote Rhododendron: 'Fragrantissimum Improved': Flower white blushed pink, yellow blotch, funnel-shaped, wavy edged, about 2" across, very fragrant. Held in trusses with up to 5 flowers. Blooms early midseason. Leaves elliptic, acute apex, cuneate

'Fragrantissimum Improved'. Photo by H. Greer.

base, 2½" long, prominent veins, glossy, dark green, retained 2 years. Upright, well-branched plant habit; much tighter growing and more compact than *R.* 'Fragrantissimum'. Grows to a typical height of 3 ft. in 10 years. Hardy to 15°F (-9°C). Hybridizer is unknown.

'Ripples'. Photo courtesy of Singing Tree Gardens.

Evergreen Azalea: 'Ripples': Flower light purplish red, unmarked, funnel-shaped, fully double, 2½" across. Inflorescence 2-3 flowered. Blooms early to early midseason. Long blooming period. Leaves obovate, acute apex, cuneate base, about 1½" long, dark green, bronze-colored in cold weather. Plant grows wider than tall. Typical height is 1 ft. after 10 years. Cold hardy to 15°F (-9°C). Hybridized by Kerrigan.

'Strawberry Ice'. Photo by H. Greer.

Deciduous Azalea: 'Strawberry Ice': Flower pale pink, heavily veined and netted deeper pink, with a deep orange-yellow blotch, funnel-shaped, slightly wavy edges, 2¾" across. Ball-shaped truss holds 7-15 flowers. Blooms midseason to late midseason. Leaves elliptic, broadly acute apex, cuneate base, 3" to 4" long, medium green, hair on upper surface. Broadly upright, somewhat open habit. Grows to a typical height of 4 ft. in 10 yrs. Cold hardy to -25° F (-32°C). Hybridized by de Rothschild. Award of Merit from the Royal Horticultural Society in 1962.

'Aleksandr'. Photo by S. Bertelmann.

SOUTHERN CALIFORNIA/HAWAII REGION

Vireya Rhododendron: 'Aleksandr': Flower inside purplish pink with a light yellow throat, tube paler; floral bracts dark purplish pink, 5-7" across, tubular funnel-shaped, with ruffled, broadly overlapping lobes; lightly scented. Truss has 4-5 flowers. Blooms several times a year. Leaves obovate, broadly acute to obtuse apex, cuneate base, glossy, dark green. Upright, well-branched plant habit. Hybridized by Sullivan.

A Digital Publication of the International Rhododendron Register and Checklist

Michael Martin Mills
Philadelphia,
Pennsylvania

There were some glitches along the way, but in December the Royal Horticultural Society achieved a milestone in the electronic publication of the entire International Rhododendron Register and Checklist (IRRC). Now anyone with an internet connection can peruse this vast compilation of rhododendron and azalea names and descriptions.

So, just what is the IRRC 2004? It is the second edition of the register maintained by the RHS in its role as the International Cultivar Registration Authority for the genus *Rhododendron*. RHS became the registration body for the genus in 1955, and the first register was published in 1958. The 2004 edition not only added all cultivars registered in the intervening year but, of particular note, included names of non-registered cultivars published elsewhere. Annual supplements have brought the register current as of 2016.

The IRRC was published in 2004 as a hefty two-volume paperback, but it was expensive and in recent years out of print. Given the definitive nature of so many of its entries and the fact that the Hirsutum website is no longer adding entries, having IRRC 2004 universally available in digital format is a boon to rhododendron breeders and enthusiasts. The Rhododendron Group, an RHS affiliate, gets credit for the digital publication of the register.

To access the register, go to www.rhodogroup-rhs.org/publications/bookpdf. The file is so large (119 mb) that you may wish to download it to a thumb drive to avoid eating up space in your computer. Also on the site are the twelve annual supplements as small, separate files (The RHS is hoping to merge them into one, alphabetically organized file), as well as a user's "companion," basically the introduction and 50-page name list from the IRRC 2004 segregated as a separate document. This can be handy when a reader is on Page 469 and needs to check a name or consult the glossary.

It is the "checklist" aspect of the IRRC 2004 that greatly enhances its value, for there are many hundreds of cultivars, many well known and widely marketed, that have not been formally registered. The non-registered names also include a fair number that are presumed to be "extinct." While no compilation will ever be "complete," it's a safe bet that IRRC 2004 with the supplements is as good as it can get. Note that the supplements are limited to only registered names, but Dr. Alan C. Leslie, the international registrar, maintains a database of published but not-yet-registered names that have accumulated since the 2004 edition appeared.

Of importance to active hybridizers is the fact that for registration purposes going forward, once a plant name is in the IRRC, it is no longer available for use, which also applies to the names of "extinct" cultivars. That may not seem fair but those are part of the rules of the international botanical world. The non-duplication rule covers the entire genus, so for example, an azalea cannot now be registered with a name already used for a lepidote rhododendron.

One further note on non-registered names in the IRRC is that the 1958 first edition, coming just three years after the RHS began its registration duties, had hundreds of never- or not-yet-registered plants. In IRRC 2004, they are designated as "INC: ICRA (1958)," meaning "included." This has resulted in hundreds of grandfathered duplicate names (eight 'Sunrise's and ten 'Sunset's, for instance).

Anyone seeking utterly definitive information on a cultivar needs to check all the supplements as well as the main register. Corrections to older entries appear only in the supplements.

For someone unfamiliar with IRRC, it's also good to know what it is not. For one thing, it is not illustrated. It also is not a guide to what's available or what's an excellent plant for a given climate. That information must be pursued elsewhere.

For most, it is probably not exactly fun reading. The entries from more recent decades follow a rigid format, with a fair amount of arcana. Colors are described scientifically, with a RHS Colour Chart number and a name that is often inscrutable (such as "dark greyish purple" or "dark purplish grey"), and there are many colors referred to with the same name. For example, the most recent RHS Colour Chart has at least 13 chips for "moderate red." Without a color chart in hand, it can be very difficult to visualize a flower from an IRRC entry.

Entries include both parentage and plant history, that is, who hybridized it, grew it to first flower, and named it. Flower and shrub sizes are given only in the metric system. Only in the past couple of years has plant hardiness been included, and often an entry gives no indication as to where the cultivar originated. To find out if a cultivar might likely prosper in say, Ohio, USA, a reader needs to consult the list of names at the end of the register or in the companion to determine the hybridizer's locale. If he or she was

(Continued on next page)

Newly Registered Cultivar Names

Michael Martin Mills
North American Registrar of
Plant Names
Philadelphia, Pennsylvania

The following rhododendron and azalea names were approved and added to the International Rhododendron Register before January 31, 2018, by the Royal Horticultural Society, which serves as the International Cultivar Registration Authority for the genus *Rhododendron*. (Information on the registration process follows the descriptions of cultivars.)

Key
(a) – deciduous or evergreen azalea
(r) – elepidote or lepidote rhododendron
(v) – vireya rhododendron
(z) – azaleodendron
X – primary cross

Digital Publication **continued**

based in Cornwall, England, for example, the hybrid created there may not do well under extreme cold conditions.

A reader may also learn that a cultivar's leaves are apiculate and flowers tubular-campanulate (be glad there's a glossary!). The word "dorsal" shows up a lot, and a dorsal lobe is what many call the top petal of the five connected petals in a rhododendron flower. More recent entries also include the etymology of a name, e.g., "mother-in-law" of the hybridizer.

One of the quirks of the register is that everyone's given name is reduced to initials, e.g., J.B. Gable and W.E. Delp, even in the name-and-town list.

In summary, there is no question that the International Rhododendron Register and Checklist 2004 has aspects that limit its appeal or use. However, it's the largest compilation of rhododendron names I know of, and since you don't have to pay a penny for it now, its publication in digital form is a highly welcome advance.

Michael Martin Mills is the North American Registrar of Plant Names for rhododendrons and is a member of the Greater Philadelphia Chapter.

(s) – seed parent of cross, if known
x – cross of an unnamed parent
* – not registered
H – hybridized by
G – grown to first flower by
R – raised by
S – selected by
N – named by
I – introduced commercially by
REG – registered by
Royal Horticultural Society color numbers in parentheses, unless another system is noted

(r) 'Arctic Morn'


'Arctic Morn'. Photo by Jim Barlup.

Elepidote rhododendron: 'Sun Blush' (s) X 'Golden Mist'. H (2009), G (2015), N (2017), REG (2018): Jim Barlup, Bellevue, WA. Flrs 19/ball truss, broad funnel, 2 inches (51mm) long x 3 inches (76mm) wide with 5 rounded lobes, wavy margins. Bud: pale yellow (11C). Inside: pale yellow green (4D), light greenish yellow (4C) in dorsal section of throat; with prominent deep greenish yellow (153A) spotted blotch in dorsal lobe and flanking halves of adjacent lobes. Outside: pale yellow green (4D), light greenish yellow (4C) in dorsal lobes from base to 0.25 inch (6mm) from margins. Calyx: 1 inch (25mm) long, pale yellow green (4D) shading to light greenish yellow (4C). Yellowish pistil and filaments, light brownish anthers. Truss 5.5 inches (140mm) high x 6 inches (152mm) wide. Lvs 5 x 1.75 inches (127 x 44mm), elliptic, rounded base, broadly acute apex, flat margins, moderate olive green (147A), semiglossy. Shrub 2 feet (0.6m) high x 3 feet (0.9m) wide in 8 years; intermediate habit, leaves held 2 growing seasons. Hardy to 0°F (-18°C). Flowering midseason (mid-May in Seattle area).

(r) 'Ariadne Grace'

Elepidote rhododendron: ('Apricot Fantasy' x 'Phipps Yellow') (s) X 'Virginia Delp'. H (2002), G (2009): George Woodard, Westbury, NY; N (2011): Mario Calvo-Platero, New York state; REG (2018): Howard Phipps Jr. Estate, Garrison, NY. Flrs 13/dome truss, funnel, 2 inches (51mm) long x 3 inches (76mm) wide with 5 rounded lobes, frilly margins. Bud, inside, and outside: white, with vivid greenish yellow (2A)

interior dorsal area from base into dorsal lobes, surmounted by strong orange (170A) spotted blotch and flanking spots. Whitish stamens and style, pale yellow stigma. Truss 5 inches (127mm) high x 6 inches (152mm) wide. Lvs 5 x 1.5 inches (127 x 38mm), elliptic, cuneate base, broadly acute apex, flat margins, moderate olive green (137A), matte. Shrub 10 x 10 feet (3 x 3m) in 10 years; open habit, lvs held 1 growing season. Hardy to -5°F (-21°C), good heat tolerance. Flowering midseason. Etymology of name: for the wife of the namer; naming rights acquired in an auction at Old Westbury Gardens, NY.

'Ariadne Grace'. Photo by George Woodard.

(a) 'Donald H. Voss'

Evergreen azalea: : ('Haru-no-sono' x [{'Pocono Pink' x 'Janet Rhea'} x {'Pocono Pink' x Klupenger's 'Satellite'}]) (s) X ('Caitlin Marie' x ['Coronado Red' x {'Leopold-Astrid' x 'Girard's Fuchsia'}]). H (2010), G (2013), N (2017), REG (2017): Joseph Klimavicz, Vienna, VA. Flrs 2/terminal cluster, saucer, semi- to fully double, 1.4 inches (35mm) long x 2.5 inches (65mm) wide with 18 rounded lobes, wavy margins. Bud: vivid purple (80A) shading to strong purplish red (63A) at base. Inside: vivid purple (80A), with slight tinting of light purple (74A) and deep purplish red (59B) blotch on 3 dorsal lobes. Outside: vivid purple (80A). Calyx: insignificant, strong yellow green (144C). Purplish style and filaments, blackish anthers, red stigma. Lvs 1.2 x 0.6 inches (30 x 15mm), elliptic, cuneate base, broadly acute apex, flat margins, moderate olive green (146A), semiglossy. Shrub 3 x 3 feet (0.9 x 0.9m) in 10 years; intermediate habit. Hardy to 0°F (-18°C), heat tolerant to 110°F (43°C). Flowering midseason (early May in Washington, DC, area). Etymology of name: for longtime Northern Virginia azalea, taxonomy and floral color expert Donald H. Voss (1922-2016), who was also editor of *A Contribution Toward Standardization of Color Names in Horticulture* (1984), the standard for rhododendron name registration. He particularly admired the color of this cultivar. Synonym: hybridizer's number HM-10-34. Hybridizer's numbers of seed and

'Donald H. Voss'. Photo by Joseph Klimavicz.

pollen parents: HP-07-1 and M4-07-2, respectively.

(r) 'Drifting Dreams'

'Drifting Dreams'. Photo by Jim Barlup.

Elepidote rhododendron: 'Summer Sunrise' (s) X 'Plum Passion'. H (2009), G (2013), N (2016), REG (2018): Jim Barlup, Bellevue, WA. Flrs 13/ball truss, broad funnel, 2 inches (51mm) long x 3 inches (76mm) wide with 7 rounded, emarginate lobes, slightly wavy margins. Bud: deep purplish pink (54B). Inside and outside: light purplish pink (65B) shading to pale purplish pink (65D) at margins; interior with strong red (46A) nectar pouches (larger on dorsal side) and strong red (46A) spots below dorsal lobe. White style and filaments, prominent red-pink stigma, whitish anthers. Truss 5 x 5 inches (127 x 127mm). Lvs 5.25 x 2.1 inches (133 x 54mm), elliptic, rounded base, broadly acute apex, flat margins, moderate olive green (147A), semiglossy. Shrub 3 feet (0.9m) high x 4 feet (1.2m) wide in 8 years; intermediate habit, lvs held 2 growing seasons. Hardy to 5°F (-15°C). Flowering midseason (mid-May in Seattle area).

(a) 'Everlasting Ella'

'Everlasting Ella'. Photo by Joseph Klimavicz.

Evergreen azalea: ('Betty Christopher' x 'Komo-kulshan') (s) X ('Acrobat' x Klupenger's 'Satellite'). H (2005), G (2008), N (2017), REG (2017): Joseph Klimavicz, Vienna, VA. Flrs 2/terminal, broad funnel, 1.4 inches (35mm) long x 2.5 inches (64mm) wide with 5 rounded lobes, wavy margins. Bud: white, often with moderate purplish pink (62B) or strong purplish red (64B) marks or sectors. Inside: most commonly, strong purplish pink (73B) with irregular white margins and deep purplish red (61A) blotch from base and filling most of dorsal lobe, spreading to adjacent lobes; less commonly, white with strong purplish pink (68B or 73B) sectors and light yellow green (145B) blotch; occasionally, strong purplish red (60D) with deep purplish red (61A) blotch. Outside: white with irregular occurrences of moderate purplish pink (62B), strong purplish pink (68B, 73B), or strong purplish red (64B). Calyx: 0.25 inch (6mm) long, strong yellow green (144B). Stamens and pistil variably

red or whitish. Lvs 1.2 x 0.6 inches (30 x 15mm), elliptic, cuneate base, broadly acute apex, flat margins, moderate yellow green (137C), semiglossy. Shrub 4 feet (1.2m) high x 3 feet (0.9m) wide in 10 years; intermediate habit. Hardy to 0°F (-18°C), heat tolerant to 110°F (43°C). Flowering midseason (early May in Washington, DC, area). Etymology of name: for a friend of the hybridizer, in whose family all women have had "Ella" in their names for almost 200 years.

(r) 'Kailey'

'Kailey'. Photo by Jim Barlup.

Elepidote rhododendron: 'Polarnacht' (s) X 'Wild Berry'. H (2009), G (2014), N (2016), REG (2018): Jim Barlup, Bellevue, WA. Flrs 13/ball truss, broad funnel, 2 inches (51mm) long x 3 inches (76mm) wide with 5 rounded lobes, frilly margins. Bud: deep purplish red (71A). Inside and outside: strong purple (84A); light purple (84B) midveins on all lobes; with interior dark grayish reddish brown (200A) blotch in dorsal lobe. Truss 5 x 5 inches (127 x 127mm). Lvs 4.5 x 2 inches (114 x 51mm), elliptic, cuneate base, broadly acute apex, downcurved margins, moderate olive green (147A), semiglossy. Shrub 3 x 3 feet (0.9 x 0.9m) in 8 years; intermediate habit, lvs held 2 growing seasons. Hardy to 0°F (-18°C). Flowering midseason (mid-May in Seattle area). Etymology of name: for a business associate of the hybridizer.

(r) 'Liquid Sunshine'

'Liquid Sunshine'. Photo by Jim Barlup.

Elepidote rhododendron: 'Lemon Prelude' (s) X 'Goldprinz'. H (2005), G (2009): Jim Barlup, Bellevue, WA; S (2017), N (2017), REG (2018): Roy Blackmore, Victoria, BC. Flrs 17/dome truss, broad funnel to saucer, 1.75 inches (44mm) long x 3.25 inches (83mm) wide with 7 rounded, often emarginate lobes, wavy margins. Bud: strong red (39A). Inside and outside: pale yellow (11C), with 3 or 4 interior strong red (53B) spotted flares extending 0.75 inch (19mm) from throat into dorsal area. Calyx: 0.75 inch (19mm) long, pale yellow (11C) with strong red (53B) spots. Yellow pistil and stamens. Truss 5 x 5 inches (127 x 127mm). Lvs 3.75 x 1.75 inches (95 x 44mm), elliptic to oblanceolate, rounded to slightly cuneate base,

broadly acute apex, flat margins, moderate olive green (147A), semiglossy. Shrub 2 feet (0.6m) high x 2.7 feet (0.8m) wide in 6 years; intermediate habit, lvs held 2 growing seasons. Hardy to 5°F (-15°C). Flowering midseason (May in Victoria, BC).

(r) 'Lois Norma'

'Lois Norma'. Photo by Martin Borsky.

Elepidote rhododendron: 'Helen Everitt' (s) X 'Phipps Yellow'. H (1983): Richard Murcott, East Norwich, New York, USA; G (1987), N (1993), REG (2018): Martin Borsky, Bridgewater, New Jersey, USA. Flrs 9-10/ball truss, funnel, 1.75 inches (45mm) long x 3.4 inches (86mm) wide with 7 rounded lobes, wavy margins. Bud: strong purplish pink (63C). Inside: shading from very light purple (75C) at margins through very pale purple (75D) to greenish white (155C); with light yellow green (145B) flare and stippling, shading to strong yellow green (145A) in throat. Outside: shading from very light purple (75C) at margins through very pale purple (75D) then greenish white (155C) to very light purple (75C) 0.4 inch (10mm) from calyx. Calyx: 0.1 inch (1mm) long, strong yellow green (145A). Stamens absent or vestigial, 0.3 inch (8mm); yellow-white style, yellow-green stigma. Fragrance: strong. Truss 5.1-5.5 inches (130-140mm) high x 5.1 inches (130mm) wide. Lvs 5.6 x 2.4 inches (142 x 60mm), elliptic, rounded base, broadly acute apex, flat margins, moderate olive green (137A), matte. Shrub 5.7 feet (1.75m) high x 13 feet (4m) wide in 34 years; intermediate habit, floriferous, lvs held 2 growing seasons. Hardy to 0°F (-18°C), heat tolerant to 100°F (38°C). Flowering midseason (May in central NJ). Etymology of name: for the registrant's wife, Lois Norma Borsky.

(r) 'Mary Abair'

'Mary Abair'. Photo by Jim Barlup.

Elepidote rhododendron: 'Golden Mist' (s) X 'Mac's Orange Crush' *. H (2010), G (2016), N (2017), REG (2018): Jim Barlup, Bellevue, WA. Flrs 15/ball truss, broad funnel, 2 inches (51mm) long x 3 inches (76mm) wide with 6 rounded lobes, wavy margins. Bud: strong red (39A). Inside: light greenish yellow (8C) at base shading to pale yellow (8D), on dorsal lobe(s) shading to light pink (39D); twin strong greenish yellow (153B) basal

flares below dorsal lobe. Outside: light greenish yellow (8C) at base shading to pale yellow (8D), on dorsal margins shading to light pink (39D). Calyx: 0.9 inch (22mm) long, light greenish yellow (8C) shading to pale yellow (8D) with strong greenish yellow (153B) spots. Yellow style and filaments; reddish stigma, brown anthers. Truss 6 x 6 inches (152 x 152mm). Lvs 5.75 x 2.1 inches (146 x 54mm), elliptic, rounded base, broadly acute apex, flat margins, moderate olive green (147A), matte. Shrub 3 x 3 feet (0.9 x 0.9m) in 7 years; intermediate habit, lvs held 2 growing seasons. Hardy to 0°F (-18°C). Flowering late season (mid-June in Seattle area). Etymology of name: for the hybridizer's sister, Mary Abair, of Amery, WI.

* 'Mac's Orange Crush': not registered; ('Coral Velvet' x 'Goldsworth Orange') X ('Catalgla' x *R. dicroanthum*), red-orange, hybridized by Dennis MacMullan, formerly of Hamburg, PA, now residing in Houston.

(r) 'Mike Peterson'

Elepidote rhododendron: 'Evening Embers' (s) X 'Holli's Hope'. H (2009), G (2015), N (2016), REG (2018): Jim Barlup, Bellevue, WA. Flrs 17/ball truss, broad funnel, 1.75 inches (44mm) long x 2.5 inches (64mm) wide with 5 rounded lobes, frilly margins. Bud: deep purplish red (71A). Inside and outside: very pale purple (76D) shading to strong purple (77B) at margins; with interior twin

'Mike Peterson'. Photo by Jim Barlup.

dorsal flares of light yellow green (154D) spots. Pinkish style, reddish stigma, whitish stamens, buff anthers. Truss 4.5 x 4.5 inches (114 x 114mm). Lvs 4 x 1.9 inches (102 x 48mm), elliptic, rounded base, broadly acute apex, downcurved margins, moderate olive green (147A), matte. Shrub 2 feet (0.6m) high x 2.5 feet (0.8m) wide in 8 years; intermediate habit, lvs held 2 growing seasons. Hardy to 5°F (-15°C). Flowering late season (late May in Seattle area). Etymology of name: for a longtime friend of the hybridizer.

(r) 'Moe's Journey'

'Moe's Journey'. Photo by Jim Barlup.

Elepidote rhododendron: ('Mrs. Furnival' x 'Coronation Day') (s) X 'Elegant Touch'. H (1992), G (1999), N (2017), REG (2018): Jim Barlup, Bellevue, WA. Flrs 15/dome truss, broad funnel, 2 inches (51mm) long x 3 inches (76mm) wide with 5 rounded lobes, flat or slightly cupped margins. Bud: strong red (53C). Inside: pale yellowish pink (36D) shading to light pink (39D) at margins, moderate yellowish pink (39C) midveins; dark red (187B) at throat, continuing as 0.9-inch (22mm) twin dorsal flare, extending along side margins of dorsal lobe, and 3 shorter ventral flares, dark red (187B). Outside: pale yellowish pink (36D) shading to light pink (39D) at margins, light pink (39D)

midveins. Prominent pistil, style whitish shading to pink with reddish stigma. Truss 5 x 5 inches (127 x 127mm). Lvs 4.5 x 2 inches (114 x 51mm), elliptic, slightly upangled from midvein, rounded base, broadly acute apex, flat margins, moderate olive green (147A). Shrub 2.5 x 2.5 feet (0.8 x 0.8m) in 6 years; intermediate habit, lvs held 2 growing seasons. Hardy to 5°F (-15°C). Flowering midseason (mid-May in Seattle area). Etymology of name: For the late Moe Massa, a special rhododendron friend of the hybridizer from Victoria, BC. "May he enjoy his journey to gardens in the great beyond as he did in this life."

(r) 'Rose Passion'

'Rose Passion'. Photo by Jim Barlup.

Elepidote rhododendron: 'Summer Sunrise' (s) X 'Plum Passion'. H (2009), G (2014), N (2017), REG (2018): Jim Barlup, Bellevue, WA. Flrs 17/ball truss, broad funnel, 1.75 inches (44mm) long x 2.75 inches (70mm) wide with 5 rounded lobes, wavy margins. Bud: strong red (53B). Inside: pale yellow (11D), shading through pale purplish pink (55D) to strong purplish pink (55B) at margins, darker midveins; with deep red (53A) at base, extending 0.5 inch (13mm) dorsally, changing to strong red (53D) spotting in dorsal lobe. Outside: pale purplish pink (55D) with strong purplish pink (55B)

midveins toward margins. Calyx: 0.1 inch (3mm) long, pale yellow (11D) with deep red (53A) flare. Reddish style and filaments, darker red stigma. Truss 4.5 inches (114mm) high x 5 inches (127mm) wide. Lvs 4.5 x 1.75 inches (114 x 44mm), elliptic, rounded base, broadly acute apex, flat margins, moderate olive green (147A), semiglossy. Shrub 1.25 feet (0.4m) high x 2 feet (0.6m) wide in 7 years; open habit, lvs held 2 growing seasons. Hardy to 5°F (-15°C). Flowering midseason (early May in Seattle area).

(r) 'Rose Velvet'

'Rose Velvet'. Photo by Jim Barlup.

Elepidote rhododendron: 'Cody' (s) X 'Plum Passion'. H (2009), G (2014), N (2017), REG (2018): Jim Barlup, Bellevue, WA. Flrs 17/dome truss, broad funnel, 2.25 inches (57mm) long x 3.25 inches (83mm) wide with 5 or 6 rounded lobes, wavy margins. Bud: strong red (53C). Inside: strong purplish pink (55B) shading near base to pale yellow (11D); strong red (53D) dorsal flare from base, becoming spots, with small areas of greenish white (155C) near base, producing a central star effect. Outside: strong purplish pink (55B), deep purplish pink (55A) margins and midveins. Calyx: 0.5 inch (13mm) long, pale yellow (11D) with strong red (53D) streaking. Pinkish style and filaments, green stigma. Truss 5.5 x 5.5 inches (140 x 140mm). Lvs 5 x 2 inches

(127 x 51mm), elliptic, rounded base, broadly acute apex, flat margins, moderate olive green (147A), semiglossy. Shrub 3 feet (0.9m) high x 2.5 feet (0.8m) wide in 8 years; intermediate habit, lvs held 2 growing seasons. Hardy to 5°F (-15°C). Flowering midseason (mid-May in Seattle area).

(r) 'Sonora Sun'

'Sonora Sun'. Photo by Jim Barlup.

Elepidote rhododendron: 'Maverick' (s) X 'Trina'. H (2009), G (2014), N (2017), REG (2018): Jim Barlup, Bellevue, WA. Flrs 17/ball truss, broad funnel, 2 inches (51mm) long x 3.25 inches (83mm) wide with 5 rounded, emarginate lobes, wavy margins. Bud: moderate red (47A). Inside: light yellow (18B) shading to pale yellow (18D) with strong red (53C) dorsal spotting. Outside: light yellow (18B) shading to pale yellow (18D), moderate yellowish pink (31D) midveins. Yellow style and filaments, brown stigma. Truss 5 inches (127mm) high x 5.5 inches (140mm) wide. Lvs 4.25 x 1.6 inches (108 x 41mm), elliptic, rounded base, broadly acute apex, flat margins, moderate olive green (147A), semiglossy. Shrub 3 feet (0.9m) high x 2.5 feet (0.8m) wide in 8 years; intermediate habit, lvs held 2 growing seasons. Hardy to 5°F (-15°C). Flowering midseason (early May in Seattle area).

(r) 'Sunset Splendor'

'Sunset Splendor'. Photo John Delano.

Elepidote rhododendron: unknown parentage. H (1960s), G (1960s): John C. Cowles, Sandwich, MA; N (2014): Greg and Terry Anderson, Hyannis Port, MA; REG (2017): Heritage Museums and Gardens, Sandwich, MA. Flrs 16/conical truss, broad funnel, 2.5 inches (64mm) long x 3.5 inches (89mm) wide with 5-6 rounded lobes, wavy margins. Bud: strong purplish red (63A-63B). Inside: light purplish pink (62C) blending to strong purplish red (63B) at margins, with prominent flare of green speckling from throat into upper lobe surmounted by a whitish halo. Outside: strong purplish red (63B). Calyx: insignificant. Whitish pistil and filaments; pale yellow (158B) anthers. Truss 7 x 7 inches (178 x 178mm). Lvs 6.5 x 2.25 inches (165 x 57mm), oblong, oblique base, obtuse apex, wavy margins, moderate olive green (137A), semiglossy. Shrub 7 feet (2.1m) high x 6 feet (1.8m) wide in 45 years; dense habit, lvs held 2 growing seasons. Hardy to -10°F (-23°C), buds to -5°F (-21°C). Flowering midseason (May on Cape Cod). Synonyms: 'Shaker Gold' (minimal propagation); Heritage 105-2004.

NEW ZEALAND RHODODENDRON ASSOCIATION (INC)

Subscription: 2018

Individual NZ$40 • Couple NZ$45 • Overseas NZ$55

Membership Includes:

- Annual Bulletin
- Newsletters
- Annual Conference
- Lectures and Garden Visits

For further details contact:

Secretary
Pauline Allen
Website:
www.rhododendron.org.nz

Corrections and additional information

(a) 'Bill Miller': JARS 71:2 (Spring 2017), p. 106. The unnamed, unregistered cultivar CB-11 was incorrectly rendered with single quotation marks.

(r) 'Elmer's Gift': JARS 72:1 (Winter 2018), p. 48. An incorrect town was given for the bybridizer, Elmer Morris; he resided in Wall Township, NJ. Add: Synonym: Morris 452.

(a) 'Flurry': JARS 72:1 (Winter 2018), p. 48. The heading erroneously had (r) instead of (a).

(a) 'Judith Quarrington': JARS 71:2 (Spring 2017), p. 107. The unnamed, unregistered cultivar CB-1 was incorrectly rendered with single quotation marks.

References

Names conform to the rules and recommendations of the *International Code of Nomenclature for Cultivated Plants, Eighth Edition* (2009). Color names are from *A Contribution Toward Standardization of Color Names in Horticulture*, R.D. Huse and K. L. Kelly; D. H. Voss, editor (ARS, 1984).

To register a rhododendron or azalea name

North Americans: Electronic registration may be submitted at www.rhododendron.org/plantregistry.htm. The site also provides instructions and forms for downloading and completing manually. Those submitting paper applications should use only the current form (revised 2015). The quickest way to obtain paper forms is to ask a friend with Internet access to go to the ARS website and print the form and instructions. Questions, completed paper forms, all photographs and requests for paper forms

should be directed to Michael Martin Mills, North American Registrar. There is no fee.

All others: Please direct inquiries to Alan C. Leslie, International Rhododendron Registrar.

Errata

In the Winter 2018 issue of JARS (Vol. 72, No. 1), page 38, in the article "Newly Registered Cultivar Names," an error occurred in the entry for 'Flurry'. The entry should be preceded by (a), not (r). It is an azalea, not a rhododendron.

New JARS Associate Editor Selected

Donald Smart has been selected as the new Associate Editor of the *Journal American Rhododendron Society,* replacing Sonja Nelson. His duties include the computer layout of the ARS journal and the handling of advertising in the journal. He also will help our Office Administrator Katherine Sterner with mailing support.

Don is a long-time member of the ARS, serving as its president from 2011 to 2013. He has also served as a District Director and the editor of the newsletter for his home chapter, the Cascade Chapter. Along with Bob Weissman, he also helped develop the ARS Office.org and the Rhododendron.org websites.

As the person who designs the layout of the journal and deals with the computer technology involved, he will work with JARS Editor Glen Jamieson to produce a publication not only interesting to read but also visually attractive. Handling the advertisements in the journal is also the job of the Associate Editor, including the billing for ads and their placement in the journal. Don will begin his duties in his new position in March 2018.